

Factors Affecting English Self-Efficacy According to the CEFR of Students at St Theresa International College, Thailand

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Received on 6 January 2022, Revised, Accepted on 02 March 2022, and Published on 2 May 2022

Abstract

The objectives of this research were to compare the level of English self-efficacy according to the Common European Framework of Reference for Languages (CEFR) of students, and to study the factors affecting English self-efficacy according to the CEFR of students at St Theresa International College, Thailand. This research is quantitative research. The statistics used in this research were Mean, S.D., t-Test and Multiple Regression Analysis. The results showed that 1) the level of English self-efficacy both overall and in each competency, students from educational and service disciplines, and students from health science disciplines have the same level of English self-efficacy according to the CEFR. 2) Factors affecting English self-efficacy of students according to the CEFR consisted of 3 factors, namely the learning scenario factor ($\beta = 0.517$), the learning resources factor ($\beta = 0.429$), and the learning tools and technologies factor ($\beta = 0.136$), with a predictive efficiency coefficient of 94.50 percent ($R^2 = 0.945$). The predictive linear equation of the English self-efficacy of students can be written as 'English self-efficacy = .031 + 0.482 (learning scenario) + .378 (learning resources) + .134 (learning tools and technologies)'.

Keywords: Self-efficacy, English Proficiency Development, CEFR, Scenario-Based Approach

Background

St Theresa International College emphasizes the development of students' English proficiency by using the learning management process in a scenario-based approach, in the form of skills-based scenario, problem-based scenario, issue-based scenario, and speculative-based scenario (Errington, 2010). By means of the four main factors of learning management including learning scenario, learning resources, learning tools and technologies, and learning support (Naidu, 2008) to develop the learners' English skills in accordance with the Common European Framework of Reference for Languages: CEFR (Council of Europe, 2001).

To achieve goals of developing the learners' abilities, emphasis must be given to building awareness of self-efficacy to the students (Bandura, 1986). As students who have a high level of self-efficacy will be able

to develop practical training to achieve desired professional competence (Mattavangkul and Prasomsuk, 2010; Puncreobutr and Khamkhong, 2016; Shokebumroong et al., 2021) with patience, endeavor to achieve outcome expectation, and with determination and persistence in the face of obstacles (Bandura, 1997).

For the English proficiency development of undergraduate students according to the CEFR in Thailand, it is carried out by endorsing learning in the form of communicative language teaching: CLT (Pomin and Srinonyang, 2020) with the aim to develop students in 3 key English competencies including listening and comprehension, grammar and writing, and reading comprehension (Praboromarajchanok Institute for Health Workforce Development, 2017; Choopun and Khamchang, 2020; Bunching et al., 2021).

Therefore, in the management of the English proficiency development project, St Theresa International College begins with building awareness of English self-efficacy according to the CEFR, which consists of self-efficacy in three competencies, namely self-efficacy related to listening and comprehension competency, self-efficacy related to grammar and writing competency, and self-efficacy related to reading comprehension competency, which will be beneficial to students in their exit exam assessing English proficiency and skills according to the CEFR before graduation.

St Theresa International College has implemented the program since the academic year 2017 and has instigated it until now (academic year 2021). It was found that the results of the students' English proficiency development with the learning management process in a scenario-based approach has been consistently successful. However, to raise the quality of the students' English proficiency development program to a higher level, the college therefore sought to study which factors of the scenario-based approach affected English self-efficacy according to the CEFR of students. Subsequently, the college will utilize the results of the study to accentuate any factors affecting self-efficacy more strongly or lessen the importance of any factors that do not affect self-efficacy, as well as adopt the information for the college administrators, the administrators of the English proficiency development project, faculties, and curriculum, or the people involved in curriculum development, and for further development of the students' English learning management process.

Research Objectives

1. To compare the level of English self-efficacy according to the CEFR of students at St Theresa International College, Thailand, classified by study discipline.
2. To study the factors affecting English self-efficacy according to the CEFR of students at St Theresa International College, Thailand.

Research Methodology

This research is a quantitative research.

The population consists of third year students at St Theresa International College

who have undergone the learning management process in a scenario-based approach, and have been developed to cultivate self-efficacy, from the academic year 2019 to the academic year 2021. A total of 380 people were students from various study disciplines, comprising of 269 students from the Faculty of Education, the Faculty of Humanities and Social Sciences, and the Faculty of Business Administration, and 111 students from disciplines in the Faculty of Nursing and the Faculty of Public Health.

