



# Integrating Information Literacy into an English for Specific Purposes Course: Empirical Results and Recommendations for Practice

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**Abstract.** Teaching English course for specific (ESP) purposes is not only about the skills in reading or speaking, the task requires teachers to deliver heavily on knowledge and practical skills in the discipline. With tradition language teaching methods, the results in ESP courses cannot be fulfill, therefore, a new teaching approach need to be developed. Integrating information literacy into university curricula to improve students' performance have been proved to be the one of the best solutions. However, there is no study about the effects of integrating information literacy into an ESP course. This paper therefore fills this research gap, as it investigates the empirical results and recommendations for practice. This study was conducted using mixed method approach, including questionnaires and semi-structured interviews. The data was collected from 103 students participating in an experimental course integrating information literacy. The findings show that leaners have a great satisfaction about this new method after the course. The options of developing information literacy support for EFL learners were also discussed.

**Keywords:** Information Literacy, English for Specific Purposes, language teaching method, integrating information literacy.

## 1 Introduction

Information Literacy and its positive impact on language learning and course performance of both undergraduate and graduate students have been proven in many different studies [1-3] which make a new type teaching become popular in most universities in the world as well as in Vietnam. However, because the purposes and the characteristics of ESP and general English are basically different, it is not sure if integrating information literacy into an ESP course can be effective or not. Moreover, it is also hard to know whether the non-English-majored students find this new method suitable for their learning behavior. Therefore, in order to fill in the research gap, new research needs to be conducted to examine the effects of integrating information literacy into an English for Specific Purposes course as well as investigate the student's attitudes about this teaching combination. In this article, the researcher wants to present a part of her research about integrating information literacy into an ESP course, specifically about

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non-English-majored students' attitudes towards the experimental ESP course which information literacy was integrated into.

## **2 Literature review**

### **2.1 English for Specific Purposes (ESP)**

English for Specific Purposes or ESP is a small teaching branch of the English language that has been well developed after the end of the Second World War [4]. Therefore, compared with General English, which deals with the English language in general, this concept still has some different versions of definitions. Some most recent definitions that fit the purposes of this research may consist of the one from Paltridge and Starfield [5] which defines ESP as an English language study that concerns the language, discourse, and culture of English-language professional communities and specialized groups. This definition then was explained thoroughly by Mohamed and Alani [6], who state that ESP is the teaching and learning way that educators use the English teaching method to deliver specific content of a certain major. Thus, with this type of learning, English is designed to fulfill certain needs that are specific for a certain profile, including some training and practice of specific spoken and written in order to accomplish specific official or academic work.

From the definitions above, it can be shortened that the purpose of teaching ESP is to equip learners with the needed skills to utilize them in a special area, job, or profession through English. As a result, ESP courses have their own characteristics that make them different from General English courses. Nurpahmi [7] has listed some absolute characteristics and variable characteristics that an ESP course usually has. The absolute characteristics of ESP include:

1. Language teaching must meet students' disciplines;
2. The learning content must be relevant to their working environments;
3. The language content must be suitable to discipline practice in syntax, lexis, discourse, semantics and so on;
4. It is designed in contrast with General English.

The two variable characteristics of ESP consist of:

1. ESP should be restricted to the major language skills;
2. ESP should not be taught according to any pre-ordained teaching method.

For these characteristics, educators and researchers in English language teaching are concerned that the traditional English teaching methods may not meet the requirements to fulfill these ESP courses [6, 7]. Therefore, a new teaching method needs to be developed to satisfy learners in these courses.

### **2.2 Information Literacy (IL)**

The definition of information literacy (IL) has been developed from time to time beginning defined as a set of library skills that help students to find the information easier to the competence that is essential for all citizens around the world [8]. After reviewing

all the definitions from the early stage to the latest one, there is a significant concept that was used to conduct this research. It is from the American Library Association (ALA) in 2015 which defines IL as the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning [9]. From this latest IL concept, it is considered that the definition of IL mainly emphasizes the development of the individual's capacity and understanding of information rather than defaulting information skills with fixed results. Because of that, the use of information literacy is changing from only serving academic purposes to working environments outside the university.

