CHAPTER I

INTRODUCTION

This chapter describes the background of the research. It contains identification of the issue/phenomenon, delimitations and focus of the research, research questions consisting of two questions, aims of the research consisting of two aims, and significance of the research namely theoretical and practical significance. In addition, it also describes the theoretical foundation covering several topics related to this research, previous research, and frame of thought. Finally it explains the research method includes research design and steps of the research, sources and types of data, data collection techniques and instruments using questionnaires and interviews, data analysis techniques, and research timeline.

1.1 Background of the Research

Many Indonesian teachers have difficulty in choosing the teaching and learning materials. The teacher had difficulties in selecting the indicators that would be appropriate to the learning materials (Retnawati et al, 2016, p. 40). The difficulties of a teacher for developing indicators are; first is the material being taught, second is the effective and efficient techniques. Technique is the entire process that the teacher uses. (Harmer in Sugianti, 2016, p. 65). For the students to grasp readily, the teacher needs a creative strategy. And the third, students' attitude. Attitude is a reaction to a situation or object that is negative or positive (Kurniawan et al, 2019, p. 455). A positive attitude indicates that students tend to be more diligent in learning so that they get satisfying results, whereas a negative attitude is characterized by students being less diligent so that they get unsatisfactory results and the students are less motivated in learning (pp. 455-456). One of the teaching and learning materials is a worksheet. Learning materials are needed for students' better learning.

Learning materials are a part of the content in the curriculum. Materials have an important role in the teaching and learning process as a resource for ideas and activities for learning, and provide teachers with justification for

what students do (Annisa, 2020, p.18). Learning materials contain a variety of communications, including facts, concepts, principles, rules, procedures, and difficulties, among others (Suhono & Sari, 2020, p. 29). In other words, learning materials serve as a resource or material that students must grasp during the learning process (p. 29). One of the materials commonly used in Indonesian schools is learning worksheets.

Worksheets are important tools that help the students to participate in the learning process. Worksheet is important tools that help them to construct knowledge in their own minds and encourage students to participate in classroom activities (Atasoy, 2008, Kuo et al, 2011 in Taslidere, 2013, p. 145). To carry out these activities, worksheets should be produced and used. Worksheets contain questions that must be done by the students with teacher guidance to get a subject matter concept (Khusna et al, 2019, p. 16). In addition, worksheets are used as a learning facility, able to handle learning difficulty, and increasing learning experience (p. 17).

Regarding the current research, there is also some previous research, and it has been divided into some clusters, they are worksheet development (Romli, 2018; Khusna et al, 2019; Fitria et al, 2019; Husnul, 2020; Suhono, 2020; Romayanti, 2021; Anggun 2021), quality of questions in worksheet (Purba & Dewi, 2020; Rina, 2020), the use of worksheet for teaching and learning English (Setyadi et al, 2020) and need analysis for worksheet development (Betti & Rostika, 2018; Suci, 2020).

There are still students who are unable to comprehend the material. The student will undoubtedly become bored with repetitive, lecture-style learning, as there is no variety in approaches to keep students from being engaged in class, particularly while studying a foreign language. English is a foreign language that is frequently taught in schools (Geoffrey et al, 2003). Such as, junior high school, senior high school, and vocational high school. Of course, it is difficult for those who are new to English to understand it, therefore the teacher must employ certain methods to help students learn it. One of the components in the learning process is the teacher.

Some teachers often explain the subject matter rather than providing the widest opportunity for students to construct their knowledge. Worksheet contains learning that encourages students to critical thinking and problem solving, creativity and innovation, collaboration, and communication. This English worksheet must be mastered by students so that they can face challenges in the 21st century. One of the hallmarks of twenty-first-century demands is the need to adapt to changing conditions and make judgments and take action in settings where previous acts may trigger unforeseen reactions, influencing later tactics and possibilities (Patrick et al, 2012). Dealing with such ambiguity is necessary, but it poses a new challenge to curriculum and evaluation. Evaluation used to measure the abilities of students.

Some students are less motivated to learn English and their skills are low. So, the teacher must guide them through the worksheet. A worksheet can increase the students' interest in learning English. It is better for teachers to provide interesting topics so that the students are more enthusiastic about expressing themselves. By this, teachers can accomplish the aim of the activity in the teaching process. Teaching students to talk correctly can be a focus of speaking classes. Form-based training is used to teach language accuracy, whereas meaning-based instruction is used to teach language fluency (Julian & Amal, 2017). On the other hand, attempts to help students communicate.

Based on previous problems, it is necessary for the researcher to conduct the research on this topic and to develop the students' worksheet for English of the eighth grade students at junior high school. By conducting this research, the researcher wants to raise the students' interest in learning English and the design also helps the English teachers to conduct this new activity.

1.2 Identification of the Issue

Learning material is one of the components in the learning system that play an important role in helping students to achieve basic competencies and learning objectives in the curriculum. Learning which is only centered on the teacher and ignores the importance of being effective, creative, and innovative also makes students weak, in terms of cognitive, affective, and psychomotor.

