Readiness in English Speaking Skills of Engineering Students at Rajamangala University of Technology Srivijaya before Entering the ASEAN Community

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> The European Conference on Language Learning 2016 Official Conference Proceedings

Abstract

The main purposes of this study was to investigate engineering students' readiness in speaking skills concerning three aspects: 1. fundamental grammar knowledge, 2. patterns and functions of language for communicating in certain situations, and 3. socio-culture of native speakers before entering the ASEAN Community. Participants were 142 fourth year Engineering students studying in eight departments of the Faculty of Engineering in. The instrument was a 60-item multiple choices test of three aspects. Data was analyzed for mean, minimum, maximum, standard deviation, percentage, t- test, F-test (One-Way ANOVA) and Multiple Comparison. The results indicated that 1. The total minimum and maximum scores of 142 engineering students are 10 and 41 respectively. While the overall mean scores is 23.57 which is equivalent to 39.29 % and the readiness for ASEAN Community is at the poor level (31% - 40%). 2Among eight departments in the Faculty of Engineering, the students from Computer Engineering Department got the highest minimum and maximum scores with 25 and 41 scores respectively. Computer Engineering students got the highest readiness level with the mean of 32.31 (53.85%), however, the level is at the moderate level(51% - 60%). 3. There is no statistically significant difference in the achievement in doing the test about the readiness of English speaking between male and female students. 4. There is a statistically significant difference of means of the achievement in doing the test among the eight departments in the Faculty of Engineering at the .05 level, but there is no significant difference between each other among seven departments, except Computer Engineering Department.

Keywords: Readiness, English speaking skills, Engineering students, the Asean Community

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Introduction

Nowadays, the world is a global community where people communicate with each other through a common language, which has been recognized as English, a universal language in the international community. In four skills in English, namely, listening, speaking, reading and writing, students have to be taught in order to use English effectively in their daily lives. In the viewpoints of English teachers, among these skills, speaking is the most important one, since the students often think that the ability to speak a language is the product of language learning.

The researchers who have been teaching speaking skills for degree students at Rajamangala University of Technology Srivijaya for many years are interested in evaluating the knowledge of speaking skills of engineering students for the purpose that the results will be used for finding the appropriate strategies for developing speaking skills and for preparing the readiness of students for the incoming of the ASEAN Community in the near future.

Purposes of the Study

The main purposes of this study were:

1. To investigate engineering students' readiness in speaking skills concerning fundamental grammar knowledge.

2. To investigate engineering students' readiness in speaking skills concerning patterns

and functions of language for communicating in certain situations.

3. To investigate engineering students' readiness in speaking skills concerning socio-culture of native speakers.

Research Questions

The research was designed to answer the following research questions:

1. Which level of readiness in English speaking skills do the engineering students have in the knowledge concerning fundamental grammar, patterns and functions of language for communicating in certain situations, and socio-culture of native speakers?

2. Which department of eight departments in the Faculty of Engineering has the most readiness in English speaking before entering into the ASEAN Community?

Scope and Limitation of the Study

This study focuses only on the readiness of knowledge essential for speaking skills, not paying attention to oral speaking competence of engineering students.

Research Framework

Independent variables are Engineering Students (gender, department, faculty) and dependent variables are readiness in speaking skills in terms of fundamental grammar knowledge; patterns and functions of language for communicating in certain situations and socio-culture of native speakers.

Significance of the Study

The benefits of the results of this study are as follows:

1. The results identifying the level of readiness of engineering students should be beneficial to English instructors in order to find the best resolutions or techniques to improve speaking skills.

2. After students know their levels of readiness in speaking English, they will be able to prepare themselves in mastering knowledge of English in order to work in the future when Thailand enters the ASEAN Community in year 2015.

3. The results will increase students' awareness of the importance of English, especially speaking skills which will be used for major communication among the ASEAN Community.

Definition of Terms

The key terms used in this study are defined as follows:

1. Readiness in English speaking means scores obtained from doing a test, constructed by the researchers and analyzed for levels of readiness.

2. Fundamental knowledge in English speaking means knowledge on how to make questions in English and how to use tenses.

3. Patterns and functions of language for communicating in certain situations means English in greeting, introduction, parting, apologizing, thanking, requesting and offering, inviting, giving direction, asking for prices, bargaining, ordering food, telephoning, making an appointment, giving opinions and suggestions.

4. Engineering students means 142 fourth year students studying in the second semester of academic year 2011 from the Faculty of Engineering in Departments of Mechanical Engineering, Electrical Engineering, Computer Engineering, Surveying Engineering, Civil Engineering, Electronics Engineering, Industrial Engineering, and Garment Engineering at Rajamangala University of Technology Srivijaya, Songkhla.

Literature Review

The following review will discuss the concept of readiness, the concept of speaking skills, the ASEAN Community and the concept of cultures.

Concept of Readiness

There are many definitions of readiness; it refers to a certain range of information that has -perhaps momentarily--become more accessible (Gerrig & McKoon 1998); Ackerman and Barnett (2005) stated that readiness is influenced by various environmental factors but can be enhanced through effective education; Hersey and Blanchard (1993) mentioned that readiness means ability and willingness in working, doing activities or whatever in order to achieve a goal.

