CHAPTER FOUR

RESULTS AND DATA ANALYSIS

4.1 Introduction

The analyses of the questionnaires given out to 80 students, 8 Technical Presentation Skills (TPS) instructors and 10 Engineering instructors are presented in this chapter. The questionnaires are analysed according to the following subheadings:

a. Personal Particulars
b. Language Ability
c. Language Needs
d. Course Design
e. Course Evaluation

All the data obtained from the above questionnaires are analyzed using the SPSS Unleashed Version 11.0 software to tabulate the frequency and the percentage of the responses.

4.2 Personal Particulars

This section presents the analysis of the students', TPS instructors and Engineering instructors' personal particulars.
4.2.1 Students’ Personal Particulars

Under this section, personal particulars of the students such as their gender, age, academic qualifications, Sijil Pelajaran Malaysia (SPM) English results and TPS IV results (fourth semester results) are analyzed and presented.

Figure 4.1
Students’ Personal Particulars

As can be seen in Figure 4.1, 68.8% of the student respondents were male as compared to 31.2% who were female. In terms of age, more than half of the respondents (52.5%) were 20 years old, and the other 47.5% of the respondents were between 21 to 26 years of age. A majority of the students (70.0%) were SPM holders, followed by 22.5%, certificate holders, and the other 7.5%, diploma holders. Figure
4.1 also shows that 42.5% of the students obtained a Credit (C3 to C6) in their SPM English; 32.5%, a Pass (P7 and P8); 20.0%, a Distinction (A1 and A2); while the remaining 5.0% obtained a Fail (F9) in their SPM English. A majority of the students (82.5%) obtained a Merit in the TPS IV module, while the other 12.5% obtained a Pass, and the remaining 5.0%, a Distinction.

4.2.2 TPS Instructors' Personal Particulars

This section presents the analysis of the TPS instructors' personal particulars, which include their gender, highest academic qualification, teaching experience, and the TPS modules that they are teaching.

Figure 4.2
TPS Instructors' Personal Particulars
As can be seen in Figure 4.2, all the TPS instructors who took part in the study were females. More than half of them (62.5%) had a bachelor degree; two held a master's degree (25.0%) and one respondent did not indicate her qualification (12.5%). All the respondents had at least two years of teaching experience. Figure 4.2 also shows that all the instructors were teaching the TPS modules at HND level, i.e. TPS III, TPS IV and TPS V at the time of the study. One TPS instructor however did not indicate the levels she taught.

4.2.3 Engineering Instructors' Personal Particulars

In this part, personal particulars of the Engineering instructors, such as their gender, highest academic qualification, number of years of teaching and the modules that they were currently teaching at the point the research was conducted, are analyzed and presented.

As shown in Figure 4.3, 70.0% of the Engineering instructors were male, while the other 30.0% were female. In terms of qualification, seven of them had a bachelor degree (70.0%) while the other three had a master's degree (30.0%). From Figure 4.3, 70.0% of the respondents had 2 to 5 years of teaching experience, while the other 30.0% had 5 to 10 years of teaching experience. As to the modules they were teaching at the point of this study, 40.0% of them were teaching modules related to electrical Engineering, while the other 40.0%, modules related to electronics Engineering. The remaining 20.0% were teaching modules related to information technology and mathematics.
4.3 Language Ability

This section presents the analysis of the students', TPS instructors' and Engineering instructors' perception of the students' language proficiency in the four skills namely listening, speaking, reading and writing respectively. The analysis of the students', TPS instructors' and Engineering instructors' perception of the students' difficulty in each of the skills is also presented.
Figure 4.4 shows that slightly more than half of the students (57.5%) perceived themselves as having good listening skill, while the remaining 42.5% of the students perceived themselves as being average. However, none of them perceived themselves to be weak in listening. More than half of the TPS instructors (62.5%) perceived their students as having only average ability in listening, while the remaining 25.0% of the instructors perceived their students as being good. A low percentage of them (12.5%) perceived their students as being weak in the skill. Slightly more than half of the Engineering instructors (60.0%) perceived the students as being average in listening, while less than half of them (40.0%) perceived the students to be good. However, none of them perceived the students to be weak in listening.
More than half of the students (65.0%) perceived themselves as being average in speaking, and only 32.5% of them considered themselves to be good. A very low percentage of the students (2.5%) perceived themselves as being weak. Many TPS instructors (37.5%), however, had the perception that their students were weak in speaking. This is followed by 25.0% of them who perceived their students as being good and average in speaking respectively. As for the Engineering instructors, 40.0% of them perceived the students as having good and average speaking skill respectively. A low percentage of them (20.0%) perceived their students as being weak in the skill.

In terms of reading, a significantly high percentage of the students (78.7%) perceived themselves to be good. On the other hand, a low percentage of the students perceived themselves as being average (18.8%) and weak (2.5%) respectively. Only half of the TPS instructors (50.0%) perceived their students to be of average ability. On the other hand, a low percentage of the instructors perceived their students as being good (25.0%) and weak (12.5%) in the skill. As for the Engineering instructors, slightly more than half (60.0%) perceived the students as being average, while the remaining 40.0% of them perceived the students as being good.

As for writing, slightly more than half of the students (53.7%) perceived themselves to be good, while the other 45.0% perceived themselves as having only average ability. Only a very low percentage of the students (1.3%) perceived themselves to be weak. It is important to note here that the students perceived themselves as being better in the receptive skills; i.e. listening and reading, as compared to the productive skills, i.e. speaking and writing. This implies that more
emphasis should be given to productive skills in the English modules as the students felt that they had lower ability in these skills. As for the TPS instructors, 37.5% of them perceived their students to be weak and average in writing respectively. However, a low percentage of the TPS instructors (12.5%) perceived their students as being good. 40.0% of the Engineering instructors perceived the students as being average and weak in writing respectively. Only 20.0% of the Engineering instructors perceived the students to be good.

