

CHAPTER 5

CONCLUSIONS AND SUGGESTIONS

This chapter presents two main parts, namely conclusions and suggestions from this research. Conclusions are derived from the findings and the discussion in this research. Suggestions, on the other hand, are provided with regard to the application and future studies.

5.1 Conclusions

From the data analysis of questionnaire and interview, this research can finally answer the focus of research questions in terms of the necessities of engineers, the lacks of engineering students' English proficiency, and their learning needs.

First, in the context of necessities of engineers, the results show that due to the advent of ASEAN Economic Community (AEC), English proficiency which is more accentuated to communication skill both oral and written, is compulsory for an engineering graduate to get a job, especially in a multinational company. This communication skill will be engaged in some professional engineering job, such as giving an oral presentation, face-to-face discussion, problem solving, reading and writing report. In addition, one of the significant content areas of engineering is engineering content in line with the development of technological modernization in their focus of study.

Second, in fact the engineering students were still lack of communication skill including speaking fluently and oral presentation. With this in mind, the students prioritized to improve oral presentation as the most important skill to succeed them in global job enterprise. The students already had a need to increase their range of English skills due to their different plans of career including studying abroad, working at multinational company, working at international company, working abroad, working at national company, and conducting an international research. It is astonishing however, the majority of the students were already good at reading, especially understanding main ideas and skimming for content and meaning. In the relation between the necessities for engineers and the

present condition of engineering students' proficiency, they seem not ready to face the global demand unless the improvement of the lack skill is increased.

Third, to pattern the route in reaching the necessities whom students lack, the analysis of learning needs attempts to overcome the problem. There are several pivotal points of learning needs based on students' perception as follows (1) the material should be in a good combination of these several kinds of material including course content (such as textbooks, instruction/manuals, CDs, DVDs, videotapes), job materials (such as work forms, charts, and samples of relevant course assignments and students' paper), and material from website (such as business letter, dialogues, instructions, telephone conversation related to work context). (2) The preferred-media used in learning English is the internet. (3) Learning English in a small group and in pair were suitably preferred. (4) Some suitable classroom activities related to engineering context include having a simulation related to engineering work context, problem solving, and giving an oral presentation. (5) The best time of English subject enrollment is in the 1st and 8th semester in which 1st semester focused on reading comprehension, in contrast 8th semester focused on written and oral presentation. (6) The students were flexible with the time decision of having an English class.

5.2 Suggestions

The results of data analysis and research conclusions lead to some suggestions as follows. A win-win solution for improving students' lack of English proficiency can be from internal and external factors. The internal factor means that the students' self-motivation of keeping update with the information about their future professional engineering world should be highly accentuated by the lecturers. In comparison, the external factor means the department should cooperate with particular companies and alumni already sitting in a company, especially in multinational company, to have sharing session in terms of target needs. The information obtained then should be given to the students. Another further effort is to evaluate the curriculum whether still match with the current target needs or not. In addition, to be balanced, the effectiveness and efficiency of learning should also be evaluated whether achieving the objective in the context

of target needs. With regard to further studies, it is highly suggested to find out the target needs from the real context by using the engineering workers as the participant of the research. Besides, instead of merely finding out the target needs, it is of grade urgency to look further into the ways of solving the gap between the necessities demanded by the company and students' lack of acquiring those necessities.