

# CHAPTER I

## INTRODUCTION

### 1.1 Research Background

The education system in the new paradigm that exists in Indonesia emphasizes students being directly involved in it. The foundation of the education system is known as the curriculum. According to Smith, Stanley, and Shores (1957), the curriculum can be defined as the foundation that comes through experiences to make students disciplined in thinking and doing the activity that the school department makes. The *Merdeka* Curriculum is a part of a new learning paradigm with the concept of a Pancasila Student Profile as a guide for learning objectives and assessments (Kemendikburistek, 2022, p. 1). The curriculum will help educators because it contains the teacher guidance structure (Yulianto, 2022). The Ministry of Education, Culture, Research, and Technology (2022) issued the *Merdeka* Curriculum is an evaluation form of the 2013 Curriculum which aims to overcome cases of low learning concepts due to the pandemic. *Merdeka* Curriculum has a philosophy where schools, teachers, and students can learn independently.

The *Merdeka* Curriculum emphasizes future-oriented and sustainable learning by implementing authentic learning in the 21st-century era. The Ministry of Education, Culture, Research, and Technology (2022, pp. 14-15) stated that in the regulation of the process standard in primary and secondary education, the teachers had required to implement authentic instruction to their students that enable students to have experiences about their real-life by implementing 21st-century learning methods, Problem-Based Learning, Project-Based Learning, and

Discovery-Based Learning. PBL, known as problem-based learning, is an approach based on the open-ended contextual problem that students must solve to become more independent due to the student-centered events (Padmadewi et al., 2019, p. 36). Second, project-based learning stated by Bell (2010), project-based learning can be defined as a learning strategy that aims to make students successful during the 21st century through inquiry learning and work in groups to complete projects. Moreover, the following method should be implemented, which is discovery-based learning. It means a student-centered approach where the learners can collect their ideas through observation or interview (Capacity Building Series, 2014). Those authentic instructions can balance the students' skills and knowledge about real life.

The authentic instructions will impact the quality of the education delivered by the teachers. Whatever the teachers do, it will impact the other generations. Teachers must deliver proper skills during this 21st-century era. Teaching students using the appropriate abilities ask students to master the skills of 21st-century learning, which may be achieved, such as their ability to think critically and creatively, as well as to complete those things must be good at communicating by collaborating with others. Moreover, Padmadewi et al. (2017) noted that the scientific method has goals that need to be expected by the students their ability to think critically, become more active, and students for the concepts of cooperative learning during the learning processes. As cited in Ball et al. (2016), Silvia (2009) said that for the success of education, students must master those skills in the 21st-century era. Teachers are responsible for guiding their students and delivering those skills (Angelianawati, 2019). According to Fullan (1993), as cited in Angelianawati (2019), the advancement of learning concepts is obligated through increased

literacy and technological developments. Also, as cited in Angelianawati (2019), teachers are expected to be facilitators and evaluators for students throughout the learning process (Harmer, 2007). Teachers are also expected to be capable of coordinating students by monitoring deficiencies that should be fixed and student strengths that should be improved by giving instructions to students when giving assessments to students.

The learning and teaching process in implementing the *Merdeka* Curriculum aimed to achieve learning objectives, especially in three aspects such as cognitive, affective, and psychomotor. Implementing the *Merdeka* curriculum to achieve the learning objective and assessing the students' achievement must use assessment. *Assessment* is defined as a tool to measure how successful the learning activity process is and whether the students understand or not the materials (Susilo & Wandarita, 2017, p.186). Regarding this 21st-century learning and the implementation of *Merdeka* Curriculum, the assessment that must be implemented is called authentic assessment. Nevertheless, most schools still need to implement it. The teachers still use traditional assessment in evaluating and assessing their students. The authentic assessment contains three domains: performance assessment, portfolio, and self-assessment (O'Malley & Pierce, 1996). According to Ozan (2019), authentic assessment can provide students with meaningful experiences where they gain knowledge about real life which builds higher-level thinking.