Moreover, Meisels (1998) indicated that readiness can be derived from the goals contained within the potential for encouraging policies harmful to children. Readiness has often been defined as a child's skills, behaviour, or attributes in relation to the expectations of individual classrooms or schools (Ackerman and Barnett, 2005). In terms of education, it refers to a child who is ready to learn something and will not learn unless he/she is taught it or unless the conditions are propitious for a child to learn it on his or her own (Meisels, 1998).

Consequently, readiness is the process of development in skills, behaviour and ability to be able to do activities or tasks for his/her destination.

Concept of Speaking Skills

The population of English language learners in schools has increased. In Thailand, English has been widely accepted as an international language and thus the Thai government has demonstrated the urgent socio-political, commercial and educational needs for Thai people to be able to communicate in English (Wongsothorn, 1999 cited in Noytim, 2006).

In addition, English in Thailand has been influenced by the world of cyber or internet, as the great majority of documents available on the Internet are in English. It reflects contexts, cultures, and materials. Moreover, English is also in high demand in the tourism industry which is a key income of the Thai economy (Warschauer, 2001 cited in Noytim 2006).

In terms of speaking, it is one of four skills which are crucial in learning English, this skill is always used in daily lives. Speaking is an interactive process of constructing, it means to involve production and receiving and processing information (Florez, 1999 cited in Brown, 1994; Burns & Joyce, 1997). Moreover, Florez (1999) stated that its form and meaning are dependent on the context in which it occurs, including the participants themselves, their collective experiences, the physical environment, and the purposes of speaking. It is often spontaneous, open-ended, and evolving.

According to, Olivares' theoretical framework, Moreira (2006) mentioned that spoken language and thought are not always directly correlated, and that abstract concepts, which are not language dependent, can be transferred from the native language (L1) to the target language (L2) without specific labels. That is, for a second-language learner not every word-to-word translation and this is particularly true at the beginning of new language learning. This approach to language learning thus infers that English language learners (ELLs) use their previous knowledge to negotiate information acquired in L2. In terms of negotiation meaning, according to experiences, ELLs acquire L2 from the native speakers by using negotiation meaning; for instance, a learner attempts to speak English to the native speaker

by using his/her previous knowledge. The native speaker, then, will revise the structure of sentences, which is constructed by ELLs, in making a conversation. Eventually, ELLs can gain this knowledge from the native speakers.

Moreover, Tasee (2009) also indicated the Bygate's theoretical framework towards speaking skills that speaking is a skill which deserves cautious attention as much as literacy skills in both first and second language. It is the vehicle par excellence of social solidarity, social ranking, professional advancement and business and also a medium through which much language is learnt, which for many is conducive for learning. Further, Bygate states that 'knowledge' and 'skill' are necessary factors for learners in learning to speak. Both can be understood and memorized but only 'skill' can be imitated and practiced. To be a successful speaker, 'knowledge' and 'skill' should go together. In terms of skill, two basic ways in which something can be seen as a skill involve motor-perspective skills and interaction skills. The former deal with perceiving, recalling, and articulating in the correct order sounds and structures of the language, while the latter involves making decisions about communication, such as what to say, how to say it, or the ability to use language in order to satisfy particular There are at least two demands which can affect the nature of speech, i.e. demands. processing conditions and reciprocity conditions. The former refers to internal conditions of speech or the fact that speech takes place under the pressure of time, while the latter refers to the dimension of interpersonal interaction in conversation.

Furthermore, from the communicative point of view, speaking has many different aspects including two major categories – accuracy, involving the correct use of vocabulary, grammar and pronunciation practiced through controlled and guided activities; and, fluency, considered to be 'the ability to keep going when speaking spontaneously' (Vilimec, 2006). Vilimec had mentioned two theories of speaking: Bygate's theory and Harmer's theory. According to Bygate's theory, in order to achieve a communicative goal through speaking, there are two aspects to be considered – knowledge of the language, and skill in using this knowledge. It is not enough to possess a certain amount of knowledge, but a speaker of the language should be able to use this knowledge in different situations. He views the skills as comprising of two components: production skills and interaction skills, both of which can be affected by two conditions: firstly, processing conditions, taking into consideration the fact that 'a speech takes place under the pressure of time'; secondly, reciprocity connected with a mutual relationship between the interlocutors.

Production skills in certain ways limit or modify the oral production; it means the use of production skills. For that reason, speakers are forced to use devices which help them make the oral production possible or easier through 'facilitation', or enable them to change words they use in order to avoid or replace the difficult ones by means of 'compensation', Bygate says (Vilimec, 2006).

In terms of interaction skills, both speakers and listeners, besides being good at processing spoken words should be 'good communicators', which means 'good at saying what they want to say in a way which the listener finds understandable'. This means being able to possess interaction skills. Interaction skills involve routines and negotiation skills. Routines present the typical patterns of conversation including interaction and information routines. Negotiation skills serve as a means for enabling the speaker and listener to make themselves

clearly understood. This is achieved by two aspects: management of interaction and turn-taking (Vilimec, 2006).

The other theory is derived from Harmer, he distinguishers between two aspects – knowledge of 'language features', and the ability to process information on the spot, it means 'mental/social processing': from Harmer's point of view the ability to wage oral communication, it is necessary that the participant possess knowledge of language features, and the ability to process information and language on the spot. Language features involve four areas – connected speech, expressive devices, lexis and grammar, and negotiation language. Supposing the speaker possesses these language features, processing skill, 'mental/social processing', will help him/her to achieve successful communication goal. Processing skills include features – language processing, interacting with others, and on-the-spot information processing (Vilimec, 2006).

