

## Chapter 5

### Conclusion, Discussion and Suggestion

The purposes of this research were: 1) to design an English for Agriculture course that integrates the Philosophy of Sufficiency Economy concepts with Content-Based Instruction; 2) to study the analytical thinking ability focusing on the Philosophy of Sufficiency Economy of Maejo University students; 3) to study the English proficiency of Maejo University students taking English for Agriculture course. The samples in this study were 38 students who registered in an English for Agriculture in the first semester of Academic Year 2016.

Research tools include: 1) 7 lesson plans integrating the concepts of the Philosophy of Sufficiency Economy with the course of English for Agriculture, totaling 30 hours; 2) The assessment test of understanding in the Philosophy of Sufficiency Economy; 3) an analytical thinking assessment test; 4) English reading and writing proficiency tests. Research tools were examined by experts in curriculum and instruction, English teaching, and the Philosophy of Sufficiency Economy, and were tried out with students enrolled in the English for Agriculture in the third semester of Academic Year 2015 before the implementation in the following semester.

Students were assessed for their understanding in the Philosophy of Sufficiency Economy, analytical thinking, and reading and writing proficiency before and after the implementation of the 7 lesson plans. In each lesson plan, analytical thinking, reading and writing proficiency were also assessed to monitor students' improvements. The basic statistics used for data analysis were mean, standard deviation and percentage.

#### 1. Conclusion

##### 1. Constructions and Effectiveness of the lesson plans and instruments

There were 7 lesson plans constructed in this study. The elements of each lesson plans were learning objectives, reading passage, reading and writing activities, learning material, and assessment. In each learning plan, English proficiency and analytical

thinking ability were assessed. Teaching activities in each lesson plan focused on reading comprehension, reading and writing activities based on the Philosophy of Sufficiency Economy and expected learners' outcomes of Maejo University.

After teaching all the lesson plans, the learners evaluated the instructional management and performance of the instructor through the university's assessment system. Comments and suggestions of the course were also collected and analyzed. The instructional management and performance of the instructor was at a Good level. Teachers had a good knowledge transfer, learning activities were diverse and appropriate. The activities encouraged learners' analytical thinking abilities. They could analyze data from various sources, resulting in systematic learning. In addition, the lecturers in the Agricultural for English course also observed and evaluated teaching. From the evaluation of the lesson plans and class observation, the instructional management and performance of the instructor and appropriateness of the lesson plans were at the Most Appropriate level. The methodology was appropriate and helped improve analytical thinking ability and English proficiency of learners as well.

## 2. Learners' Understanding in the Philosophy of Sufficiency Economy and Analytical Thinking Development

### 2.1 Understanding in the Philosophy of Sufficiency Economy

Students' understanding in the Philosophy of Sufficiency Economy developed from Good level to Excellent after the implementation of all the lesson plans. The understanding development was higher in all categories including the basic understanding of The Philosophy of Sufficiency Economy, the Philosophy of Sufficiency Economy and application in agriculture, and the implementation of the philosophy of sufficiency economy in everyday life.

### 2.2 Analytical Thinking Ability

From the evaluation of each lesson plan, the average of learners analytical thinking ability was at Fairly Good level. From the comparison of the pretest and posttest, the average of analytical thinking ability was developed from Need Improvement to Fairly Good.

### 3. Learners' English Proficiency Development

#### 3.1 Reading Proficiency

From the evaluation of each lesson plan, the average of learners' reading ability was at the Fairly Good level. From the comparison of the pretest and posttest, the average of reading proficiency was developed from Need Improvement to Fairly Good.

#### 3.2 Writing Proficiency

From the evaluation of each lesson plan, the average of learners' writing proficiency was at the Fair level. From the comparison of the pretest and posttest, the average of writing proficiency was developed from Need Improvement to Fairly Good.

## 2. Discussion

From the results of the study, there were several issues to be discussed as followed.

