

DESIGNING ENGLISH INSTRUCTIONAL MATERIALS FOR VOCATIONAL HIGH SCHOOL: A NARRATIVE INQUIRY AT SMK AT-THOAT TOROH PURWODADI

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Abstract

The purpose of this study is to evaluate the steps of designing English instructional materials for Vocational High School by referring to the application of scientific approach of Curriculum 2013. This study is qualitative research with narrative inquiry. The object of the study is SMK AT-Thoat Toroh, a Vocational High School in Purwodadi, which has three majors: office administration, computer network engineering and motorcycle engineering. The data were collected by interviewing the English teachers of SMK At-Thoat Toroh, Purwodadi in February, 2019. The result showed that the steps taken by the teachers in designing English instructional material included identifying Competency Standards and Basic Competencies, identifying the types of material related to Competency Standards or Basic Competencies, then determining the materials according to Competency Standards and Basic Competencies. The teachers had taken appropriate steps in designing English instructional material, such as identified the instructional goal which is to encourage the students to be active in the learning process and to be able to think critically and creatively as expected in the 2013 curriculum; conducted needs analysis; analyzed learners' input and characters; determined the materials according to Basic Competencies and Competency Standards set by the government; and evaluated both the teaching methods and the teaching materials. The teachers also understood the different needs of each department and determined the different materials for each department's needs. Even so, there were still less appropriate things related to the design instructional materials, such as needs analysis that were less applicable due to limited time and facilities, and the application of scientific approach that was still less than optimal.

Keywords: English Instructional Materials, Vocational High School

1. INTRODUCTION

Instructional design is commonly defined as a systematic procedure in which educational and training programs are developed and composed aiming at a substantial improvement of learning (Reiser & Dempsey, 2007). It is a systematic reflective process of applying instructional principles into plans by material, activity, resources and evaluation (Smith & Ragan, 2004; Morrison, Ross & Kemp, 2001). Instructional design can also be described as "The systematic development of instructional specifications using learning and instructional theory to ensure the quality of instruction" (Moallem, 2001, p. 113). It includes the entire process of analysis of teaching and learning needs and objectives, and the development of an instructional system that meets those needs. It can also be defined as the process of identifying learning needs and develop learning materials in order to improve instructions to the learners. Such definitions are associated with the assumption that certain models of instructional design can serve as a frame

of reference and a regulation of the development of courses and lessons which aiming at the improvement of learning and influencing the learners' motivation and attitudes in such a way that they can achieve a deeper understanding of the subject matters to be learned.

Instructional materials refer to the channels of communication which an instructor or teacher can use to concretize a concept during teaching and learning process (Amadioha, 2018). They can also be defined as any collection of materials including animate and inanimate objects and human and non-human resources that a teacher may use in teaching and learning process to ease, encourage, improve and promote teaching and learning activities ("What is instructional materials?", n. d.). There are some types of instructional materials, such as graphic materials, which include charts, graphic, posters, diagrams, comics, maps and globes; three-dimensional materials, which include models and mock-ups, realia, specimens, Instructional materials is important in the teaching learning process to provide knowledge in all topics, in-depth information based on facts and give learners on the topics; allow instructor to engage learners by supporting concepts through the use of multimedia; offer learners the opportunity to practice concepts and develop a product that demonstrates their level of understanding; and evaluate the learners' knowledge.

In designing English instructional materials, teachers must arrange it systematically and coherently, in order to facilitate effective teaching and learning process. As one of the models of instructional design, Dick and Carey (1990) proposed 9 steps of systematic approach which have been proved to be effective in the design of instructional materials (for example; Hashim, 1999; Manurung, 2009; Bello and Aliu, 2012; Syatriana et al., 2013, in Manurung, 2017). The steps are: 1) identify instructional goal, 2) conduct instructional analysis, 3) analyze learners and contexts, 4) write performance objectives, 5) develop assessment instruments, 6) develop instructional strategy, 7) develop and select instructional materials, 8) design and conduct formative evaluation, 9) revise instruction. In applying Dick and Carey model of instructional design, teachers or instructors have to clarify the goals and objectives, determine what they want the learners to be able to do after they have completed the instruction, identify skills that must be learned and the procedural steps that have to be followed by the learners, identify any specific characteristics of the learners that may be important to design instructional materials and activities, identify the criteria for successful performance, and evaluate and revise teaching materials according to the evaluation results.