The following section will discuss the students’, TPS instructors’ and Engineering instructors’ perceptions of the difficulties they face in each of the listening, speaking, reading and writing sub-skills respectively.

4.3.1 Perception of Difficulties in Listening

In order to identify the students’ difficulties in listening, the sub-skills identified for analysis are understanding different accents, understanding meanings of words, following instructions, understanding technical descriptions, distinguishing main ideas from supporting details and understanding what people say. Figure 4.5 shows the students’, TPS instructors’ and Engineering instructors’ perceptions of the students’ difficulties in the listening sub-skills.

From Figure 4.5, only one major difficulty in listening was identified by the students that is in understanding different accents. 70% of them perceived they were not skilled in this area. As for the other listening sub-skills, less than 33.8% of the
students perceived that they had difficulty in them. These sub-skills include understanding meanings of words (33.8%), understanding technical descriptions (28.8%), distinguishing main ideas (25.0%) and understanding what people say (12.5%). Only a very low percentage of the respondents (2.5%) stated that they had difficulty in following instructions.

Figure 4.5
Perception of Difficulties in Listening

On the other hand, a high percentage of the TPS instructors (87.5%) perceived that the students had difficulty in understanding the meanings of words when listening. This is followed by 75.0% of them perceiving their students as having difficulty in distinguishing main ideas from supporting details, and 62.5% perceiving that the students had difficulties understanding different accents as well as technical
description. Half of the TPS instructors (50.0%) perceived their students as having difficulty in following instructions. However, only 25.0% of them perceived that their students had difficulty in understanding what people say.

A majority of the Engineering instructors (80.0%), however, perceived that the students had most difficulties in understanding different accents and in distinguishing main ideas from supporting details. Slightly more than half of them (60.0%) perceived that their students had problems in understanding technical description. Less than half of them (40.0%) had the perception that the students had difficulty in understanding the meanings of words, and in following instructions. A very low percentage of them (20.0%) perceived their students as having difficulty in understanding what people say.

4.3.2 Perception of Difficulties in Speaking

Difficulties in speaking include problems in performing the following speaking sub-skills – using appropriate body language, speaking fluently, speaking accurately, interrupting politely, agreeing and disagreeing, making suggestions and supporting view points, participating in discussion, and communicating with people. The percentages of all the items are tabulated in Figures 4.6 and 4.6 (a).

Figures 4.6 and 4.6 (a) show that the most difficult speaking sub-skill perceived by the students is the ability to speak accurately. As 91.2% of the students affirmed this difficulty, it clearly shows that almost all the students perceived themselves as being unable to speak without any grammatical mistakes. The second difficulty in
speaking as perceived by the students (68.7%) was to speak fluently. Therefore, the two most difficult sub-skills identified according to the students’ perception are speaking accurately and fluently. As for the other sub-skills, less than 50.0% of the respondents stated that they had problems with them. These include interrupting politely (46.3%), agreeing and disagreeing (36.3%), using appropriate body language (35.0%), making suggestions (21.3%) and participating in discussion (20.0%). Only 13.8% of the students perceived they had difficulty in communicating with people.

Figure 4.6
Perception of Difficulties in Speaking
On the other hand, all the TPS instructors perceived that the students had difficulty in speaking fluently. This is followed by 87.5% of them perceiving that the students also had difficulties in speaking accurately, as well as in agreeing and disagreeing. The other areas in which a high percentage of the TPS instructors agreed as being difficult to the students were in making suggestions and supporting their view (75.0%), and in using body language (62.5%). Half of the TPS instructors (50.0%) perceived that their students had problems in interrupting politely, and in communicating with people. However, only a low percentage of them (37.5%) had the perception that their students had problem in participating in discussions.
Contradictory to what the students and TPS instructors had perceived, all the Engineering instructors (100.0%) perceived that the students had difficulties in agreeing and disagreeing as well as in making suggestions and supporting their view. A high percentage of the instructors (80.0%) also perceived that the students had difficulty in speaking fluently, and in speaking accurately. 60.0% of them perceived the students as having difficulties in interrupting politely, and in participating in discussion. Only less than half of the Engineering instructors (40.0%) had the perception that the students had difficulty in communicating with people. As for using appropriate body language, a very low percentage (20.0%) of them perceived that their students had problems with it.

4.3.3 Perception of Difficulties in Reading

To identify the kinds of difficulties that the students face in reading, the following reading skills are analyzed – reading aloud, understanding technical terminology, skimming, scanning, distinguishing main ideas from supporting details, distinguishing facts from opinions, summarizing, reading and understanding technical materials, as well as determining relevant and irrelevant information for study purpose. The percentages of the responses are presented in Figures 4.7 and 4.7 (a).

Figures 4.7 and 4.7 (a) show that less than 38.8% of the students perceived that they had problems with the reading sub-skills. These sub-skills include scanning (38.8%), distinguishing main ideas (38.8%), summarizing (38.8%), understanding technical terminology (36.3%), skimming (33.8%), determining relevant information
(28.8%), understanding technical materials (25.0%) and distinguishing facts from opinions (23.8%). The sub-skill perceived as being the least problematic for the students was reading aloud with only 12.5% of the students indicating that they had difficulty in it.