The sample group was randomly sampled from the population of third year students at St Theresa International College. The number of students used as the sample group according to the Krejcie and Morgan table totaled to 191 people. The group was sampled by stratified random sampling with the study disciplines as a criterion for stratification. The service group involving students from various disciplines in the Faculty of Education, the Faculty of Humanities and Social Sciences, and the Faculty of Business Administration, consisted of 135 people, and the health group involving students from various disciplines in the Faculty of Nursing and the Faculty of Public Health, consisted of 56 people.

The variables studied are:

1. Independent variables are the study disciplines, consisting of 2 groups:

The service group which entails educational and service disciplines, consisting of students from various disciplines in the Faculty of Education, the Faculty of Humanities and Social Sciences, and the Faculty of Business Administration.

The health group which entails health science disciplines, consisting of students from various disciplines in the Faculty of Nursing and the Faculty of Public Health.

2. Dependent variables are the perception of English self-efficacy according to the CEFR, including

Self-efficacy related to listening and comprehension competency

Self-efficacy related to grammar and writing competency

Self-efficacy related to reading comprehension competency

Research tools and statistics: The tool used was a questionnaire created by the researcher. The discriminant power was .387-

.892, the reliability factor was .91. The statistics used in the research were Mean, S.D., t-Test and Multiple Regression Analysis.

The study duration was June 2021–October 2021.

Research Findings

The findings of the study are as follows:

1. A comparison of the level of English self-efficacy according to the CEFR of students

A comparative study of the level of English self-efficacy according to the CEFR of students at St Theresa International College, Thailand, classified by study discipline as shown in Table 1.

Table 1 A comparison of the level of English self-efficacy according to the CEFR of students (N=191)

Competency	Service Group (135)		Health Group (156)		t	p
	Mean	S.D.	Mean	S.D.		
Listening and Comprehension	4.54	.3778	4.50	.3963	.669	.504
Grammar and Writing	4.52	.3519	4.48	.3509	.662	.509
Reading Comprehension	4.52	.3573	4.51	.4052	.232	.817
Overall English self-efficacy	4.53	.3190	4.50	.3474	.585	.559

* $p < .05$ ** $p < .01$

From Table 1, the comparison of the level of English self-efficacy according to the CEFR of students found that the overall English self-efficacy of educational and service disciplines (service group) was higher than that of health science disciplines (health group), with no statistical significance. When considering each competency, it was found that all competencies including listening and comprehension competency, grammar and writing competency, and reading comprehension competency of students for the educational and service disciplines (service group) was higher than the health science disciplines (health group), statistically insignificant as well.

Table 2 The results of the multiple regression analysis of factors affecting English self-efficacy according to the CEFR of students

Independent variable (predictor)	b	Beta	t	p
Learning scenario factor	.482	.517	19.501**	.000
Learning resources factor	.378	.429	17.388**	.000
Learning tools and technologies factor	.134	.136	5.229**	.000
Constant	.031		.382	.703
R = 0.972 R ² = 0.945 F = 1068.316 p value < 0.000				

From Table 2, the results of the multiple regression analysis of factors

2. Factors affecting English self-efficacy according to the CEFR of students

Factors affecting self-efficacy

A study of the factors affecting English self-efficacy according to the CEFR of students at St Theresa International College, Thailand, by multiple regression analysis from 4 factors including the learning scenario factor, the learning resources factor, the learning tools and technologies factor, and the learning support factor. The results are shown in Table 2.

affecting English self-efficacy according to the CEFR of students found that the positive

factors with statistical significance at the .01 level consisted of 3 factors, which are the learning scenario factor ($\beta = 0.517$), the learning resources factor ($\beta = 0.429$), and the learning tools and technologies factor ($\beta = 0.136$). Another factor is the learning support factor which does not affect English self-efficacy according to the CEFR of students at St Theresa International College, Thailand.

The results of the study showed that the value of $R^2 = 0.945$ indicates that the predictive efficiency coefficient of factors affecting English self-efficacy according to the CEFR of students consists of 3 factors, the learning scenario factor, the learning resources factor, and the learning tools and technologies factor, which accounted for 94.50 percent. The remaining predictive efficiency of 5.50 percent was a result of other variables that were not included in the study.

From the results of the statistical examination of the coefficients of the 3

independent variables, the equation can be written in the form of a linear equation obtained from a multiple regression analysis to predict the English self-efficacy of students as:

$$\text{English self-efficacy} = .031 + 0.482 (\text{learning scenario}) + .378 (\text{learning resources}) + .134 (\text{learning tools and technologies})$$

The equation can be written in standard score form as:

$$Z_{\text{English self-efficacy}} = .517 Z_{\text{learning scenario}} + .429 Z_{\text{learning resources}} + .163 Z_{\text{learning tools and technologies}}$$

The degree of influence of the learning scenario factor on English self-efficacy

The degree of influence of the learning scenario factor on English self-efficacy according to the CEFR of students as shown in Table 3.

