Needs Analysis of English Skills Development for Agripreneur of Thai Students in Higher Education

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Abstract

Over the past decade, agripreneurship has emerged to increase the potential of agricultural sector. Many universities have advanced the vision of agripreneur development for students. There is still a limited number of English for agripreneur textbooks worldwide. The aim of this study was to critically investigate the needs analysis of Thai students in higher education to develop English language skills for agripreneur. This study was carried out on a group of thirty agricultural students at Maejo university, Phrae campus, in Northern Thailand. The research instruments included a questionnaire and interviews for developing the six skills of English language learning. Descriptive statistics and the modified Priority Need Index (PNImodified) were used for the needs assessment. The results indicated that the students had moderate level of English language proficiency. Most students ranked reading as their best skill ($\bar{X}$=3.13) and grammar as their weakest skill ($\bar{X}$=2.53). Another important finding was that the students extensively needed to improve the English skills, especially in speaking, with pitching identified as the most critical task to be an agripreneur (PNImodified=1.70). This was followed by listening, writing, vocabulary, and reading, respectively. An unanticipated finding was that the students still rated grammar as the least skill needed, particularly regarding relative pronouns (PNImodified=0.52). The results of this study will contribute to the course syllabus for the development of an English for agripreneur textbook tailored to the needs and knowledge of Thai agricultural students with Thai-context culture, enhancing sustainable learning in English for specific purpose.

Keywords: Needs Analysis, English Skills Development, Agripreneur, English for Specific Purpose, Higher Education

Introduction

In the World Digital Competitiveness Ranking 2023, published by the International Institute for Management Development, Thailand ranked 30th out of 64 countries for overall performance (IMD, 2023). Notably, Training and Education ranked even lower at 52nd. A deeper analysis of Thailand's educational performance revealed that the country consistently occupies lower-tier rankings, particularly in English language skills tailored to meet the demands of employers. This finding aligns with a report by the Thailand Productivity Institute (2015, as cited in Pinkaew & Sirinuphong, 2017), indicating that Thai officers had very low English proficiency and needed to improve their English skills. This has raised the need for undergraduate students to acquire English for Specific Purpose (ESP) in order to prepare themselves to enter the workforce. ESP aims to equip learners with the ability to use English effectively in academic and professional areas, underscoring the necessity for course developers to understand learner needs (Basturkmen, 2006, 2010; Brown, 1995; Dudley-Evans & St. John, 1998; Hutchinson & Waters, 1987; Rahman, Ming, Aziz, & Razak, 2008, as cited in Chatsungnoen, 2015). Higher education institutions have thus recognized the importance of enhancing the quality of graduates to meet labor market demands (Mansakorn, 2007). This awareness has highlighted the necessity of ESP instruction, aiming to produce graduates equipped with English language skills that align with professional standards.

Furthermore, students in Thailand, both at the basic and higher education levels, often face obstacles in learning English that do not align with practical objectives or meet employer expectations. One significant issue is the reliance on textbooks or materials from renowned international publishers that, while adhering to global standards, are not designed to address the specific needs of various professional contexts. This observation is consistent with Griffiths & Keohane (2000), who stated that textbooks frequently failed to achieve a meaningful level of engagement from learners; education should not be limited to the classroom with set textbooks and exercises. Suntornsawate (2018) also noted that most English instruction in Thailand focuses on everyday communication rather than workplace-specific applications. Learners must therefore acquire English tailored to their particular professional purposes.

In recent years, there has been an increasing interest in entrepreneur around the world. As a result, Maejo University where has the renown for agriculture in Thailand has advanced the vision in agripreneurship development for students and community. Throughout this research, the term agripreneurship will be referred to entrepreneurship in agriculture. Entrepreneurship is a concept that encompasses transforming an idea or vision into a "new business or new venture creation, or the expansion of an existing business, by an individual, a team of individuals, or an established business" (Reynolds et al., 2000). Quite similar, Agripreneur is an individual who starts, organizes and manages a business venture focusing on the agricultural sector (Mukhopadhyay, 2020). To keep pace with contemporary needs, the university has revised its ESP curriculum, introducing new courses, namely English for Creative Agripreneurs. Jordan (1997) indicated that needs analysis is the initial step in course design, teaching methodologies, and the development of relevant educational materials. This aligns with Chatsungnoen (2015), who stated that ESP programs often lack clear course objectives due to the absence of a prior needs analysis. Only a small portion of these have involved in agripreneurship and investigated the link between the needs of English skills development and agripreneurs. In light of these challenges, the researcher, as a lecturer, is responsible for teaching fundamental English courses and designing ESP courses at Maejo University Phrae Campus. To ensure effective and efficient development of English skills in

alignment with the university's mission, the research team has adopted the theoretical framework of Needs Analysis (NA) to identify the English skills necessary in accordance with the attributes of agripreneurs.

