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Enhancing students critical thinking skills in writing by promoting ESP-based language learning environment

Pg Ahmad Hasanuddin
Universiti Kebangsaan Malaysia, Malaysia and Ministry of Defence, Brunei Darussalam

Zamrin Md Zin
Universiti Pendidikan Sultan Idris, Malaysia

Noor Azlin Yamin
Universiti Tun Hussein Onn Malaysia, Malaysia

Harjinder Kaur a/p Balbir Singh
Segi University, Kota Damansara, Malaysia

Zuriah Sulaiman
Kolej Matrikulasi Perlis, Malaysia

Mohamad Maulana Magiman
Universiti Putra Malaysia, Bintulu, Sarawak, Malaysia

Hishamuddin Salim
Universiti Sultan Zainal Abidin, Terengganu, Malaysia

Mohd Faeiz Pauzi
Universiti Sultan Zainal Abidin, Terengganu, Malaysia

***Abstract*---**"Flipped classroom" business English classes are required at most universities that teach economics, and this study will investigate how these classes help students learn critical thinking skills and improve their academic performance, as well as what students think of this model. A multimedia textbook titled "English for Business" enhances the learning environment. This was an exploratory investigation that used a range of methodologies. The study examined children's critical thinking and academic progress (learning outcomes). Surveys of students' critical thinking abilities and placement assessments were utilized to acquire statistical data. The Cronbach alpha coefficients were used to evaluate the critical thinking

test outcomes, and the aggregated data was analyzed using SPSS AMOS statistical software. The study revealed that teaching ESP and Business English to Economics students via the "flipped schoolroom" technique can enrich both the learners' and instructors' education experiences. Because students are held responsible for their progress, this method develops critical thinking skills and academic accomplishment by using a variety of teaching methods. A student-centered approach replaces the teacher-centered approach in the preceding paradigm. Students at colleges and universities are increasingly using language as a medium of instruction rather than rote memorization, as demonstrated by business English and English as a Second Language (ESL) programs.

***Keywords*---**Higher education institutions, flipped school rooms, E-textbooks, students majoring in economics, teaching effectiveness related English.

Introduction

Generating an environment that promotes critical thinking in students' abilities reflects contemporary trends in higher education and vocational training. These trends involve independently acquiring knowledge and conducting crucial analysis of the information obtained, forming their attitude toward a specific problem through comparisons of opposing views and approaches, presenting, and challenging their point of view, and ultimately making the correct decisions. This highlights the importance of critical thinking development in youngsters. Concerns about future professional activity and pupils' capacity to communicate in a foreign language must be addressed while preparing future teachers of foreign languages. It is vital to guarantee that students gain academic information and the critical thinking skills necessary for future professional obligations (Alemdag & Cagiltay 2018; Stark et al., 2018; Pérez-Rodrguez & Rojo-Alboreca 2017; Moghavvemi et al., 2018).

A high level of specialized focus on textbooks written by specialists is shown in "Teaching Foreign Language for Specific Purposes," which reveals several inconsistencies that hinder future professionals' critical thinking development (Abdulrahaman et al., 2020). This education subject is thus focused on building a foreign language classroom atmosphere that supports students' critical thinking while simultaneously teaching a foreign language for reasons (Faham & Asghari 2019).

The specifics of the ESP program at a university or college of economics

First- and second-year students take a Business English or soft skills English introduction course, and then an ESP core course covering themes pertinent to their concentration. Students learn how to mingle, present, engage in meetings and negotiations, talk on the phone, and compose business letters in this soft skills course. Furthermore, it assists students in better understanding key business concepts as well as context-specific functional language and grammar.

CLIL or task-based techniques are often employed in the ESP core course to teach financial, economic, and managerial issues. The experiment was carried out with students enrolled in the ESP program's required Business English course.

Critical thinking as a concept and ESP as a phenomenon

This review says scholars interpret critical thinking in numerous ways. Analyzing arguments, assertions, or facts; evaluating, deciding, or solving issues forecasting; deriving conclusions via induction and deduction; understanding, explaining, and clarifying vocally. This idea (Varenina et al., 2021) is based on three essential methods to comprehend critical thinking. The following terms are defined: (Gever et al., 2021; Cheng & Wan, 2017; D'Alessio et al., 2019; Teo, 2019); (Teo, 2019).