Teaching Speaking

Many language learners regard speaking ability as the measure of knowing a language. They define fluency as the ability to converse with others, much more than the ability to read, write, or comprehend oral language. Language learners need to recognize that speaking involves three areas of knowledge:

1. Mechanics (pronunciation, grammar, and vocabulary): Using the right words in the right order with the correct pronunciation.

2. Functions (transaction and interaction): Knowing when clarity/information exchange and when precise understanding is not required (interaction/relationship building).

3. Social and cultural rules and norms (turn-taking, rate of speech, length of pauses between speakers, relative role of participants): Understanding how to take into account who is speaking to whom, in what circumstances, about what, and for what reason.

In the communicative model of language teaching, instructors help their students develop this body of knowledge by providing authentic practice that prepares students for real-life communication situations. They help their students develop the ability to produce grammatically correct, logically connected sentences that are appropriate to specific contexts, and to do so using acceptable pronunciation. (http://www.nclrc.org/essentials/speaking/spindex.htm)

Strategies for Developing Speaking Skills

Effective instructors teach students speaking strategies:

1. Using minimal responses

One way to encourage language learners who lack confidence in their ability to participate successfully in oral interaction is to build up a stock of minimal responses that they can use in different types of exchanges since minimal responses are predictable, often idiomatic phrases that conversation participants use to indicate understanding, agreement, doubt, and other responses to what another speaker is saying. Having a stock of such responses enables a learner to focus on what the other participant is saying, without having to simultaneously plan a response.

2. Recognizing scripts

Some communication situations are associated with a predictable set of spoken exchanges—a scrip. Greeting, apologies, compliments, invitations and other functions that are influenced by social and cultural norms often follow pattern of script. Through interactive activities, instructors can give students practice in managing and varying the language that different scripts contain.

3. Using language to talk about language

Instructors can give students strategies and phrases to use for clarification and comprehension check. By encouraging students to use clarification phrases in class when misunderstanding occurs, and by responding positively when they do, instructors can create an authentic practice environment within the classroom itself. As they develop control of various clarification strategies, students will gain confidence in their ability to manage the various communication situations that they may encounter outside the classroom. (http://www.nclrc.org/essentials/speaking/stratspeak.htm)

ASEAN Community:

Thai and ASEAN Community

The 10-member Association of South East Asian Nations (ASEAN) aims to create an ASEAN Economic Community (AEC) by 2020. The AEC would have a combined population of over 575 million and total trade exceeding US\$ 1,400 billion.

ASEAN Economic Community

The ASEAN Vision 2020 aims to create a stable, prosperous and highly competitive ASEAN economic region, in which there is a free flow of goods, services, investment and capital, equitable economic development and reduced poverty and socio-economic disparities by 2020.

Free Trade Area

Underpinning the AEC is the ASEAN Free Trade Area (AFTA), a preferential tariff scheme to promote the free flow of goods within ASEAN that are manufactured locally within any ASEAN country.

Comprehensive Investment Area

The ASEAN Comprehensive Investment Area (ACIA) will encourage the free flow of investment within ASEAN. Its main principles are:

• All industries are to be opened up for investment, with exclusions to be phased

out according to schedules

- National treatment is granted immediately to ASEAN investors with few exclusions
- Elimination of investment impediments
- Streamlining of investment process and procedures
- Enhancing transparency
- Undertaking investment facilitation measures

Full realization of the ACIA with the removal of temporary exclusion lists in manufacturing, agriculture, fisheries, forestry and mining is scheduled by 2010 for most ASEAN members and by 2015 for Cambodia, Lao PDR, Myanmar and Vietnam.

Trade in Services

ASEAN members are negotiating intra-regional services liberalization in several sectors, including air transport, business services, construction, financial services, maritime transport, telecommunications and tourism.

Single Aviation Market

The ASEAN Single Aviation Market (SAM) will introduce an open-sky arrangement to the region by 2015. The ASEAN SAM will be expected to fully liberalize air travel between its member states, allowing ASEAN to benefit from the growth in air travel around the world, and encouraging tourism, trade, investment and services flowing between member states.

Free Trade Agreements with Other Countries

ASEAN has concluded free trade agreements with China, Korea, and Japan, and is negotiating FTAs with India, Australia/New Zealand, and the European Union. Taiwan has also expressed interest in an agreement with ASEAN but needs to overcome diplomatic objections from China.

ASEAN Socio-cultural Community

The ASEAN Socio - Cultural Community envisages Southeast Asia bonded together in partnership as a strong community of caring societies and aimed at the vigorous development of regional identity and the preservation of the region's cultural heritage. Current cultural activities include S.E.A. Write Award, Association of Southeast Asian Institutions of Higher Learning, Heritage Parks, Scholarship and University Network. To prepare each country's work force for economic integration, ASEAN will encourage investment in education, training, science and technology development, job creation, and social protection. ASEAN will also seek increased cooperation in public health, especially the prevention and control of infectious and communicable diseases.