The newest curriculum in Indonesia, curriculum 2013, is based on scientific approach. By implementing curriculum 2013, the government expects Indonesian students will be better in the future. Students are required to have higher order thinking skills (HOTS), which is developed by applying the scientific process in teaching and learning process. Whewell (1859, in Fauziati, 2014: 153) describes the scientific process as follows: 1) Formulation of a question, that is, the explanation of a specific observation; 2) Hypothesis, which is the formation of opinions based on the knowledge obtained while formulating the question that may explain the observed behavior; 3) Prediction: this step involves determining the logical consequences of the hypothesis; 4) Testing: this is an investigation of whether or not the observed behavior is true as it is predicted by the hypothesis. This can be done by conducting experiments; 5) Analysis: it involves determining what the results of the experiment show and deciding on the next actions to take. Scientific approach can be implemented in classroom teaching practices. Abidin (2014: 125 in Sodik and Wijaya, 2017) stated the application of scientific approach in teaching learning is through teaching and learning activities which are oriented to develop the student's ability to solve the problem by using integrated inquiry activities which demand to have a critical

thinking, creative, to increase students' understanding. McCollum (2009:2 in Fauziati, 2014: 154) describes four basic components to a scientific approach to teaching, namely: 1) it encourages learners to be curious about "why" and "how"; 2) it encourages experiments and observation; 3) it pushes for analysis, since curiosity grows with understanding, and understanding comes of analysis; 4) it requires communication: a scientific approach requires learners to communicate their learning and their findings.

According to article 15 of National Education System Act Number 20/2003, a vocational school is one of the educational units that prepare their students to work on specific skills (Purbasari, 2016). In the case of secondary education, this educational unit is different from academic high schools which usually prepare students who aim to pursue tertiary education, rather than enter directly into the workforce. Teaching English in Vocational High School (SMK) is different from that in Senior High School. In Vocational High School, students are expected to be able to take part in business and industry work. As a consequence, English teachers in Vocational High School are required to carry out an analysis of the needs of students in order to be able to design an appropriate teaching-learning process. In Vocational High School, the teachers are demanded to be more creative in delivering English material to students based on what majors they take, such as automotive, business and administration, etc. By this condition, the researcher would like to know what stages do the teachers do in designing English instructional materials and to what extent the teachers apply the steps to design instructional materials according to the relevant theories of instructional design to apply scientific approach?

There are a bulk of research that has been done related to designing instructional materials for Vocational High School. Among others is a research conducted by Purnamasari (2015), which investigated the way to develop English learning materials for grade X students of beauty study program by following Dick and Carey's model with some modification. Researcher conducted needs analysis that were used to develop syllabus, then the syllabus became the guideline to develop the first draft of the materials. The result is, based on the materials evaluation, the content, the language, the presentation and the lay-out of the materials are appropriate with the relevant theory. Another research was done by Audrey and Sidabalok (2016), which investigated the design of instructional materials for blended learning by using schoology for speaking class of English education study program of teacher training and education faculty of Bandar Lampung University. The study aims to make instructional materials for blended learning suitable for implementation in speaking class. The result of the research showed that the instructional materials for blended learning in speaking 2 classes are able to facilitate students learning process and increase their activeness in learning. Another research was done by Syatriani (2015), which investigated the design of English instructional materials for EFL senior high school students based on school curriculum. The result indicated that instructional materials based on the school curriculum and the procedures of presentation, practice and production are appropriate for students and school curriculum. Instructional materials with different strategies and various materials effective to improve the English achievement of the students. Both teachers and students argue that the instructional materials are good enough to be used in the teaching and learning process to increase the English achievement of the EFL students. This study is different from the previous studies above. The differences are in the focus of the study, the setting and also the object. This study focuses on the steps in designing English instructional materials conducted by the English teachers at SMK AT-Thoat Toroh, a Vocational High School in Purwodadi, Central Java. The problems to be discussed are to what extent the teachers apply the steps to design English instructional materials according to the relevant theories of instructional design.

