

Vocational Secondary School English Coursebooks Based on Social Semiotic Perspective: Voices from Engineering Professionals

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Abstract

English coursebooks used in vocational secondary schools should accommodate the engineering students' needs for their future profession. It is essential to reveal company trainers' and engineers' perception of the English coursebook used at school to know whether the English coursebook meets students' needs for their future profession or not. Therefore, in this study, we investigated company trainers' and engineers' perception of the English coursebook that is used at vocational secondary schools based on the social semiotic perspective. We distributed open-ended questionnaires and conducted in-depth interviews to both engineers and engineering company trainers as professionals about the topics and registers provided in the English coursebook. The results of data analysis revealed that the topics and registers in the coursebook are not relevant with what students need for their future profession as engineers. In fact, both engineers and company trainers believed that the English coursebook should provide topics and registers related to the engineering field. Thus, we hope that the findings of this article would positively contribute to the development of English materials and coursebooks for vocational secondary school level.

Keywords: English coursebook, professionals' perception, social semiotic, vocational school

Introduction

English is a compulsory subject in Indonesian vocational secondary schools based on the Regulation of the Director General of Primary and Secondary Education Number 07/D. D5/KK/2018. The government believes that English serves an important part in students' future related to their career or profession. When vocational secondary school students work in future, they will need good English so that they can do their job well. That is why English has become a compulsory subject in vocational secondary schools in Indonesia.

In the English teaching and learning process, a coursebook is used. Ideally, the English coursebook used in vocational secondary schools should provide what the students need for their future career or profession. When we discuss the condition of an ideal English coursebook, we should consider the nature of the language reflected in the coursebook. According to Halliday (1978), language is used by people for making meaning. People make meaning through the language they produce both in spoken and written language. In this case, we uphold the philosophy that language is as a social semiotic. Since language is a social semiotic, the language provided in the coursebook should be able to serve the goal of studying the language itself. In

vocational secondary school, the goal of studying English it to help students have the competence to do their job as engineers well in future.

The issue in this research is that the coursebook used in vocational secondary schools is the same as the one used in general secondary schools. Knowing the different nature possessed by vocational secondary school students and general secondary school students, the English coursebook they use should logically be different. In fact, we believed that it is crucial to know whether the coursebook meets the needs of vocational secondary school students majoring in engineering or not.

Many studies had been done by many researchers all over the world about English lessons and English coursebooks in the vocational area. For example, Muhammad and Raof (2019) did a research on assessing the needs of Saudi engineering undergraduates. Mahbub (2018) studied the needs analysis in vocational secondary school from the teachers' and students' point of view. Widodo (2015) highlighted and developed vocational English materials from the social semiotic perspective. Unfortunately, none of such studies have dealt with the coursebooks used in vocational secondary schools from the company's side or from the professionals' side. Thus, we intended to fill this gap. To guide this research, the following research question was addressed:

RQ. What are the perceptions of the engineers and company trainers of the English coursebook used in vocational secondary school based on the social semiotic perspective?

Literature Review

Theoretical Background

Language as Social Semiotic in English for Vocational Purposes

Language as a social semiotic is a philosophy that language is as a tool for making meaning Halliday (1978). People communicate and socialize through language. Language comes to life only when functioning in some environment. Each environment or context of situation is different and each determines the register used by the people communicating in that particular environment or context of situation. The register used in a context of situation will vary depending on the field, tenor, and mode. Field refers to what is happening. Tenor refers to who is taking part. Mode refers to what part of language is playing according to Martin and Rose (2007, p. 297). The context of situation in vocational area is discussed below.

The purpose of studying English in vocational secondary schools is to help students have the competence to do their job well in future. The objectives of the English lesson in Indonesian vocational secondary schools based on the Regulation of the Director General of Primary and Secondary Education Number 464/07/D. D5/KK/2018 are stated in the table below.

Table 1

The Core Competences of the English Lesson based on the Regulation of the Director General of Primary and Secondary Education Number 464/07/D.D5/KK/2018

Core Competence 3 (KNOWLEDGE)	Core Competence 4 (SKILL)
3. Understand, apply, analyze, and evaluate about factual concepts, basic procedures, and metacognition in accordance with the English field in the technical, specific, detailed and complex level, about the knowledge of	4. Do specific work by using the tools, information, work instructions or procedures which are commonly done and solve problems based on the English field.

technology, arts, culture, and humanities in the context of self-development as a part of the family, school, work field, and national, regional as well as international society.	Show performance under guidance with measured quality and quantity based on the work competence standard.
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Based on the table, it can be implied that the context of situations the vocational secondary school students will encounter in future are the family (home), the society (national, regional, and international society), and the work field (in this research, the case is the engineering field or company).