However, the TPS and Engineering instructors perceived otherwise. A majority of the TPS instructors (75.0%) ranked understanding technical terminology, skimming for the main points, extracting important points to summarize, reading and understanding technical materials, and determining relevant and irrelevant information for study purpose as the reading sub-skills students have difficulty in. This is followed by 62.5% of the instructors perceiving that their students had difficulties in scanning to locate specifically required information, and distinguishing main ideas from supporting details respectively. However, less than half of them perceived that the students had difficulty in distinguishing fact from opinions (37.5%), and reading aloud (25.0%) respectively. One TPS instructor did not respond on whether the students had problems in reading aloud, distinguishing main ideas, distinguishing facts, summarizing and determining relevant information. Two TPS instructors did not respond to whether their students had problem in distinguishing main ideas or not.
Figure 4.7

Perception of Difficulties in Reading

Figure 4.7 (a)

Perception of Difficulties in Reading
However, a majority of the Engineering instructors (80.0%) ranked distinguishing facts from opinions, extracting important points to summarize, and determining relevant and irrelevant information for study purpose as the reading sub-skills students have difficulty in. Slightly more than half of them (60.0%) perceived that their students had problems with the following reading tasks: skimming, distinguishing main ideas from supporting details, as well as reading and understanding technical materials. Half of them (50.0%) perceived that the students had difficulty in understanding technical terminology or words. However, none of them perceived that students had problems in reading aloud.

4.3.4 Perception of Difficulties in Writing

The students', TPS instructors' and Engineering instructors' perception of the students difficulties in the writing skills are analysed according to their difficulty in spelling, choice of words, writing grammatically correct sentences, linking sentences in a paragraph, combining paragraphs in an essay, and organizing and planning their writing. Percentages of all these difficulties are as shown in Figure 4.8.
Figure 4.8 shows that the students perceived that they had difficulties in writing grammatically correct sentences (85.0%) and in choosing suitable words (70.0%). In contrast, less than 31.3% of the respondents stated that they had difficulties in linking sentences (31.3%), organizing and planning their writing (31.3%), combining paragraphs (20.0%) and spelling (16.3%).

All the TPS instructors also perceived that their students had difficulties in writing grammatically correct sentences, and in combining paragraphs in an essay. This is followed by a majority of the TPS instructors (87.5%) perceiving their students as having difficulties in choosing suitable words, and linking sentences in a paragraph respectively. The other writing task that had also been highly ranked by them (75.0%)
as being difficult to the students is organizing and planning a piece of writing. However, only less than half of the TPS instructors (37.5%) perceived that spelling posed a problem to the students.

All the Engineering instructors had the perception that the students had difficulty in writing grammatically correct sentences. A high percentage of the Engineering instructors (80.0%) also had the perception that the students had difficulties in choosing suitable words, and in combining paragraphs in an essay. More than half of them (60.0%) perceived that their students had difficulties in linking sentences in a paragraph, and in organizing and planning a piece of writing. However, they did not perceive spelling as a problem to the students where less than half of the Engineering instructors (40.0%) perceived it as a difficult task for the students.

4.4 Language Needs

This section presents the outcome of the analyses of the language tasks that the students, TPS instructors and Engineering instructors perceive as important to the students. The language tasks are categorized into listening, speaking, reading and writing tasks respectively. The results and the percentages of each language task are presented in the following sub-sections.
4.4.1 Perception of the Importance of Listening Tasks

The listening tasks are categorized into listening and understanding lectures, discussions, listening to and following instructions, listening and understanding social conversations, listening and understanding explanations, as well as listening and understanding presentations. The percentages of the students’, TPS instructors’ and Engineering instructors’ responses to the importance of these tasks are as shown in Figures 4.9 and 4.9 (a).

Figure 4.9
Perception of the Importance of Listening Tasks
In Figures 4.9 and 4.9 (a), it can be seen that more than 65.0% of the students perceived that all the listening tasks stated were ‘very important’ and ‘important’ to them. All the students ranked listening and understanding explanations as being the most important task with 50.0% ranking it as ‘very important’ and ‘important’ respectively. This is closely followed by 97.5% of the students perceiving listening and understanding lectures as being important to them with 53.7% perceiving it to be ‘very important’ and 43.8%, ‘important’. The other tasks that had also been highly ranked by the students include listening and understanding discussions, and listening to and following instructions with more than 90.0% of the students perceiving them to be of importance. This is followed by 87.5% of the students perceiving listening and understanding presentations as being important. The task perceived as being
comparatively of lesser importance was listening and understanding social conversations with 68.8% of the students perceiving it to be of importance.

Figures 4.9 and 4.9 (a) show that a majority of the TPS instructors (87.5%) perceived all the listening tasks listed in the figure as 'very important' and 'important' to the students. It is interesting to note here that none of the TPS instructors perceived these listening tasks as being 'not important' to the students.

A high percentage of the Engineering instructors (80.0%) perceived all the listening tasks listed in the questionnaire as being of importance to the students. All the Engineering lecturers ranked the following tasks as being the most important tasks to the students - listening and understanding lectures, discussions, following instructions, as well as listening to explanations and presentations. The other task that had been highly ranked by the Engineering instructors was listening and understanding social conversations with 80.0% of them perceiving it to be of importance to the students.