Table 3 The degree of influence of the learning scenario factor on the English self-efficacy of students (N=191)

Scenario	mean	S.D.	Degree of influence
An everyday life scenario	4.481	.5009	High
A scenario where an event is a trigger point, problems should be solved according to the scenario	4.617	.4872	Very high
Having the student at the center of the scenario	4.486	.5011	High
Having friends/other people at the center of the scenario	4.492	.5012	High
A scenario that requires cooperation in solving the problem	4.445	.4982	High
Overall learning scenario	4.504	.3511	High

From table 3, the overall learning scenario factor found that there was a high degree of influence. When considering each scenario, it was found that there was a very high degree of influence in a scenario where an event is a trigger point, problems should be solved according to the scenario. Other scenarios including having friends/other people at the center of the scenario, having the student at the center of the scenario, an everyday life scenario, and a scenario that requires cooperation in solving the problem,

Table 4 The degree of influence of the learning resources factor on the English self-efficacy of students (N=191)

Resources	mean	S.D.	Degree of influence
Books/textbooks	4.518	.5009	Very high
Journals/ short stories/ novels/ supplementary reading books from the library	4.502	.5013	High

have a high degree of influence (in descending order).

The degree of influence of the learning resources factor on English self-efficacy

The degree of influence of the learning resources factor on English self-efficacy according to the CEFR of students is shown in Table 4.

Operation manuals/performance reports from various organizations	4.534	.5001	Very high
E-book and access to learning databases	4.586	.4937	Very high
Teaching documents and worksheets	4.460	.4997	High
Overall resources	4.520	.3709	Very high

From table 4, the overall learning resources factor found that there was a very high degree of influence. When considering each resource, there was a very high degree of influence in e-book and access to learning databases, operational manuals/performance reports from various organizations, and books/textbooks (in descending order). The journals/ short stories/ novels/ supplementary reading books from the library and teaching

documents and worksheets have a high degree of influence (in descending order).

The degree of influence of the learning tools and technologies factor on English self-efficacy

The degree of influence of the learning tools and technologies factor on English self-efficacy according to the CEFR of students is shown in Table 5.

Table 5 The degree of influence of the learning tools and technologies factor on the English self-efficacy of students (N=191)

Tools and technologies	mean	S.D.	Degree of influence
Image/ cartoon/ caricature	4.486	.5011	High
Audio tape/ dialogue/ video clip/ movie	4.497	.5013	High
The number of wireless distribution points and Wi-Fi signal strength	4.523	.5007	Very high
Activities/ games in different applications	4.586	.4937	Very high
Self-learning materials such as different modules	4.560	.4976	Very high
Overall tools and technologies	4.530	.3312	Very high

From table 5, the overall learning tools and technologies factor found that there was a very high degree of influence. When considering each tool and technology, there was a very high degree of influence in activities/games in different applications, self-learning materials such as different modules, and the number of wireless distribution points and Wi-Fi signal strength (in descending order). Image/ cartoon/ caricature and audio tape/ dialogue/ video clip/ movie tools have a high degree of influence (in descending order).

Conclusion

The results of the study can be summarized as follows:

1. A comparison of the level of English self-efficacy according to the CEFR of students at St Theresa International College, Thailand, classified by study discipline.

The results of the study found that the overall level of English self-efficacy of students from educational and service disciplines (consisting of the Faculty of Education, the Faculty of Humanities and

Social Sciences, and the Faculty of Business Administration) and students from health science disciplines (consisting of the Faculty of Nursing and the Faculty of Public Health) have the same level of English self-efficacy according to the CEFR.

When considering each competency according to the CEFR including self-efficacy related to listening and comprehension competency, self-efficacy related to grammar and writing competency, and self-efficacy related to reading comprehension competency, it was found that students from educational and service disciplines (consisting of the Faculty of Education, the Faculty of Humanities and Social Sciences, and the Faculty of Business Administration) and students from health science disciplines (consisting of the Faculty of Nursing and the Faculty of Public Health) have the same level of English self-efficacy according to the CEFR in all competencies.

2. A study of the factors affecting English self-efficacy according to the CEFR of

students at St Theresa International College, Thailand.