Therefore, due to the absence of research on the needs analysis for English skills development specifically for agripreneur, this study aimed to explore this need based on the perceptions of agricultural students. In order to address this question, the needs analysis of English skills development for agripreneur of Thai agricultural students will be discussed in detail. The research results will contribute to the course syllabus for the development of an English for Agripreneur textbook, tailored to the specific needs and knowledge of Thai students at Maejo university Phrae campus, and as related programs in institutions offering courses for agripreneurs to enhance sustainable learning in English for Specific Purposes.

Research Methodology

This study employed mixed methods between qualitative and quantitative techniques. Purposive sampling was employed to select 30 student participants. They were the sophomore students enrolling in the English for Creative Agripreneur subject in the academic year 2023. Data were collected through questionnaire surveys for the quantitative component. The participants were asked to complete four tasks, as follows:
1. Background Information
2. Self-assessment of English proficiency level
3. The needs of English skills development for Agripreneur
4. Suggestion

According to the self assessment questions, a 5-point Likert scale was used, ranging from low competency (1) to high competency (5). For the need questions, a 5-point Likert scale was also adapted ranging from the least needed (1) to the most needed (5). The data were then analyzed using descriptive statistics and Modified Priority Needs Index ($PNI_{modified}$). The $PNI_{modified}$ was used to compare the differences between the needs level and the existing state using formula as presented in Eq. (1):

$$PNI_{modified} = (I-D)/D \qquad (1)$$

Where I refers to the needs level, and D refers to the existing state (Wongwanich, 2007).

Additionally, the participants were interviewed using a semi-structured format in focus groups, lasting approximately 30 minutes to 1 hour, to collect qualitative data. The interviews were conducted with two low-achieving, two medium-achieving, and two high-achieving students regarding to their grades in the Fundamental English course. Content analysis was prepared by adapting the procedure outlined by Chatsungnoen (2015).

Findings and Discussion

This section discusses the results obtained from both questionnaire surveys and semi-structured interviews conducted with Thai agricultural students regarding their needs for developing six English skills essential for agripreneurship: speaking, listening, reading, writing, grammar, and vocabulary.

Questionnaire Surveys

The students' self-assessment of English proficiency was at a moderate level. When ranked according to average scores from highest to lowest, the results revealed that reading skills had the highest average score of 3.13. Following this, writing and vocabulary were determined to have equivalent average of 2.90, while speaking, listening, and grammar recorded average scores of 2.80, 273, and 2.53, respectively. Moreover, the survey findings concerning students' need to enhance their English language skills indicated a significant need, with eighty-eight percents expressing a strong desire for improvement. The primary focus for development was on speaking, followed by listening, writing, vocabulary, reading, and grammar, in that order. It is of particular interest that Thai students exhibited the lowest proficiency in grammatical knowledge; however, they rated grammar as the least needed skill. It has been argued that effective communication in English relies primarily on a strong understanding of grammar, as it enables the clear and comprehensible construction of sentences (Kumduang, 2019). This situation was further examined through interviews, as indicated in the following excerpts:

> We don't need to be perfect in grammar, as long as we can communicate what we want, it should be fine. (Excerpt from medium-achieving student)

> If it's speaking, we don't need to worry too much about grammar. (Excerpt from low-achieving student)

Most Thai undergraduate students had the same voice that grammar was difficult to understand due to their struggles with its complex structure. They frequently gave up on learning. This led them to focus more on speaking to facilitate communication rather than comprehension (Carrió-Pastor & Mestre Mestre, 2014). Except for high-achieving students, they indicated that the more difficult grammar was perceived to be, the more they felt the need to improve.

In addition, another finding related to students' needs for the development of English sub-skills relevant to agripreneur. The findings are illustrated in Table 1 to Table 6 from the most needed skill to the least needed skill.