The authentic assessment in the *Merdeka* Curriculum that exists to assess students' learning process does not only come from the final result, but this authentic assessment assesses how their progress is during learning. Prasetyo

(2016) stated that the focus of this authentic assessment is not on student achievement but on the progress made by students. This can be seen when the teacher applies the project-based learning method, where at the end of learning, students will produce a product. From this authentic assessment, the teacher has the right to assess the process of making the product and the final work produced by students. This can be indicated that the teacher cannot only see the final results of students from the products that have been produced, but the teacher must assess how students' performance during the manufacture of these products.

Let us look at the Buleleng regency. Almost all schools must implement *Merdeka* Curriculum, which started during the pandemic. The teaching and learning process at Senior High School 4 Singaraja is similar to online learning, where the teacher is still using blended learning with an online assessment that has not seemed maximal. A case of students when doing tasks was found based on the preliminary observation. Many Senior High School 4 Singaraja students, depend on technology by searching internet sources and copying them into the answer sheet. This is a habit that students do due to online learning during the pandemic. This is very dangerous for their future as well as for teachers. This fault made by students is different from 21st-century learning, which must emphasize the 4Cs of students, including the authentic assessment aspect, which refers to three parts such as cognitive, affective, and psychomotor. Nevertheless, the cognitive aspects of students are good, but the affective and psychomotor aspects are less. Thus, it is essential to emphasize authentic assessment to avoid things that damage students' futures.

The implementation of authentic assessment seemed not maximal based on the case found. The teachers only gave the achievement when students had already

collected their assignments. Based on the teacher's interview, the teacher has yet to implement authentic learning due to the limited time given by the school. So, the teacher only gave the students a real problem to be discussed, or in other words, they tend to use problem-based learning only. In assessing their work, the teacher only gave them a good score that can be said as quantity, not quality, even though only one to five students made it and the rest were only copying then pasting. This was contrary to authentic learning, where students should be encouraged to practice in addition to learning by giving theory. In addition, it was found that the teachers did not use instruments in assessing their students. The assessment instrument is a way of assessing that is required to be used by the *Merdeka* Curriculum. Hence, the implementation of the learning method and assessment in Senior High School 4 Singaraja is not maximal.

The implementation of authentic learning evaluated with authentic assessments still needs to be improved, as expected by the *Merdeka* Curriculum. The principle of the *Merdeka* Curriculum in the form of assessment are three: assessment of learning, assessment for learning, and assessment as learning (Kemendikbud, 2022). The authentic assessment of the 2013 curriculum and the *Merdeka* Curriculum is based on the process rather than the final result. Teacher in Senior High School 4 Singaraja has difficulty making a reasonable assessment with appropriate rubric instruments and simple learning activities by authentic learning indicated by the changes in the curriculum. Henceforth, teachers need to be assisted by providing references to authentic learning activities that support authentic assessment instruments.

The rubric development was supported by authentic teaching activities from Problem-Based Learning, Project-Based Learning, and Discovery-Based Learning according to the syntax of each method. The use of these three learning methods in developing the authentic rubric was related to the *Merdeka* Curriculum, which requires students to apply learning according to real life to achieve the 4C's skills (critical thinking, collaboration, creativity, and communication). The assessment would assess students' achievement at the end of the process and during the learning process. The researcher made the authentic assessment, both summative and formative assessments, with the appropriate learning method during the 4.0 revolution era and *Merdeka* Curriculum. This research focuses on developing an authentic rubric assessment with the appropriate learning method Problem-Based Learning, Project-Based Learning, and Discovery-Based Learning. The researcher hopes that authentic assessment can be used for assessing and evaluating students to achieve 21st-century learning and fill the three domains of authentic assessment so that there is no overlapping in cognitive, affective, and psychomotor.

Giving authentic assessments based on the 21st-century learning models have been conducted by the researchers. Sudeni and Lestari (2022) researched and developed mixed methods for developing authentic assessment rubrics in the 2013 Curriculum by adopting 21st-century learning methods, namely problem-based learning, project-based learning, discovery learning, and task-based language learning for primary students and secondary students in Buleleng Regency. The rubrics made were appropriate to be used by English teachers. In the same way, Sylvia et al. (2018) conducted research and development using mixed methods for developing authentic project-based assessments in senior high schools. After giving

the experiment, the authentic project-based assessment seems valid and reliable as well, as it can increase students' HOTS skills based on 21st-century learning in learning sociology. These two previous studies related to the development of authentic assessment based on implementing 21st-century learning are appropriate to assess and evaluate students. On the other hand, none focuses on all the learning methods based on 21st-century learning at the senior high level who use *Merdeka* Curriculum. Moreover, this study attempts to fulfill the gaps.