English for ASEAN

English is the official language for the Association of South East Asian Nations (ASEAN) and for that reason, the 600 million plus people across South East Asia will have to learn to communicate in English sooner or later. But probably not longer than 2015, because the association has planned to become the ASEAN Community, like the European Community. (http://englishforasean.bloqspot.com/)

Thailand and Preparation for ASEAN Community

The Education Minister, delivered a lecture in relation to Thailand's Educational Preparation for ASEAN Community in 2015. The event which was held by the Education Commission of the Senate Members took place on the 11th of November, 2010 in reception rooms 1-2 of the Parliament Building. The Minister reported that Thailand was one of the main founders of ASEAN. As a core leader in the ASEAN Community, Thailand is aiming at the prosperity of its people through developing resources and economy building under the strategic vision of, "One Vision, One Identity and One Community". The ASEAN Community consists of three pillars, they are: ASEAN Economic Community, ASEAN Political and Security Pillar and ASEAN Socio - Cultural Pillar. Education comes under the ASEAN Socio - Cultural Pillar, the aim of which is to enhance the growth of every community, as this is seen as being the development foundation.

The main purpose of the Ministry of Education on educational readiness preparation is as follows:

1. To build an ASEAN Community through education: Thailand will be an Education Hub with crucial concepts which focus on equipping Thai people with the essential awareness of being part of the ASEAN Community, through having the capacity to be able to live harmoniously in a multi-society, also in showing the ability to establish educational cooperation in the region. The latter will emphasize educational quality development, educational opportunity expansion and participatory enhancement on educational services and educational management.

2. To reinforce ASEAN Community building through education: This process will be highlighted through the understanding of inculcation regarding ASEAN neighboring countries, ethnic differences, human rights principles. Moreover, a high emphasis will also be given to teaching foreign languages. This is in order to develop efficient communication amongst ASEAN citizens. The Ministry will also allow English teachers to integrate the English language at every level. The aim is to encourage Thai students to communicate creatively. In addition, the private sector will assist in the support of volunteer teachers to teach foreign languages. In addition foreign language volunteers should also teach cultural awareness in order for all to reach better understanding.

With regards to ICT for education, development of this will be through 3 Ns principles, namely the Ned Net- National Education Networks, the NEIS- National Education Information System –A Center for gathering, collecting and linking educational information and data, and NLC – National Learning Center for life-long learning. The significant

objectives embedded are to develop Thai students to become good ASEAN citizens. To develop Thai citizens who can live together with all other citizens of ASEAN in harmony, in a happy, caring and sharing atmosphere. Furthermore, students who graduate from vocational and technical colleges will be ready to enter the workplace as efficient staff members who are coupled with sufficient abilities to work in multicultural societies.

Finally, the Ministry of Education will set out to promote Thailand as being an education center of ASEAN in the areas of religion and culture. This policy will be implemented under the 6 months - 6 qualities strategy. This is in order to continually develop Thailand's move forward to both ASEAN and International Communities. (http://www.en.moe.go.th/index.php?option=com_content&view=article&id=473:4-m...)

Concept of Cultural Aspects

According to the Department of Academic Affairs (2001), research on cultural contents for teachers and the problem in study and teaching English. The research was from 300 schools in Thailand, both primary and secondary, including large and medium sized schools, by analyzing cultural content in English textbooks assigned by the Ministry of Education. The main points in English speaking skills are about conversational routines that include introductions, greetings and farewell, invitation, answering and refusing, thanking, saying congratulations and regretting, apologizing and forgiving, requesting and offering. The other important aspects for studying English are about customs, living, attitude and values in the areas of religion, worship and belief, job application, working and occupation, social values, participating is social events, tables manners, tradition and celebration.

In addition Peterson and Coltrane (2003) supported that understanding the cultural context of day-to-day conversational conventions such as greeting, farewells, forms of address, thanking, making requests, and giving or receiving compliments, implies more than just being able to produce grammatical sentences. It means that in conversation, knowing what is appropriate to say to whom, and in what situations is a very essential skills.

Consequently, understanding the cultures, beliefs and values represented by the various forms and usages of the target language, English, will certainly make the communication much more appropriate and more effective.

According to the importance of English speaking skills, awareness of cultural aspects and the incoming of the ASEAN Community in year 2015, when Thailand becomes a part of the ASEAN Community and when the English language will be very important for communication, the researchers, as English teachers at the University of Technology Srivijaya, Songkhla realize that the students, especially engineering students who will graduate to work and to be a member of this community should be ready to enter the workplace as efficient staff members who are coupled with sufficient abilities to work in multicultural societies.

Research Methodology

Participants

There were a total of 142 participants including 4th year engineering students selected by purposive sampling from the Faculty of Engineering including Mechanical Engineering, Electrical Engineering, Computer Engineering, Surveying Engineering, Civil Engineering, Electronics Engineering, Industrial Engineering and Garment Engineering.

Instrument

The instrument for this study was a 60 item test of multiple choices constructed by the researchers and approved by 3 specialists. The test was divided into 3 parts:

- 1. 20 item test of essential knowledge for English speaking
- 2. 20 item test of patterns and functional English used in speaking
- 3. 20 item test of socio-cultural aspects

Procedure

The study was done by in the following stages:

1. Study and review related literature and research about the readiness in speaking English and ASEAN Community.

2. Select subjects of this research using purposive sampling.

3. Construct the test which consisted of three parts according to the objectives of the research: Part 1 - essential knowledge for English speaking; Part 2 - patterns and functional English used in speaking; and Part 3 - Socio-cultural aspects. Overall the test comprised of 60 items, 20 items for each part. The test was approved and edited by three specialists including a native speaker.

4. Apply the test to the samples.

5. Analyze the data for mean, minimum, maximum, standard deviation,

percentage, t- test, F-test (One-Way ANOVA) and Multiple Comparison.

- 6. Write a draft research report and submit to the Faculty of Liberal Arts.
- 7. Improve the research report according to the suggestions of the experts.