A set of abilities, knowledge, the term critical thinking will be used in this training to describe the concept of relatability. These abilities include the ability to present information in a structured way (in the form of an argument), the ability to maintain a conversation's flow, the ability to plan and conduct meetings/negotiations, and the ability to write about business issues. Yuan et al. (2020), Janssen. et al. (2019), and Din (2020) all defined critical thinking in different ways, but they all agreed on one thing: it is a refining of their concepts.
The development of critical thinking is becoming more widely accepted in university sceneries, including studies such as Cargas et al. (2017) and Stupple et al. (2017b). Reading and writing abilities are becoming more important in language instruction, as is critical thinking. A combination of job-related skill acquisition and language teaching is ESP training (Bezanilla et al., 2019). Many methodological issues have gotten less attention than theoretical ones, notably in teaching "foreign language for specific purposes."

The ESP and the "Flipped schoolroom."

As a multi-tool method capable of shifting the perspective of a teacher and student roles, the term "flipped schoolroom" has been coined as a technological, instructional, and psychological phenomenon (Chang & Hwang, 2018). Researchers are investigating the flipped schoolroom to see whether it can be used to get students involved in extracurricular activities while also getting them to finish up any sedentary work they have been putting off until later in the day. A wide variety of multimedia tools like computers, smartphones, and tablets seem to be the best fit for this goal since they allow learners to study in an environment that is tailored to their own needs. Seven flipped classroom concepts have been identified by Njie-Carr et al. (2017) for usage in higher education and ESP. Here are a few: Models include the classic inverted classroom, discussion, demonstration, group, and teacher-to-student conversion.

Engaging students in active learning, altering their learning habits, and maximizing class time are all aims of the program (Vagg et al., 2020; Lewis et al., 2018). It was decided to focus on discussing, faux-flipping, and group-based converted classroom models that have been reviewed in terms of current flipped classroom concepts (Njie-Carr et al., 2017). These models were found to be sufficient for teaching ESP to Economics students. (Thai et al., 2017), (Park et al.,

2019); (Wu, 2017) Accountability for every one quality resources, class community building, and competent classroom management and incentive for students all helped (Mutlu-Bayraktar et al., (2019). Shi et al. (2020), Thai et al. (2017), Awidi & Paynter (2019), and Wu (2017) taught students in ESP courses on the success of the "flipped classroom" teaching style. According to the studies done, it was shown to be appropriate for both traditional classroom teaching methods and more self-directed, independent study methods.

Objectives of the Study

The study's goal was to evaluate how a flipped learning ESP-based language course influenced students' critical thinking abilities. The education lectured the following research issues:
What relationship does the ESP-based linguistic course's flipped knowledge paradigm have with the learners' experimental group improved ability to think critically in the areas of emotion and, argumentative, and reflective thinking?
To what extent does the flipped learning paradigm used in the experimental group's language course contribute to their success in school?
What did the students think about the approach employed to deliver the course?

Materials and Methods

This study included experimenting. There were three phases in this study: an empirical location, an experimental set, and an analytical stage (Here is a visual representation of how this research was organized in Figure 1). The study's criteria were critical thinking and abstract accomplishment (education results).
As a reminder, the experiment was divided into two stages: the standard first semester of 2017 studies and the "flipped schoolroom" second semester of 2018 studies. This is important to remember. There was a flipped model and a conventional model applied to students in the EG (the experimental group).