Table 1: The Needs for Speaking Tasks of 30 Agricultural Students

Tasks	Importance (I)	Degree of success (D)	PNImodified = I-D/D	Rank
1. Pronunciation	4.33	2.97	0.458	7
2. Daily speaking	4.37	2.63	0.662	3
3. Asking and answering questions	4.30	2.83	0.519	6
4. Stating opinions or ideas	4.23	2.67	0.584	5
5. Giving a presentation	4.67	2.80	0.668	2
6. Pitching	**4.23**	**2.53**	**0.672**	**1**
7. Negotiating	4.20	2.53	0.660	4
Total	4.33	2.71	0.603	

Note: "I" may refer to the needs level, while "D" refers to the existing state. Both variables vary from 1 (the lowest) to 5 (the highest).

The results show the 30 agricultural students rank the speaking tasks from "the least needed" to "the most needed", with no additional speaking tasks suggested. According to the

PNI$_{modified}$ values as presented in Table 1, the prominence of "pitching" is striking, with a rating of 0.672. This result is consistent with a study by Rimkeeratikul (2022), who reported that a sales pitch was identified as a critical skill, which distinguished it from a general presentation in English for International Business course. Most students express an extensive need for "giving a presentation", followed closely by "daily speaking", and "negotiating" at the rate of 0.668, 0.662, and 0.660, respectively.

In contrast, the tasks of "stating opinions or ideas", "asking and answering questions", and "pronunciation" are perceived as the least needed, with the scores of 0.584, 0.519, 0.458, respectively.

Table 2: The Needs for Listening Tasks of 30 Agricultural Students

Tasks	Importance (I)	Degree of success (D)	PNImodified = I-D/D	Rank
1. Listening for gist	4.30	2.80	0.536	2
2. Listening for details	4.27	2.87	0.488	4
3. Listening to discussions	**4.17**	**2.63**	**0.586**	**1**
4. Listening to conversation	4.23	2.90	0.459	5
5. Listening to social media	4.20	3.00	0.400	6
6. Receiving spoken instructions	4.03	2.67	0.509	3
Total	4.20	2.81	0.496	

Note: "I" may refer to the needs level, while "D" refers to the existing state. Both variables vary from 1 (the lowest) to 5 (the highest).

As demonstrated in Table 2, the highest PNI$_{modified}$ value is attributed to "listening to discussions", which received a rating of 0.586. This result is in line with Tham-ngarn & Chaiwong (2020), revealed that most students preferred the teacher used English as a medium language in class to practice their listening skills. Besides, The students express the greatest need to develop "listening listening for gist", "receiving spoken instructions", and "listening for details", with PNI$_{modified}$ values of 0.536, 0.509, and 0.488, respectively. Conversely, the students indicate a lower need to improve "listening to conversation" and "listening to social media", with ratings of 0.459 and 0.400, respectively.

Table 3: The Needs for Writing Tasks of 30 Agricultural Students

Tasks	Importance (I)	Degree of success (D)	PNImodified = I-D/D	Rank
1. Mind mapping	4.27	2.80	0.525	7
2. Writing product descriptions	**4.27**	**2.47**	**0.729**	**1**
3. Writing brief business descriptions	4.27	2.63	0.624	5
4. Writing Agribusiness canvas	4.27	2.53	0.688	2
5. Writing for pitching	4.30	2.63	0.635	4
6. Creating pitch deck	4.17	2.60	0.604	6
7. Writing instructions	4.27	2.60	0.642	3
Total	4.26	2.61	0.635	

Note: "I" may refer to the needs level, while "D" refers to the existing state. Both variables vary from 1 (the lowest) to 5 (the highest).

The PNI$_{modified}$ value obtained for the writing needs evaluation from Table 3 is 0.635, which is the highest score of all tasks. This is due to the significant gap between the current level of

English proficiency and the needs of the students. Thus, writing skills represent an urgent need for improvement to enhance overall performance. "Writing product descriptions" has the highest $PNI_{modified}$ value of 0.729, ranking as the top priority. This concurs with the findings of Chatsungnoen (2015), who mentioned that the ESP course should teach language functions related to business English such as writing product descriptions or e-mails. The second highest priority is "writing an agribusiness canvas", with a value of 0.688. This is followed by "writing instructions", "writing for pitching", "writing brief business descriptions", and "creating a pitch deck", with $PNI_{modified}$ values of 0.642, 0.635, 0.624, and 0.604, respectively. The lowest priority is "mind mapping", which has a $PNI_{modified}$ value of 0.525. In contrast, Yunus and Chien (2016) found that undergraduate students in Malaysia employed mind-mapping strategies in their writing planning, which not only helped them gain a deeper understanding of the topic but also fostered creativity in their written work.