8. Write a complete research and submit to the University.

Data Collection

This study was conducted during the second semester of academic year 2011. The subjects were allowed to do the test within 1.30 hours.

Data Analysis

Data was analyzed to show mean, minimum, maximum, standard deviation, percentage, t-test, F-test (One-Way ANOVA) and Multiple Comparison.

Criteria for interpreting the readiness in speaking skills.

Oller's criteria (Oller, 1983) was used to evaluate as follows:

More than 80%	=	very good
71% - 80%	=	good
61% - 70%	=	fairly good
51% - 60%	=	moderate
41% - 50%	=	fairly poor
31% - 40%	=	poor
Lower than 30%	=	very poor

Data Analysis and Findings

The findings of the study about the readiness of Engineering students in the Faculty Engineering at Rajamangala University of Technology Srivijaya, Songkhla before entering the ASEAN Community are shown in the following tables.

Table 1	General	data o	of part	icipants
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Department	Frequencies	Percent
Garment Engineering	19	13.38
Electrical Engineering	20	14.08
Mechanical Engineering	18	12.68
Electronics Engineering	14	9.86
Surveying Engineering	18	12.68
Industrial Engineering	17	11.97
Computer Engineering	19	13.38
Civil Engineering	17	11.97
Total	142	100

Table 1 shows that 142 engineering students from the Faculty of Engineering participated in this study. Nineteen students from Garment Engineering, 20 from Electrical Engineering, 18 from Mechanical Engineering, 14 from Electronics, 18 from Surveying Engineering, 17 from Industrial Engineering, 19 from Computer Engineering and 17 from Civil Engineering.

 Table 2
 Gender Distribution

Gender	Frequency	Percent
Male	117	82.4
Female	25	17.6
Total	142	100

Table 2 shows that among 142 engineering students, 117 students are male, which is equivalent to 82.4 % of participants and that 25 students are female which equals to 17.6 % of total participants.

Department	Ν	Minimum	Maximum	Mean	Std. Deviation
Garment Engineering	19	4	11	8.00	1.82
Electrical Engineering	20	2	17	9.35	3.67
Mechanical	18	2	16	0 00	2.08
Engineering		2	10	0.00	5.90
Electronics	14	2	14	0.42	3.83
Engineering		2	14	9.42	5.05
Surveying	18	4	13	7 11	2 35
Engineering		4	15	/.44	2.33
Industrial Engineering	17	5	14	9.05	2.90
Computer	19	10	17	14 57	1.05
Engineering		10	17	14.52	1.95
Civil Engineering	17	3	15	9.17	2.83
Overall	142	2	17	9.51	3.58

Table 3Minimum, Maximum scores, Mean and Std. Deviation of
Part 1: Essential knowledge for English Speaking

Table 3 shows that the minimum score of engineering students was 2 and students from Electrical, Mechanical and Electronics Engineering got the same minimum scores, and the maximum score was 17and both Mechanical and Computer engineering achieved that. Overall mean of engineering students from 8 departments in the Faculty of Engineering is 9.51 out of the total scores of 20. This means that the mean score is lower than 50% except those from Computer Engineering who got the highest mean of 14.52.

Department	Ν	Minimum	Maximum	Mean	Std. Deviation
Garment Engineering	19	3	12	6.10	2.66
Electrical Engineering	20	3	11	6.70	2.17
Mechanical	18	2	11	6.83	2.61
Electronics	14	3	12	7 00	3.08
Engineering		5	12	1.00	5.00
Surveying	18	2	11	6.27	2.78
Engineering					
Industrial Engineering	17	3	12	7.05	3.09
Computer	19	5	14	8 42	3 28
Engineering		5	17	0.72	5.20
Civil Engineering	17	1	13	7.17	2.72
Overall	142	1	14	6.94	2.82

Table 4Minimum, Maximum scores, Mean, and Std. Deviation of
Part 2: Patterns and functional English used in speaking

Table 4 shows that the mean for part 2 which is about Patterns and functional English used in speaking was only 6.94 out of 20 scores. Still, students from Department of Computer Engineering got the highest maximum scores and got the highest mean of 8.42 And Civil Engineering had the minimum score of 1 out of 20.

Department	Ν	Minimum	Maximum	Mean	Std. Deviation
Garment Engineering	19	2	11	6.31	2.62
Electrical Engineering	20	3	10	7.15	1.95
Mechanical	18	4	11	7 1 1	2.51
Engineering		4	11	/.11	2.31
Electronics	14	4	11	6.02	1 07
Engineering		4	11	0.92	1.77
Surveying	18	2	0	6.44	1 01
Engineering		Z	9	0.44	1.71
Industrial Engineering	17	4	10	7.29	1.89
Computer	19	5	13	0 17	2 45
Engineering		5	15	J.42	2.45
Civil Engineering	17	4	12.	6.64	1.96
Overall	142	2	13	7.18	2.33

Table 5Minimum, Maximum Scores, Mean, and Std. Deviation of
Part 3: Socio-cultural aspects

Table 5 shows that in part 3 which is about Socio-cultural aspects, the minimum scores of the participants is 2 and students from Garment and Surveying Engineering achieved this. The maximum score is 13, and that students from Computer Engineering achieved this. The overall mean for this part is 7.18, which is equivalent to 35.9% and is lower than the average level.