4.4.2 Perception of the Importance of Speaking Tasks

The speaking tasks are categorized into presenting oral reports, giving instructions/directions, participating in meetings, participating in group discussions, communicating in interviews, communicating with people in social contexts, making suggestions, interrupting politely and discussing technical problems.
In general, a very high percentage of the students (87.5%) perceived that all the speaking tasks presented in Figures 4.10, 4.10 (a) and 4.10 (b), as being of importance to them. The tasks which had the highest percentage of students (97.5%) perceiving them as being the most important were discussing technical problems, and communicating in interviews with 56.2% and 41.3% ranking them as 'very important', and the other 41.3% and 51.2% ranking them as 'important' respectively. The other speaking tasks that had also been highly ranked by the students include participating in group discussions, participating in meetings, interrupting politely, giving instructions/directions, communicating with people in social contexts, and making suggestions with more than 90.0% of the students perceiving them to be of importance. The only task perceived as being of lesser importance was presenting oral reports with 87.5% of the students perceiving it to be of importance.

A majority of the TPS instructors (87.5%) ranked the following speaking tasks as the most important tasks to their students – presenting oral reports, giving instructions/directions, participating in meetings, participating in group discussions, communicating in interviews, and discussing technical problems. The other speaking tasks that had also been highly ranked by the TPS instructors include communicating with people socially, making suggestions and interrupting politely with more than 75.0% of the instructors perceiving them as being 'very important' and 'important' to the students.
All the Engineering instructors had the perception that the following speaking tasks as being important to the student – presenting reports, giving instructions, participating in group discussion, communicating with people socially, making suggestions and discussing technical problems. A high percentage of the Engineering instructors (80.0%) also had the perception that participating in meetings and communicating in interviews were of importance to the students. The least important speaking task perceived by the Engineering instructors was interrupting politely with only 40.0% of the Engineering instructors perceiving it to be of importance.

Figure 4.10
Perception of the Importance of Speaking Tasks
Figure 4.10 (a)
Perception of the Importance of Speaking Tasks

Figure 4.10 (b)
Perception of the Importance of Speaking Tasks
4.4.3 Perception of the Importance of Reading Tasks

The reading tasks are categorized into reading and understanding technical textbooks, reading and understanding technical journal articles, reading and understanding newspaper articles, reading and understanding notices and instructions, reading and understanding laboratory or computer manuals, reading and understanding technical magazines, reading and understanding general magazines, reading and understanding handouts/ notes, as well as reading and understanding various texts on internet websites. Percentages of the responses are shown in Figures 4.11, 4.11 (a) and 4.11 (b).

Figure 4.11
Perception of the Importance of Reading Tasks
Figure 4.11 (a)
Perception of the Importance of Reading Tasks

Figure 4.11 (b)
Perception of the Importance of Reading Tasks
As shown in Figures 4.11, 4.11 (a) and 4.11 (b), generally more than 60.0% of the students perceived all the reading tasks listed in the questionnaire as ‘very important’ and ‘important’. 90.0% of the students ranked reading and understanding notices and instructions as being the most important task, with 52.5% ranking it as ‘important’ and 37.5%, ‘very important’. The other reading tasks that had also been highly ranked by the students include reading and understanding handouts and notes, reading and understanding information on internet websites, reading and understanding newspaper articles as well as reading and understanding technical textbooks with more than 85.0% of the students perceiving them to be of importance. This is followed by 76.3% and 73.7% of the students perceiving reading and understanding technical magazines, as well as laboratory and computer manuals as being important to them respectively. The reading tasks perceived by the students as being comparatively of lesser importance were reading and understanding general magazines and technical journals with only 63.7% of the students perceiving them to be of importance.

More than 75.0% of the TPS instructors had the perception that all the tasks listed as being of importance to the students, except for reading and understanding general magazines. Specifically, a very high percentage of the TPS instructors (87.5%) perceived the following reading tasks as being the most important tasks to the students: reading and understanding technical textbooks, technical journals, newspaper articles, notices, laboratory or computer manuals, technical magazines, as well as information on internet websites. This is followed by 75.0% of the TPS instructors perceiving that reading and understanding the instructors’ handout as being important to the students, with 37.5% of them perceiving it to be ‘very important’ and
important' respectively. The reading task perceived as being comparatively of lesser importance by the TPS instructors was reading and understanding general magazines with 62.5% of them perceiving it to be of importance.

A high percentage of the Engineering instructors (80.0%) perceived all the reading tasks listed in the questionnaire as being of importance to the students, except for reading and understanding newspaper articles and general magazines. All the Engineering instructors ranked the following tasks as the most important reading tasks for the students: reading and understanding technical textbooks, laboratory or computer manuals, technical magazines, handouts from instructors, as well as information on internet websites. The other reading tasks that had also been highly ranked by the Engineering instructors include reading and understanding technical journal articles, as well as notices and instructions with more than 80.0% of the Engineering instructors perceiving them to be of importance to the students. This is followed by slightly more than half of the Engineering instructors (60.0%) perceiving reading and understanding the newspaper as being 'very important' (40.0%) and 'important' (20.0%). The reading task perceived as being comparatively of lesser importance by the Engineering instructors was reading and understanding general magazines, with only 40.0% of the Engineering instructors perceiving it to be of importance.
4.4.4 Perception of the Importance of Writing Tasks

The writing tasks analysed in the questionnaire are writing lecture notes, descriptions, instructions, recommendation reports, proposals, progress and project reports, formal letters, laboratory reports and memos. Percentages of the students', TPS instructors' and engineering instructors’ responses are tabulated in Figures 4.12, 4.12 (a) and 4.12 (b).