The research of Granruth and Pashkova-Balkenhol [10] has proved that there is a great correlation between students' language performance and their information literacy competence. One of the most important impacts of IL on students' language performance is through the process of searching documents. When language teachers ask students to conduct information searching about a certain issue, assuming that students know the process, it is shown that students with high IL competence can perform the searching process much better than those who have low IL competence. Therefore, the results show that their overall scores in language classes were much higher than the others. In addition to the searching for information, IL also affects the development of students' reading and writing abilities through the process of using information. In particular, the researchers believe that the language teaching environment is very suitable for integrated teaching of intellectual abilities, especially in courses that develop language output skills such as writing and speaking. Finally, students' IL competence also has a strong impact on their language competency through the process of absorbing information. Accordingly, students who have IL competence can build their own self-study process outside the classrooms, which results in having the ability to use language fluently. Therefore, it can be concluded that IL has big impacts on students' language performance. This makes IL become good potential to develop a new teaching method for ESP courses.

### **2.3 Related studies**

Martin et al. [1] conducted a study on building relationships between students who use English as a second language and librarians, who teach IL as a bridge to help them to access information resources in the library more easily. The research results show that when guided by librarians with inappropriate IL skills, international students tend to use the library more efficiently. In addition, the study also shows that with close cooperation between librarians and lecturers who teach courses, in guiding and training IL for international students. However, the research goes deeper in the direction of description and explanation rather than providing the attitudes of international students toward the new teaching combination.

Shao and Purpur [2] conducted a research to understand the impact of IL on students' writing skills and overall scores. This study analyzes the IL competence of first-year students at a university. The results show that there is a good relationship between

learners' IL competence and their writing ability as well as their overall course achievement. Specifically, IL directly develops the writing scores and overall; scores of students participating in the training courses. This study consolidates and expands the research direction of integrating IL in an English course to develop students' language competence. However, this study only observed a single skill, which is writing rather than conducting a research on all English skills.

Granruth and Pashkova-Balkenhol [10] conducted a study on the benefits of improving IL in order to develop students' writing skills in sociology majors. The study has detailed a collaborative teaching model between lecturers and librarians to develop students' writing and creative thinking skills through an IL training process. The results of the study showed that as students improved their IL competence, they also improved their writing skills. In addition, research also shows that students appreciate course content and teaching methods that integrate IL into the curriculum. However, similar to the study of Shao and Purpur [2], only writing skills were examined and evaluated in correlation with IL without any development on other language skills.

Nguyen Le Ngoc Anh and Thai Cong Dan [3] carried out a case study on the effects of EFL teachers' use of the IL model - Big6 on learners' argumentative writing. In their research, they use a mixed method including quantitative and qualitative research tools to gather the data. The results from the pre-test and post-test show that there is a significant difference in the students' scores before and after the experimental group who learnt English via the information literacy model Big6, which indicates the positive effects of this type of teaching. Moreover, the results of the questionnaires and semi-structured interviews show that both EFL teachers and students have positive attitudes toward the integration of information literacy skills into their lessons. However, similar to previous studies, this research was only conducted in a general English course.

In short, there have been many studies proving the correlation between IL competence and language competence. However, most studies stop at observation and description or only on general English courses. Therefore, there is a need for extensive research to learn about the impact of IL on students' language ESP competence as well as their attitudes toward this new teaching method.

### **3 Research Questions**

The primary aim of this research is to investigate the non-English-majored students' attitudes towards the experimental ESP course which information literacy was integrated into. In order to do that, the study has two questions that need to be answered:

1. What are non-English-majored students' attitudes towards the experimental ESP course which information literacy was integrated into?
2. What are the challenges that non-English-majored students can get when participating in an ESP course which information literacy is integrated into?

## **4 Methods**

### **4.1 Pedagogical Setting & Participants**

The research was conducted in a private learning center in Can Tho, Vietnam from August, 2022 to October, 2022. There were 103 purposeful students for sampling in this research. Regarding the participants, they were all library and information science students who had passed the English proficiency requirement used to select participants for the experimental ESP course.

The experimental course was taught with an integrating information literacy ESP curriculum which highly focuses on the development of students' English proficiency for library and information major. The course book used for instruction in the course was "English for Library and Information Management 1" composed by Huỳnh Thị Trang and Lê Ngọc Linh [11]. They were taught as the instructional material. Besides this course book, for the purposes of this study, different worksheets and task activities related to IL were also used in this experimental course. In general, the program concentrated on the training interventions on IL skills such as information seeking, citing sources, evaluating the information obtained, and issues when using of information like copyright and open access.

At the end of the research, a questionnaire and a series of semi-structured interviews were conducted to collect students' attitudes towards the experimental ESP course which IL was integrated into.

### **4.2 Design of the Study**

In order to find out non-English-majored students' attitudes towards the experimental ESP course which IL was integrated into, a mixed method combined with both quantitative and qualitative designs was adopted.