Department	Ν		Maximu		Percent	Std.
		Minimum	m	Mean		Deviation
Garment Engineering	19	10	32	20.73	34.55	4.96
Electrical	20	12	20	22.20	38.67	6.65
Engineering		15	30	23.20		0.05
Mechanical	18	11	25	<u></u>	38.05	7.60
Engineering		11	33	22.83		/.09
Electronics	14	11	26	22.26	38.93	6 5 7
Engineering		11	30	23.30		0.32
Surveying	18	10	22	10.70	32.96	5 90
Engineering		10	33	19.78		5.80
Industrial	17	14	26	22.04	38.23	671
Engineering		14	30	22.94		0./4
Computer	19	25	41	22.21	53.85	5 90
Engineering		23	41	32.31		5.80
Civil Engineering	17	10	34	23.00	38.33	5.93
Overall	142	10	41	23.57	39.28	7.14

 Table 6
 Total Minimum, Maximum Scores, Mean, and Std. Deviation of the test

Table 6 shows that the total minimum and maximum scores of 142 engineering students are 10 and 41 respectively. While the mean is 23.57, which is equivalent to 39.29% and the standard deviation is 7.14. Among the eight departments in the Faculty of Engineering,

students from Computer Engineering got the highest minimum and maximum scores with 25 and 41 respectively.

Test Scores	Ν				Percent	Std.
		Minimum	Maximum	Mean		Deviation
Part 1 = 20	142	2	17	9.51	47.55	3.58
Part 2 =20	142	1	14	6.94	34.70	2.82
Part 3 =20	142	2	13	7.18	35.90	2.33
Total = 60	142	10	41	23.57	39.28	7.14

 Table 7
 Overall Minimum, Maximum scores, Mean, Percent, and Std. Deviation of the test

Table 7 shows that the minimum and maximum scores of part 1 of 142 engineering students are 2 and 17 respectively, and that the mean is 9.51, which is equivalent to 47.55% and the Std. Deviation is 3.58. In part 2, the minimum and maximum scores are 1 and 14 respectively. The mean for this part is 6.94, which is equivalent to 34.70% and the Std. Deviation is 2.82. According to part 3, the minimum and maximum scores are 2.00 and 13.00 respectively. The mean for this part is 7.18, which is 35.90% and Std. Deviation is 2.33. For the total scores of the test, the participants got the minimum and maximum scores of 10 and 41 respectively. The total mean is 23.57 which equals 39.28%. And Std. Deviation is 7.14.

 Table 8 Comparison of achievement in doing the test between gender

Gender	Ν	\overline{X}	S.D.	t	df	р	
Male	117	23.43	7.22	48	140	.62	
Female	25	24.20	6.86				

Table 8 shows that the mean of male engineering students is 23.43 while that of female engineering students is 24.20, and that there is no statistically significant difference in the achievement in doing the test about the readiness of English speaking between male and female students.

 Table 9 Comparison of English speaking achievement among 8 departments in the Faculty of Engineering

	SS	df	MS	F	р	
Between	1200.04	7	270.00	6.90	00*	
Groups	1890.04	1	270.00	0.80	.00*	
Within Groups	5314.75	134	39.66			
Total	7204.79	141				

*p<.05

Table 9 shows that there is a statistically significant difference of means of the achievement in doing the test among eight departments in the Faculty of Engineering at the .05 level.

Departm ent	N	X	р							
			Garm ent	Electr ical	Mecha nical	Surve ying	Electr onics	Indust rial	Comp uter	Ci vil
Garment	19	20. 73	-	.16	.36	.17	.57	.29	.00*	.24
Electrical	20	23. 20		-	.63	.94	.05	.76	.00*	.86
Mechanic al	18	22. 83			-	.61	.15	.86	.00*	.77
Surveying	14	23. 35				-	.06	.73	.00*	.81
Electronic s	18	19. 77					-	.11	.00*	.90
Industrial	17	22. 94						-	.00*	.90
Computer	19	32. 31							-	.00 *
Civil	17	23. 00								-

Table 10 Multiple Comparison of achievement among 8 departments in the Faculty of Engineering

*p<.05

Table 10 shows that there is no significant different between seven departments, namely, Garment Engineering, Electrical Engineering, Mechanical Engineering, Surveying Engineering, Electronics Engineering, Industrial Engineering and Civil Engineering. Further, only the achievement in doing the test of readiness for speaking skills of the students in Computer Engineering has a statistically significant difference at the .05 level with the other seven departments.

Summary of the Findings

The findings are concluded as follows:

1. There are 142 engineering 4^{th} year students from the Faculty of Engineering that participated in this study. The number ranges from 14-20 students from 8 departments in the Faculty of Engineering. Among 142 engineering students, 117 students are male, which is equivalent to 82.40% of participants and that 25 students are female which equals 17.60% of the total participants.

2. In part 1 which investigated the readiness in speaking skills concerning fundamental grammar knowledge, the minimum score of engineering students was only 2 scores and the maximum score was 17. The students from Electrical, Mechanical and Electronics Engineering got the same minimum scores, and both Mechanical and Computer engineering

got the maximum score. Overall mean of engineering students from 8 departments in the Faculty of Engineering is 9.51 out of the total score of 20 and is equivalent to 47.50%. This means that the mean is lower than 50%. According to the criteria given, the readiness of students for essential knowledge is at the fairly poor level. Except those from Computer Engineering Department who got the highest mean of 14.52, which equals 72.60% and the readiness of this department is at the good level (71% - 80%).