In addition, the presentation of teaching materials that place more emphasis on the theory can also make students less able to actively participate in learning. One of the learning materials commonly used is a worksheet.

Worksheet really helps students' understanding and trains students in doing tasks, especially multiple choice. In the matter of choice, multiples have similar answers that confuse students, so that the answer is wrong. This often happens when facing exams, students many fail to answer questions because the answers are almost the same. So, that the worksheet is needed to train students in working the exam.

The results of the interview and questionnaire, there are some issues that occur of this research;

- 1. There are still students who are unable to comprehend the material
- 2. Some educators often explain the subject matter rather than providing the widest opportunity for students to construct their knowledge.
- 3. Some students are less motivated to learn English and their skills are low. So, the teacher must guide them through the worksheet.

1.3 Delimitations and Focus of the Research

Based on the problems above, this research is limited by not designing lesson plans, guidelines, video materials, etc., but in this research, only designing about the worksheet for English for the first semester. The worksheet is very necessary for the learning process because the worksheet is evidence real from student activities. In addition, worksheets provide basic activities that students must complete in order to add information about the topic they learned in order to create basic capabilities in accordance with the learning outcomes indicators desired (Anjani, 2018). This research also focuses on how to develop the worksheet for English at the first semester of the eighth grade students at junior high school.

1.4 Research Questions

1. What are the characteristics of worksheet for English of the eighth grade students at junior high school?

2. How to develop worksheet for English of the eighth grade students at junior high school?

1.5 Aims of the Research

- 1. To find out the characteristics of worksheet for English of the eighth grade students at junior high school?
- 2. To describe the worksheet development for English of the eighth grade students at junior high school.

1.6 Significances of the Research

1. Theoretical Significance

Theoretically, the worksheet that has been proposed can be used by the students to increase their knowledge. And also provide supporting references and train students to be more active, creative, and independent in learning. In this case, it will provide opportunities to increase students' understanding and learning abilities, as well as provide a sense of comfort and fun in learning. The researcher hopes that this research contributes to developing a worksheet for English of the eighth grade students at junior high school.

2. Practical Significance

Practically, the worksheets that have been proposed can be used by the teacher. The teacher can use the worksheets to build teaching activities in the classroom, which will improve their teaching and learning quality. Aside from that, the teacher will know what worksheets are appropriate for teaching Englis. In addition, students will be more enthusiastic about learning English. It will also drive students to learn, and they will be able to comprehend the lesson better by doing the worksheet.

1.7 Theoretical Foundation

This chapter intended to provide a theoretical framework or theoretical foundation for this research. There are seven primary topics of this part involves curriculum, developing, worksheet, learning material, English, junior high school and relationship between curriculum, developing, worksheet, learning material, English, and junior high school.

1.7.1 Curriculum

The curriculum is the most important factor that helps students become more capable and powerful. A curriculum is a collection of courses with common students. (Ruggero et al, 2016). Moreover, all of the experiences that a student has while being guided by the school are included in the curriculum. Indonesian schools follow a curriculum. The curriculum typically changes periodically (Festus, 2015). Curriculum is a byproduct of the educational process.

A process curriculum was created to be a suggestion to be tested rather than a plan to be followed (Howard, 2007). In addition, curriculum has some components. Sukmadinata in Lestari (2018) the component of the curriculum consists of six parts. Those are: Purpose, Tools of learning, teaching strategy, media of study, teaching evaluation, and fixing. A curriculum should be have material that already managed and processed. Those things show that the material that offered in curriculum should pass many steps before applied to the students.

The 2013 curriculum is new curriculum which is developed to increase formerly curriculum was really popular is *KTSP* 2006. In this curriculum have three important aspects will have to know for teacher and student, those are cognitive, affective, and psicomotoric. The 2013 Curriculum is the development of curriculum with basic competence from the previous curriculum in *KBK* 2004 and *KTSP* 2006 which has attitude, knowledge, and skill (Thelucky, 2013). There are four competences for the 2013 Curriculum; 1) *Kompetensi Inti-1* (*KI-1*) for religious competence. 2) *Kompetensi Inti-2* (*KI-2*) for social competence. 3) *Kompetensi Inti-3* (*KI-3*) for cognitive competence. 4) *Kompetensi Inti-4* (*KI-4*) for skill competence.

1.7.2 Developing

The teacher necessary develop a worksheet that can be used by students in teaching and learning process. Developing refers to create, design, idea, or improve an object, or add some materials for the previous product by using some systems (Jannah, 2017). Moreover, developing means re-designing material for teaching which according to students' need. Beside, development is an activity to deepen and expand their existing knowledge with R&D method (Hasanah, 2016, p. 8 in Cennamo & Kalk, 2005). Furthermore, developing is the same as creating a new set of materials that fit the learning objectives and specific subject area of particular learners (Rinanti, 2009, p. 7 in Hutchinson & Waters, 1994, p. 106). In addition, development is the best understood as the increasing capacity to identify, analyze, and solve one's own problems (Kent, 1982, p. 188).

