

## **CHAPTER II**

### **REVIEW OF THE RELATED LITERATUR**

This chapter presents theoretical foundations related to the research problems. It includes discussions on the concept and role of reading tests in English language learning, the use of Socrative as a digital testing platform, student responses to digital testing, relevant previous studies, and the conceptual framework that guides that this research.

#### **2.1 Reading Test in Language Learning**

Reading test are essential tools in evaluating student' understanding of written texts in English. They help measure not only comprehension but also vocabulary and critical thinking skills. In language learning, such test provide valuable insights into students' progress and guide teachers in improving instruction. This section discusses the concept, role, objectives, and types of reading.

##### **2.1.1 The Concept of Testing in English Language Learning**

Testing and assessment in English language learning serve both summative and formative purposes. According to Brown (2004), assessment is a systematic process of collecting and interpreting information about student performance to guide instructional decisions. Tests, as formal assessment tools, are used to measure student competencies at specific points in time.

In recent years, technology has played a growing role in formative assessment. Alazemi (2024) found that computerized formative assessment with rapid feedback and adaptive intervention significantly improved EFL students' achievement across multiple skills, including reading. Similarly, Astiandani & Anam (2021) reported that online formative assessments during the pandemic enhanced students' learning

autonomy and motivation, though technical challenges such as internet connectivity and digital literacy were noted.

According to Hughes (2003), a good language test must meet criteria of validity, reliability, practicality, and positive washback. Socratic as a digital assessment platform has the potential to fulfill all four: 1.) Validity: questions can be organized according to specific learning objectives; 2.) Reliability: results are recapitulated automatically and consistently; 3.) Practicality: easy to use by both teachers and students; 4.) Washback: immediate feedback fosters learning motivation. However, these effectiveness is highly dependent on instructional design and teacher technical support in implementing it.

### **2.1.2 The Role of Test in Reading Development**

An effectively designed reading test not only measures literal comprehension skills, but also develops strategic reading strategies, such as scanning, inference, and critical appraisal. (Alderson, 2000) and follow-up research by (Förster et al., 2021) in their meta-analysis concluded that the implementation of structured formative assessment can significantly improve students' reading achievement.

Furthermore, (Alazemi, 2024) study on EFL learning through the Nearpod platform (AI-based formative assessment) showed that technology-based formative testing improved reading ability, as well as aspects of students' motivation, personal goals, and academic awareness.

A study from (Suci, 2020) also found that the use of Socratic in academic reading activities, although at university level resulted in improved vocabulary and reading comprehension, as students were encouraged to use strategies such as difficult word recording and translation.

### **2.1.3 Objectives of Reading Test**

Purpose of Reading Test Reading tests have the main purpose of assessing the extent to which students are able to understand the content of the text. (Alderson, 2000) mentions that reading tests are designed to measure literal, inferential, and evaluative comprehension. These objectives include students' ability to 1.) Locate the explicit information in the text; 2.) Infer the implied information based on the context; 3.) Evaluate the accuracy or effectiveness of the reading content.

Thus, the purpose of a reading test is not only to assess the basic ability to comprehend text, but also to test advanced thinking skills such as logical reasoning and critical judgment. This goal is important to ensure that students actually understand the meaning of what they read, rather than simply reading mechanically.

### **2.1.4 Types of Reading Tests**

Reading tests can be categorized into various formats, each designed to assess different aspects of reading comprehension. According to (Brown, 2004), a well-structured reading test should include a variety of question types to measure different levels of understanding. The following are common types of reading tests: 1.) Multiple Choice: This format allows students to select the correct answer from several options. It is effective for assessing literal comprehension and can also be used for inferential questions; 2.) True/False: This format is suitable for quick assessments of students' understanding of key facts or main ideas in a text. It can be used as a pre-test or for immediate feedback before a discussion. 3.) Short Answer: This format gives students the opportunity to provide open-ended responses. It is useful for assessing deeper understanding, as students can explain their reasoning or provide examples. 4.) Open-Ended Questions: These questions

require students to elaborate on their thoughts and interpretations of the text. They are effective for evaluating critical thinking and evaluative skills. 5.) Performance-Based Assessments: These assessments involve tasks that require students to demonstrate their reading skills in real-world contexts, such as summarizing a text or presenting an analysis.