3. Pertaining to part 2 which is about patterns and functional English used in speaking, the mean was only 6.94 out of 20 scores, which equals 34.70% and is at the poor level. Still, students from the Department of Computer Engineering achieved the highest maximum scores and got the highest mean of 8.42 which is equivalent to 42.10% and Civil Engineering got the minimum score of 1 out of 20, which is equal to only 5 % and is at the very poor level (Lower than 30%).

4. For part 3 which is about Socio-cultural aspects, the minimum scores of the participants is 2 and students from Garment and Surveying Engineering got this. The maximum scores is 13, and students from Computer Engineering achieved this. The overall mean for this part is 7.18, which is equivalent to 35.90% and is at the poor level (31% - 40%).

5. The total minimum and maximum scores of 142 engineering students are 10 and 41. While the mean is 23.57, which is equivalent to 39.29% and is at the poor level (31% - 40%). Among the eight departments in the Faculty of Engineering, students from Computer Engineering got the highest minimum and maximum scores with 25 and 41 scores respectively. The mean of this department is 32.31 which is equivalent to 53.85% and is in the moderate level (51% - 60%). The order of readiness in relation to the means from the highest to the lowest are first, Computer Engineering; the second, Electronics Engineering; the third, Electrical Engineering; the fourth, Civil Engineering; the seven, Garment Engineering and the last is Surveying Engineering with the means of 32.31(53.85%), 23.36(38.93%), 23.20(38.67%), 23.00(38.33%), 22.94(38.23%), 22.83(38.05%), 20.73(34.55%) and 19.78(32.96%) respectively. The readiness level in English speaking skills of seven departments, except Computer Engineering is in the poor level (31% - 40%). Computer Engineering had the highest readiness level, however the level is at the moderate level (51% - 60%).

6. The mean of male engineering students is 23.43, which is equivalent to 39.05% while that of female engineering students is 24.20, which is equivalent to 40.33% and that there is no statistically significant difference in the achievement in doing the test about the readiness of English speaking between male and female students. And the level of readiness of male engineering students is at the poor level (31% - 40%) whereas that of female engineering students is at the fairly poor level (41% - 50%).

7. There is a statistically significant difference of means of the achievement in doing the test among the eight departments in the Faculty of Engineering at the .05 level, but there is no significant different between each among seven departments, namely, Garment Engineering, Electrical Engineering, Mechanical Engineering, Surveying Engineering, Electronics Engineering, Industrial Engineering and Civil Engineering. And that only the achievement in doing the test of readiness for speaking skills of the students in Computer Engineering Department has a statistically significant difference at the .05 level with the other seven departments.

Discussion

1. According to the results, the level of readiness in the speaking skills of engineering students in the Faculty of Engineering at Rajamanala University of Technology Srivijaya, Songkhla is in the poor level (31% - 40%). Since the mean is 23.57 from the total score of 60 and its percentage is equivalent to 39.29%. This result is lower and different from the results of research conducted by Tassanee Kirisri (2009) entitled "A Study of Achievement in English Grammar of the First Year Students, Degree Level in English 1 Course", that of the first year students at this university was at the moderate level (51% - 60%) since the mean was 46.78 out of 90 and is equal to 51.97%. The results is like this since students have no goals to speak in their daily life as McKoon 1998); Ackerman and Barnett (2005) stated that readiness is influenced by various environmental factors but can be enhanced through effective education; Hersey and Blanchard (1993) mentioned that readiness means ability and willingness in working, doing activities or whatever in order to achieve a goal.

2. Only the students from the Faculty of Computer Engineering got the highest mean that is higher than 50% while the other seven groups of engineering students are at the poor level shows that the mean of this department is 32.31 which is equivalent to 53.85% and is at the moderate level (51% - 60%) whereas the other seven departments are in the poor level. This could be caused by the familiarity in English of these students since they use computers more often than other students and most instructions when they study, search data, watch movies, listen to songs and so on are in English. The more they expose to spoken English, the more they are ready to speak.

3. Among three parts of the test, engineering students got the highest means in part 1 which investigated the readiness in readiness in speaking skills concerning fundamental and essential grammar knowledge, the minimum score of engineering students was only 2, the maximum score was 17 and the overall mean of this part is 9.51 which is equivalent to 47.50%. The level of readiness is at the fairly poor level. However, only students from Computer Engineering Department got the highest mean of 14.52, which equals 72.6 % and the readiness of this department is in the good level (71% - 80%). Compared to the other two parts, the mean of this part is the highest since this part tested about how to make questions in English and how to answer questions in general and what students use in their daily life.

4. Pertaining to part 2 which is about patterns and functional English used in speaking, the mean was only 6.94 out of 20 scores, which equals 34.70% and is at the poor level. Still, students from the Department of Computer Engineering got the highest maximum scores and got the highest mean of 8.42 which is equivalent to 42.10% And Civil Engineering got the minimum score of 1 out of 20, which is equal to only 5 % and is in the very poor level (Lower than 30%). For this part, the result shows that students had the least readiness in speaking skills since the mean is only 34.70% and is at the poor level. The causes of the poor

level were not only that the students did not understanding the questions and situations given in the test, but their knowledge of vocabulary also affected them.