One ef the efforts that can be made to improve the learning is developing students' worksheet. The development of student's worksheet needs to be done to help the teachers improve their abilities and understanding of the material. In addition, student worksheet can attract more student interest because they are directly close to the student environment. So, in teaching and learning process the worksheet is needed.

1.7.3 Worksheet

A worksheet is a sheet that contains tasks that students must do. Worksheets are typically in the form of instructions, steps to perform a task, and a task that is ordered in an activity sheet must be explicit about the basic competency that must be attained (Romli et al, 2018, p. 2). In addition, worksheets are one of the instructional tools used to demonstrate the efficacy of the teaching and learning process.

In teacing and learning process, worksheet can be used as a guide for the development of all element of learning. Learning material that can be used is a worksheet. Students' worksheets are sheets that include the activities that teachers assign to students, which are organized according to the fundamental competencies and learning objectives that must be met (Nurhidayah, 2017). In addition, worksheet frequently in the form of

instructions, step-by-step instructions, and tasks that explains the explicit basic competency that will be attained in a worksheet.

Worksheet for student, provide assignments help communication skills and self-efficacy. Student worksheets play a vital part in delivering assignments that are relevant to the material being taught and optimize students' capacity to understand by using learning resources (Munifah, 2019). Student worksheets that can combine the content of the material with phenomena that occur in everyday life, accompanied by the guide activities that must be carried out both inside and outside the classroom are needed. Worksheets direct teaching or introduce a particular activity as a teaching and learning activity, optimizing teaching aids, helping students be more active in the teaching and learning process, arouse interest and sense of want students to be able to use their abilities.

1.7.4 Learning Material

Learning materials are used to support learning goals for all subjects. Materials have an important role in the teaching and learning process as a resource for ideas and activities for instruction/learning, and provide teachers with justification for what students do (Annisa, 2020, p.18). Materials usually serve as the basis of the basis of the language input that the students receive and the language practice that happens in the classroom (Azarnoosh, 2016). In addition, learning materials contain a variety of communications, including facts, concepts, principles, rules, procedures, and difficulties, among others (Suhono & Sari, 2020, p. 29). Learning materials serve as a resource or material that students must grasp during the learning process. Beside, materials are assisting resources that every student needs in learning process (Damayanti et al, 2018, p. 2). Moreover, materials that enable the learners to be interested in them, that can draw their attention, and that can attract them to learn the materials will facilitate them to learn the materials by themselves (Harsono, 2007, p. 171).

For the most part, English teaching programs include learning materials. Anything utilized to aid in the instruction of language learners is referred to as a material. It is a resource that can be applied to the processes of teaching and learning. Materials can be anything that presents or educates about the language being learnt, including a textbook, workbook, cassette, CD-ROOM, video, photocopied handouts, newspapers, and paragraphs scribbled on whiteboards.

Tomlinson (1998) gives some basic principles of good English learning materials as stated below. 1) Materials should have an impact. Impact is produced when learning materials have an apparent impact on students; this occurs when students' curiosity, interest, and attention are piqued. 2) The materials should give students a case-like experience. Materials should offer students multiple opportunities to experience the scenario. 3) Learning materials ought to promote self-assurance. 4) Students should believe that what is being taught is pertinent and helpful. 5) Materials should demand and encourage learners to put forth their own effort. 6) Students must be prepared to understand the concepts being taught. 7) Learning materials should introduce students to language in context. 8) Language in genuine use should be brought to the learner's notice. 9) The learning materials should give students the chance to communicate with others by using the target language. 10) Materials must consider the good impacts of instruction, which are frequently delayed. 11). Materials should recognize that learners have a variety of learning preferences and attitudes. 12) Materials should optimize learning potential by promoting intellectual, artistic, and emotional participation, which stimulates both right and left brain processes, at the beginning of training. 13) Materials shouldn't rely too heavily on controlled practice. 15) Resources should offer chances for input on the results. As a result, learning materials have some benefits. Teachers can utilize them to help students reach their learning objectives throughout the teaching and learning process.

1.7.5 English

In Indonesia, English taught as a foreign language. Most foreign language learners are curious about the cultures of the countries where the language they are learning is spoken. English presents an interesting case with regard to culture because it is now an international language (Alexander & Fox, 2004). English is taught since Elementary School (Jauhar & Siti, 2019). As with other languages, English has four basic skills, starting from listening, speaking, reading, and writing.

The first skill is speaking. The most crucial aspect of learning a second or foreign language is considered to be speaking. Speaking is the skills that students will be judged upon most in real-life situations (Bahadorfar & Omidvar, 2014). In addition, we need an English environment to learn English, yet we can't always communicate with native English speakers face to face. Moreover, we'll be able to communicate with clients and suppliers all over the world if you speak English correctly. It is easier to travel around the world if you have a solid command of the English language. Knowing English makes it easy to receive help in many places of the world because it is the main worldwide common language for foreigners.

The second skill is listening. In order to help students understand what they hear when listening, we might use their prior knowledge. We constantly pay attention to the details (Brown, 2006). Students are more attentive if they understand why they are listening. Remember how the human mind has a finite capacity for information processing? (p. 6). By utilizing students' prior knowledge, teaching them vocabulary that are helpful for the listening job, and explaining the goal of their listening, teachers can assist students in understanding what they are hearing.