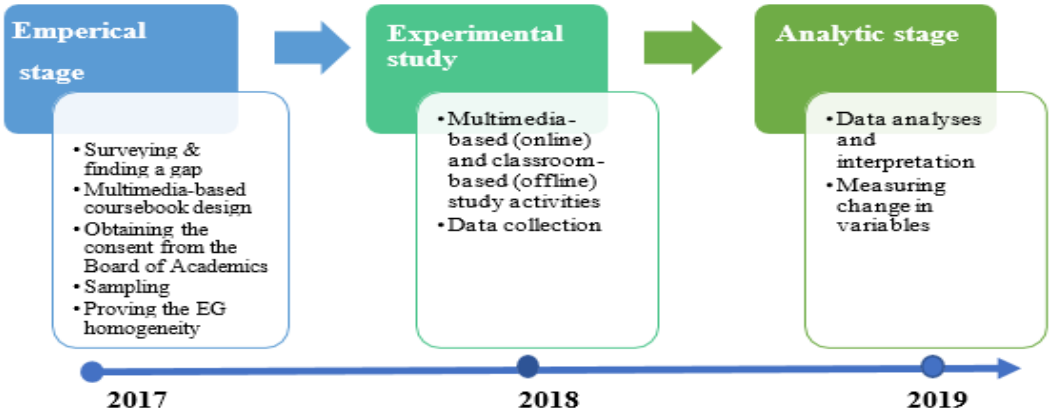

Figure 1. The research's flow

Sample

Two steps of sampling were used. First-year Economics students and their teachers/tutors were randomly selected for ethical data. Universities of Odesa,

Kyiv and Ternopil used an online questionnaire to conduct the poll. Population size was calculated at 87 (e =.05) via Sample Size Online Calculator. There were two groups of 44 first-year students from the Kyiv National Economic University's Faculty of Economics and Management named after Vadym Hetman. The learners were divided into clusters based on their examination results and prerequisites for the English for Special Purposes Course.

Multimedia book design and experiment procedure

It should be noted that the multimedia content in this book is derived from four primary sources: (Park et al 2019). A combination of iSpring and Sony Vegas software was used in its development. Business soft skills were taught using a multimedia coursebook named "Business Skills through English." Class topics included business socialization, presentations and negotiations, telephoning and business correspondence, and job applications. Table 1 provides a breakdown of each module's learning activities and assignments. In addition, we added reading and listening passages and exercises to the "Market Leader" coursebook to enhance the previous material.

Table 1. Online and offline delivery of learning activities and assignments based on modules.

Module	# Of the Lessons	Online learning activities and assignments	Offline learning activities and assignments
Socializing in Business	12	Fundamentals of cross-cultural communication theory. Drills in functional language and communicative grammar, online quizzes, assignments involving writing. Through social media, international networking is possible.	Simulations. Tasks that need problem-solving. Lessons on skill development.
Presenting	10	Language exercises that are both functional and communicative. Research using the Internet, acquiring, and processing information. Assembling a Skype conference. Students' written comments on the presentations of their group members. They were recording the pupils' speeches on video.	Presentations. Lessons on skill development. Presentations about Machu Piochu. The master sessions with cover the basics of using PowerPoint. Affinity, Zoho Show & Prezi applications.
Consultations and talks	8	Grammatical activities that are both practical and effective Basics of cross-cultural communication.	Simulations. Tasks that need problem-solving. Cross-group evaluation. Lessons on skill development. Teamwork
Telephoning	8	Language exercises that are both	Simulations. Tasks

		functional and communicative. International communication through video calls (via telegram, or WhatsApp	that need problem-solving. Teamwork. Lessons on skill development.
Business correspondence	14	Language exercises that are both functional and communicative. Communication fundamentals across cultures. Worldwide emailing.	Simulations. Tasks that need problem-solving. Teamwork. Lessons on skill development.
Obtaining employment	10	Writing a resume, a cover letter, making phone calls, and submitting online applications all require the use of functional language. How to draft a cover letter for a certain job. How to make a video resume.	Simulations. Tasks that need problem-solving. Teamwork. Lessons on skill development. CVs, cover letters, and simulated interviews are peer-reviewed.

"Obtaining employment" students who were especially interested because of their early careers and need for insight into job-hunting strategy (How to be chosen) refined their cover letter and CV-writing abilities (Type, Structure, Language) as well as learning about interrogating confidences (An understanding of the skills associated with interview techniques). Students were also given a list of questions to ask themselves to get the knowledge they needed: Identify the people you'd want to present to the members of your group; (2) What is their area of expertise? How has their career progressed? As well as putting up a summary of their professional advice. What are the advantages of following their advice?

Expected outcomes of learning for EG students upon completion of each module

Learning to communicate well in modes like speaking, listening, reading, and writing are all part of the EG requirements. Improvements in Internet search, observation, and analysis (including interpretation), retrospection and appraisal (including time responses), problem-solving and decision-making (including timeliness) were also expected. They, too, are included.