From Figures 4.12, 4.12 (a) and 4.12 (b), it can be seen that a very high percentage of the students (70.0%) perceived all the writing tasks listed in the questionnaire as being of importance to them. Almost all of the students ranked writing progress/ project reports as being the most important writing task with 60.0% ranking it as 'important' and 37.5% ranking it as 'very important'. This is closely followed by 95.0% of the students who perceived writing proposals as being important to them with 50.0% of them perceiving it to be 'important' and 45.0%, 'very important'. The other writing tasks that had also been highly ranked by the students include writing lab reports, recommendation reports, instructional manuals and descriptions, with more than 85.0% of the students perceiving them to be of importance to them. This is followed by 82.5% of the students perceiving writing lecture notes as being important to them. The writing tasks perceived by the students as being comparatively of lesser importance were writing letters and memos with about 70.0% perceiving them to be of importance.
Figure 4.12
Perception of the Importance of Writing Tasks

Figure 4.12 (a)
Perception of the Importance of Writing Tasks
More than three-quarter of the TPS instructors (75.0%) perceived all the writing tasks listed in the questionnaire as being of importance to the students, except for writing lecture notes. All the TPS instructors ranked writing progress reports and lab reports as the most important tasks with 75.0% of the TPS instructors ranking writing progress reports as 'very important' and 25.0%, 'important'. As for writing lab reports, 62.5% of the TPS instructors ranked it as 'very important' and the other 37.5%, 'important'. This is followed by a very high percentage of the TPS instructors (87.5%) perceiving that writing descriptions, recommendation reports and proposals as being important to the students. The other writing tasks that had also been highly ranked by the TPS instructors include writing instructions/ manuals, letters and memos with more than 75.0% of them perceiving it to be of importance to the students. Only
half of the TPS instructors perceived writing lecture notes as ‘important’ (25.0%) and ‘very important’ (25.0%) to the students.

Slightly more than half of the Engineering instructors (60.0%) perceived all the writing tasks listed in the questionnaire as being of importance to the students, except for writing lecture notes and memos. All the Engineering instructors ranked the following writing tasks as being the most important tasks to the students – writing proposals, writing progress reports and writing lab reports. This is followed by a high percentage of the Engineering instructors (80.0%) perceiving writing recommendation reports and instructions/manuals as being important to the students. The other writing tasks that were perceived as being important by more than half of the Engineering instructors include writing formal letters (40.0% important, 20.0% very important) and writing descriptions (60.0% important). Only less than half of the Engineering instructors (40.0%) perceived writing lecture notes as being very important to the students. However, none of the Engineering instructors had the perception that writing memos was important.

4.5 Course design

This section presents the results of the students’ and TPS instructors’ opinions on the TPS module in terms of selection of teaching and learning materials, handouts and notes, the importance of teaching aids, the types of assessments and grading, the number of students for TPS activities and tasks, as well as the types of classroom
activities that should be carried out. Detailed discussions of the results are presented in the following sub-sections.

4.5.1 Perception of Teaching and Learning Materials

This part presents the analyses of the students' and TPS instructors' perception of whether the teaching and learning materials should be related to Engineering subjects, English literary works, the students' daily experiences, social activities, current interests and general topics. Generally, more than 75.0% of the students agreed completely with all the above statements, while a high percentage of the TPS instructors (87.5%) agreed that the teaching and learning materials should be related to all the items listed except for English literary works.

As can be seen from Figure 4.13, a very high percentage of the students (85.0%), agreed completely that the teaching and learning materials used in the TPS modules should be related to Engineering subjects. A majority of them (82.5%) believed that the teaching and learning materials should be related to their daily experience. 80.0% of the students also felt that the teaching and learning materials should be related to their social activities. 78.8% of the students completely agreed that the teaching and learning materials should be related to current interests and general topics. 75.0% of them also perceived that the teaching and learning materials should be related to English literary works.
All the TPS instructors believed that the teaching and learning materials for the TPS modules should be related to students' daily experiences and students' social activities. A very high percentage of them (87.5%), also agreed completely that the teaching and learning materials for TPS should be related to Engineering subjects, as well as current interests and general topics. However, only half of the instructors (50.0%) perceived that the teaching and learning materials should be related to English literary works.
4.5.2 Perception of Handouts and Notes

The analyses of the students' and TPS instructors' perception of whether the current handouts and notes should be taken directly from the original source, modified to suit the learners' level of proficiency, produced by English instructors or by the students themselves, and related to Malaysian or foreign context and culture, are presented in this section. In general, a very high percentage of the students (80.0%) agreed that the handouts and notes should be modified to suit the learners' level of proficiency and produced by the language instructors. A very high percentage of the TPS instructors (87.5%) agreed that the handouts and notes should be modified to suit the learners' level of proficiency and related to foreign context and culture. A detailed analysis of the students' and TPS instructors' perception of handouts and notes is presented in Figures 4.14 and 4.14 (a).
Figure 4.14
Perception of Handouts and Notes

Figure 4.14 (a)
Perception of Handouts and Notes
As can be seen in Figures 4.14 and 4.14 (a), a high percentage of the students (87.5%) agreed completely that the handouts and notes used should be modified to suit the learners’ level of proficiency. 80.0% of the students also perceived that the handouts and notes used in the course should be produced and prepared by the English instructors themselves. Slightly more than half of them (52.5%) agreed that the handouts and notes should be taken directly from the original source like magazines, journals or websites. Only half of the students (50.0%) agreed completely that handouts and notes should be related to foreign context and culture, while 47.5% of them felt that the handouts and notes should be related to Malaysian context and culture. As for the statement on whether the handouts and notes should be produced by the students themselves, only 40.0% completely agreed.

