An ESP Textbook Analysis: The Case of English for Civil Engineering

Zulis Astuti
University Of Muhammadiyah Malang
Raya Tlogomas Malang, Indonesia
zulisastuti@webmail.umm.ac.id

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Abstract
In this study, the authors evaluate the ESP textbooks that were institutionally prepared for students of Civil Engineering and the Faculty of Engineering, University of Muhammadiyah Malang. The analysis for evaluating textbooks in this study used a qualitative descriptive method based on the Cunningsworth and Miekley checklist. The rating scale points evaluated include very good, good, moderate, and poor. The results showed that almost all categories were marked enough to meet the evaluation textbook criteria proposed by Cunningsworth and Mickley. This is because of textbook only focuses on vocabulary enrichment. Several recommendations for improvement and revision of textbooks are given at the end of this research, especially those related to the material.

Keywords: ESP; Textbook Evaluation; English for Civil Engineering

1. Introduction
Coursebooks are handles in the teaching and learning process. Usually, the required teaching materials will be provided in the coursebook. It is not surprising that coursebooks are needed by students as the main source of learning. That means the coursebook has an important role in the learning process. Therefore, according to Cegeni (2016) teachers should know how to select books based on standards and reliability in certain fields. Hutchinson and Waters (1987) claimed that in learning English, coursebooks have a significant and useful role, such as providing input from various operations, lectures, and various material explanations. Besides, Richards (2001) said that most of the elements in language programs are in books. The quality of the material is very important because it affects the level of success and failure in learning.

To achieve success in learning, it is necessary to analyze the textbook used in order to produce appropriate textbooks. The analysis is matching the contents of the book with the existing needs. Hutchinson and Torres stated that teaching and learning activities are not complete if the coursebook used is not appropriate. So that the textbook must be adapted to the needs of students in their field of study. Not only that, another issue that needs to be addressed is that regardless of the student's major, they have been taught general English (GE) in schools and higher education. However, it does not meet the needs of students in real life. There are many fields but very different like nursing, engineering, accounting, tourism, banking, and others. Therefore, it takes a textbook that contains material with adjustments in the fields of each student.
Several studies on the evaluation of ESP text/course books have been conducted. Brunton (2009) examines an ESP coursebook for students in the hotel industry, whether they are in school, college, or undergoing training in the industry. To evaluate the book, he used Zhang’s evaluation steps. As a result, the book was appropriate because it was written for hotel industry students. Suhriman (2018) investigated the use of ESP textbooks in Islamic education for college students. The findings revealed that the book provided sufficient Islamic studies materials, but it placed an excessive emphasis on reading and grammar. Meanwhile, Syahrial (2018) focuses on evaluating textbooks published by the Ministry of Education and Culture (Kemendikbud) using the Cunningsworth checklist. The researcher found that the book was not suitable for VHS because the topic was too general. In addition, the activities carried out are still insufficient, especially in vocabulary and grammar, as well as in integrating the four skills.

Based on previous studies, there is still a scarcity of research on ESP textbooks, especially in the field of Civil engineering. So it will be useful to conduct this research, to determine the suitability of the textbook used. From the website page, http://lc.umm.ac.id/id/pages/divisi-akademik/esp-course-schedule.html. LC explained that the purpose of ESP learning is to develop communication based on student discipline areas such as English for management, medicine, pharmacists, etc. However, reading and writing skills are also provided for learners to improve their vocabulary and structure. The general purpose of this study is to evaluate the textbook based on Alan Cunningsworth’s (1995) and Miekley's (2005) checklist of evaluation criteria.

The coursebook being evaluated in this paper is a student’s guidebook entitled English for Civil Engineering. This book was an institutional book published by Universitas Muhammdiyah Malang Press in 2020. This book was used to teach English to first and two-semester students of the Engineering Faculty of Universitas Muhammdiyah Malang. The reason for choosing this book is that the ESP material provided must be appropriate and of high quality so that it can compete globally. In this paper, the researchers formulate two research problems, first: has the textbook of English for Civil Engineering met the evaluation textbook criteria proposed by Cunningsworth and Miekley? Second: how has the textbook of English for Civil Engineering met those evaluation textbook criteria?

Limitations in this study, from all the items in the checklist items teacher books and teacher manuals, are excluded because they are not provided by the institution. Thus, it can provide recommendations for the development of ESP books to be better in the future.

**The Role of Textbook in Learning English**

The majority of students learn a language by reading a book, and they do not regard class as a serious learning environment without a book (Badshah, 2016). Without the appropriate teaching materials, the teaching and learning process will not be carried out, because the textbook contains all of the guidelines for presenting learning materials in order to meet the objectives.

