Principles and Practices of ESP Course Design—A Case Study of a University of Science and Technology

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Abstract. The study is aimed to investigate the learners' perspectives of perceived needs on their ESP (English for Specific Purposes) course at a university of technology. Two groups of 257 students of varying proficiency levels participated in the study, including English majors and non-English majors. A learner's needs analysis questionnaire was administered to collect data from the subjects using the survey method. The data was analyzed via the SPSS software package for window. It was concluded that the extent of ESP needs perception held by the students was very high, about 80% of students thought ESP courses are useful and helpful for the future job. Plus, the English skill needed most was writing skill and students with the higher English proficiency held significant difference from the lower on interest in English learning.

Keywords: needs analysis; English for specific purposes (ESP); international business

Introduction

The international business world is a complicated field with a number of exotic cultures which makes the teaching approach on international trade and business transactions more challenging. Given the concept of the global economy, it is inevitable to provide students with a comprehensive but professional English relevant courses in order to meet the needs of international business operation. As long as presenting clear objectives and understanding what students expect

of, a feasible and practical English for Specific Purposes (ESP) course design would be carried out for a successful and particular business English teaching.

Research Purposes

ESP courses are widely provided in higher education in Taiwan. The most common ones are business English, technical English, or major-based courses for specific purposes. It should be appropriate for the purposes to share the newest developments and advances in knowledge and practice of international business to cope with the global environment. It is for the purpose of sharing the teaching experience and exchanging relevant information on business English course design, the study is focused on a case study on business English courses, in term of investigating the learners' needs and requirements to help them adjust to their further academic study or future business career.

In addition to a wide review of literature on ESP, this paper is aimed to present fundamental support for EFL instructors developing business English courses. Educational system in Taiwan provides students with more than ten years of intensive English training, in terms of language listening, speaking, reading and writing. Moreover, the government has strived for elevating the English abilities of their people. Nevertheless, a big discrepancy has still remained relatively high between general English level required for university EAP and the requirements of ESP for real workplaces. Plus, the majority of teachers are not native speakers of English and the fields of their expertise are general English teaching rather than occupational English used in the world of international businesses. Worst of all, materials provided are not authentic content of the workplace texts. These materials might fail to integrate the academic English into the required specific English tasks needed in the international business world. Therefore, the preliminary step is to examine current business courses in order to find out the demerits and restrictions. Simply put, it would be the first step to implement a simple needs assessment for the ESP course design.

Questions of Research

Research questions are accordingly illustrated on the basis of the purposes of the present study as follows:

1. What English language skills do the students perceive that they will need the most in their future work?
2. Do the perceived needs of ESP differ among students by gender?

3. Do the perceived needs of ESP differ between English major and Non-English major students?
4. Do the perceived needs of ESP differ among the variety of the students' English proficiency levels?
5. Do the perceived needs of ESP differ among expected future jobs of the students?

Definition of Terms

1. English for specific purposes (ESP): The foundation of ESP is an approach to ELT to meet learner need and it is "an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning (Hutchinson & Waters, 2001)."
2. Needs analysis: A needs analysis of ESP course is usually referring to not only an indispensable process of clustering information on the requirement of the students, but also a basis of a curriculum development for general English courses or English for Specific Purposes (ESP) to satisfy the needs of a particular group of students (Iwaii et al., 1999). In the study, the analysis of needs is an approach on processing statistically descriptive data collected from the students' responses to a questionnaire of needs analysis adopted from Balint (2010).

Literature Review

This literature review consists of three sections: one to define the needs analysis, the other to indicate the needs analysis in ESP curriculum development, and another to explore the current state of ESP course design in Taiwan.

What is ESP?

As for the more focus on the question "What is ESP?" the greater details might come out to explain its discrepancy from English Language Teaching (ELT), either EFL or ESL. Although people think ESP is all but essentially language-centered approaches for the particular learners to gear up with particular or professional knowledge of specific subjects through the process of English learning, the learning processes of ESP is not much different from those of general English. Except for the various content of learning, ESP could as well be used in the learning of any kind of English. Therefore, "ESP must be seen as an approach not as a product" as what Hutchinson and Waters (2001) indicate, which illustrates that ESP is a learner-centered approach to English learning.

Origins and Development of ESP

The emergence of ESP was not imminent until in the late 1960s. Underlying its theoretical and practical focuses, "it was particularly associated with notion of a special language and with important sub-field of English for science and technology (Far, 2008)." Later on, the view of communicative function was applied to ESP and the importance of needs analysis was brought into the focus of the perspectives on learners' needs for English learning and language skills.