### 1. Integrating the Philosophy of Sufficiency Economy with the English for Agriculture course

In this study, researcher used situations and contents that learners familiar. The reason was to draw learners' interest, and teach learners searching information and solving problems. Another reason was to teach learners for sufficient living, living with balance of economics, socializing, environment, and culture. This was consistent with The Project to Promote Philosophy of Sufficiency Economy in Academic Institution (2007) that suggested to integrate the Philosophy of Sufficiency Economy with the curriculum. Several suggestions was given in developing curriculum and expected characteristics of learners. For example, there should be an integration of the Philosophy of Sufficiency Economy with curriculum of the institutions. Curriculum should be revised under the concepts of the philosophy. Learning management in institutes should follow learners' way of life, focusing on analytical thinking and authentic practice. This led to the proper practice in living as a part of family, community and country as a globalization. The assessments must cover the 3 dimension: skills, process, and expected learners' characteristics. The institute must

follow management under the Philosophy of Sufficiency Economy from evaluation of learners' outcomes and management process of the institute.

Integrating the Philosophy of Sufficiency Economy with English for Agriculture course could develop English proficiency and analytical thinking ability. Learners had satisfied participation in leaning activity and their understanding in the Philosophy of Sufficiency Economy was improved as the expected outcomes.

For sustainable development, follow up is necessary, The Project to Promote Philosophy of Sufficiency Economy in Academic Institution (2007) suggested that institutions must follow and evaluate their integration of the Philosophy of the Sufficiency Economy from learners' outcomes and process of the integration at the same time. Therefore, this study should follow outcomes of learners after learners finished their course and their graduation. The institutions must focus on the expected learners' outcome process and revise them when necessary.

## **2. Analytical Thinking Ability**

In this study, effectiveness of analytical thinking ability depended on understanding in the Philosophy of Sufficiency Economy. Learners had a Fairly Good level of analytical thinking ability because the reasons followed. Frist, the Philosophy of Sufficiency Economy Concepts was continuously announced through several channels and campaigns. Inside the university, the Philosophy of Sufficiency Economy was applied as the suggestion from The Project to Promote The Philosophy of Sufficiency Economy in Academic Institutions (2007). At present, there were 25 agricultural learning bases in Maejo University which focused on the New Theory Agriculture and The Philosophy of Sufficiency Economy. There were also some courses that applied the Philosophy of Sufficiency Economy in the core subject. These learning resources were available for learners to study as an elective course and as a compulsory in some faculties. Therefore, learner had acquired some background of the theory and could understand the theory concepts effectively when they studied English for Agriculture course.

After the implementation of the lesson plans, learners' understanding in The Philosophy of Sufficiency Economy developed to the Excellent level. One reason was the from the contents and reading passages. In Lesson 1 and Lesson 2, learners studied

the history of Thai agriculture and concepts of The Philosophy of Sufficiency Economy. Therefore, learners could relate previous experience with the new contents in English. From this reason, they could understand the lessons effectively. In the following lessons, the concepts of the philosophy would be revised in every lesson before the reading tasks and analytical thinking activities.

In English for Agriculture course, learners had to do analytical thinking activities based on the three pillars and two condition of The Philosophy of Sufficiency Economy. To promote analytical thinking, instructor provided samples and practiced learners in steps. Instructors used the prepared questions to promote analytical thinking. Learners' answers would be corrected and gave feedback for their improvement. The questions that promote analytical thinking would be 1) has no fixed answer 2) has various answers and explainable 3) should be open-ended question 4) should be in the interests of the learners in current situations. This was in accordance with Charoen Kumyung suggestions in using questions to promote learners' analytical thinking ability (Charoen Kumyung, 2010). From the learning activities provided, learners could develop their thinking ability to higher level. Higher thinking activities included of critical thinking, decision making, problem solving, creative thinking, and synthetic thinking. Lesson 2 was the first lesson that learner started analytical thinking activity. Therefore, learners had lower scores from the assessment. In the following lessons, lecturers kept revising the concepts of the philosophy and assisted learners in learning activities with appropriate atmosphere in learning. As a result, learners familiarized with the activity and had development in their thinking ability.