The third skill is reading. James in Alexander (2004, p. 36), reading would be best described as mindfull habit. Reading courses have used the ideas of prior knowledge and top-down processing for years, typically in the form of pre-reading questions or tasks (p. 3). Reading

courses also have used the idea of processing when they have taught new vocabulary and other word and sentence knowledge that students might need to know before reading. Thus, reading is one important thing to construct students' knowledge.

The fourth skill is writing. Writing is significant because it is utilized frequently in both the business and in school. Students who lack the ability to communicate effectively in writing will struggle to interact with peers, teachers, employers, and just about anybody else (Klimova, 2012). Proposals, notes, reports, applications, first interviews, emails, and more are all common forms of written professional communication that successful college students and recent graduates use on a regular basis. Due to the fact that learning to write requires proficiency in the other three language abilities of speaking, reading, and listening, it occupies a special place in language instruction. It also calls for the mastery of other abilities, such metacognitive abilities. Allowing students to write as freely as possible from the start of the learning process and inspiring a sense of creativity in them are two of the best strategies to get them interested in writing.

Moreover, there are numerous advantages to learning the English language. Six reasons why English is important (Niyozova, 2020). First, it is a widely spoken language over the world. Second, it is an academic language. Third, it provides us with access to a vast amount of written media, both online and in print. Forth, it is useful for traveling. Fifth, if you want to work in international industry or trade, it's a must. And the sixth, it's the language of the movie industry.

1.7.6 Junior High School

Students of junior high school with students of senior high school are different, and also have different needs. Junior high school is a level that students have to go through after they pass their elementary school (Rinanti, 2009, p. 8). Junior high school is a form of formal education unit that organizes general education at the basic education level as a

continuation of elementary school or other equivalent or advanced forms of learning outcomes that are recognized as equal or equivalent to elementary school (Government Regulation No. 17 of 2010 on the Management and Administration of Education).

Furthermore, adolescence is the phase of life that stretches between childhood and adulthood has long posed a conundrum (Sawyer et al, 2018, p. 1). Adolescence is a period of increased risk of experiencing psychological disorders including addictive behaviors that causes cognitive, social, hormonal, and neurobiological immaturities (Arnet, 1999; Masten & Garmezy, 1985; Steinhausen & Metzzke, 2001 in Rodriguez et al, 2018, p. 707). In addition, characterized the onset of adolescence by the increase in peer influence, it's begin to spend more time with peers (Douvan & Adelson in Youniss & haynie, 1992, p. 60).

1.7.7 The Relationship between Curriculum, Developing, Worksheet, Learning Material, English, and Junior High School

The topics have certain relation in this research, curriculum is a subject and education program given by education institution to the expert in a lesson to make a suitable material, the teacher necessary develop the material that can be used by students in teaching and learning process. A worksheet is one of material used, usually in the form of instructions, steps to complete a task, and a task that is arranged in an activity sheet must be specific about the basic competency that must be achieved. Worksheet have some lessons, one of the lessons is English. To learn English, we need to be in an English-language environment. Students' of junior high school has different needs. Students' junior high school is called as a adolescence, adolescence is the phase of life that stretches between childhood and adulthood. In addition, adolescence is a period of increased risk of experiencing psychological disorders including addictive behaviors that causes cognitive, social, hormonal, and neurobiological immaturities. So, characterized the onset of junior

high school by the increase in peer influence, it's begin to spend more time with peers.

1.8 Previous Research

Some previous research discussed students' worksheets for English, for instance, the design of students' worksheets (Romli, 2018, Husnul, 2020). Developing students' worksheets (Suhono, 2020; Romayanti, 2021; Toman, Kurniawati, Servitri and Trisnawaty, Kahar, Basuki and Wijaya, and Husna). In this research, the researcher took ten relevant studies as research references.

In Romli's research about "designing students' worksheet based on an open-ended approach to foster students' creative thinking skills". Based on the result of the research, the developed open ended-based worksheet was able to develop students' creative thinking skills containing aspects of material summary, open-ended problem, exploration, and presentation. The design of the worksheets was developed through focus group discussion (FGD) which involved tenth-grade students. The FGD results were described and analyzed qualitatively so as to develop an open ended-based worksheet that can develop students' creative thinking skills. In this research, there are no practice questions, here only discuss the summary of the material and student instructions for learning in the class. Therefore, the researcher will make short exercises to find out how far the students' understanding during the learning process.

In Husnul's research about "design of the student worksheet for the collision material to develop analytical thinking skills" Based on the result of the research, she concluded that student worksheets for the collision material with the development of analytical thinking have been designed successfully. Student worksheets are designed to include three stages of analytical thinking that are differentiating, organizing, and attributing. Momentum material student worksheets designed based on analytical thinking stages to support the development of higher-order thinking. In this research, the appearance of the worksheets is less attractive, the lack of examples that trigger the material and the basic competencies expected by the 2013 curriculum is not achieved.