These skills include identifying relevant information, comparing data from multiple sources, eliminating irrelevant data, analyzing the problem from multiple perspectives, determining cause-and-effect relationships, structuring, and summarizing data (argumentative criterion), formulating conclusions, and (reflexive criterion).

If you notice, there is a quotation from a well-known person in each subject area, yet the writers make no attempt to evaluate or refute it. Since using quotes and aphorisms may greatly develop learners' critical thinking, we feel that the substance of the quotations and their relevance to the subject matter being studied should be addressed in small groups of learners.

There are three components of critical thinking that are emotional, argumentative, and reflexive: (Yuan et al., 2020; Janssen et al., 2019; Din 2020).

To identify significant indications of students' critical thinking growth phases, the following criteria were developed:
New information, obstacles, and knowledge gaps may be identified; questions or problems can be formed, and criteria for picking material pertinent to the activity are established. determine the validity of information from various sources, eliminate information that isn't relevant, separate fact from opinion, examine a topic from several angles to establish causal links, and compile and synthesize information).

to retain emotional control while processing data: the capacity to link new knowledge to one's own life experiences and to display impartiality in judgments, to resist from expressing hatred based on race, ethnic background, or religion. To be reflexive, one must be able to articulate and defend one's position on a problem, as well as assess one's own data collection methods. The Triangular Assessment Method was used to gather input measures at the beginning of the educational experiment. Based on the work of Pérez-Rodriguez and Rojo-Alboreca (2017), this approach developed a set of criteria for comparing various measures.

Experimental and control groups did not differ statistically significantly in terms of critical thinking development. Education of a foreign language for its own sake was used in groups C and D; on the other hand, an atmosphere conducive to critical thinking was produced in groups E and F using a variety of pedagogical settings that were unique to each group. In terms of academics, the following criteria are apparent:
When teaching "Foreign Languages for Specific Purposes," foreign language instructors must be trained to help pupils develop their critical thinking skills.
Students' critical thinking skills are honed via a range of approaches and materials used in foreign language instruction.
Continual evaluation of how pupils improve their critical thinking skills while studying "Foreign Language for Specific Purposes."

Lectures and masterclasses by foreign language professors fulfilled the first educational requirement. Participants learned about the features and indications of critical thinking in these activities, as well as strategies for improving students' capacity for critical thinking. Teaching instructors how to better support students' critical thinking in the classroom may be as simple as presenting a session on "Critical Thinking in ESP Teaching" to educators. (1) The criterion for selecting ESP course materials and tools that promote critical thinking. As well as (2) producing worksheets and handouts to help students enhance their critical thinking abilities in ESP classes.

During teaching "Foreign Language for Specific Purposes," instructors were asked to complete evaluation and self-assessment sheets to describe their pedagogical experience and preparation. It was used to prepare and teach "Foreign Language for Specific Purposes" courses. Topics, textbooks, and teaching tools should all be selected with care. It was discovered during pre-project research that most English language textbooks for purposes stress the linguistic approach, do not highlight the improvement of four major abilities and feature many texts with extensive analysis of each. Adopting foreign resources, particularly textbooks with a more general emphasis and authored by an experienced team, is advocated by

the British Council's experts in the field of education. Their other recommendation is that teachers should employ more modern and diversified methods in the creation of their materials (Chen & Kent 2020). The exercise "Starting Up" was used to assist students to build their capacity to link new information to their own life experiences and easily accessible knowledge and to identify obstacles and gaps in understanding while they were learning the content for each topic segment. Take this assignment from the "Careers" section for instance:

Discuss these questions:
What is your level of ambition?
Do you have any plans to work in the future? How do you see yourself in 10 years?
The following options are available: a) Work for a single company for the duration of your profession; b) be employed by a wide range of companies; or c) consider going it alone?
What steps should you take to advance in your profession? Decide on the four most critical suggestions from the following list: a) frequently switch jobs; b) utilize appeal while dealing with supervisors; c) Participate in all conferences; d) Attend social activities hosted by your firm; e) maintain an energizing and joyful disposition at all times; f) every day, be the last employee to go; g) seek the assistance and guidance of an experienced individual. ; h) in your spare time, pursue different credentials.
Each chapter closes with a problem-solving task. These tasks assist students to learn to connect causes and effects, collect, and synthesize data (argumentative criteria), make objective decisions, and justify their results (practical test) (reflexive criterion).