For the collecting and analyzing process, the quantitative method, which is a questionnaire, was used first to collect data about students' attitudes towards the experimental ESP course. The results were used to answer the first research question of the study. Then, the qualitative method was used for answering the second research question, which was a series of semi-structured interviews. This type of design helps the researcher to understand more about the attitudes of students toward this experiment as well as the difficulties that they could face when integrating IL into their learning.

### **4.3 Data collection & analysis**

At the end of the experimental course, the researcher did a survey of 103 participants who were involved in the experience to know their attitudes. The learners were asked to range their satisfaction with the language, library, teacher, facility and overall satisfaction about the course on the 5-point Likert scale from "Not at all Satisfied" to "Very Satisfied". The whole process lasted 12 minutes.

After that, 10 learners selected randomly from 103 participants were interviewed to gain insight into their thinking about this new teaching method and the difficulties that they could face when integrating IL into their learning. Each interview was audio-recorded and then transcribed into words later. The whole process took the researcher 3 hours and a half to complete.

After the data have been collected, the SPSS software will be used to analyze the answers from the questionnaire. For analyzing the quantitative data, the one-sample t-test and the descriptive statistic t-test were used. For the qualitative data, the transcriptions of the interviewees were divided into themes for analysis.

## 5 Results/Findings and discussion

### 5.1 Non-English-majored students' attitudes towards the experimental ESP course which information literacy was integrated into

The Descriptive Statistic Test and the One Sample T-test were run again in each cluster of the questionnaire to examine the students' attitudes towards the four sections, including the language, library, teacher and facility related items. These are four fundamental elements of the new teaching method which information literacy was integrated into. In the experimental course, the library content was used to support and enhance the language content in each lesson, where, the parts of the teacher and facility were used as the devices to deliver these two.

It is easy to see in Table 1 that all the mean scores of these clusters are above 3.4, the medium level in the 5-point Likert scale in the Jenkins' framework [12]. With the results from the one sample t-test ( $p=0.00$ ), it can be interpreted that the students have satisfaction with the experimental ESP course which information literacy was integrated into.

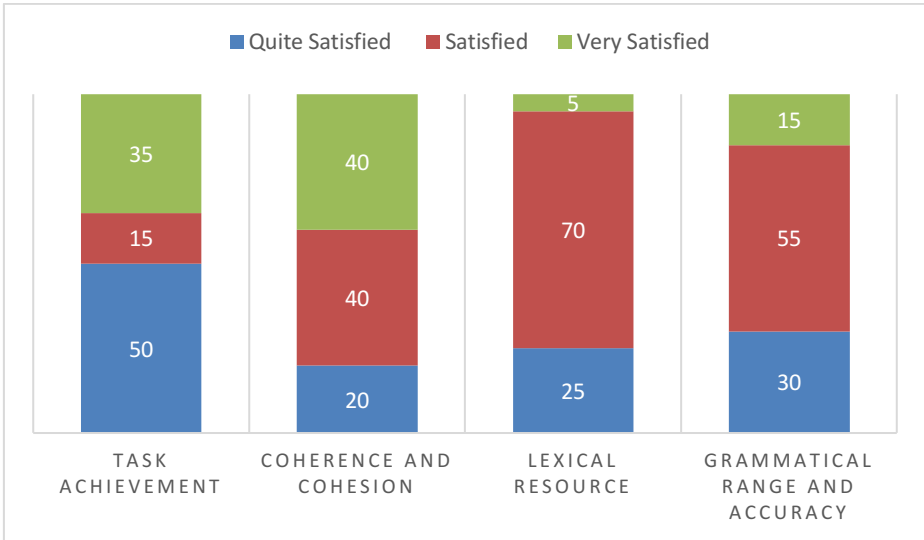
**Table 1.** The mean scores of students' attitudes towards the experimental ESP course.

	N	Minimum	Maximum	Mean	Std. Deviation
Mean Language	103	4.00	4.32	4.3227	.25075
Mean Library	103	4.00	5.17	4.2183	.28240
Mean Teacher	103	3.91	4.42	4.2036	.25961
Mean Facility	103	4.00	5.00	4.4600	.27910

In particular, the facility-related items have the highest mean score ( $M=4.46$ ,  $SD=0.27$ ) while the language-related items have the second highest mean score ( $M=4.32$ ,  $SD=0.25$ ). The teacher-related items have the lowest score ( $M=4.20$ ,  $SD=0.25$ ) while the library-related items are just above it slightly ( $M=4.21$ ,  $SD=0.28$ ). It can be seen that the differences between the figures are too small to count, therefore, it can be inferred that the attitudes of non-English-majored students towards each cluster of the questionnaire are the same.