### **3. English Reading and Writing of Maejo University Students in English for Agriculture Course**

English reading proficiency of learners was developed from Need Improvement level to Fairly good level after the implementation of the lesson plans because of many reasons. First, Content-Based Instruction helped learners to connect prior knowledge with new knowledge, so that they could understand the contents better (Stoller, 1997). In this research, Content-Based Instruction promoted learners to use their background knowledge in agriculture to comprehend contents in English which were related. Researchers assigned learners to study vocabulary and structures which were from

reading passages, and practiced together in pre-reading activities. As a result, learners were familiar with the vocabulary and structure. They could understand the passages with less difficulty. In addition, in pre-reading activity learners were also stimulated to answer some guiding questions before their reading activity. These questions aroused learners to use their prior knowledge and prepared to read the passage which was directed from the guiding questions. During while-reading activity, researcher also provided sets of questions to help learners understand the main ideas and supporting details more effectively. In the lessons that learners had background knowledge, they could comprehend the passages and used the vocabulary and language patterns taught appropriately. On the other hand, in the lessons that learners did not have prior background, they would have some difficulties such as in Lesson 4 and Lesson 5. From this reason, preparation of reading passages based on learners' background and class activities was important and reflected achievement in learning.

Second, Grabe & Stoller (1997) mentioned that Content-Based Instruction stimulated learners to learn. Learners would explore contents which were complicated and challenging. This stimulation was from contents and challenging assignments. Cantoni Harvey (1987) mentioned that if learners knew the contents and the contents were in their interest, they would be interested in learning even though the contents were complicated and difficult to understand. To understand the contents, learner would find the way to read such as using dictionary, consulting friends, and instructors. In this study, the contents were from several resources and simplified for learners in English for Agriculture course. Language level would be in different levels to challenge learners in doing activities.

From the implementation of the lesson plans. Learners expressed their willingness to read and answer questions. Learners participated in group and helped each other in sharing opinions, analyzing the texts, identifying details and new vocabulary, and answering the questions. When the instructor reviewed the contents and vocabulary later, it was found that most learners could remember what had been taught previously. In addition, the learner also questioned the instructor about the contents they read with an ambition to learn more besides the learning lessons.

Third, one benefit of Content-Based Instruction was learner centered development. Learners are more likely to choose content and activities in terms of their interests (Grabe & Stoller, 1997). In this study, instructor implement activities focusing on learner center with variety of media and learning instruments. Authentic materials were implemented based on students' interests. The language level was adjusted appropriately for learners. Instructor observed while students are doing classroom activities in groups, in pairs and individually. The researcher gave only a little guidance, and the learners were able to complete the task assigned. In teaching reading, learners successfully finished a pre-reading activities. Learners helped each other in activities such as guessing vocabulary, guessing story, and sharing opinion before reading the passage. When the content was related to learners' background, it would be enthusiastic for learners to participate pre-reading activities such as answering questions and predicting contents as Short (1991) discussed the management of language teaching using Content-Based Instruction to focus on cooperative learning activities. Interaction between the instructor and the learners should be promoted. Participation of learners and enthusiasm in activities would help learners understand the content as well as the language perception. In addition, it also created a relaxed learning atmosphere and a good attitude to study. Therefore, the results of English proficiency were developed from Need Improvement level to Fairly Good after the implementation of the lesson plans. The result was in accordance with the study of Malee Devakul Na Ayudhy that CBI developed ability in reading and writing in satisfied level.

Writing proficiency of learners was developed from Need Improvement level to Fairly Good level after implementation of the lesson plans. The reason was from several factors. One factor was from the characteristics of Content-Based Instruction and learning activities that promoted learner centered and cooperative learning. Learners learned together, helped each other to work and solve problems in pairs or in groups. The instructor was the facilitator, giving help and guidance to the learners. Learner with different abilities helped each other in learning. Learners with less proficiency would be assisted from friends with higher writing skills. They also helped each other in proofreading the writing assignment given. Therefore, they had improvement in writing from the assistance mentioned.

Second, in write activities of each lesson plans, the instructor prepared the learner's readiness by reviewing vocabulary and language structure before the writing activity. Learners had the opportunity to study language patterns before they did writing activity. For example, in Lesson Plan 2, there was an assignment to write a paragraph giving comments and suggestions. The learners had studied the samples in the various forms of expression. The learners able to write their sentences from the sample given depending on their ability. At first, the instructor gave assistance by providing the necessary language patterns, and gave less assistance in the following lessons. It was evident that learners developed their writing proficiency in the following lessons.