The third pedagogical condition was utilized to evaluate students' critical thinking progress while teaching "Foreign Language for Specific Purposes." Graphs and SWOT analyses were utilized to evaluate pupils' critical thinking abilities. Critical thinking development criteria and indicators were created, and a SWOT analysis was performed on each experimental student to determine the student's strengths and weaknesses (internal factors) in critical thinking development, as well as opportunities and threats (external variables supporting or hindering critical thinking). An ongoing SWOT analysis allowed for the identification of positive and negative elements affecting critical thinking growth and the assessment of the level of psycho-pedagogical assistance to be offered to each student. SWOT analysis. After conducting an educational experiment, the impact of a foreign language environment on critical thinking was evaluated.

Instruments

Student critical thinking capacity was assessed by the Course Satisfaction Questionnaire and the ESP accomplishment assessments. (Sasson et al., 2018) Needs analysis questionnaires were also used. Examinees' critical thinking scores were evaluated using Cronbach Alpha, and the totals were analyzed using SPSS AMOS.

Results

The experiment's findings indicated that students' academic achievement, critical thinking abilities, and attitude toward the model improved (see Figures 2 and 3 below).

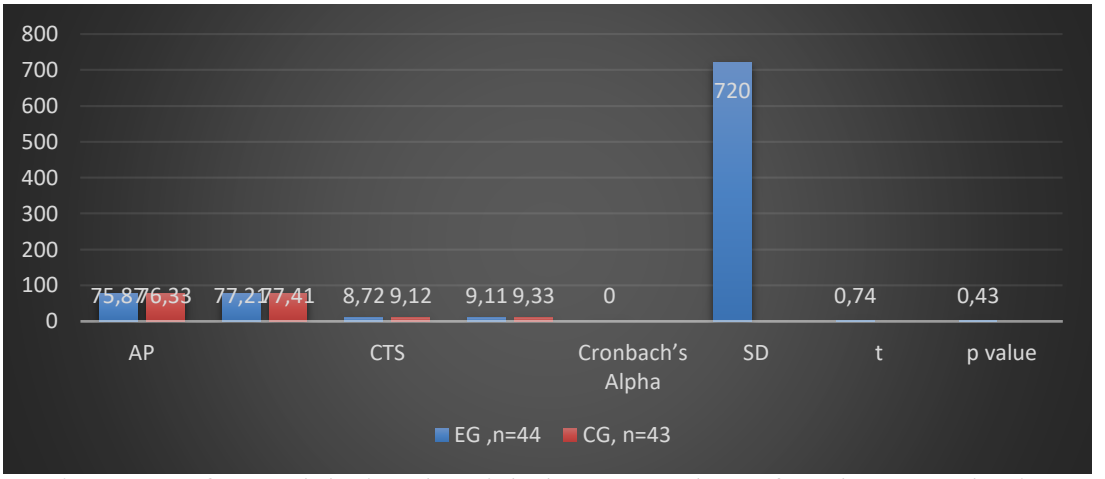

Figure 2. Before and during the trial, the mean values of students' academic performance and critical thinking tests

Note: Critical-thinking skills are called AP and CS is called critical-thinking skills. As seen in Figure 2, EG students outperformed CG students in terms of academic performance and critical thinking skills.