5. For part 3 which is about Socio-cultural aspects, the minimum score of the participants is 2 and students from Garment and Surveying Engineering got this. The maximum score is 13, and students from Computer Engineering got this. The overall mean of this part is 7.18, which is equivalent to 35.9% and is at the poor level (31% - 40%). Surprisingly, the engineering students got higher level of readiness of socio-cultural aspects than functional English. The reason why the students got a higher level since the questions in this part were written partly in Thai because the researchers would like to investigate the knowledge of socio-culture of native speakers or western cultures. As Peterson and Coltrane (2003) supported that understanding the cultural context of day-to-day conversational conventions such as greeting, farewells, forms of address, thanking, making requests, and giving or receiving compliments, implies more than just being able to produce grammatical sentences. It means that in conversation, knowing what is appropriate to say to whom, and in what situations is a very essential skills. Understanding the cultures, beliefs and values represented by the various forms and usages of the target language, English, will certainly make the communication much more appropriate and more effective.

6. That the mean of male engineering students is 23.43 while that of female engineering students is 24.20, and that there is no statistically significant difference in the achievement in doing the test for the readiness of English speaking between male and female students. This shows that gender of students who study in Engineering does not affect in speaking proficiency. This result is correspondent to the study of Tassanee Kirisri (2009) in the same research on knowledge of grammars of students in the University of Technology Srivijaya, Songkhla. However, the level of readiness of male engineering students is at the poor level (31% - 40%) whereas that of female engineering students is at the fairly poor level (41% - 50%). Even though among the participants of 142 engineering students, 117 students are male and 25 students are female. This means that female engineering students got higher level of readiness in English skills than male students

7. There is a statistically significant difference of means of the achievement in

doing the test among eight departments in the Faculty of Engineering at the .05 level, but there is no significant different between each other among seven departments, namely, Garment Engineering, Electrical Engineering. Mechanical Engineering, Surveying, Electronics, Industrial Engineering and Civil Engineering. Only the achievement in doing the test of readiness for speaking skill of the students in Computer Engineering Department has a statistically significant difference at the .05 level with the other seven departments. This result shows that all seven departments got the same level of readiness and the means are from 19.77 - 23.55 out of 60, which means that these engineering students failed in doing the test for investigating the readiness in speaking skills. Still, they are at the very poor level (Lower than 30%). And they need to be improved urgently.

Pedagogical Implications

1. An Intensive training programme for preparing the readiness and improving speaking in English should be done urgently for the engineering students before going to the workplace in the ASEAN age.

2. Knowledge of cultures and social values of English speaking countries

should be emphasized and taught in schools and universities.

3. The results of this study should be reported to the administrators of the University and the Faculty of Engineering in order that an urgent policy is implemented to solve the problem of English speaking of students, not only engineering students.

Recommends for Further Study

1. Researches using oral tests should be applied to investigate the readiness of students before they graduate from the university.

2. A comparative study between all the faculties should be conducted.

3. Research on factors influencing the problems in English speaking of Thai students should be conducted in order to use correspondent solutions for the purpose that Thai students will be ready to be efficient ASEAN citizens in the year 2015.

4. Research on the readiness in English proficiency in four skills in English, namely listening, speaking, reading and writing should be conducted.

5. A survey of reasons why students in the Computer Department got the

highest readiness level in English speaking should be done.

7. A study of factors influencing low English proficiency in four skills in English should be conducted.

References

Ackerman D. J. and Barnett W. S. (2005). Prepared for Kindergarten: What Does "Readiness" Mean?

Department of Academic Affairs. (2001). Remembering Language and Realizing Culture. Kurusapa Printer, Bangkok.

English for ASEAN. Retrieve 10 October 2011 from http://englishforasean.bloqspot.com/

English Speaking Year 2012. Retrieved from http://thailand.prd.go.th/view_around_thailand.php?id=6065

Florez M. C. (1999) Improving Adult English Language Learners' Speaking Skills. National Clearinghouse for ESL Literacy Education Washington DC.

Gerrig R. J. & McKoon G. (1998) The Readiness Is All: The Functionality of Memory-Based Text Processing. Department of Psychology, State University of New York, Stony Brook and Northwestern University.

Meisels, S. J. (1998). Assessing Readiness. Center for the Improvement of Early Reading Achievement. University of Michigan.

Noytim, U. (2006). The Impact of the Internet on English Language Teaching: A Case Study at a Thai Rajabhat University. Faculty of Education. Sydney, University of Technology. Doctor of Philosophy.

Oller, J.w. Jr. (1983). Issue in language testing research. Rowley, Mass: Newbury House.

Peterson, E & Coltrane, B. (2003). Culture in Second Language Teaching. Retrieve 25 December 2011 from www.cal.org/resources/digest/digest.../0309peterson.pdf

Speaking Skill. Retrieved 26 August 2011 from http://www.englishonline.org.en/teachers/workshop/teaching-speaking/teaching-tips/...).

Tassanee Kirisri.(2009). A Study of Achievement in English Grammar of the First Year Students, Degree level in English 1 Course. University of Technology Srivijaya, Songkhla.

Teaching Speaking. Retrieved 23 January 2012 from http://www.nclrc.org/essentials/speaking/spindex.htm)

Tasee, P. (2009). Factors Affecting English Major Students' Anxiety about Speaking English. Suranaree University of Technology. Doctor of Philosophy.

Thailand and Preparation for ASEAN Community. Retrieved 12 October 2011 from http://www.en.moe.go.th/index.php?option=com_content&view=article&id=473:4-m...

Villimec E. (2006). Developing Speaking Skill. Faculty of Arts and Philosophy, University of Pardubice.