The results of the multiple regression analysis of factors affecting English self-efficacy according to the CEFR of students revealed that the positive factors consisted of 3 factors, namely the learning scenario factor ($\beta = 0.517$), the learning resources factor ($\beta = 0.429$), and the learning tools and technologies factor ($\beta = 0.136$). The remaining factor was the learning support factor which does not affect the English self-efficacy of students.

The results of the study showed that the predictive efficiency coefficient of 94.50 percent ($R^2 = 0.945$), and the remaining predictive efficiency of 5.50 percent was a result of other variables that were not included in the study, indicating that there are only a few relevant factors remaining.

That is, a multiple regression analysis to predict the English self-efficacy of students can be written as the following equation:

Linear equation

$$\text{English self-efficacy} = .031 + .0482 (\text{learning scenario}) + .378 (\text{learning resources}) + .134 (\text{learning tools and technologies})$$

The equation can be written in standard score form as:

$$Z_{\text{English self-efficacy}} = .517 Z_{\text{learning scenario}} + .429 Z_{\text{learning resources}} + .163 Z_{\text{learning tools and technologies}}$$

Each factor has a degree of influence on important aspects as follows:

The degree of influence of the learning scenario factor found that there was a very high degree of influence in a scenario where an event is a trigger point, problems should be solved according to the scenario. Other scenarios have a high degree of influence.

The degree of influence of the learning resources factor found that there was a very high degree of influence in e-book and access to learning databases, operational manuals/performance reports from various organizations, and books/textbooks (in

descending order). Other resources have a high degree of influence.

The degree of influence of the learning tools and technologies factor found there was a very high degree of influence in activities/games in different applications, self-learning materials such as different modules, and the number of wireless distribution points and Wi-Fi signal strength (in descending order). Other tools have a high degree of influence.

Discussion

From the multiple regression analysis to study the factors affecting English self-efficacy according to the CEFR of students, it was found to comprise of the learning scenario factor, the learning resources factor, and the learning tools and technologies factor, with a predictive efficiency coefficient of 94.50 percent ($R^2 = 0.945$). This signifies that the students' English proficiency development with the learning management process in a scenario-based approach of St Theresa International College has been successful. As well as the factors used in the college's development of the students' English self-efficacy, almost all of them helped the students to succeed in raising their English self-efficacy according to the CEFR, in line with Errington's (2010) concept which states that the scenario-based approach can be implemented in four ways: skills-based scenario, problem-based scenario, issue-based scenario, and speculative-based scenario. It is also consistent with Naidu's (2008) notion that students can learn meaningfully and realistically, create motivation, and incorporate realistic contexts into the culture and community of students from learning scenario, learning resources, learning tools and technologies, and learning support. This is in alignment with the learning process of Cubukcu (2014), which alleged that a good scenario-based approach starts with choosing the right topics that lead to expected learning outcomes, gathering content that is relevant to the topic to create a realistic situation, creating challenging scenarios through online, face-to-face, or other forms of media that are balanced with learning methods. As well as teachers must use roles in each scenario appropriately, whether to use the participant, observe-mentor, or participant-observer roles.

Recommendations

Recommendations for the application of the research results

From the study which found that the level of English self-efficacy both overall and in each competency, students in the educational and service group (consisting of the Faculty of Education, the Faculty of Humanities and Social Sciences, and the Faculty of Business Administration) and students in the health science group (consisting of the Faculty of Nursing and the Faculty of Public Health) have the same level of English self-efficacy according to the CEFR. Therefore, teachers who are directly responsible for organizing English learning management and the people responsible for organizing extracurricular English proficiency development activities can design learning management/activities that are of the same level of difficulty.

From the study which found that the factors affecting the English self-efficacy of students according to the CEFR consists of the learning scenario factor, the learning resources factor, and the learning tools and technologies factor. Therefore, the faculty members and those responsible for organizing activities should be developed to be able to use all 3 factors in learning management for students so they can learn meaningfully and realistically, create motivation, and incorporate realistic contexts into the culture and community of students.

Recommendations for further research

From the study which found that there was 1 learning scenario factor which had a very high degree of influence, there were 3 learning resources factors which had a very high degree of influence, and there were 3 learning tools and technologies factors which had a very high degree of influence. However, this research was a cross-sectional research with third year students preceding their internship. Therefore, to achieve a clear development process, the college administrators, the administrators of the English proficiency development project, faculties, and curriculum, should define a working committee and conduct an audit to assess operational results that is comprehensive of every academic year and all disciplines. This will be beneficial in the development of the curriculum and further

development of the learning management process.

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