### **1.2 Problem Identification**

Based on the preliminary observation in Senior High School 4 Singaraja, there were several issues faced by an EFL teacher who teaches in tenth grade. First, the teacher needed to apply authentic learning optimally. Regarding the interview and observation, the teacher had difficulty applying authentic learning due to limited time allocation. The teacher usually applies Problem-Based Learning only and rarely applies Project-Based Learning because the teacher said that when applying Project-Based Learning, it costs more time to complete the project. Also, in applying Discovery Learning, the teacher rarely applies it because almost all the materials are significantly related to the problem in real life. Even though based on the *Merdeka* Curriculum English syllabus, it is suggested to vary the teaching methods to support the learning activities. The teacher only tended to give some activities such as giving them a quiz taken from the internet, giving a multiple choice. Students answer it individually without collaborating with others. This could not promote their language skills related to authentic learning because authentic learning can also be seen when the students perform in front of the class.

Second, based on the interview and observation, there was no corresponding authentic learning in the classroom, and authentic assessment was applied. The changes in the curriculum from the 2013 Curriculum to *Merdeka* Curriculum made the teacher feel difficulty in making authentic assessment rubrics because the teacher still needs to gain experience, knowledge, and preparation in doing authentic assessment rubrics based on the *Merdeka* Curriculum. The teacher gathered the score from students' tasks, mid-term, and final tests. At the same time, summative and formative assessments must be conducted during learning. However, the teacher needs more preparation to create authentic assessment rubrics and still tends to use the traditional assessment, which focuses on measuring students' learning outcomes without using rubrics as an assessment instrument.

Adapting the situation is very important to help the teacher and students in Senior High School 4 Singaraja by developing an authentic assessment rubric for them that can be used to assess and evaluate students' learning. The assessment development would adopt three appropriate authentic learning methods: Problem-Based Learning, Project-Based Learning, and Discovery-Based Learning. Adopting those three learning methods can help teachers to promote learning experiences to become meaningful for students because they will learn based on real life. Collaborating meaningful learning activities with authentic assessment rubric firmly form a positive and successful teaching-learning relationship between the instructors and the students.



### 1.3 Limitation of The Study

Deep on the problem of problem identifications, the main focus of this research would be limited on developing an authentic assessment rubric for 10<sup>th</sup> grade at Senior High School 4 Singaraja who use *Merdeka* Curriculum that is based on the appropriate learning method (Problem-Based Learning, Project-Based Learning, and Discovery-Based Learning).

### 1.4 Research Questions

Based on the background, the research questions for this research are as follows:

1. What are the criteria in designing the rubric authentic assessment instruments based on, Problem-Based Learning, Project-Based Learning and Discovery-Based Learning in *Merdeka* Curriculum?
2. How is the authentic assessment rubric in *Merdeka* Curriculum developed for assessing 10<sup>th</sup> grade senior high school students through adopting the 21<sup>st</sup>-learning method?
3. How is the quality of the authentic assessment rubric in *Merdeka* Curriculum for 10<sup>th</sup> grade in Senior High School 4 Singaraja developed?

### 1.5 Research Objectives

The objectives of this research are as follows:

1. To determine the criteria in designing the authentic assessment rubric based on 21<sup>st</sup> century learning method namely, Problem-Based

Learning, Project-Based Learning and Discovery-Based Learning in *Merdeka* Curriculum.

2. To develop authentic assessment rubric in *Merdeka* Curriculum related to Problem-Based Learning, Project-Based Learning and Discovery-Based Learning.
3. To recognize the quality of the authentic assessment rubric in *Merdeka* Curriculum for 10<sup>th</sup> grade at senior high school level.

### **1.6 The Expected Specification of The Product**

The product of this research has the expected specification that can be stated as follows:

1. By developing authentic assessment rubric, it is expected to help teachers in conducting proper assessment practice in evaluating and assessing students' performances both during learning and their final achievement.
2. Developing authentic assessment rubric combined with appropriate learning method such as Problem-Based Learning, Project-Based Learning, and Discovery-Based Learning, it is expected to help the teachers in providing a meaningful learning atmosphere for the students related the real-world.