The results show that all the TPS instructors agreed completely that the handouts and notes used for the TPS modules should be modified to suit the learners’ level of proficiency. A high percentage of TPS instructors (87.5%) also agreed completely that the handouts and notes should be related to foreign context and culture. Slightly more than half of the TPS instructors (62.5%) agreed completely with the statement that the TPS handouts should be related to Malaysian context and culture. Half of the TPS instructors (50.0%) agreed completely that they should produce the materials themselves. However, less than half of the TPS instructors (37.5%) agreed completely that the handouts and notes should be taken directly from the original source like magazines, journals or websites. A very low percentage of only 12.5% of the TPS instructors agreed completely that the students should produce the handouts and notes.
4.5.3 Perception of the Use of Teaching Aids

The teaching aids selected to be analyzed here are radio and cassettes; television, compact disc and compact disc player; computers with compact disc and software; slides; overhead projectors; as well as newspapers and magazines. Generally, more than half of the students (65.0%) perceived all the teaching aids listed above as being of importance to them. A high percentage of the TPS instructors (75.0%) perceived all the teaching aids listed above as being of importance to the students.

Figure 4.15
Perception of Teaching Aids
From Figures 4.15 and 4.15 (a), the results show that a high percentage of the students (88.7%) perceived that it is 'important' (56.2%) and 'very important' (36.2%) to have computers with compact discs and software as teaching aids. This is followed by television and compact disc with 85.0% ranking them as 'important' (42.5%) and 'very important' (42.5%), and slides with 85.0% of the students perceiving it as 'important' (62.5%) and 'very important' (22.5%). More than three-quarter of the students (77.5%) felt that it is important to use newspapers and magazines as teaching aids, with 47.5% perceiving it as 'important' and 30.0% perceiving it as very important. 73.7% of the students perceived radio and cassettes as being important teaching aids, with 46.2% ranking them as 'important' and 27.5%, 'very important'. More than half of the students (65.0%) perceived that it is important to use overhead
projectors as teaching aids, with 40.0% perceiving them as 'important' and 25.0%, 'very important'.

All of the TPS instructors perceived radio and cassettes as being important teaching aids, with 87.5% ranking them as 'important' and 12.5%, 'very important'. All the TPS instructors also perceived television and compact disc, as well as computers with compact discs and software, as being of importance, with 75.0% ranking them as 'important', and 25.0%, 'very important'. A high percentage of the TPS instructors (87.5%) felt that it is important to use slides (75.0% important, 12.5% very important) as well as newspapers and magazines (62.5% important, 25.0% very important) as teaching aids. Three-quarter of the TPS instructors (75.0%) perceived that it is important to use overhead projectors as teaching aids, with 62.5% perceiving them as 'important' and 12.5%, 'very important'.

4.5.4 Perception of Assessments

The assessments that the students and TPS instructors prefer to be carried out in the TPS modules are analyzed in terms of classroom tests, individual project work, project work done in pairs, project work done in small groups, case studies, individual presentations, group presentations, listening tests, and a final examination. In general, more than 60.0% of the students completely agreed to have all the stated assessments in the TPS modules except for having final examination, in which only 46.25% of the students agreed to this. A high percentage of the TPS instructors (75.0%) completely agreed to have all the above stated assessments in the TPS module except for having
case studies and listening tests. A detailed analysis of each assessment is presented in Figures 4.16 and 4.16 (a).

Figures 4.16 and 4.16 (a) show that a very high percentage of the students (92.5%) strongly believed that group presentations should be part of the TPS assessment. A majority of the students also completely agreed that project work in pairs and in groups (87.5%), listening tests (85.0%), individual presentations (81.2%), case studies (76.2%) and individual project work (73.3%) should be part of the TPS assessments. Slightly more than half of the students (61.2%) agreed completely that classroom tests or short quizzes should be included in the TPS assessment. However, only less than half of the students (46.25%) agreed completely to have the final examination as part of their course evaluation.

All the TPS instructors completely agreed that classroom tests or short quizzes and individual project work should be included in the TPS assessment. A majority of the instructors (87.5%) completely agreed that project work in pairs and in groups, as well as individual presentations should be carried out as part of the TPS assessment. Three-quarter of the TPS instructors (75.0%) agreed completely to the inclusion of group presentations and the final examination. Slightly more than half of the TPS instructors (62.5%) agreed completely for a listening test. However, only half of the TPS instructors (50.0%) agreed completely that case studies should be part of the TPS assessment.
Figure 4.16
Perception of Assessments

Figure 4.16 (a)
Perception of Assessments
4.5.5 Perception of the Types of Grading for the TPS Modules

Figure 4.17 presents the analysis of students' and TPS instructors' preferred type of grading.

Slightly more than half of the students (51.2%) agreed that the assessments should be based on marks/percentage, as compared to less than half (41.3%) who were in favour of a grading criteria. This is interesting to note because currently all the assessments in BMI are based on a grading criteria, where no marks or percentages are given for assessments. 62.5% of the TPS instructors are in favour of using marks as compared to a grading criteria.

Figure 4.17
Perception of the Types of Grading for the TPS Modules
4.5.6 Perception of the Number of Students for Activities and Tasks

This sub-section analyzes the students' and TPS instructors' perception of the activities and tasks that should be carried out in the TPS modules either individually, in pairs, in small groups of 3-4 persons, in a large group of more than 4 persons, or as a whole class. Generally, more than half of the students and TPS instructors completely agreed that individual, pair and small group activities and tasks should be carried out.

Figure 4.18
Perception of the Number of Students for Activities and Tasks

As can be seen in Figure 4.18, a majority of the students (73.7%) strongly felt that the activities and tasks should be carried out in small groups of 3 to 4 persons. This is followed by 72.5% of them who believed that the activities and tasks should be
carried out in pairs. Slightly more than half of the students (55.0%) agreed completely that activities and tasks should be carried out individually. Less than half of them (42.5%) agreed completely that these should be carried out in large groups of more than 4 persons. However, only a low percentage of the students (30.0%) completely agreed that activities be conducted as a whole class.