2. RESEARCH METHOD

This study is a qualitative study with narrative approach. This research data is in the form of information about the process of designing English instructional materials for Vocational High School. The data were collected by interviewing two English teachers of SMK AT-Thoat Toroh Purwodadi, Ms. D and Mr. A, to find out the process of designing English instructional materials for Vocational High School. There are three majors in SMK At-Thoat Toroh, which are office administration, computer network engineering and motorcycle engineering. The interview was conducted in February, 2019. The researcher described and concluded the result of the interview and analyzed it using the concepts and principles of instructional design.

3. FINDINGS AND DISCUSSION

3.1 The Steps of Designing English Instructional Materials

Based on the result of the interview, both teachers have almost the same steps in designing English instructional materials. They said that in designing the instructional materials, they adapted the standard syllabus from the school or the English MGMP (Teachers Professional Development Forum). *“Dalam penyusunan materi, langkah pertama adalah mengetahui dan mengidentifikasi Standar Kompetensi dan Kompetensi Dasar, kemudian mengidentifikasi jenis-jenis materi yang berkaitan dengan Standar Kompetensi atau Kompetensi Dasar, kemudian menentukan materi sesuai Standar Kompetensi dan Kompetensi Dasar.”* (In designing the instructional materials, the first step is to identify Competency Standards and Basic Competencies, then identify the types of material relating to Competency Standards or Basic Competencies, then determine the materials according to Competency Standards and Basic Competencies) (An interview with Ms. D), while Mr. A stated that *“materi pembelajaran Bahasa Inggris saya buat berdasarkan silabus dan arahan MGMP, juga berdasarkan Kompetensi Inti dan Kompetensi Dasar yang telah ditetapkan oleh pemerintah, khususnya mengenai topik-topik apa saja yang harus diajarkan. Saya juga membuat modul yang materinya saya ambil dari berbagai sumber, termasuk dari textbook, lalu LKS untuk memperkaya soal-soal, dan dari internet. Walaupun di sekolah kami tidak mewajibkan penggunaan LKS, tetapi saya tetap menggunakannya untuk memperkaya materi dan soal-soal silabus sendiri, berdasarkan Kompetensi Inti dan Kompetensi Dasar yang ditetapkan oleh pemerintah”* (the English instructional materials are based on the syllabus and the guideline from MGMP, based on Core Competencies and Basic Competencies set by the government, especially for what topics should be taught. For the materials, I also made my own module, which I took from various sources, including from the textbook, then LKS to enrich the questions, and from the internet. Although at school we do not require the use of LKS, but I still use it to enrich the materials and questions).

Since vocational school consists of different majors with different input and character of the students, the two teachers both consider that it is important to analyze the needs of students in designing instructional materials, even though the results of the analysis will also be adjusted to the suggestions from the MGMP.

“Menurut saya sangat penting dalam melakukan analisis kebutuhan siswa dalam menyusun materi. Dalam hal ini, saya sendiri melakukan analisis terhadap kebutuhan siswa, selain untuk menyesuaikan materi dengan Kompetensi Dasar, saya juga melakukan analisis materi yang disesuaikan dengan kemampuan siswa. Hal ini dilakukan dengan harapan siswa mudah untuk