In Romayanti's research about "speaking students' worksheet based on e-book". Based on the result of the research, she concluded that the MA Ma'arif Roudlotut Tholibin's student response was very good and enthusiastic about the use of learning applications with a percentage value of 87% with the criteria for the results of the feasibility of the system very well. A valid, effective and efficient English learning material learning tool has been produced with a 4-D development model for class *X MA Ma'arif Roudlotu Tholibin* students. In this research, what was developed as a student worksheet in the form of an e-book that allowed students to be lazy to read. This time, the researcher made or developed a student worksheet in the form of a printed book, which was designed as attractive as possible so that students participate more actively in learning.

In Suhono's research about "developing students' worksheet based educational comic for the eleventh grade of vocational high school agriculture". Based on the result of the research, he concluded that the students' worksheets based on educational comics at SMK Agriculture Bumi Nabung XI grade are appropriate to use. This is based on the acquisition of the average final score of the assessment results of students 'worksheet based educational comics by the media expert of 69, the acquisition of the average final score of the results of the assessment of students' worksheet based educational comic by the material expert of 44, the acquisition of the average final score the results of the students' worksheet based educational comic assessment by language experts of 36, from all validators and obtained valid or worth categories. And from the results of the questionnaire responses of students to students' worksheet based educational comics at the SMK Agriculture Bumi Nabung XI grade obtained a very worth category with an average score of 71,6 In this research, the worksheet that was made did not provide enough information opportunities for students to practice developing skills critical and creative thinking.

In Toman's research about "extended worksheet developed according to 5E model based on constructivist learning approach". Based on the result of

the research, he concluded that the rate of student success increased after the worksheets. When the questions are examined at length, higher response rates for the 5th question in the pre-test draw attention. It can be interpreted that the students must have acquired the 5th behaviour presented in Table 4.3.1 before. It is revealed from the responses given to the 2nd question in the pre-test that level of student success was rather low. It can be concluded that what the students know about the explanation of the products that enter and leave the reaction in ethanol fermentation is inadequate.

In Kurniawati's research about "Developing student worksheet based on higher order thinking skills for economics learning in senior high school" Based on the result of the research, she concluded that the lowest ratings on teachers' and students' review were found in the aspect of the worksheet's interface. This is because this student's worksheet was still in the form copy printed and was still not well-printed and well-designed like the work of a professional publisher. Other aspects in this assessment received good review with the score above 4. The results of the review and written critics from the teachers and students were applied on the final revision of the student'sworksheet. The developed worksheets have not been used in real teaching yet, either with the classroom action approach or even in the quasiexperimental research. Future research can be performed with these kind approaches to analyze the effectiveness of this worksheet in improving the students' skills in critical thinking in real teaching situation. Based on the results and discussion as described previously, it is concluded that the developed student's worksheet, as per the review from experts, economic subject's teachers and high school students, is classified as "good" and are feasible to be used in learning economics to improve the students' higher order thinking skills.

In Servitri and Trisnawaty's research about "The development of inquiry science worksheet to facilitate the process skills" Based on the result of the research, they concluded that quality of developed inquiry worksheet was in good categorized. The developed lesson plan was well-implemented.

Medium Gain was achieved using the inquiry-based worksheet for learning (0.96). The percentage of students that successfully completed the inquiry worksheet's learning tasks using their process abilities was under 85%. The students' attitude toward learning was positive, with 100% of them saying that they had fun participating in the teaching and learning activities. The researcher proposes that, given the findings of this study, similar inquiry worksheets in other subject areas must necessarily be developed. One method of instruction that helps students practice their process skills is learning via inquiry.

In Kahar's research about "Development of problem solving-oriented worksheet of physics learning in senior high school" Based on the result of the research, he concluded that the development of problem-solving oriented student worksheets is declared valid and effective based on the results of validation by the experts and the results of the implementation of classroom learning. Furthermore, in learning by using problem-solving oriented worksheets, it is obtained the average learning outcomes of 79.44 with the results of the analysis of tcount = 32.806 > ttable = 1.734 with the significance degree of 0.000. On the other hand, in the implementation of worksheets oriented to problem-solving shows the influence on students' responses to learning with a score of 0.338 with a significance level of 0.085. The implication by these results has an impact on improving student learning outcomes so that it was expected that learning process with different materials can be applied in improving students' ability to solve problems. It is anticipated that using the worksheet would help students' problem-solving skills as they learn various subjects and topics.