A majority of the TPS instructors (87.5%) strongly felt that the activities and tasks should be carried out in small groups of 3 to 4 persons. More than half of them (62.5%) believed that these activities and tasks should be carried out in pairs. Half of them (50.0%) agreed completely that they should be carried out individually. Less than half of them (37.5%) agreed completely that the activities and tasks be carried out in large groups of more than 4 persons. However, none of the TPS instructors agreed completely that the activities and tasks should be carried out as a whole class.

4.5.7 Perception of the Types of Classroom Activities

In order to find out the students' and TPS instructors' perceptions of the preferred types of classroom activities in the TPS modules, the following types of classroom activities are analyzed: lectures, public speaking, grammar exercises, dramas/role-plays, audio-visual activities such as listening to cassettes or watching videos, problem-solving tasks, projects and assignments, language games, and field trips. In general, more than half of the students (63.7%) agreed completely that all the classroom activities stated above should be carried out. A high percentage of the TPS instructors (87.5%) also agreed to this except for lectures where only 50.0% agreed.
As can be seen from Figures 4.19 and 4.19 (a), a high majority of the students (87.5%) completely agreed to have grammar exercises as classroom activities. A high percentage of them (82.5%) also agreed completely that language games should be included as classroom activities. This is followed by a high percentage of them (80.0%) who agreed completely to include audio-visual activities such as listening to cassettes and watching videos as part of classroom activities. A majority of them (77.5%) completely agreed that projects and assignments should also be carried out while 76.2% of them completely agreed to have public speaking and field trips. Slightly more than half of them agreed completely that problem-solving tasks (67.5%), dramas and role-plays (65.0%), as well as lectures (63.7%) should be included as classroom activities.

All the TPS instructors agreed completely that grammar exercises, dramas and role-plays, projects and assignments, as well as language games should be carried out as classroom activities. A high percentage of them (87.5%) also completely agreed that public speaking, audio-visual activities such as listening to cassettes and watching videos, problem-solving tasks as well as field trips should also be carried out. However, only half of the TPS instructors (50.0%) agreed completely that lectures should be part of classroom activities.

4.6 Course Evaluation

This section presents the results based on the analysis of the students’ and TPS instructors’ evaluations of the present TPS course. The responses were elicited based on the followings – whether there have been enough opportunities to practise what
have been taught in class; whether the lessons, materials and assignments have been interesting; whether there has been much information gained from the module; whether the module has helped in understanding technical subjects; whether there has been sufficient emphasis given to students' weak areas; whether there has been any difficulty in understanding the lessons, and whether the number of contact hours per week has been sufficient. Figures 4.20 and 4.20 (a) show students' and TPS instructors' evaluation of the current course.

As is shown in Figures 4.20 and 4.20 (a), a high percentage of the respondents (82.5%), believed that they gained much information from the module, and that the 4 contact hours for the module per week was sufficient. This is followed by 78.7% of the respondents who perceived that they did not have difficulty understanding the content of the TPS module, even though everything was taught in English. A total of 76.2% of the students felt that there was sufficient emphasis given to areas which they were weak in. 71.2% of them agreed completely that the TPS module had been useful because it helped them understand the other technical subjects. As to whether there had been enough opportunities for students to practise what was taught in class, 68.7% of the students agreed completely with this. 67.5% of them completely agreed that the lessons as well as the assignments given to them had been interesting. In terms of materials, only slightly more than half of the students (58.8%) agreed completely that the materials used in the TPS module had been interesting.
Figure 4.20
Evaluation of Current Course

Figure 4.20 (a)
Evaluation of Current Course
Three-quarter of the TPS instructors (75.0%) agreed completely to the statement that the assignments given to students were interesting. Three-quarter of them (75.0%) also believed that the students gained much information from the module and that there was sufficient emphasis given to areas which the students were weak in. Slightly more than half of the TPS instructors (62.5%) felt that the module was useful because it helped students to understand other technical subjects. Half of them (50.0%) perceived that the materials in the TPS lessons were interesting for the students, that there were enough opportunities for students to practise what was taught in the class, and that the number of contact hours per week was sufficient. Only less than half of the TPS instructors (37.5%) agreed completely that the TPS lessons were interesting for the students, and that the students had no difficulty understanding the lessons, respectively.

4.7 Course Recommendation

In response to the question on course recommendation in the questionnaire, the students, TPS instructors and Engineering instructors wrote several responses. However, not all of them responded to this section. 46 students (57.5% of the total 80 respondents), 4 TPS instructors (50.0% of the total 8 respondents) and 6 Engineering instructors (60.0% of the total 10 respondents) gave their suggestions on how to improve the module.
In terms of course recommendation, 12 students (26.1%) recommended a lot of classroom activities "to make classes interesting". One student (2.2%) cited that there were "not enough activities and students' participation and there should be more exercises for students to master on what is taught to them". Besides having more exercises, one student (2.2%) suggested that in order to "make the module more interesting, it should be added with games, watching films or videos". Another suggestion from the students on the activities was to include "more outdoor activities during class sessions or make a trip to other places". Besides that, one student (2.2%) recommended having a "mass lecture", while the lessons in the classroom should be "for students to finish their exercises". Six students (13.0%) suggested the inclusion of more presentations in the module. In contrast, one student (2.2%) felt that the TPS modules should "limit activities like presentation" and instead have more discussions because "there are a lot of assignments in other modules". Five students (10.9%) recommended having more group work in class, but one student (2.2%) thought otherwise. His reason was that "in group, some people do their work but some other people do other work (and) become sleeping partner".