In practice, teachers should design reading questions that are relevant to the learning context and appropriate for the students' skill levels. The questions should be able to reveal students' abilities to understand the structure of the text, recognize key concepts, and draw implied meanings from the information presented.

## **2.2 Digital Based Assessment**

Digital-based assessment refers to the use of technology to evaluate student learning and understanding. This approach allows for more interactive and engaging assessments, providing immediate feedback and data analysis that can inform instructional decisions. The integration of digital tools in education enhances the learning experience and supports diverse learning needs.

### **2.2.1 Implementation of Digital Assessment**

The implementation of digital assessment tools significantly improves student engagement and learning outcomes. According to O'Keeffe et al. (2020), students show greater enthusiasm and focus when assessments are delivered through digital platforms, thanks to their dynamic features and flexible access. Digital tools also support real-time feedback and personalized learning paths, allowing students to learn at their own pace (Anastasopoulou et al., 2024).

Moreover, the integration of multimedia elements such as timers, hyperlinks, and interactive videos further enriches the assessment experience. Tomar et al. (2024)

emphasize that such interactive features enhance student engagement and information retention by offering diverse and stimulating ways to interact with the content. Compared to traditional paper-based tests, digital assessments promote more active learning and deeper cognitive processing.

### **2.2.2 Definition and function of Socrative**

Socrative is a web-based assessment tool designed to facilitate real-time feedback and interactive learning environments. As described by (Pintado & Cerio, 2017), *"Socrative transforms traditional assessment methods by providing a platform that engages students through interactive quizzes and instant feedback."*

This tool allows educators to create quizzes, polls, and quick checks—that students can access through laptops, tablets, or smartphones. Socrative offers several key functions that support both teachers and students in the assessment process include:

- 1) **Real-Time Feedback:** Teachers can receive immediate insights into student performance, allowing them to adjust their teaching strategies on the fly. As noted by (El Shaban, 2017a), *"The ability to provide instant feedback through platforms like Socrative significantly enhances student learning outcomes."*
- 2) **Variety of Assessment Types** Socrative supports multiple question formats, including multiple choice, true/false, and short answer questions. This variety allows teachers to assess different levels of understanding and skills. **Interactive Learning** The platform encourages student engagement through interactive quizzes and polls, making learning more dynamic. Features like exit tickets and quick quizzes help teachers gauge student understanding at the end of a lesson;
- 3) **Data Analysis and Reporting,** Socrative provides detailed reports on student performance, enabling teachers to analyze trends and identify learning gaps. This data can inform instructional

decisions and help tailor future lessons to meet student needs. Accessibility Being a cloud-based platform, Socrative can be accessed from anywhere with an internet connection, making it convenient for both teachers and students. The user-friendly interface ensures that both educators and learners can navigate the platform easily.

### **2.2.3 Socrative as a reading Assessment tool**

Socrative has been shown to effectively improve students' reading comprehension compared to traditional paper-based assessments. In a study conducted in Indonesia, students using Socrative demonstrated better reading comprehension outcomes than those in the control group using paper-based methods (Prastikawati & Wiyaka, 2023). Socrative is an innovative online assessment tool designed to enhance classroom engagement and facilitate real-time feedback between teachers and students. Developed in 2010, it allows educators to create interactive virtual classrooms where students can respond to questions using their devices. This platform not only captures student interest but also promotes collaboration and active participation, ultimately aiding in knowledge retention and stimulating classroom discussions (Pintado & Cerio, 2017)

By utilizing features such as multiple-choice questions, short answer responses, and instant feedback, Socrative enables teachers to assess students' reading comprehension effectively. The immediate feedback provided helps students identify areas for improvement, fostering a more personalized learning experience. In conclusion, Socrative serves as a powerful tool for reading assessment, enhancing student engagement and comprehension through its interactive and collaborative features.