The textbook serves as a roadmap for completing all series in the teaching and learning process for achieving the desired outcomes. Furthermore, the quality of learning in the classroom can be determined by the textbooks that have been provided. The available checklists are widely regarded as the foundation for selecting coursebooks. Based on the principle, each specification in the teaching and learning process must have certain characters in the material taught. Therefore, appropriate coursebooks enable teachers can adapt and modify them to meet the needs of their students. According to Dudley-Evans and St. John (1998), textbooks play an important role in every learning situation and assist teachers with their responsibilities. They offer four reasons for using textbooks: a) as a source of language, b) as a learning aid, c) for motivation and stimulation, and d) as a source of reference. Hutchinson and Waters (1987). Identify six material objectives: such as (a) Materials should provide a stimulus for learning, (b) assist in organizing the teaching and learning process, (c) embody a view of the nature of language and learning, (d) reflects the nature of the learning task, (e) broaden the basis of teacher training, and (f) provide models of correct and appropriate language use.

**Textbooks Evaluation**

Textbooks are one of the most important resources for achieving the objectives of a course based on student needs. However, they are not necessarily the goal of the course (Brown, 1995). Regarding textbooks, it is important to ensure that the books used meet proper standards. We must ensure that careful choices are made, and that the materials selected closely reflect the aims, methods, and values of the teaching program (Cunningsworth, 1995).

The evaluation process is one way that can help us achieve the above goals. As Nunan (1991) points out: the selection process can be greatly facilitated by the use of systematic material evaluation procedures that help ensure that the material is consistent with the needs and interests of the learners they wish to serve, as well as aligned with institutional ideologies about the nature of language and learning.

Several reasons for textbook evaluation have been suggested by Sheldon (1988). He claims that choosing a textbook is a significant indicator of professional, financial, and even political investment in educational decisions. The teacher
will become familiar with the contents of the available textbooks and recognize the strengths and weaknesses of each through evaluation.

Cunningsworth (1995) and Ellis (1997) propose another reason for evaluation. They argue that evaluation can be viewed as a form of professional improvement and a method of conducting action research. It can also be part of a teacher preparation course where teacher candidates learn about features to look for in a textbook. Cunningsworth (1995) and Miekley's (2005) propose three types of materials evaluation: predictive or pre-use evaluation, which looks at the future or potential performance of the textbook, in-use evaluation, which looks at the textbook as it is currently used, and retrospective or post-use evaluation, which looks at how to improve the textbook for future use.

Asking questions and acting on answers is how Dudley-Evans and St John (1998) describe evaluation. They went on to say that evaluation "starts with deciding what data to collect and ends with changing existing activities or influencing future activities." Likewise, Hutchinson and Waters (1987) define evaluation as the process of matching demands with accessible solutions. The evaluation process is broken down into four stages: criteria setting, subjective analysis, objective analysis, and matching. They went on to say that the many parties participating in the course should be considered to make optimal decisions: teachers, students, and sponsors.

Lastly, Three stages were proposed by McDonough and Shaw (2003) as a model for textbook evaluation. First, an external assessment of the structure of the author or publisher's material, including claims on the cover page and information in the introduction and table of contents. The intended audience, proficiency level, context of use, presentation and organization of the material, and the author's opinion on language and methodology, use of audio-visual materials, vocabulary lists and indexes, cultural aspects, tests, and exercises included in this book are all included in this type of evaluation. Second, internal evaluation of the following factors: a) presentation of skills, b) assessment and order of material, c) authenticity or falsity of listening material, d) authenticity or falsity of speaking material, e) suitability of tests and materials, and f) suitability of materials for different learning styles and claims made by the authors for self-study. The final stage is an overall evaluation, which looks at criteria including usability, generalizability, adaptability, and flexibility.

2. Method (Capitalized first letter, Times New Romans, Bold, 10 pt)

For this study, document analysis and descriptive qualitative were used as a primary instrument for analysis of the English Specific Purposes (ESP) coursebook for Engineering. The research is intended to identify specific characters of a textbook (Ary, Jacobs, Sorensen, & Razavieh, 2010). Textbook content will be analyzed using a checklist developed by Cunningsworth (1995) and Miekley (2005), which includes 11 criteria, namely: aims and approaches, design and organization, content, skills, topic, methodology, vocabulary and grammar, exercises, and activities, Attractiveness of the text and physical make-up, context, and practical consideration. The data will interpret using a checklist that includes a rating scale of very good (E), good (G), moderate (A), and poor. On the other hand, Twelve bullet points and a Cunningsworth and Miekley checklist will be combined into one written as content. Not only that, in this study two criteria regarding the teacher’s book or manual were excluded because they were not available in the textbook. The reason for selecting this book is there is still a scarcity of research on ESP textbooks, especially in the field of Engineering. So it will be useful to conduct this research to find out whether the material in the book used is appropriate or not with the major being taught. Since this book was designed for Engineering, the topics should more situational and contextual to the Engineering work situations.