In terms of recommendation on course materials, three students (6.5%) stated that the TPS modules should have more interesting materials especially those related to "engineering subject and student social activities/ daily activities". Besides that, one student (2.2%) suggested decreasing the contact hours from four hours to just two hours per week. Another student (2.2%) recommended that the credit hour for TPS should be increased, as at present, it is only one credit hour per semester. As for teaching aids, two students (4.3%) recommended incorporating teaching or learning
software in the lessons with a lab session of at least 2 hours per week. In terms of grading, there was a suggestion that the “TPS subject should be graded like SPM or IELTS test and to give more essay like questions rather than giving drama/presentation assignments”. There were also recommendations made on the assessments of the TPS modules such as having assessments that were “non-similar to technical modules assignments”. Other recommendations included having more assessments “related to the real working lifestyle like meeting and presentation” and to have a different assignment topic every semester because when “the topic is still same, students just copy from the previous semester”. Finally, there was a suggestion to implement peer tutoring in which students who are proficient in the language assist those who are not as proficient.

General interesting comments were also gathered from 4 TPS instructors on how the TPS modules should be improved. Two of the TPS instructors (50.0%) recommended introducing an ‘Intensive English’ or ‘Foundation English’ course, prior to taking any ESP course, so that “students can have a better grasp of the language”. One of them (25.0%) further specified that “in the Foundation course, the students should be drilled in the language skills, particularly grammar”. Besides that, another TPS instructor (25.0%) suggested having “better facilities in language lab and also add more AV aid equipment which can be used to make classroom activities more interesting”. In order to have better facilities and to carry out more activities, one TPS instructor (25.0%) made a comment that there should be “support and participation from the management”. Two TPS instructors (50.0%) suggested that in order to arouse students’ interests, various activities should be carried out such as “public speaking,
debating competitions and etc.” and “activities where everybody can take part and answer questions spontaneously, such as general knowledge quizzes”. In terms of evaluation, one TPS instructor (25.0%) suggested that the TPS modules “should evaluate students capability and skills individually”. The rationale was to “give chance to each and every student to show their ability”.

The Engineering instructors were required to identify areas of English language that they felt the students should be taught or should master so that the students could graduate from the course successfully. Based on the analyses of the Engineering instructors’ responses, all the Engineering instructors indicated that the students should improve on the two productive skills- writing and speaking. Two of the Engineering instructors (33.3%) further indicated that in terms of writing, the students should be taught the relevant grammatical structures so that they can write “technical reports with minimum grammatical errors”. Another Engineering instructor (16.7%) stated that it was also important to help students improve their “ability to convey their ideas effectively in writing”. Two Engineering instructors (33.3%) also specified that the speaking skill was necessary for the students especially in presenting Engineering projects. Thus, it is important for students to be able to speak fluently in English. Another Engineering instructor (16.7%) felt that among the four skills, the speaking skill was the most important skill that should be stressed in the module. As for listening, no comment or suggestion was made by the Engineering instructors. One Engineering instructor (16.7%) perceived listening as the least important skill for the students. Similar to listening, no comment was made on reading except for one
Engineering instructor who felt (16.7%) that it was the second most important skill after speaking.

4.8 Findings from Interviews

To triangulate the findings from the questionnaires, interviews were also carried out with the respondents. A total of 10 students, 5 TPS instructors and 5 Engineering instructors participated in the interviews. The interviews revealed interesting findings as most students; TPS instructors and Engineering instructors had almost similar perceptions of the students' difficulties in the four language skills. In terms of speaking, almost all of the respondents – students, TPS instructors and Engineering instructors – felt that the students could speak quite fluently. However, they believed that the students lacked the confidence in making presentation, and lacked the ability to elaborate their points when presenting. Six of the students (60.0%) elaborated that their lack of confidence was due to the lack of practice speaking in English. Two students (20.0%) claimed that it was the “environment”, which made them reluctant or shy to speak in English because they were afraid that they would be teased or laughed at by their peers.

In terms of reading, all of the respondents felt the students did not have any problems in reading, as they were able to understand handouts, assignments and exam questions. Four of the TPS and Engineering instructors (80.0%) explained that even though students had difficulty understanding certain terms at times, the students were
asked to refer to a dictionary. One instructor said that all the students owned a dictionary - either monolingual English dictionaries or bilingual English-Malay.

Similarly, all the respondents interviewed seemed to be in agreement when they said that the listening skills did not pose any difficulty to the students. All the students said that they understood their instructors' explanation and instruction, and similarly, the instructors reported that their students had no difficulty following instructions.

As for the writing skills, all the respondents were in agreement when they reported that the main problem faced by students was to write grammatically correct sentences. However, according to the TPS and Engineering instructors, even though there were many grammatical errors in the students' writing, they were able to understand the main points conveyed. Half of the students (50.0%) and three Engineering instructors (60.0%) also pointed out that the students had difficulty using the correct technical and non-technical terms in writing. These terms include 'procedures', 'standard deviation', 'substandard', 'simultaneous', 'excited', 'define' and 'equilibrium'. Two students (20.0%) explained that they had difficulty choosing the appropriate words, when writing in English, as they would normally use direct translation from Malay to English when writing.
4.7 Conclusion

All the data obtained from the student questionnaire, TPS instructor questionnaire and Engineering instructor questionnaire have been analysed and presented in this chapter. The analysis shows that there are similarities and differences in views among the students, TPS instructors and Engineering instructors on the students' language ability, language needs, course design and in the evaluation of the current TPS course. Conclusions from the findings will be presented in the next chapter.