memahami materi tersebut. Setelah saya melakukan analisis tersebut, hasil analisis tentang materi tersebut saya terapkan sebagai pedoman dalam penyusunan materi, selain juga saran dari MGMP.” (In my opinion, it is very important to analyze students’ needs in designing instructional materials. In this case, I myself conducted an analysis of the needs of students. In addition to adjusting the material with Basic Competencies, I also conducted material analysis tailored to the abilities of students. This is done in the hope that students will easily understand the material. After analyzing, I applied the results of the analysis as a guideline in designing instructional material, along with the suggestions from MGMP) (an interview with Ms. D). Mr. A also gave similar answer with Ms. D. “Di SMK, needs analysis menurut saya sangat diperlukan, karena kemampuan dari tiap program keahlian itu berbeda. Contohnya teknik sepeda motor, banyak (materi) yang harus diberikan dari guru kepada siswanya, karena input dari siswa itu sendiri, apalagi anak laki-laki yang kita tahu seperti itu, jadi kebutuhan untuk penyampaian materi ini sangat tinggi, jadi kita harus lengkap menganalisis kebutuhan untuk teknik otomotif ini. Untuk jurusan lain, saya rasa needs analysis-nya mudah dibuat karena jurusan lain seperti komputer atau jaringan dan administrasi perkantoran, rata-rata dari input anak-anaknya sudah lumayan, jadi dalam proses pengajaran cenderung lebih mudah. Kalau memang ada kesulitan itu bisa diselesaikan sebelum ke proses evaluasi. Karena jurusan itu didominasi oleh anak perempuan atau anak yang rajin.” (In Vocational High School, needs analysis, in my opinion, is very important, because the ability of students of each program of expertise is different. For example, for motorcycle engineering, much (materials) that must be given from the teacher to the students, because of the input from the students themselves, especially the boys with their characters, so the needs analysis must be complete and comprehensive to fit the input. For other majors, I think the needs analysis is easy to make because other departments such as computers or networks and office administration, the average input from their children is pretty good, so the teaching process tends to be easier. If indeed there are difficulties that can be resolved before going to the evaluation process. Because the department is dominated by girls or diligent students).

By holding an analysis of student needs, the teacher can better know the different needs of each department. This can be seen from the teacher's answers as follows: “Kalau selama ini jadi selain materi umum yang biasa seperti tenses dan kinds of text juga memperdalam masing-masing jurusan, seperti ini namanya kunci ring, atau mungkin ini sekop atau apa dalam Bahasa Inggrisnya, nah kemudian dalam administrasi perkantoran, ini yang lebih lagi yang saya tekankan dalam administrasi perkantoran karena ada ujian prakteknya, dimana ujian kompetensi kejuruannya itu ada nasional jadi mendatangkan pengujian eksternal dari luar, jadi memang untuk pengetahuan Bahasa Inggris di administrasi perkantoran itu dituntut memang harus lebih daripada jurusan yang lain, maka presentasi dalam ujian kompetensi nanti harus memakai Bahasa Inggris. Kemudian membuat surat ataupun arsip arsip, semua data di perkantoran juga harus memakai Bahasa Inggris, kemudian untuk membuat surat lamaran ataupun surat bisnis itupun semuanya dari Bahasa Inggris maka untuk jurusan AP ini memang lebih saya fokuskan lagi ke administrasi jadi entah itu membuat surat ataupun bagaimana menyusun kalimat yang baik di perusahaan ketika nanti mereka sudah jadi sekretaris ataupun paling tidak admin dalam sebuah perusahaan.” (During this time, in addition to the usual general materials such as tenses and kinds of text, I also deepened the English material needed by each department, such as for automotive engineering, learning terms such as ring keys, or shovels in English. Then in office administration, because in office administration there is a practical exam, where the vocational competency exam has national exams so it brings external examiners from outside, so indeed for knowledge of English in office administration it is demanded that it must be more than other departments, because the competency exams will