Engineering students of vocational secondary schools will become engineers in future. The contexts of situations in their future workplace are companies, industries, workshops, etc. When they work, they need the competence to understand the procedure in using tools and work instructions. The language they use will be technical. Therefore, the registers they will use are technical terms related to engines and procedures in operating or fixing engines.

English for Vocational Purpose Coursebooks from the Social Semiotic Perspective

Coursebooks have an important part in the English lesson. Both teachers and students rely on coursebooks. Therefore, the quality of the coursebooks used in the English lesson should be good. Table 2. shows the elements of a good language coursebook according to Nation and Macalister (2010). It is pointed that learners' needs should be taken into account in the coursebook. In this matter, engineering students' needs should be taken into account.

Table 2

The Elements of a Good Language Coursebook according to Nation and Macalister (2010)

Language coursebooks should:
Suit the environment in which it is used Meet learners' needs Apply sensible principles of teaching and learning Match the goals of the course Suit the proficiency level of the students Reflect sensible selection and sequencing principles Be effective Include tests and ways of monitoring students' progress

In addition, Widodo (2016) mentioned seven key elements in English for Specific Purposes materials. The elements are presented in Table 3 below. In the table, it is stated that authenticity, topic/themes, and texts and contexts are key elements in ESP materials. In this case, the coursebook used by engineering students in secondary vocational schools must have real topic/themes and the context related to their future profession.

Table 3*Seven Key Elements in ESP Materials by Widodo (2016)*

Seven key elements in English for Specific Purposes materials
Authenticity
Topic/themes
Texts and contexts
Knowledge and language
Tasks or activities
Representations of participants and social practices
Pedagogical prompts

Based on the elements of good English coursebooks and materials proposed by the experts above and relating them to the vocational area, it is concluded that learners' needs based on the context of situation of their future work field is essential to be taken into account. The context of situation of their future work can be inserted in the topic and register in the coursebook. Material and coursebook developers should take into account the topics and registers the learners need related to their future workplace (in this case in engineering companies) in the development of the materials or coursebooks.

Previous Studies

Muhammad and Raof (2019) did a research on assessing the needs of Saudi engineering undergraduates. They did a mixed-method research by administering a set of questionnaires to 257 engineering undergraduates and 32 content-subject teachers. They also conducted interviews with the participants. The results of their research showed that there were 27 tasks which are most frequently performed by the students from all engineering departments in the university. Another finding was that there was a big difference among the students' responses from all four levels of study. So, they suggested that these tasks should be considered in the ESP syllabus.

Mahbub (2018) studied the needs analysis in vocational secondary school from the teachers' and students' point of view. The participants of this research were 32 students. They were asked to fill in a set of questionnaires administered by the researcher. Interviews were also done to gather more data in this research. The findings showed that the students had different perceptions of their needs, wants, and what they lacked. Sagli (2017) did a research on teachers' and students' perceptions of vocational orientation. To collect the data, semi-structured interviews were conducted to nine vocational students and three English subject teachers teaching at a vocational school. In addition, observations in three English classes were done. The results showed that both students and teachers had positive perception of vocational orientation. However, the students believed that the implementation of the vocational relevance was not enough. As for the teachers, the results revealed that they did not have enough competence to teach English with vocational orientation.

Aviyanti (2015) developed English learning materials for grade XI students of beauty and skin care study programme at vocational secondary schools. This research aims to find out the target and learning needs of the students taking the beauty and skin care programme at vocational secondary schools. The research results revealed that the students needed materials related to beauty and skin care and to their life. In addition, the results showed that the materials developed were appropriate to be implemented in the English lesson. Rehouma (2013) too identified and analyzed students' needs in learning English for specific purposes. The subjects of the research were 90 second-year students studying at a business department. In gathering the data,

questionnaires about the teaching/learning situation were administered. The results revealed that the students needed to use language for their target work. In addition, they also needed language for further education. They preferred two courses to be available. One course should be provided for the occupational business studies, and another one for the academic studies.