In Basuki and Wijaya's research about "The development of student worksheet based on realistic mathematics education" Based on the result of the research, they concluded that student worksheets developed based on validity and applicability were necessary for Realistic Mathematics Education on the circles with characteristics employing real-world context, construction, the mathematization process, interactivity, and integrated learning. It is claimed to be true that (2) there is internal consistency between components and (1)

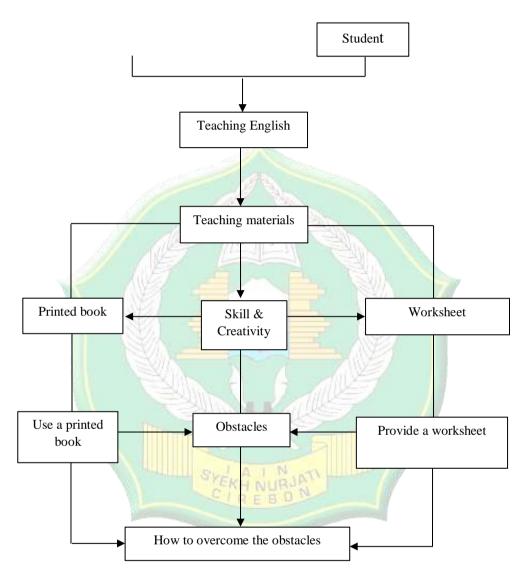
products are generated based on grand theory. If a teacher and other specialists believe the generated product is simple and usable by teachers and participants' students in accordance with the development's goals, then the product is considered practical. Validity and usefulness were necessary for the created student worksheets based on Realistic Mathematics Education on the circles.

In Husna's research about "Developing STEM-based student worksheet to improve students' creativity and motivation of learning science" Based on the results of the research, she concluded that the STEM-based student worksheet, which was developed in the form of salt-producing tools using a sunlightgathering mirror. This student worksheet could be used as teaching materials in the entrepreneurship class. The STEM-based student worksheet implementation that was developed could significantly increase students' learning motivation and creativity. The product evaluation model of salt-producing tools using a sunlight-collecting mirror produced by students showed an average value of a very good percentage. It was all done by implementing the STEM-based student worksheet.

Those ten previous have the same goal, which is to develop a worksheet for students. This research similarity worksheet has already made it easier for a student to understand the material, and then to point out certain worksheet descriptions that can be used as a source for other research. The differences between the ten kinds of researches above, this research develop English worksheet for the first semester that has some materials and skills for eighth grade based on the trend and students' needs. Then, the worksheets used can increase students' knowledge and interest.

1.9 Frame of Thought

FIGURE 1.1 Frame of Thought Chart



The teaching and learning process is a process carried out by teachers and students. In this case, the subject is being taught in English. The process of teaching English is influenced by factors that include teaching materials as a means of supporting learning. Teachers as the main role holders in learning are expected to be able to choose the right teaching materials so that the teaching and learning process can run optimally. The need for teaching materials and student worksheets are more interesting and motivate students to learn. In fact,

the use of teaching materials in schools is still lacking and even often forgotten. Therefore, the development of teaching materials was carried out, namely student worksheets for English that match the needs of teaching materials and student worksheets that are more interesting and more motivating for students to study according to the abilities and creativity of teachers and students, especially for the eighth grade of junior high school.

1.10 Research Method

This research focuses of some of the issues in the discussion of the research in methodological terms, and it starts with the discussion of the research method, sources and types of data, data collection techniques and instruments, data analysis techniques and research timeline.

1.10.1 Research Design and Steps of the Research

This research used a qualitative approach, because more qualitative research has been found to achieve a deep insight of a certain organization or event than describing the surface section of a big population sample (Dedy et al, 2019). In addition, the design used in this research is research and development (R&D), because in the process of educational research and development (R&D) there is a data collection which is utilized to design new products and procedures, and then rigorously field-tested, reviewed, and revised until they fulfill specified effectiveness, quality, or other requirements (Gall, Borg, & Gall, 2003). And also, this method is employed in the production of specific items as well as the testing of their efficacy. Actually, Research and Development (R&D) has many models, which can be applied by researcher such as Sugiyono model, Addie model, Borg and Gall model, Dick and Carey model, Kemp model, and many others. Based on many models stated formerly, the researcher applied Borg and Gall model.

Borg and Gall stated that educational research and development (R&D) was a process used to develop and validate educational products. The major steps in the R&D cycle are as follows:

- 1. Gathering information through research, includes conducting a literature review, observing students in the classroom, and creating a report on the state of the art.
- Planning. includes establishing competencies, outlining goals, choosing a course sequence, and doing small-scale feasibility testing.
- 3. Create an early version of the product. includes creating handbooks, evaluation tools, and teaching materials.
- 4. An initial field tasting, conducted in one to three schools with six to twelve subjects, and data from questionnaires, interviews, and observations were gathered and analyzed.
- 5. The primary revision. product revision proposed by the preliminary field test findings.
- 6. Primary field testing. 30 to 100 disciplines are taught at 5 to 15 schools. Results are assessed in light of the course objectives and, where necessary, are contrasted with data from the control group.
- 7. Product revision in use. Product revision in response to the major findings of the field tests.
- 8. Field testing in operation. comprising 40 to 200 disciplines and taking place in 10 to 30 schools. Data from questionnaires, observations, and interviews were gathered and examined.
- 9. The product's final revision. Revision of the product in response to the findings of the operational field tests.
- 10. Implementation and dissemination. Journals and professional meetings should both report on the product. Collaboration with a publisher who takes on commercial distribution To ensure quality, oversee distribution.

In this research, the researcher took three steps are research and information collecting, planning, and develop preliminary form of the product.