have to be in English. Then in making business letters or archives, all data in offices must also use English, so I focus more on office administration using English. So they can compile sentences that are good in English when they later become secretaries or at least an administrative part of a company) (An interview with Mr. A). Whereas Ms. D explained that the needs analysis that she did was usually in the form of a pretest, to determine the students' initial abilities. Usually I have a kind of pre-test that has to do with each department. So I tried to find out what students' initial abilities are. *"Biasanya saya mengadakan semacam pre test yang itu hubungannya dengan setiap jurusan. Jadi saya mencoba mengetahui kemampuan awal siswa seperti apa. Biasanya pre test saya hanya tentang vocabulary, misal 10-20 kosakata, jadi saya bisa tahu kemampuan masing-masing jurusan seperti apa. Biasanya yang banyak pengetahuannya atau kemampuan Bahasa Inggrisnya itu memang di jurusan Administrasi Perkantoran. Karena memang lebih rajin, lebih disiplin, karena terdiri dari perempuan semuanya."* (Usually my pre-test is only about vocabularies, for example 10-20 vocabulary words, so I can know what each department is capable of. Usually those who have a lot of knowledge or ability in English are indeed majoring in Office Administration. Because it's more diligent, more disciplined, because it consists of all women).

After doing the pretest, Ms. D follows up on the results by adjusting the teaching method. *"Setelah pretest tadi, dilihat berapa persen yang sudah tahu dan berapa banyak yang tidak tahu. Ketika dalam sehari-hari berarti saya harus menyesuaikan metode. Misal di Teknik Sepeda Motor, siswanya banyak yang tidak menguasai, jadi saya harus lebih banyak aktif. Jadi bukannya siswanya yang aktif, tetapi gurunya yang lebih aktif. Bisa jadi sejak SMP, gurunya belum mengajari, sehingga menjadi kendala ketika siswa tersebut ada di jenjang SMK."* (The pretest shows what percentage of students mastered more vocabulary, and how many were only a little. I have to adjust the method so that it can accommodate students' different abilities. For example in Motorcycle Engineering, many students do not master, so I have to be more active. So the teacher is more active than the students. It could be that when the student was in junior high school, the teacher in their previous level hasn't taught about it, so it becomes an obstacle when the student is in the vocational school level).

For the implementation of the design, the two teachers also gave similar answers. Ms. D stated that *"Untuk pemberian materi, bisa berjalan sesuai dengan rencana, akan tetapi terkadang ada ketidaksesuaian karena kemampuan siswa, ada yang tidak memahami materi tersebut sehingga perlu mengaitkan materi tersebut dengan hal yang berhubungan dengan materi sehingga terkadang yang seharusnya materi tersebut diterangkan selama 3 kali pertemuan atau 2 kali pertemuan tetapi pada kenyataannya lebih."* (In delivering the materials, it can go according to plan, but sometimes there are discrepancies due to the ability of students, there are those who do not understand the material so it is necessary to associate the material with matters related to the material so that sometimes in the lesson plans, the lesson should be taught in 3 or 2 meetings but in reality, it could be more). Mr. A stated the similar thing with Ms. D. *"Untuk kegiatan belajar-mengajar di kelas, sudah sesuai dengan desain materi, tetapi kendalanya adalah mengenai waktu. Waktunya tidak cukup. Jadi materi yang seharusnya disampaikan dalam satu pertemuan, pada akhirnya harus disampaikan dalam dua kali pertemuan atau bahkan lebih. Karena mungkin ada kendala siswa mengalami kesulitan memahami materi, sehingga akhirnya guru harus mengajarkan kembali materi yang belum dipahami oleh siswa"* (teaching and learning activities in the classroom are designed to be compatible with the design of materials, but sometimes in the reality, it is not always compatible. The problem is about the time needed to deliver the materials. The time given to the teachers to deliver the materials is not enough. So the materials that previously designed to be delivered in one meeting must be delivered in two meetings or even more, since some students have difficulty in understanding the materials. The

teacher then repeat the explanation of the materials to the students who have not understand about the materials).