The fundamental of needs analysis for ESP is first to define the situation or premises in which the learners will use English and practice their profession, and then the relevant instruction is aligned accordingly. Consequently, teachers of ESP courses provide authentic and specific language in their students' needs to succeed in future career.

Needs analysis

The overview of needs analysis in language teaching has depicted its history, theoretical foundation, and approaches. Needs analysis is also regarded as demand or requirement needs, which has become a necessary and important stage of course design for either general English course or English for Specific Purposes (ESP) course(West, 1994). Learner's needs has been the principle of the curriculum development of ESP. As defined by Johns and Dudley-Evans (1991), it can be regarded as what field the learners will practice English in the future. Studies on learner needs focused on the "needs analysis" and "needs assessment," including the survey about students' backgrounds and goals, as well as interviewing the faculty (Johns, 1981; Howorwittz, 1986). The more learner needs are clear, the more the objectives are expressed and the ESP course easily becomes successful (Theeb, H., & Albakrawi, M. (2013).

Since needs analysis has become a prerequisite and necessary condition, it is also expounded as a guidance of course design or an evaluation of the students' existing perceptions of needs. Although experienced teachers may ask students directly to understand what they expect of the class in the very beginning, a well-aligned needs analysis involve just much more than that. Needs analysis can help teacher gather information to find out how much the students already know and what they still need to learn. Pourshahian et. al. (2012) concluded the results of previous studies and suggested the needs analysis should be to learn

what aspects of language the learners need to study, what degree they need to study and why the learners study language. Berwick (1989) stated the administration of needs analysis can help course designer realize the discrepancy between a current state of learner's language skills and a desired future state. Generally speaking, the previous studies on needs analysis usually focus on collecting data on the perspectives of learners' wants, needs and expectation in terms of attitudes, beliefs and viewpoints. Furthermore, detailed information about all contextual factors like learning materials, aids, and environment are included into a more comprehensive needs analysis (Boroujeni & Fard, 2013).

Method

The present study investigated the perspectives and perception on the needs of ESP courses among students in a technological university. The information of the demographic part was as follows; 257 three-year students including 62 males and 195 females voluntarily participated in this study; 105 were English majors and 152 were non-English majors; their English proficiency level range was between elementary to advanced ones; 158 of the participants expected English related jobs as their future career, whereas 99 of them chose non-English related ones, including, and 62 males, 195 females.

A Six-point Likert scales questionnaire by Balint (2010) was adopted to find out the needs of Taiwanese college students from the language point of view. The questionnaire was distributed to 257 respondents. The questionnaire consisted of two parts; one was the demographic part for personal information and the other was questionnaire items for the perceived language skill needs. The origin English version was translated into Chinese to prevent students from misunderstanding the question items. A pilot test with 52 second-year students was implemented to check for each item wording and the construction of the questionnaire. The formal questionnaire consisted of 35 five-point Liker scale items. Both item analysis and reliability were processed to support the construct validity of research instrument. The Cronbach's alpha reliability of the instrument was .92. The questionnaire was scrutinized by two English teachers to gain the content and face validity.

The formal questionnaire was distributed to the students to collect the data. Descriptive, t-test and ANOVA statistic via SPSS statistic software package for

windows were used to analyze the collected data.

Results and Discussion

The result of the analysis of first question was presented in Table 1. Most (50% or above) students were interested or very interested in learning English. Among the interest in learning English, item 6 and 8 had the much highest percentages, 83.3 and 85.2 respectively, which concluded that the students all believed in having good English proficiency would be of great help to their future career. The least frequency was item 4 indicating half of the participants did not expect to seek an English-related job after graduation. Moreover, among the ESP, EAP and general English courses, the students felt most interested in ESP instruction (78.2%) and considered ESP courses could be more useful for their future English needs.