1.10.2 Source and Type of Data

Sources of data used in this research are expert, teachers and students, because the expert and teacher is the one who knows best about the learning material. What the teacher did could be based on the teacher's thoughts about the students' needs, as well as the adoption of a suitable curriculum and textbook selection procedures (Anne, 2012). In this case, the worksheet is used by the teacher, and the students use the worksheet to learn and also to increase their enthusiasm for learning English. In this research, the researcher recorded directly the acknowledgments of teachers and students. From these data sources, the researcher expected to be able to describe the developing worksheets for English of the eighth grade students at junior high school.

The type of data used in this research is qualitative data, because the process of qualitative data analysis is describing, categorizing, and connecting phenomena with the researcher's concepts (Isabella, 2016). This research is a general description of the object of research, including; characteristics of the worksheet, how is develop the worksheet for teaching and learning English process in the class.

1.10.3 Data Collection Techniques and Instruments

To obtain the desired data in accordance with problems, this research used three data collection techniques. They are literature review, interview and questionnaire delivery.

1. Literature Review

The data analysis used theoretical frameworks developed by the researcher. The researcher look for the references from journals, books, articles and the internet to gain knowledge and find the information related to this research. A literature review or theoretical framework is the most important aspects in the research process. The literature review represents a method because the literature review chooses from an array of strategies and procedures for identifying, recording, and understanding information pertinent to a topic of interest. Moreover, a literature review is equivalent to conducting a research study, with the information that the literature reviewer collects representing the data (Onwuegbuzie, Leech, & Collins, 2011). The theoretical framework is the foundation from which all knowledge is constructed (metaphorically and literally) for a research study (Grant & Osanloo, 2014). It provides the framework and foundation for the study's justification, problem description, purpose, importance, and research questions. For the literature study and, most crucially, the methodologies and analysis, the theoretical framework acts as a foundation.

2. Interview

The researcher conducted the informal interview with senior teachers who has experienced in teaching in the junior high school level for 10 years. The interview technique is a dialogue conducted by the interviewer to obtain information from the interviewee. The researcher uses this technique because what was asked was only 2 teachers and the data were taken was a lot. The data collection instrument is in the form of an interview protocol. A brief script for presenting the study's goal to the interviewee, locations to record the date and background information on the respondent, and the preliminary questions to be used in the interview should all be included in an interview protocol (Marguerite, Dean, & Katherine, 2006). By interviewing the teacher about the learning media, worksheet and activity of teaching and learning English in the class. The researcher used the interview (see Appendix 1.2) as the guidance to the development of the worksheet.

3. Questionnaire Delivery

The researcher designed the questionnaires for eighth grade students at junior high school. A questionnaire is a number of questions written form used to obtain the information from respondents. It's a typical occurrence that several studies have the same goal and theme yet use completely different questionnaires (Abdul & Wardah, 2012). In addition, questionnaire may also include open-response items in the form of fill-in and short-answer questions (Brown & Rodgers, 2002). The researcher use this technique because many students asked and the data taken was a lot, to find the data directly by delivering the questionnaire to the students about the worksheet, learning media, and activity of learning English in the class. The researcher used the questionnaire (see Appendix 1.2) as the guidance to the development of the worksheet that students need.

1.10.4 Data Analysis Technique

After carrying out the data collection process, the results of the data will be analyzed to give meaning to the results that have been obtained. Data analysis is the main thing that must be done. The process of data analysis begins from raw data collection, data display, data reduction, and comes to data verification and conclusion. The data obtained from the result of the interview and questionnaire of expert, teachers, and students. Miles and Huberman in Thomas (1994) stated that qualitative data analysis consists of three concurrent flows of activity: data reduction, data display, and conclusion drawing or verification.

1. Data Reduction

The first step of qualitative data is data reduction. In data reduction phase, the researcher refered to select, focus, simplify, abstract, and transform data that appear in comments, notes, suggestions, rubrics, and questionnaires to short descriptions. Then, she determined relevance of strings of the data before by making codes. The goal of data reduction was to get the bigger picture from the data (Thomas, 2006). While coding helps break down the data

into smaller parts, data reduction was the process of abstracting back out from the particular to the conceptual.

The data obtained from the field is quite large, for that it is necessary recorded carefully and in detail. Because the data is quite a lot, it is necessary immediately carried out the data analysis through data reduction. Data reduction means summarizing, choose the basic things, focusing on important things, look for themes and patterns (Sugiono, 2014). Firstly, the researcher collected data about the characteristics of worksheet at the eighth grade students of junior high school in-depth interview. After get the data, the researcher then transcribed it. The researcher only took the relevant data. After collecting and reducing the data, the data displayed in the form of descriptive.

2. Data Display

The second step in analyzing the data is displaying data. In data display, the researcher organized the compressed information in the previous phase and assembling it in ways that help her drawing conclusions. It can be an extended piece of text or a diagram, chart, or matrix that provides a new way of arranging and thinking about the more textually embedded data. At the display step, additional, higher order categories or themes may emerge from the data that go beyond those first discovered during the initial process of data reduction.