After applying the design, the teachers conducted evaluation of the design and material. *“Saya dan guru Bahasa Inggris lain di sekolah mengevaluasi materi tersebut dengan cara sharing dengan guru Bahasa Inggris sekolah lain ketika ada pertemuan guru/MGMP. Dari sharing tersebut kami melakukan revisi materi tersebut atau memperbaiki materi tersebut. Untuk melakukan evaluasi terhadap pemahaman siswa terhadap materi, saya mengadakan ulangan harian, latihan soal dan hafalan kosakata yang dianggap sulit bagi siswa. Biasanya untuk hafalan ditargetkan 1 bulan hafal 20 kosakata yang dianggap sulit, sesuai materi tersebut.”* (I and the other English teacher at the school evaluated the material by sharing with other schools' English teachers when there was a MGMP meeting. From the sharing we made revisions to the material or corrected the material. To evaluate students' understanding of the material, I held daily tests, practice questions and memorized vocabulary that was considered difficult for students. Usually for memorization is targeted at 1 month memorized 20 vocabulary that is considered difficult, according to the material) (An interview with Ms. D). While Mr. A evaluated student understanding of the material whenever he had finished delivering the material in each chapter. *“Biasanya kalau saya sudah selesai (menjelaskan materi) untuk tiap tema, pasti saya mengadakan evaluasi.”* (When I have finished explaining the material for each theme, I conduct an evaluation).

3.2 The Application of Scientific Method in Designing English Instructional Material

3.2.1 Teachers' Perception on Scientific Approach in Teaching and Learning Process

According to Mr. A, scientific approach is teaching steps that must be done in the teaching-learning process in order for the students to be more active. *“Menurut saya scientific approach adalah langkah langkah dalam mengajar yang terdiri dari 5 M, kemudian harus urut sesuai dengan langkah langkah tersebut, apakah itu menanya atau mengamati terlebih dahulu. Dalam mengajar, guru harus mengikuti alur dari 5 M tadi, dan mengupayakan agar siswa aktif dalam pembelajaran. Dalam kurikulum 2013 ini, yang semula mengacu pada teacher-centered kemudian berubah jadi students-centered. Sehingga kemudian menciptakan pemikiran bagaimana siswa itu bisa lebih aktif, bagaimana siswa itu dalam mempelajari materi itu lebih mudah. Khususnya karena guru hanya sebagai fasilitator jadi siswa dituntut untuk lebih aktif dalam pembelajaran di kelas.”* (According to me, scientific approach is a step in teaching which consists of 5 M, then it must be sorted according to the steps, whether it is asking or observing it first. In teaching, the teacher must follow the flow of the 5 M earlier, and strive for students to be active in learning. In curriculum 2013, which originally referred to teacher-centered and then changed to student-centered, so that it then creates the idea of how students can be more active, how the students can easier to learn the material. Especially because the teacher is only a facilitator so students are required to be more active in learning in the classroom) (An interview with Mr. A). While according Ms. D, scientific approach is *“pendekatan yang digunakan dalam proses pembelajaran. Dalam penerapannya harus menggunakan metode-metode ilmiah dalam pengajaran, yang merangsang siswa untuk lebih aktif dalam kelas, seperti lebih aktif bertanya, lebih giat mencari tahu tentang sesuatu, tidak selalu harus dari guru tapi bisa mencari sendiri dari buku-buku ataupun sumber-sumber terpercaya dari internet, dan lain sebagainya. Bisa juga diskusi dengan temannya sehingga dapat menambah pengetahuan, dan*

sebagainya.”(According to me, scientific approach is the approach used in the learning process. In its application must use scientific methods in teaching, which stimulates students to be more active in the classroom, such as being more active in asking questions, more active in finding out about something, not always from the teacher but can search for themselves from books or reliable sources from the internet, and so on. Students can also discuss with their friends so they can increase the knowledge, and so on).