#### **2.2.4 Features of Socrative**

Socrative is not just a technical medium, but part of a data-driven instruction strategy that integrates technology with modern pedagogy. Socrative also has several existing features, namely: 1.) Multiple Choice, Teachers can create multiple-choice questions that allow for testing different levels of text comprehension, from literal to evaluative. This feature also allows for the explanation of correct answers, allowing students to reflectively understand where they went wrong; 2.) True/False, This format is suitable for quick tests that measure basic understanding of the facts or main ideas of a text. It is useful for a pre-test or instant measurement before a discussion; 3.) Short Answer, This feature gives students the freedom to write open-ended answers. In the context of reading, inferential or evaluative questions can be asked through this format, allowing teachers to assess depth of understanding more comprehensively; 4.) Space Race (GamifiedQuiz), This game-based feature spurs student engagement by providing a sense of competition between groups. This feature is suitable for interactive retesting or enrichment of material; 5.) Quick Questions, Allows the teacher to ask one spontaneous question in the middle of the lesson to check students' immediate understanding of the topic being discussed; 6.) Exit Ticket, This feature is used at the end of learning to evaluate whether students have understood the material, what they learned, and whether they have any questions. This is very useful for measuring the impact of the reading learning that has just been done; 7.) Instant Feedback, One of the most distinctive features of Socrative. Students receive automatic feedback after answering questions. This facilitates reflective learning and motivates them to correct their mistakes independently; 8.) Real-Time Result

Monitoring, Teachers can monitor students' answers live and assess their performance even while the test is still ongoing. This allows for quick intervention of students who are having difficulties; 9.) Automatic Report Generation, Once the quiz is completed, Socrative generates reports in various formats (Excel, PDF) that include individual score analysis, class comparison, as well as the success rate of each question item; 10.) Cross-Platform Accessibility, Socrative can be used on various devices: laptops, tablets, or smartphones with Android or iOS operating systems. With these features, Socrative becomes an assessment platform that is relevant, adaptive and responsive to the needs of teachers and students in English language learning.

In this study, the use of Socrative is specifically directed to test reading comprehension skills, where features such as short answers, instant feedback, and real-time result monitoring become very important to measure and respond to students' understanding accurately and quickly.

### **2.3 Testing Reading Using Socrative**

Socrative has emerged as a valuable tool for assessing reading comprehension in educational settings. By leveraging its interactive features, educators can create engaging assessments that provide immediate feedback and insights into student understanding.

#### **2.3.1 Effectiveness of Socrative in Reading Test**

The research conducted by (Kaya & Balta, 2016) is one of the main and most significant theoretical references in supporting the conceptual framework of this study. The main focus of their study was to evaluate the impact of using Socrative on several important aspects of English language learning, namely student

engagement, material comprehension, and improved learning outcomes. The study was conducted on students in a higher education setting who were studying English as a foreign language.

One of the key findings of the study is that the use of Socrative directly increases students' active participation and engagement in the learning process, especially when the evaluation is formative and interactive. Teachers can see students' responses in real-time and make adjustments to teaching strategies based on the concrete data displayed by the platform. This is very important, as this approach reinforces the practice of evidence-based instruction which places data as the primary basis for making informed teaching decisions..

More specifically, Kaya and Balta highlighted the effectiveness of question types in Socrative, especially multiple choice and short answer formats, as appropriate tools to measure two important components of reading comprehension, namely literal comprehension and inferential comprehension. Literal comprehension refers to students' ability to recognize explicit information in the text, while inferential comprehension reflects their ability to infer meaning from implied information. These two abilities are the main indicators in (Brown, 2004) reading skills test and form the core of the test used in this study.

### **2.3.2 Advantages and Challenges**

While Socrative offers significant benefits for reading assessment, its implementation comes with both advantages and challenges that educators should consider. The platform's ability to provide immediate feedback allows students to quickly identify and address misconceptions in their reading comprehension, fostering more effective learning (*Socrative*, n.d.) Its interactive features, including

gamified elements like Space Race, have been shown to increase student engagement and make assessments more enjoyable (Prastikawati & Wiyaka, 2023). Teachers benefit from real-time performance data that enables tailored instruction and evidence-based decision making (Pintado & Cerio, 2017).

The platform's cross device compatibility also makes it accessible for most classroom environments. However, several challenges merit consideration, including potential technical issues that may disrupt assessments and the digital divide that could disadvantage students with limited technological access (Pintado & Cerio, 2017). Some educators risk over-relying on digital tools at the expense of traditional assessment methods, and designing effective reading comprehension questions requires careful consideration of learning objectives. Additionally, the use of personal devices may present classroom management challenges. These considerations highlight the need for balanced implementation that leverages Socrative's strengths while mitigating its limitations for optimal reading assessment outcomes.