Table 1   Descriptive statistic for the category of "Interest in learning English"

Interest in Learning English %	From Usually To Always
I choose to attend this course because of the opportunity to take upper-division English-medium courses.	74.1
I have a goal to take elective courses taught in English in my 4 years of university.	55.1
I am interested in doing a study abroad program in an English-speaking country while I am a university student.	55.2
I have a goal to get a job which requires English after graduating from university.	47.9
Learning English is a challenge that I enjoy.	66.5
I want to learn English to be more educated.	83.3
I believe learning English is important to get a good job after graduating from university.	85.2
If taking English courses in the ESP were optional, I would choose to take them.	60.3
I think English for specific purposes (ESP, or work-related English) instruction is useful for my future English language needs.	78.2
I think English for academic purposes (EAP) instruction is useful for my future English language needs.	50.6

		75.8
I think general English instruction (Everyday conversational English and travel English) is useful for my future English language needs.		75.8
Among the three types of English instruction, I would like to take the ESP/work-related English		56.4

Table 2 presented findings regarding the importance of four English language skills which the students perceived. The mean scores of the perceived skills were 4.03, 4.27, 4.03, and 4.05 respectively regarding reading, listening, speaking, and writing. Listening skill was concerned to be the most important and needed skill to be geared up with, which might also show the lack of the students' English listening skills.

Table 2 Descriptive statistic of mean scores of the perception on the importance of four English skills

	Reading	Listening	Speaking	Writing
Mean	4.03	4.27	4.03	4.05
Std.	.647	.588	.682	.723

Table 3 illustrated findings for gender difference in perceived needs of four English skills. The importance and needs of listening was the most concerned sub-skill between male and female students (mean = 4.23 and 4.29 respectively). The result of the independent sample t-test showed no significant differences between males and females, which meant male and female students held similar viewpoints on the importance of each English skills.

Table 3 Descriptive statistic of mean scores of four English skills by gender difference

Gender		Mean	Std.	Gender		Mean	Std.
Male	Reading	3.99	.647	Female	Reading	4.04	.648
	Listening	4.23	.682		Listening	4.29	.557
	Speaking	4.07	.723		Speaking	4.02	.670
	Writing	3.99	.859		Writing	4.06	.676

In Table 4, there showed the mean scores of interest in English learning, reading, listening, speaking, and writing among different English proficiency level. As for interest in English learning, students at higher proficiency level showed higher mean score, indicating elementary and advanced levels at 3.67 and 4.18 respectively.

Moreover, the perceived needs or importance of four language skills showed the highest each at the advanced level and the lowest at the elementary level. Students at elementary level held highest needs on listening skill (M= 4.19) and lowest on speaking (M= 3.87), at intermediate level (M=4.33 for listening, M=4.08 for reading, at the intermediate-high level (M= 4.39 for listening, M=4.06 for writing), and at the advanced level (M=4.85 for listening, M= 4.50 for reading)

Table 4 Descriptive statistic of means by different English proficiency level

Proficiency	N	Interest in English	Reading	Listening	Speaking	Writing
Elementary	119	3.67	3.94	4.19	3.87	3.93
Intermediate	119	3.97	4.08	4.33	4.15	4.13
Intermediate-high	14	4.12	4.13	4.39	4.13	4.06
Advanced	5	4.18	4.50	4.85	4.57	4.80
Total	257	3.84	4.03	4.27	4.03	4.05

General Linear Model was employed to examine whether or not there were significant differences on four language skills needs by students' different English proficiency levels. The statistics analysis of the multivariate test showed significant with the Pillai's Trace value at .131 (F = 2.30, p= .03 < .05) for the unequal groups. After processing the post hoc test, the findings showed that students at elementary level held significant difference to intermediate and intermediate-high levels on interest in English learning. According to Table 4, the results indicated that students at higher English proficiency level held higher interest in English learning. Moreover, students at elementary level held significant difference to intermediate levels on English speaking needs. According to Table 4, the result stated that students at higher English proficiency level held much more needs on English speaking skill.

Table 5 The multiple comparison of different English proficiency level by Scheffe test

Dependent Variable	(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.
Interest	inElementary	Intermediate	-.2983	6.517E-02	.000