3.2.2. The Adjustment of Instructional Materials to Scientific Approach

“Setiap satu semester sekali MGMP mengadakan pertemuan, yang isinya selain membahas silabus juga memberikan arahan dan panduan mengenai materi. Kemudian masing-masing guru di setiap sekolah menyesuaikan materi dengan kebutuhan siswa, dengan fasilitas yang ada di sekolah masing-masing. Setelah guru memilah dan memilih, oh karena fasilitas saya seperti ini, karena input siswa saya seperti ini jadi kemudian baru menentukan metode ataupun cara pelajaran sehingga bagaimana siswa dapat menerima, tapi tetap menerapkan scientific approach tadi, yang diawali dengan mengamati, kemudian diakhiri dengan mengevaluasi tadi tetap saya laksanakan dalam pembelajaran.”(Once in every semester, the MGMP holds a meeting, the contents of which are in addition to discussing the syllabus also provide direction and guidance regarding the material. Then each teacher in each school adapts the material to the needs of students, with facilities available in their respective schools. Then after the teacher sorts and chooses based on the school’s facilities and input of students, they determine the method of teaching on how students can accept, but still apply the scientific approach, which begins with observing, then ends with evaluating) (An interview with Mr. A). *“Sebisa mungkin saya menyiapkan materi dan menyesuaikan teknik mengajar agar dapat merangsang siswa untuk lebih aktif bertanya, mengamati dan memiliki rasa ingin tahu yang tinggi. Terkadang saya juga memberikan satu topik atau pertanyaan yang harus mereka cari sendiri jawaban dan pemaparannya melalui internet atau buku-buku.”* (I prepared the material and adjust the teaching technique so that it can stimulate students to be more active in asking, observing and having high curiosity. Sometimes I also give one topic or question that they have to find their own answers and explanations through the internet or books) (Interview with Ms. D).

3.2.2 The Constraints on the Application of Scientific Approach

“Kalau menurut saya, kendalanya lebih karena faktor siswa. Bila basic ilmu dari siswa kurang, maka dalam mengikuti langkah-langkah scientific approach, guru memerlukan waktu lebih untuk menjelaskan lagi materi ataupun harus mengulang lebih banyak lagi. Misal di langkah mengamati, ternyata siswa hanya mengamati tapi tidak bisa memahami, atau ketika diminta untuk bertanya, ternyata tidak ada yang bertanya, itulah bila dari awal input siswa atau rasa ingin tahu siswa kurang.” (In my opinion, the obstacles are more due to student factors. If the basic knowledge of students is lacking, then in following the scientific steps of the approach, teachers need more time to explain the material or have to repeat more. For example, in the step of observing, it turns out that students only observe but cannot understand, or when asked to ask, it turns out that no one asks, that's when from the beginning of student input or students' curiosity is lacking) (An interview with Mr. A). Similar with Mr. A’s answer, Ms. D also consider the input from the students as a constraint in applying scientific approach in teaching

and learning process. “Hambatannya lebih pada kurangnya rasa ingin tahu siswa dan kurangnya kemampuan siswa untuk menyampaikan pendapat dan gagasan mereka, sehingga untuk proses menanya dan menyampaikan agak kurang.” (The obstacle is the lack of curiosity of students and the lack of students' ability to express their opinions and ideas, so that the process of asking and conveying is somewhat lacking) (An interview with Ms. D).

4. CONCLUSION

Through the results of the interview in the previous chapter, the steps taken by the teachers in designing English instructional material included identifying Competency Standards and Basic Competencies, identifying the types of material related to Competency Standards or Basic Competencies, then determining the materials according to Competency Standards and Basic Competencies. The teachers had taken appropriate steps in designing English instructional material, such as identified the instructional goal which is to encourage the students to be active in the learning process and to be able to think critically and creatively as expected in the 2013 curriculum; conducted needs analysis; analyzed learners' input and characters; determined the materials according to Basic Competencies and Competency Standards set by the government; and evaluated both the teaching methods and the teaching materials. The teachers also understood the different needs of each department and determined the different materials for each department's needs. Even so, there were still less appropriate things related to the design instructional materials, such as needs analysis that were less applicable due to limited time and facilities, and the application of scientific approach that was still less than optimal.

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