The studies mentioned above have not touched the perception of vocational English courses and vocational English coursebooks professionals' point of view. This is what the current research aimed to perform.

Method

Research Design

This research was qualitative in nature. Thus, the data were collected through in-depth interview transcripts and participants' written responses to open-ended questionnaire.

Participants

The participants in this research were two groups. The first group consisted of two engineers who were vocational secondary school alumni. The second group consisted of two company trainers whose job was training the workers and engineers in a company. The engineer participants had graduated from vocational secondary school and were selected on the basis of their competence in their job as engineers. The company trainers were chosen based on their competence as trainers. All participants worked in Indonesian reputable companies. Tables 4 and 5 below represent the participants' profile.

Table 4

Profile of the Engineers

Participant	Age	Working Experience	Company Status
Engineer 1 (E1)	20-25	3-8 years	Reputable
Engineer 2 (E2)	20-25	3-8 years	Reputable

Table 5

Profile of the Company Trainers

Participant	Age	Working Experience	Company Status
Company Trainer 1 (CT 1)	30-35	3-8 years	Reputable
Company Trainer 2 (CT 2)	30-35	3-8 years	Reputable

Procedures

Data Collection

For collecting the data, in-depth interviews and open-ended questionnaires were administered to the participants. Interviews and questionnaires were used as the instruments in this research because they will yield detailed data. There are two items in both questionnaire and

interview which follow the social semiotic perspective, 1) the topics in the coursebook and 2) the vocabulary/register in the coursebook. Through these instruments, the participants were asked about their perception of the topics or themes in the English coursebook used in vocational secondary schools. They were also asked about their perceptions of the vocabulary presented in the coursebook.

Data Analysis

To analyze the interview transcripts of the four participants' responses, four steps were taken; that is, 1) generating natural units of meaning, 2) classifying, categorizing, and ordering these units of meaning, 3) structuring narratives to describe the contents, and 4) interpreting the data (Cohen, Manion & Morrison, 2007). As for questionnaires, the participants' responses were analyzed descriptively. Then, thematic content analysis was also done for both transcripts and questionnaire results. Finally, the data elicited from the interviews, they were triangulated by comparing them with the data derived from the open-ended questionnaire. This is considered as methodological triangulation (Cohen, Manion & Morrison, 2007).

Results

Topics in the Coursebook

Based on the information in Tables 6 and 7 below, it is found that the topics in the coursebook do not accommodate the needs of vocational secondary school students majoring in mechanical engineering. In fact, all the four participants had the same perceptions.

Table 6

Interview Excerpt of the Topics in the Coursebook

Participant	Interview Excerpt of the Topics in the Coursebook	Topic Relevance
E 1	<i>After seeing the coursebook, the content is general. The content is about how we communicate using English in our daily life. Of course, that is different from what we experience when we work. We often find English words related to our job. For example, it is like when we use the manual book and the instructions in a vehicle. We do need vocabularies related to our daily life. But we also need vocabularies related to the repair manual books of the vehicles.</i>	Not relevant
E 2	<i>Maybe, the conversations are okay. But, there should be addition about for example procedure texts because when we work, we use manuals. They are in English.</i>	Not relevant
CT 1	<i>When I see it from the topics, the topics in the coursebook are still too general because usually the language in vocational secondary schools is engineering language. The language which is needed is the language the students need at work or at the school practice classes.</i>	Not relevant

CT 2	<i>After reading the coursebook, the content is still too general. The students of vocational secondary school study engineering and they will be engineers or operators. When they work in the workforce, they use a lot of technical terms which are different from general terms. This coursebook do not provide the technical terms.</i>	Not relevant
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Table 7

Open-ended Questionnaire Responses about the Topics in the Coursebook

Participant	Open-ended Questionnaire Responses about the Topics in the Coursebook	Topic Relevance
E 1	<i>The topics in the coursebook is general and for daily life communication. Actually, those topics are needed. However, those topics are not relevant with the work field (as engineers) because in the work field we need more understanding about the procedure in our work.</i>	Not relevant
E 2	<i>Some of the topics in the coursebooks are not related to my job in the engineering field.</i>	Not relevant
CT 1	<i>The topics in the coursebook are not suitable for senior secondary school students because what they need are technical terms related to specific things in their job.</i>	Not relevant
CT 2	<i>The topics in the coursebook are not suitable because they are still too general.</i>	Not relevant

Based on the above results, all the four participants believed that the topics in the coursebook are not relevant to the needs of vocational secondary school students who study mechanical engineering. They had the perception that the topics are general topics about daily life. The actually believed that vocational secondary school students studying mechanical engineering need topics related to their future jobs.