## **2.4 Student Responses to Digital Testing**

When students use digital tools like Socrative for tests, they have different feelings and experiences. Some enjoy it because it's interactive and gives quick feedback, while others may find it challenging due to technical issues or lack of familiarity. Understanding how students react to digital testing is important because it helps teachers use these tools more effectively. This section looks at

### **2.4.1 Students' Perception of Socrative**

Students' responses to the use of Socrative in English learning assessment are influenced not only by the technical aspects of the platform but also by the affective

and social factors inherent in the learning process. According to (El Shaban, 2017a), the successful use of educational technology largely depends on students' perceptions and attitudes, particularly regarding the convenience, usefulness, and interactive experience provided by the platform. In the context of digital assessment, students tend to respond positively when the technology is perceived as interesting, easily accessible, and capable of delivering understandable and actionable feedback.

El Shaban emphasizes that the user experience is crucial in shaping students' perceptions. When students feel that digital tools like Socrative support their understanding of the material and facilitate reflection on their learning achievements, they become more actively involved in the evaluation process. This aligns with findings from (Liu et al., 2022), which indicate that positive perceptions of online assessments increase when students receive support from teachers and possess sufficient understanding of the technology used. Thus, students' digital literacy and teachers' approaches to introducing and guiding the use of technology play a vital role in shaping these responses.

#### **2.4.2 Students' Engagement and Motivation**

Research by (Liu et al., 2022) on gamification in digital assessments reinforces the notion that engaging and interactive assessment designs, such as the quiz feature in Socrative, can enhance students' intrinsic motivation. Elements like scoring, timing, and immediate feedback not only make assessments more enjoyable but also contribute to building students' confidence and satisfaction with their learning experiences. Furthermore, Yao and Liu (2025) identified that students' perceived usefulness and self-efficacy regarding technology use directly impact their

engagement. If students believe that Socrative helps them better understand reading texts and provides a clearer evaluation experience than traditional methods, their responses are likely to be positive. Conversely, technical barriers or insufficient explanations from teachers can lead to decreased engagement.

To ensure positive student responses to the use of Socrative, teachers must effectively implement the platform according to students' needs. This includes providing technical explanations, conducting initial exercises, and offering motivation so that students feel comfortable and confident in taking assessments seriously. With the right support, Socrative can serve as an effective digital assessment tool that enhances student participation and understanding in English language learning, particularly in reading skills.

## 2.5 Relevant Studies

In this section, several relevant studies related to use of Socrative as a testing reading. The following are the findings of relevant studies, which are displayed in the table below as show in table 2.1 :

**Table 2. 1 List of Relevant Studies**

No	Researcher	Title	Result	Similarity	Difference
	Kaya & Balta (2016)	Taking Advantages of Technologies: Using Socrative in English Language Teaching Classes	Socrative improved student engagement and reading comprehension using multiple-choice and short answer questions.	Both focus on reading skills and use of Socrative for formative assessment.	Conducted at university level; this study focuses on senior high school students.
	Suci (2020)	The Effect of Using Socrative on Students' Reading Comprehension	Students improved vocabulary and comprehension through interactive reading quizzes.	Both assess the effect of Socrative on reading comprehension.	Context in university acad emic reading course; this research is on general high school reading.
	Prastikawati & Wiyaka (2023)	Enhancing Students' Reading Through Socrative	Socrative group performed better than paper-based group; motivation	Both use Socrative in a secondary school reading class.	Their study compares digital vs traditional

No	Researcher	Title	Result	Similarity	Difference
		: A Classroom Action Research	and engagement increased.		testing; this study focuses more on student responses.
	Pintado & Cerio (2017)	Socrative: Student Perceptions and Benefits in the EFL Classroom	Socrative enhanced classroom interaction and real-time teaching adjustment.	Both recognize Socrative as a formative, feedback-driven tool.	Their focus is broader (all EFL skills); this study focuses specifically on reading comprehension.
	El Shaban (2017)	Students' Attitudes Toward Online Assessment Tools in EFL	Positive student attitudes when tools are accessible, interactive, and provide clear feedback.	Both investigate student responses to digital assessment platforms.	Their focus is on general digital tools; this study centers on Socrative and reading test implementation.