3. Findings and Discussion

The results of textbook analysis based on Cunningsworth (1995) and Miekley (2005) are presented in the order listed in the previous section. The following is a description of the evaluation results from the Engineering English textbook:

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating Scale</th>
</tr>
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<tbody>
<tr>
<td>1. Aims and Approaches</td>
<td>✓</td>
</tr>
<tr>
<td>2. Design and organization</td>
<td>✓</td>
</tr>
<tr>
<td>3. Content</td>
<td>✓</td>
</tr>
<tr>
<td>4. Skill</td>
<td>✓</td>
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<tr>
<td>5. Topic</td>
<td>✓</td>
</tr>
<tr>
<td>6. Methodology</td>
<td>✓</td>
</tr>
<tr>
<td>7. Vocabulary and Grammar</td>
<td>✓</td>
</tr>
<tr>
<td>8. Exercises and Activities</td>
<td>✓</td>
</tr>
</tbody>
</table>
Aims and Approaches

In the first evaluation point, eight-question items relate the purpose of the book to the learning program, the needs of teachers and students, and the flexibility of the textbook. Question items include: Is the objective of the textbook related to the objectives of the teaching program? Is the objectives of the textbook by the needs of students? Is textbook appropriate for teaching/learning situations? How comprehensive is the textbook? Does it cover everything needed? Is it a good resource for students and teachers? Are textbooks flexible? Is it flexible enough to accommodate a variety of teaching and learning styles?. The results of the analysis show that almost all the topics given in the coursebook are related to the field of Civil Engineering, which means that the textbooks used are sufficient or good to meet the criteria according to the program objectives and student needs. However, in terms of flexibility, the textbook entitled English for Civil Engineering has not implemented/accommodated different teaching and learning styles.

Design and Organization

The second point relates to design and organization which includes components of the formation of the amount of material, organization of content and sequence, suitability of assessment, references used, suitability of the material for individuals, and layout of the material. The results found in the organization and order section in the text showed good results, in the first section, the text was sorted from the shortest and ended with the longest. In addition, the material provided is also good, in this case, students can learn independently through textbooks because they are equipped with adequate exercises and assignments. Not only that, the assessment and development are also good or at the level of material and questions are given.

Content

In this section, the analysis focuses on whether the given material is written topically, functionally, logically, organized, appropriate to the target culture, authentic, sufficiently varied in genre and sentence structure, and develops critical thinking. In terms of content, it turns out that the material presented is in accordance with its function, and this book is sufficient to provide insight into the culture of the target language. Topics are given according to the area being taught. In addition, the material presented is also authentic because some of it is also downloaded through several sources or websites. Not only that, this book contains various examples of sentence structures that represent the genre of civil engineering majors. So it can be concluded that the content in this book is very good.

Skills

In this section the questions posed by Cunningsworth (1995) include whether the material covers the four English skills, is there any material that requires assignments for integrated skills, authentic listening material, adequate reading text, oral material designed and adapted to real life, writing assignments are given according to style, control, accuracy, and organization. Based on the analysis that has been done, it can be seen, the existing English skills in this textbook only focus on three skills, namely reading, writing, and speaking. Each chapter consists of pre-reading, reading comprehension, and vocabulary exercises related to the topic of the text. In the writing section, several sentence structures and patterns are complemented by guided writing exercises. While in the speaking section, students are given models and examples followed by practical activities which are presented in various ways. However, the 4 integrated skills are not presented in this book, nor is the listening material. However, it is possible that the skills provided have been adapted to the interests of students even though students may still require listening skills.