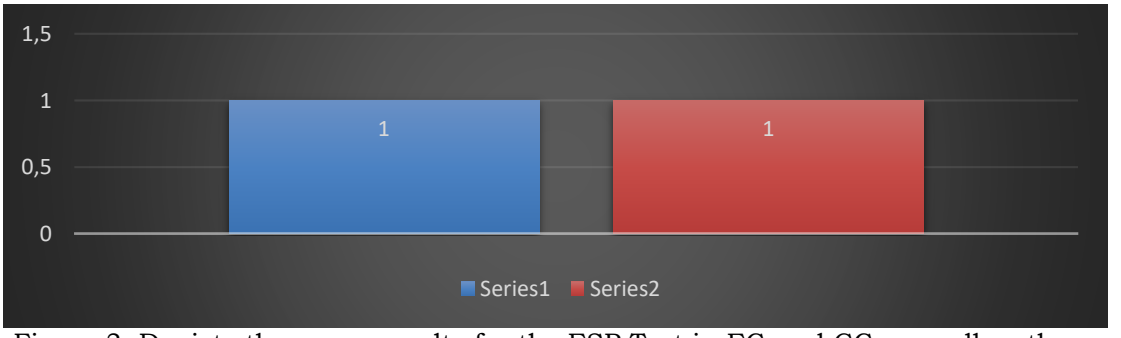

Figure 3. Depicts the mean results for the ESP Test in EG and CG, as well as the evaluation done by EG students

After therapy, both groups showed considerable gains on the ESP test, as shown in Figure 3. The EG had an 8 percent rise in grades, while the CG saw a 1 percent rise in grades. According to students' evaluations, the ESP model employed in the research scored 4.3 out of 5 on a 5-point rating scale. Writing, comprehension, language fluency, and research abilities were all improved using the "flipped classroom" method. These online exercises helped students build problem-solving, time management, and lifetime learning abilities. Students developed a positive attitude toward the "flipped classroom" approach of education because of these activities, increasing their devotion, self-confidence, and drive to learn. A

clear correlation exists between the use of this method and an improve learners' critical thinking abilities and academic success. However, it is still a long way off until teachers at universities with a focus on economics can employ technology to create a favorable environment to student education. Academic underperformance is a consequence of teachers placing too much emphasis on book-based learning and reproduction exercises.

Discussion

The research found a link between the ESP-based language course's flipped learning paradigm and the experimental group's improvement in critical thinking skills, which included emotive, argumentative, and reflective components. Students in the experimental group performed better academically after using the ESP-based language course's flipped learning paradigm. The course delivery method was evaluated positively by the students that were selected. The EG sampled children's academic performance improved by roughly 8%, while their critical thinking score improved by 0.32 points. Analyses of the three criteria used in SWOT analysis showed a significant positive shift in the argumentative standard, a positive change in emotional standards, and a positive change in reflexive standards. With the study's goals and prior research by Cáceres, Pessoa, El Soufi, and See (2019), all of which demonstrated that ESP training improves students' professional and language development, the results were in line with the findings. The flipped paradigm in the ESP course may help students build critical thinking abilities and overall learning performance, according to Lewis et al. (2018).

To address the needs of students, this program is designed to teach them the skills they'll need to be successful in their chosen field. Learning becomes more intriguing, thrilling, self-paced, and practical, and students are less likely to see themselves in a position of failure because of it. It's worth noting that students who have used the 'flipped classroom' report higher levels of self-confidence, independence, commitment, and motivation, all of which are signs of the model's efficacy. The "flipped classroom" teaching style seems to have a greater educational impact on students than the standard manner of teaching. As a result of implementing this strategy, the university's reputation among current students and prospective students may be enhanced. According to the interview, ESP training increased student-to-student cooperation, student confidence, and self-efficacy. Learning in a "flipped classroom" is more effective when it includes interactive educational and pedagogic tools, real-world knowledge, and reference sources (Humrickhouse, 2021). In this article, we will discuss the theory and practice of ESP training (Joo et al., 2017; Rasheed et al., 2020; McKinley & Rose 2018; Sierra-Piedrahita & Echeverri-Sucerquia 2020; Rus, 2019). (2019).

Conclusions

This study found that learners' critical thinking skills enhanced when ESP and business English subjects were taught in a "flipped classroom" format. This method encourages students to employ a variety of learning modalities and holds them responsible for their academic progress by making them accountable for their own learning outcomes. Furthermore, it may help students learn more

effectively and professors teach more effectively, making it a win-win situation for everyone. According to the paradigm outlined above, students are placed in a business and language context in which they are immersed, rather than being taught. Consequently, the utilization of language as a teaching instrument in a higher learning institution's ESP course shifts from memorizing Business English terminology and completing grammatical exercises to utilizing language as a medium of instruction in specific professional settings. Computer-aided simulations or clicker systems must be included in the extra research into the previously defined paradigm.

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