The five reviewed studies demonstrate the relevance and growing application of Socrative in English language learning, particularly in reading assessment. Kaya and Balta (2016) showed that Socrative enhances reading comprehension and student engagement through its interactive question formats. This aligns with the current study's focus, although their research was conducted at the university level, while this study targets high school students. Similarly, Suci (2020) found that Socrative improved students' vocabulary and reading comprehension through digital quizzes. While both studies emphasize comprehension, Suci's research took place in an academic reading context at the university level.

Prastikawati and Wiyaka (2023) conducted a classroom action research at the secondary level and found that students who used Socrative outperformed those who used paper-based tests. This supports the current study's implementation context, although their focus was on comparing digital and traditional formats, while this study emphasizes students' responses. Pintado and Cerio (2017) focused on Socrative's role in enhancing classroom dynamics and teacher feedback, which aligns with this study's use of Socrative as a formative tool. However, their scope

included various language skills, not just reading. Lastly, El Shaban (2017) emphasized the importance of students' perceptions in the effectiveness of digital tools. While his study discussed broader online assessments, its insights into learner attitudes and the role of accessibility and feedback are directly relevant to this study's second research question regarding student responses to Socrative.

In summary, these studies provide strong support for the integration of Socrative in English reading assessments and reveal both pedagogical benefits and contextual differences. However, none of them specifically explore students' perceptions and responses to Socrative in the context of high school reading tests, especially in the Indonesian EFL setting. This research, therefore, aims to fill that gap.

## **2.6 Theoretical Framework**

The theoretical framework of this study begins with the problem of conventional reading assessment, which is often limited to paper-based tests that do not fully engage students or provide immediate feedback. This challenge becomes the starting point for the study. From this problem, the research is directed toward two major foci: (1) the implementation of formative reading tests using Socrative, and (2) students' responses to the use of Socrative in reading assessments. The case selected for this study is 10th grade at SMA IT Al-Hikmah Blitar, where both the teacher and students are the units of analysis. The teacher's practice of implementing Socrative and the students' experiences are examined as part of the case study design. The study applies Miles & Huberman's (1994) interactive model of qualitative data analysis including data reduction, data display, and conclusion drawing to analyze the collected data systematically.

This framework is supported by grand theories of language testing (Brown, 2004; Hughes, 2003), a middle-range theory of digital assessment (Kaya & Balta, 2016), and recent theoretical contributions (Alazemi, 2024; Liu et al., 2022).

<b>SUPPORTING THEORIES</b>
<ol style="list-style-type: none"> <li>1. <b>Grand Theory:</b> Brown (2004); Hughes (2003)</li> <li>2. <b>Middle-Range Theory:</b> Kaya &amp; Balta (2016)</li> <li>3. <b>Recent Theories:</b> Alazemi (2024); Liu et al. (2022)</li> </ol>
<b>RESEARCH FOCUS:</b>
<ol style="list-style-type: none"> <li>1. Implementation of formative reading tests using Socrative</li> <li>2. Students' responses to the use of Socrative in reading tests</li> </ol>
<b>CASE SELECTION:</b>
<ol style="list-style-type: none"> <li>1. Grade: Class X (Tenth Grade)</li> </ol>
<b>UNIT OF ANALYSIS:</b>
<ol style="list-style-type: none"> <li>1. Teacher's implementation of Socrative in reading tests</li> <li>2. Students' experiences and responses toward Socrative use</li> </ol>
<b>DATA COLLECTION METHODS:</b>
<p>Miles &amp; Huberman's interactive model (1994) :</p> <ol style="list-style-type: none"> <li>1. Data reduction</li> <li>2. Data display</li> <li>3. Conclusion drawing</li> </ol>
<b>EXPECTED OUTCOMES:</b>
<ol style="list-style-type: none"> <li>1. A descriptive understanding of how Socrative is implemented in real classroom settings</li> <li>2. Insight into student responses and experiences with Socrative as a formative reading assessment tool</li> </ol>

**Table 2. 2 Conceptual Framework**