### **1.7 Research Significance**

This research is expected to give the benefits which can be classified into two such as in theoretical and practical. Both of them will be explained as follows:

### 1.7.1 Theoretical Significance

This research is expected to dig into and expand the theory of developing an assessment that can be a resource and reference in further research, especially in assessing and evaluating students that can emphasize 21st-century learning, especially in applying *Merdeka Curriculum*.

### 1.7.2 Practical Significance

a. For Teachers

This research is expected to help teachers assess and evaluate students' skills to implement 21st-century learning. Also, the skills are expected to help teachers refer to three aspects (cognitive, affective, and psychomotor) of learning so they will not overlap.

b. For Students

This research is expected to help students avoid copying and pasting the sources found on the internet to fulfill the projects given by the teachers and can encourage students to perform during learning by applying the 21<sup>st</sup> century learning method.

c. For researchers

It is presumed that they will be willing to use these study results as sources of information to conduct similar research on developing authentic assessment rubrics at differing levels or contextual factors of learning.

## 1.8 Assumption and the Limitation of the Development

The limitation of this development of authentic assessment rubric are as follows:

1. The product developed is related to authentic assessment based only on the criteria of 10<sup>th</sup> grade students at Senior High School 4 Singaraja so that this product will be used to assess and evaluate class X students in the even semester at Senior High School 4 Singaraja.
2. This rubric developed as a prototype that can and needs to be improved in the future according to the demands of the times and the curriculum.

## 1.9 Definition of Key Terms

Three major key terms are focused in this research such as the definition of authentic assessment, assessment instrument, as well as scoring rubric that will be explained on conceptual and operational definition as follows:

### 1.9.1 Conceptual Definition

Conceptual definition noted as the definition based on the experts. Its definition can be a theory, as follows:

- a. Authentic Assessment

According to Supardi (2015, p. 24), authentic assessment is a tool for assessing students about their achievements in the form of performance or the work result that must be based on real-life abilities. The tasks given are related to real-life can integrate their learning, enhance their knowledge, promote greater thinking skills, and put how much they

have learned and apply in their society. On the other hand, authentic assessment is symbolized as an assessment that asks students to encourage problem-solving skills in real life (Sani, 2016).

b. Assessment Instrument

According to Surya and Aman (2016), an assessment instrument is a tool used during the assessment process to collect information from students during their learning experience. When conducting assessments, an instrument is required to assist the teacher in assessing the students' performance. The instrument is used to collect evidence of students' learning achievement during the learning process. It cases teachers' evaluations of students by using assessment instruments.

c. Scoring Rubric

Once implementing assessment instruments, it is impossible to separate the use of measurement instruments, one of which can be in the form of an assessment rubric (also known as an assessment scoring rubric). According to Jeong (2015), scoring rubrics are commonly used in language classrooms as assessment instruments to help students learn and contribute to making the assessment process more accessible. As stated by Jonsson and Parackro (2016), rubrics are used to assist teachers in determining the level of student performance, and all rubrics start sharing two key characteristics. To begin, most rubrics provide information about the characteristics or criteria observed in students' performance. These characteristics or criteria are used to evaluate the

quality of the students. Second, the rubrics refer to the quality of students' levels based on a different background.

### 1.9.2 Operational Definition

Operational definition denoted as a procedural definition used in the research, as follows:

a. Authentic Assessment

Authentic assessment is defined as one of the assessments that are able to assess or measure student achievement both through assignments and students' performance in front of the class during the learning process. In this research, the authentic assessment was adapted to authentic learning models such as problem-based learning, project-based learning, and discovery-based learning taken from even semester of 10<sup>th</sup> class learning topics.

b. Assessment Instrument

Assessment instrument would be used in implementing the assessment because it helps the teacher to assess students' performance. The assessment instrument was varied depends on the assessment's need.

c. Scoring Rubric

Teachers use a scoring rubric to administer authentic assessments. Because this study leads to the development of a scoring rubric as an authentic assessment instrument, the rubric itself will be adjusted depending on what component of the students' learning process is being assessed.