In qualitative research, displaying data can be in the form of short explanation. The most frequent form of display data for qualitative research in the past has been narrative text (Sugiono, 2014). Displaying data is utilized to comprehend what actually occurred. From the start of the study to its conclusion, the amount of data gathered may increase. To determine a pattern and set up a grounded theory, those data are chosen and constantly crosschecked to the sources of the data.

3. Conclusion Drawing /Data verification

Conclusion drawing and verification are the final steps in the study of qualitative data. The researcher attempted to illustrate and convey what she sees in the data when reaching or verifying a conclusion. The researcher referred back to the raw data and data displays when making descriptions or causal inferences.

In addition, the conclusion in data analysis can answer the problem statement or even it cannot as the problem statement is temporary and might change after conducting research in the field. Conclusions are also verified as the analyst proceeds. In the other words, source data verification is one of many quality steps employed by sponsors to ensure clinical trial data validity (Tantsyura, 2010). It can be said that the conclusion is analyzed continuously and verified the validity to get the perfect conclusion about the developing of worksheet for English at the eighth grade students of junior high school.

There were some stages that had been taken in this research. Based on many models stated formerly, the researcher applied Borg and Gall model. The stages were adapted from R & D process; research and information collecting, planning, and develop preliminary form of the product.

FIGURE 1.2

Research question 1

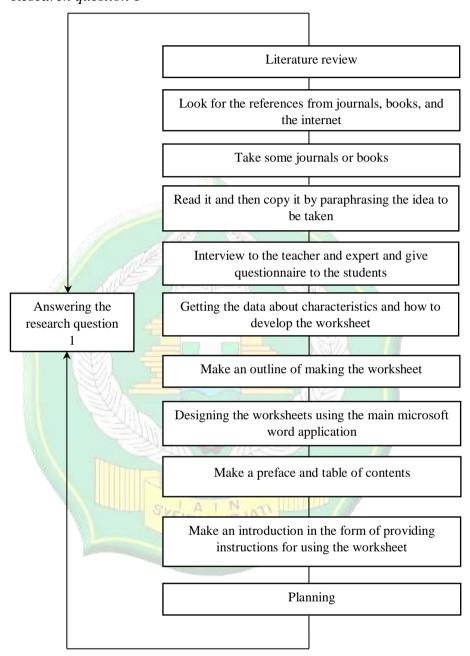
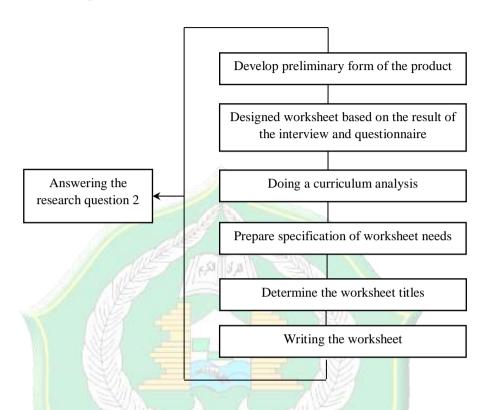


FIGURE 1.3

Research question 2



Stage one, answering the research question one. The stages are as follows; the researcher look for the references from journals, books, and the internet to gain knowledge and find the information related to this research. Then, take some journals or books. And then, read it and then copy it by paraphrasing the idea to be taken. That idea is about the characteristics of the worksheet for English. After that, the researcher conducted the interview to the English teacher and expert. Then, give the questionnaire to the students to get the students' need. There are the characteristics of the worksheet 1) Make an outline of making the worksheet, in this activity it contains identification of the worksheet program, through this identification determined: title, goals, objectives, main points of material and others included in the worksheet. 2) Designing the worksheets using the main Microsoft Word application plus the canva help app to help combination, starting from making the

cover by combine images, colors and written with several font types in the canva application, such as; times new roman, arial narrow, by using a font size that is adjusted between 10-25 and spaces 1.0 and 1.5. 3) Make a preface and table of contents. 4) Make an introduction in the form of providing instructions for using the worksheet for teachers and students.

Stage two, answering the research question two. The existence of innovative and creative worksheet is the hope of teachers and students. Innovative and creative worksheets will create a process learning becomes more fun. The stages are as follows; the researcher designed a set of worksheet based on the result of the interview and questionnaire with the teacher, expert and students. Then, the researcher doing a curriculum analysis, to carried out with the aim of determining materials that require the worksheet teaching materials. In deciding the material is first analyzed by looking at the main points and learning experience from the material to be taught, then competencies that must be possessed by students. And then, the researcher prepares a specification of worksheet needs. A specification of worksheet needs is needed to find out the number of worksheets that must be written and the sequence or order of the worksheets can be seen. After that, determine the worksheet titles until finishing.

1.10.5 Research Timeline

The time allocation for the research is estimated to takes 4 months form February 2022 to June 2022 as presented in the following table.

TABLE 1.1
Research Timeline

No	Activity	Target
1	Proposal Seminar and Consultation	January 2022
2	Management Permission	
3	Doing Interview	
4	Collecting the Data	February – June 2022
5	Analyzing the Data	
6	Finishing Thesis Writing	
7	Thesis Examination	August 2022
8	Thesis Revision	