Table 4: The Needs for Vocabulary Tasks of 30 Agricultural Students

Tasks	Importance (I)	Degree of success (D)	PNImodified = I-D/D	Rank
1. General Vocabulary	4.13	3.17	0.303	3
2. Agribusiness Vocabulary	**4.23**	**2.73**	**0.549**	**1**
3. Guessing Vocabulary in context	4.20	3.00	0.400	2
Total	4.19	2.97	0.417	

Note: "I" may refer to the needs level, while "D" refers to the existing state. Both variables vary from 1 (the lowest) to 5 (the highest).

Table 4 outlines the needs for vocabulary sub-skills by the agricultural students. The students identifies a need to develop "agribusiness vocabulary" ($PNI_{modified}$=0.549), as the highest priority, followed by "guessing vocabulary in context" ($PNI_{modified}$=0.400) and "general vocabulary" ($PNI_{modified}$=0.303), respectively. Fraser (2005) emphasized that technical vocabulary can be vast and should not be neglected in ESP instruction. It is essential to support learners in navigating and understanding unfamiliar technical terms.

Table 5: The Needs for Reading Tasks of 30 Agricultural Students

Tasks	Importance (I)	Degree of success (D)	PNImodified = I-D/D	Rank
1. Searching the Internet English Resource	4.27	3.00	0.423	6
2. Reading for gist	4.27	2.93	0.457	5
3. Reading for specific details	4.23	2.83	0.495	4
4. Inferential reading	4.33	2.83	0.530	2
5. Reading case study of successful agripreneur	**4.30**	**2.57**	**0.673**	**1**
6. Reading product descriptions	4.27	2.83	0.509	3
Total	4.28	2.83	0.515	

Note: "I" may refer to the needs level, while "D" refers to the existing state. Both variables vary from 1 (the lowest) to 5 (the highest).

The needs for reading sub-skills are provided in Table 5. The highest priority within this category is assigned to "reading case study of successful agripreneur", with $PNI_{modified}$ values of 0.673. It has been observed that applying case studies in instructions can increase students' engagement both their academic performance and sense of belonging within the learning community. (Ni Chochlain, 2021). This reading sub-skill is expected to be developed in an undergraduate programme to offer students comprehensive understanding of agripreneurship, while also drawing inspiration from the success stories of prominent individuals in this field.

The second highest priority is "inferential reading", with a value of 0.530. This is followed by "reading product descriptions", "reading for specific details", and "reading for gist", which received ratings of 0.509, 0.495, and 0.457, respectively. The lowest priority is given to "searching the internet English resources", which has a PNI$_{modified}$ value of 0.423.

Table 6: The Needs for Grammar Tasks of 30 Agricultural Students

Tasks	Importance (I)	Degree of success (D)	PNImodified = I-D/D	Rank
1. Verb tenses / Modal Verb	4.23	2.67	0.584	2
2. Relative pronouns / Relative clause	4.27	2.80	0.525	4
3. Conditional Sentences	4.17	2.70	0.544	3
4. Comparative Structures	4.23	2.67	0.584	2
5. Business Phrasal Verb	**4.17**	**2.60**	**0.604**	**1**
Total	4.21	2.69	0.568	

Note: "I" may refer to the needs level, while "D" refers to the existing state. Both variables vary from 1 (the lowest) to 5 (the highest).

The majority of students, as shown in Table 6, express a strong need to improve their understanding of "business phrasal verbs" as the grammar sub-skill, with a PNI$_{modified}$ value of 0.604. Besides, the students identify a need to develop "verb tenses/modal verbs" and "comparative structures", both of which share a PNI$_{modified}$ value of 0.584. Next, "conditional sentences" and "relative pronouns/relative clauses" are considered as the lower need to improve, with ratings of 0.544 and 0.525, respectively. These results further support the idea that relative clause has been identified as one of the most problematic and difficult areas of English learning for ESL/EFL learners (Marefat & Rahmany, 2009). As mentioned above, the participants in this study negatively need to learn the difficult or complex construction. According to some studies, relative clauses were found avoidance strategies when non-native speakers produced English relative clauses; Japan (Miura, 1989), Korea (Park, 2000), China (Chang, 2004), and Bangladesh (Maniruzzaman, 2008).