English

		Intermediate-high	-.4503	.1420	.020
		Advanced	-.5146	.2295	.173
	Intermediate	Elementary	.2983	6.517E-02	.000
		Intermediate-high	-.1520	.1420	.766
		Advanced	-.2162	.2295	.828
	Intermediate-high	Elementary	.4503	.1420	.020
		Intermediate	.1520	.1420	.766
		Advanced	-6.4286E-02	.2619	.996
	Advanced	Elementary	.5146	.2295	.173
		Intermediate	.2162	.2295	.828
		Intermediate-high	6.429E-02	.2619	.996
Reading needs	Elementary	Intermediate	-.1429	8.334E-02	.403
		Intermediate-high	-.1912	.1816	.775
		Advanced	-.5602	.2935	.305
	Intermediate	Elementary	.1429	8.334E-02	.403
		Intermediate-high	-4.8319E-02	.1816	.995
		Advanced	-.4174	.2935	.569
	Intermediate-high	Elementary	.1912	.1816	.775
		Intermediate	4.832E-02	.1816	.995
		Advanced	-.3690	.3349	.750
	Advanced	Elementary	.5602	.2935	.305
		Intermediate	.4174	.2935	.569
		Intermediate-high	.3690	.3349	.750
Listening needs	Elementary	Intermediate	-.1345	7.542E-02	.367
		Intermediate-high	-.1975	.1644	.696
		Advanced	-.6518	.2656	.113
	Intermediate	Elementary	.1345	7.542E-02	.367
		Intermediate-high	-6.3025E-02	.1644	.986
		Advanced	-.5173	.2656	.287
	Intermediate-high	Elementary	.1975	.1644	.696
		Intermediate	6.303E-02	.1644	.986
		Advanced	-.4543	.3031	.524
	Advanced	Elementary	.6518	.2656	.113

		Intermediate	.5173	.2656	.287
		Intermediate-high	.4543	.3031	.524
Speaking needs	Elementary	Intermediate	-.2737	8.663E-02	.020
		Intermediate-high	-.2587	.1888	.599
		Advanced	-.6975	.3050	.159
	Intermediate	Elementary	.2737	8.663E-02	.020
		Intermediate-high	1.501E-02	.1888	1.000
		Advanced	-.4238	.3050	.588
	Intermediate-high	Elementary	.2587	.1888	.599
		Intermediate	-1.5006E-02	.1888	1.000
		Advanced	-.4388	.3481	.662
	Advanced	Elementary	.6975	.3050	.159
		Intermediate	.4238	.3050	.588
		Intermediate-high	.4388	.3481	.662
Writing needs	Elementary	Intermediate	-.2000	9.243E-02	.199
		Intermediate-high	-.1277	.2014	.940
		Advanced	-.8706	.3255	.070
	Intermediate	Elementary	.2000	9.243E-02	.199
		Intermediate-high	7.227E-02	.2014	.988
		Advanced	-.6706	.3255	.239
	Intermediate-high	Elementary	.1277	.2014	.940
		Intermediate	-7.2269E-02	.2014	.988
		Advanced	-.7429	.3715	.264
	Advanced	Elementary	.8706	.3255	.070
		Intermediate	.6706	.3255	.239
		Intermediate-high	.7429	.3715	.264

* The mean difference is significant at the .05 level.

Furthermore, Table 6 illustrated the correlations among different perceived English skill needs. There showed significant correlations among different variables at high level above .56 to .69, which presented there were close relationship between different English skill and students perceived each individual skill was important for their English learning.

Table 6 Correlations of the perceived skill needs

		Interest in English	Reading	Listening	Speaking	Writing
Interest in English	Pearson Correlation	1.000	.577	.568	.654	.553
	Sig. (2-tailed)	.	.000	.000	.000	.000
	N	257	257	257	257	257
Reading needs	Pearson Correlation	.577	1.000	.692	.616	.566
	Sig. (2-tailed)	.000	.	.000	.000	.000
	N	257	257	257	257	257
Listening needs	Pearson Correlation	.568	.692	1.000	.683	.647
	Sig. (2-tailed)	.000	.000	.	.000	.000
	N	257	257	257	257	257
Speaking needs	Pearson Correlation	.654	.616	.683	1.000	.676
	Sig. (2-tailed)	.000	.000	.000	.	.000
	N	257	257	257	257	257
Writing needs	Pearson Correlation	.553	.566	.647	.676	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.
	N	257	257	257	257	257

** Correlation is significant at the 0.01 level (2-tailed).

Conclusions

The present study was aimed to measure the perceived needs of four English skills and interest in English learning from the students of a technological university. The major findings depicted the needs perception held by the students were at very high level, indicating students realized that four English skills were all important and needed to be much improved to help with employment advantage or the future job performance. Still, more than half of the students did not expect to obtain English-related jobs after graduation, which may indicate their view of current situation of traditional industries in Taiwan. And students at higher proficiency level held more interest in English learning than those at lower level, which showed the importance of motivation and the

inspiration of learning achievement. Last but not least important, among four language skill needs, listening skill was the most need one, followed by writing skill, and these findings could be presented as a useful suggestion to English teachers that students think and perceive that the productive skills need to be much more improved.

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