Vocabulary in the Coursebook

According to the results presented in Tables 8 and 9, it is found that the vocabulary needed by the vocational secondary school students majoring in mechanical engineering are not accommodated in the coursebook.

Table 8

Interview Excerpt of Vocabulary in the Coursebook

Participant	Interview Excerpt of Vocabulary in the Coursebook	Vocabulary Relevance
E 1	<i>Maybe there are w few vocabularies related to my job. But, there are many vocabularies or technical terms about my job which are not accommodated yet.</i>	Not relevant

E 2	<i>There are vocabularies in this coursebook that can be found in the manual book. But more vocabularies or technical terms related to my job are not there. They can be inserted.</i>	Not relevant
CT 1	<i>The vocabularies in this coursebook are far from the technical terms. What the students need are technical terms like the name of the components of the engine unit. The technical terms are all in English. In the field, when a mechanic or engineer works on a machine, he/she needs to look at the SOP manual to know the procedure, calculation, etc. Usually, the obstacle is the language. Because the manual book uses English, it is confusing when translated using Google translate. It means the students need to learn technical terms.</i>	Not relevant
CT 2	<i>They really need to read technical terms because every day, their holy books as mechanics or engineers are the SOP manual books which are in English. When they work, the guide is from the manual books. The manual books are in English. When they are translated, the meanings become weird.</i>	Not relevant

Table 9

Open-ended Questionnaire Response about the Vocabulary

Participant	Open-ended Questionnaire Response about the Vocabulary or Registers in the Coursebook	Vocabulary or Register Relevance
E 1	<i>There are some vocabularies that are related to our work in the coursebook. However, the needed vocabularies or technical terms related to our work are complete.</i>	Not relevant
E 2	<i>In my opinion, vocabularies related to the engineering job field should be added in the coursebook.</i>	Not relevant
CT 1	<i>Not suitable because the vocabularies needed by engineering vocational secondary school students are technical terms.</i>	Not relevant
CT 2	<i>The vocabularies are no relevant with technic or engineering jobs.</i>	Not relevant

Based on the above data, it can be claimed that all the four participants believed that the vocabularies used in the coursebook are not relevant to the needs of vocational secondary school students who study engineering. In fact, they all agreed that specialized vocabularies related to the engineering field should be accommodated in the coursebook.

Discussion

The findings of this research showed that that engineers and company trainers have the perception that the topics and vocabularies in the coursebook under the study do not meet vocational secondary school students' needs. In fact, vocational secondary school students, with the engineering major, need to learn technical terms or specialized language. This is in line with what Nation and Macalister (2010) have pointed; that is, vocational secondary school English coursebooks should meet the students' needs, and vocational students need English materials which are relevant to their profession. Sagli (2017) has also found that business students need English materials related to their occupational business studies. This means that materials related to future profession of the students need to be accommodated in the English coursebooks. Avianty (2015) too has found that beauty and skin care students need English materials related to beauty and skin care. Avianty's findings strengthen the findings of the current study that students in vocational secondary school need English materials related to their future work. Finally, Rehouma (2013) has claimed that the students of the business department need to use language for target work. The red line among all such research here is that vocational students need English materials related to their future profession.

Conclusion

English coursebooks used in vocational secondary schools should be able to meet the needs of the students concerning their future profession. This research investigated the perception of engineers and company trainers of an English vocational secondary school coursebook based on the social semiotic perspective. Based on the findings, it can be concluded that the topics and vocabularies in the coursebook are not relevant to what students need for their future profession. The findings of the study have implications material developers; that is, topics and vocabularies should be taken into account by them in the process of developing English coursebooks for engineering students of vocational secondary schools. Also, the practical implication for teachers is that they can add more materials related to the engineering field to enrich the coursebook so that the students can get what they need. Finally, future researchers can study more on other aspects of English materials used in vocational area by taking into account the company or professionals' points of view, thereby enhance theories related to English materials or coursebook development for vocational secondary school students.

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