Topic

There are twenty-eight topics presented in this book, including responsibilities and duties of civil engineers, the structure of engineering materials, industrial minerals, the reason why I choose civil engineering, writing about life principles, that’s a vibrant university, telling about interests and talents, etc. Some of these topics provide an overview of civil engineering responsibilities. Therefore, according to the criteria stated in the checklist, the material is sufficient to meet the existing standards. These topics may not be able to develop students' awareness and experience outside the technical and cultural areas of the target language. But, students will find it easier to relate it to their real-life context. However, they may lack knowledge and experience in other fields.
The methodological analysis section includes the approach used during learning, the active involvement of students according to their learning styles and expectations, the techniques used in introducing new language items, the skills and learning strategies used, and students' skills in independent learning. In terms of methodology, the textbooks used to apply a communicative approach, which expects students to actively participate in learning activities. However, if look at what activities in the book, it only focuses on individual activities. However, students may not be responsible for their own learning because they have to discuss everything that is learned in the book with the teacher.

**Vocabulary and Grammar**

In the Vocabulary and Grammar category, the analysis combines questions from Cunningsworth's (1995) language content and Miekley's (2005) vocabulary and grammar. Which includes how to present vocabulary and grammar, level of difficulty, techniques used for teaching, and materials on pronunciation. From the results of the analysis, it can be seen that the discussion and grammar assignments are very lacking. Grammar items only appear in some parts of the chapter, there is no specific discussion about grammar. However, vocabulary enrichment is highly emphasized in this book. In each chapter or subtopic, there is always a vocabulary exercise according to the topic being taught. On the other hand, the material on pronunciation does not exist or is not taught in this book.

**Exercises and Activities**

At exercise and activity points discusses whether the book being analyzed has interactive and task-based activities, so students can practice new vocabulary and grammar items they have learned, check their understanding of the given readings, improve students' critical thinking and ensure students get adequate examples. In this section, the analyzed ESP book is considered very good because it provides appropriate activities and exercises, reading comprehension and vocabulary exercises are provided in each chapter, this book also provides adequate examples of material and questions. In addition, the practice questions given are also varied, such as true/false, multiple-choice, blank entries, short and long answers, etc. Unfortunately, this book does not provide sufficient understanding and practice of grammar.

**Attractiveness of the Text and Physical Make-up**

This category discusses the aesthetics of the book which will analyze the cover and page contents. The cover of the book has a black background and contains the title of the book, the name of the author, the editor, the publisher's logo, and engineers' equipment. There are only a few colors and pictures in this book, so it is only dominated by black and white. However, the texts provided in this book can be enjoyed by students even though they are not colored and illustrated. However, this book is age-appropriate as it is aimed at adults who don't really need teaching motivation through pictures and colors.

**Context**

This tenth point discusses the suitability of the book with the curriculum, course objectives, levels, and interests of students. From the analysis results, the objective of the course is designed to provide an opportunity for the students to develop their English skills more communicatively and meaningfully. In addition, the material provided is not offensive material. However, some students may think that the material provided is quite difficult because many students study English only for exam purposes.

It can be underlined, this coursebook was marked enough to meet the evaluation criteria proposed by Cunningsworth and Miekley. In terms of vocabulary skill enrichment, this book is very good because giving new vocabulary items that are emphasized through various kinds of exercises from reading, writing, and speaking. Students who take more understanding of vocabulary will get more benefit from this book because vocabulary is needed for ESP students (Hutchinson & Waters, 1991) (Basturkmen, 2010). Nevertheless, this result was in contrast to Syaifulloh (2014 that stated not all research gave a positive response to the vocabulary and reading texts of the books being evaluated. Therefore, the reading in this book is adapted to the needs of students because it contains material. therefore, this book is also equipped with various types of exercises to train students' understanding. However, This book still needs improvement. The needs for revisions include grammar and pronunciation, where this book only emphasizes vocabulary. In addition, listening material in this book was also omitted. Meanwhile, ESP students have to learn 4 skills and 3 language components which include grammar, pronunciation, and vocabulary. which if one skill or component is omitted, then the language skills in the book are not integrated with each other. Meanwhile, according to Suherman (2018), the components of books and skills must be integrated. Not only that, active student participation, independent learning, and responsibility are not emphasized so it seems as if they depend on explanations from the teacher.
4. Conclusion
From the results of the analysis, it can be concluded that through the criteria developed by Cunningsworth (1995) and Miekley (2005), the ESP English for Civil engineering textbook met the evaluation textbook criteria but in almost all aspects. Recommendations for improvement should consider flexible learning styles, integrate 4 language skills, the material should cover various topics according to student interests and needs, consider student involvement in learning, the material must cover all aspects, namely grammar, vocabulary, and pronunciation. In addition, learning exercises should be varied and the layout of the material should be appropriate and attractive. Regarding the findings of this study, it is suggested to future researchers to consider the combination of needs analysis and evaluation of ESP coursebooks to get more accurate results for ESP materials and better course development.

5. References