Interviews

The six participants who responded to the questionnaire were invited to an interview based on the needs analysis model. The most compelling finding was they all extensively needed to develop the English skills for Agripreneur. The overall response to the importance of English language was similar. A common view amongst interviewees was that English serves as a bridge for communication and appears in textbooks of core subjects. Only one high-achieving students highlighted its significance in conducting research and surfing the cutting-edge information. The next session focused on the difficulties in learning each of the six English skills. Beginning with listening and speaking, students lacked of opportunity to communicate with native English speakers and lacked of consistency in their practice. Low-achieving students also struggled with the speed and varying accents as illustrated in the following excerpt:

> I think it quite challenging to understand foreigners due to their accents, and sometimes they speak too fast. Each country has its own accent. When I cannot get what they said, I find it difficult to speak as well.

In terms of reading and writing skills, the students indicated that they were involved with reading only in students' workbook, while writing occurred solely in the classroom. They

predominantly relied on Google Translate for assistance outside the classroom. Furthermore, the low achievers reported that they could read but they faced difficulties translating texts into Thai, as reflected in the following excerpt:

> I can read but translate only word by word. I cannot connect phrases or translate in complete sentences. If I cannot read the passage thoroughly, I struggle to express what I want to write.

Regarding grammar knowledge, every participant indicated that it was the most challenging skill of all. The primary reason is owing to the complex structure of English, which differs significantly from Thai sentence structure, as can be seen in the following excerpts:

> Grammar is difficult because of its complex structure, and I, myself, have limited basic knowledge in this area. (Excerpt from high-achieving student)

> There are twelve sentence structures and each sentence is not fixed. For example, in responding to questions, one can provide both short and long answers. Subject-verb agreement is also confusing. (Excerpt from medium-achieving student)

> I never understand grammar. I am always confused by verb tenses. In Thai, we don't change verbs according to subjects; we simply use other words to indicate time expressions. (Excerpt from low-achieving student)

When discussing vocabulary knowledge, high achievers reported having a limited range of lexical items and exerting less effort to acquire new vocabulary. In contrast, medium achievers indicated that certain words lacked clear associations in Thai culture, making it difficult for them to form mental images of their meanings. This often led to the belief that the words were difficult to learn, resulting in poor retention. Low achievers, on the other hand, mentioned that some polysemous words left them uncertain about which meaning is appropriate in a given context. The last session focused on addressing these challenges by designing classroom activities aimed at enhancing English skills acquisition. High achievers preferred both collaborative group work or independent tasks to unleash their potential. They also needed out-of-class activities that facilitate direct engagement with the language or teaching by example. Meanwhile, one medium achiever favored out-of-class activities and group brainstorming sessions to develop effective ideas. Another medium achiever required interactive games and opinion sharing in class. Low achiever demonstrated a preference for group work and examination to revise lessons. Another low achiever requested fieldwork and agripreneurial workshops. In short, all students shared common needs for out-of-class activities and group work. These results are in accord with Guo (2011) studies suggesting that an out-of-class activity can enhance students' exposure to English in familiar and real contexts. Besides, Active student engagement in group work is a crucial learning objective for all higher education courses (Elgort et al., 2008).

Conclusion and Suggestion Implication

Since agripreneur is a groundbreaking career, the study of English for Agripreneur is still remains limited. This research paper has provided an overview of Thai agricultural students' needs in developing English language skills for agripreneur in tertiary education. The proposed syllabus for an "English for Agripreneur" course should include the following key components: 1) Pitching skills 2) Listening to discussions 3) Writing product descriptions 4)

Acquiring agribusiness vocabulary 5) Reading a case study of successful agripreneur and 6) Mastering business phrasal verbs. Additionally, supplementary contents for each English skills are recommended as follows: 1) Delivering presentation and daily conversation 2) Listening for gist and instructions 3) Designing agribusiness model canvas and instruction 4) Guessing Vocabulary in context 5) Product descriptions and Inferential reading and 6) Using comparison, verb tenses, and modal verbs accurately. Classroom activities which meet the needs of the students are group work and out-of-class activities, emphasizing the importance of collaborative and experiential learning opportunities in enhancing English language acquisition.

This finding has important implications for those who are engaged in enhancing students' development and utilize these results to design a specific course relevant to agripreneurship for their institutions to foster undergraduate students' English skills that are essential for the future workforce. More broadly, future research is also needed to explore effective instructional models tailored to the development of each English language skill required for agripreneurship. A further study could apply this research methodology to identify necessary language skills in other fields, thereby contributing to the design of more targeted English curricula across various disciplines.

Acknowledgements

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