**Students’ attitudes towards the language related items in the experimental ESP course.**

In the questionnaire of attitudes, the language cluster was designed with 11 questions, including task achievement, coherence and cohesion, lexical resource, grammatical range and accuracy. After running the Descriptive Statistic Test in SPSS, the results are illustrated in Figure 2 below. It can be seen clearly that among four aspects, most of the learners felt more satisfied with the new teaching method as their lexical resource (M lexis=4.43) and their grammatical range and accuracy (M grammar=4.43) are both very high.



**Figure 1.** Students’ attitudes toward the language-related items in the experimental ESP course

**Students’ attitudes towards the library related items in the experimental ESP course**

A Descriptive Statistic Test was carried out to explore which IL skills students gained most after the experimental ESP course. As can be seen in Table 2, students had positive attitudes toward the improvement of their information-seeking strategies most (M strategies=4.83). The ability to synthesize information from multiple resources appeared to be the least satisfied of the six skills (M synthesis=4.21).

**Table 2.** Students’ attitudes towards the library related items in the experimental ESP course

	N	Minimum	Maximum	Mean	Std. Deviation
Task Definition	103	4.00	5.00	4.3200	.47016
Information Seeking Strategies	103	4.00	5.00	4.8300	.51299
Location and Access	103	4.00	5.00	4.3600	.48936
Use of Information	103	4.00	5.00	4.4800	.51042

Synthesis	103	4.00	5.00	4.2100	.41039
Evaluation	103	4.00	5.00	4.3800	.48936

## 5.2 The challenges that non-English-majored students can get when participating in an ESP course which information literacy was integrated into

To begin with, all ten interviewees claimed that the experimental ESP course was very useful in developing their ESP knowledge and practical skills. For example, interviewee 1, one of the two interviewees who had the highest scores in the post-test, said that:

“I find the experimental ESP course was very useful ... it is not hard to learn. I find it helps me a lot in developing their ESP knowledge and practical skills.”

(Interviewee 1)

When asked what things made them not improve after the experimental ESP course, most of them stated that fluency and pronunciation are the most difficult aspects that cannot be developed well in this type of teaching method. These are some typical notes from the interviewees:

“...I find that the most difficult part is the pronunciation since this one needs a lot of time to practice, and there are no IL skills that can help me with this. And also, the fluency because even though I had all the needed information for my presentation, I couldn't express it as well as I wanted.”

(Interviewee 5)

“...I find the most difficult part are the pronunciation and fluency.”

(Interviewee 8)

When asked what things made them feel challenging during the experimental ESP course, most of them stated that the synthesis process, the grammatical range and accuracy are the two aspects that are hard to learn. For example, the interviewees said that:

“The synthesis process looks very simple but very hard to learn. Moreover, I get tired of the grammatical range and accuracy lessons since it consumed a lot of time...” (Interviewee 4)

“...sometimes after reading the papers, I cannot synthesize them well to put into the written or spoken assignments which really annoyed me.”

(Interviewee 2)

“I find the grammatical range and accuracy lessons do not help me to improve my mistakes.” (Interviewee 7)

Another challenge the interviewees reported are the difficulty in communicating with teacher or classmates. Like the interviewees 1 and 10 explained that:

“I think when the class communication is weak, we only focus on our own searching and synthesizing without discussing with each other”

(Interviewee 1)

“I think the most difficult is it is hard to communicate with the teacher since there were many new things to ask but there was only a small time in class.”

(Interviewee 10)



## 6 Conclusion

Furthermore, most of them seemed to be more satisfied with the facility-related items of the course and the information-seeking strategies that the IL competence brought. They also claimed that their lexical resource and their grammatical range and accuracy increased most after the intervention. However, the results also found that the difficulty in communicating with teacher or classmates is the most challenging aspect that needs to be improved in this type of teaching. This finding is in line with the studies of Shao and Purpur [2] as well as Nguyen Le Ngoc Anh and Thai Cong Dan [3] that IL skills were positively correlated with both learners' writing scores and final course grades. Therefore, the research findings support the idea that integrated information literacy in an ESP course is possible.

*Presenting the limitations of the studies and recommendations for future studies.*

Like most case study research, this study has rather a small sample size, which makes it hard to generalize the results in different EFL teaching contexts outside the language center learning environment. Thus, the data from the semi-structured interviews may not cover all the aspects that most of the students who participated in the experimental course face. For that, educators and researchers are considered to use the findings of the study with awareness.

Based on the study's limitations, it is recommended that there be further research that has a larger sample size so as to contribute more general data about this new teaching method.

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