However, in lesson plan 4, learners had writing effectiveness at a Need Improvement level while other lessons were at a Fair level. They reason was because activity in this unit was based on individual work to search information from other resources such as online resources and book. Therefore, learners had some language difficulty in gathering information and doing writing tasks because the information were from different sources with different difficulty. To manage this problem, instructors reorganized the activities in the following lessons.

### **3. Suggestions**

#### **Suggestion for curriculum developments and teaching and learning activities.**

1. To carry out analytical activities focusing on the Philosophy of Sufficiency Economy including 3 pillars; moderation, reasonableness and self-immunity, and 2 conditions; knowledge and virtue, learners must analyze and understand their contexts. Each person has different potential, knowledge, experience, aptitude, interest, and lifestyle. Therefore, the implementation of the Philosophy of Sufficiency Economy doesn't have single answer or format. The learners must choose the proper practice for themselves. For this reason, the instructor should develop understanding of individual differences with learners.



2. The understanding of the Philosophy of Sufficiency Economy should be developed by providing basic knowledge about the Philosophy of Sufficiency Economy. The initiation of the philosophy needed to be described along with the guidance for the analytical thinking activities. This is to bring the principles into concrete application and create understanding of the teaching and learning activities of the course objectives.

3. Teachers should have understanding in the Philosophy of Sufficiency Economy application and learning organization thoroughly. The concepts with appropriate examples for students must be provided to practice deep analytical skills. The Philosophy of Sufficiency Economy should be linked to everyday life.

4. To promote reading skills, teachers should realize that learner's previous knowledge could be transferred to the new content. For example, in English of Agriculture, if learners have prior knowledge in contents, it would be useful. Learners would be able to link their knowledge to English content, and would be able to understand the vocabulary, passages and contents more effective.

5. The instructor should prepare necessary language use for the learner. Vocabulary and language structure must be prepared. Especially, the language used for giving suggestion, opinion, description and giving reasons. Language preparation is necessary because it is related to learning achievement of learners. Providing language patterns is an important technique for helping learners to use the language efficiently and correctly. Instructors should provide a variety of language styles, and allow learners to express their ideas and use the language patterns in addition to the given sentence patterns.

6. Group activities based on cooperative learning model can help learners acquiring knowledge. Learners have the chance to share knowledge between friends. Students in each group must be properly arranged. Each group must have learners with different language proficiency in order to help each other in the mission. The ability in listening, speaking, reading and writing should be assessed before the implantation of the lesson plans. Learners should be informed the purposes of cooperative learning and grading criteria. It may take some time for learners to become familiar with the activity. Activities may be organized to dissolve behavior and to strengthen relationships in group activities.

7. Time spent on learning activities should be flexible because there are activities to be prepared before class. Self-study outside the classroom are assigned and it takes a lot of time. For this reason, the number of students in each group should be limited. It can affect the time spent learning and the concentration of students.

8. The instructor should examine himself/herself to ensure that the instructor follows the learning plans without any prejudice. And openness in ideas should be accepted because learners are different in their personality, reasoning, attitude and personal experience.

9. Using case studies or scenario helps encourage students to practice their analytical thinking ability and understand the differences of individuals that affect the behavior that may be similar or different to their situation.

10. There should be an evaluation and keep track of student characteristics after the course or graduation from the institute. The purpose is to follow learner development in every process.

#### **Suggestions for further studies**

1. There should be more study on the Philosophy of Sufficiency Economy concepts and analytical thinking ability. This study revealed that the Philosophy of Sufficiency Economy could be integrated in English for Agriculture course as they were related in contents and have been introduced to use in agricultural sectors before. In fact, the Philosophy of Sufficiency Economy could be applied to other courses such as in business management and tourism industry which also require high analytical thinking ability.

2. Appropriate class activities such as brainstorming and analyzing situations would promote learners for expression and using prior experience for analytical thinking.