

CHAPTER I

INTRODUCTION

1.1 Background of the Study

Reading comprehension occupies a central place in Indonesian vocational education, since students who master it are better positioned to succeed academically and to enter the workforce, where they will need to understand technical manuals, business correspondence, and other informational texts written in English [1]. The 2022 curriculum for Indonesian vocational high schools underlines the need to build students' capacity to process various text types, with descriptive texts, which lay out detailed information about people, places, objects, or phenomena, receiving particular emphasis [2]. Reading was chosen as the focus of this study rather than the other three language skills because it underlies the acquisition of written information and, by extension, both academic success and future job readiness. Even so, reading comprehension remains a persistent weak point for many EFL vocational students, who often struggle to understand English texts, and this in turn depresses academic performance and limits their capacity to apply English in authentic situations. Addressing this recurring problem calls for fresh instructional and assessment strategies capable of genuinely improving students' reading comprehension.

Data from the OECD show that Indonesian students scored 359 on the PISA 2022 reading literacy assessment, well below the OECD average of 476, a gap that points to ongoing difficulty in understanding, interpreting, and evaluating written material. This underscores why reading comprehension should remain a central concern in English language education [3]. Such national-level findings mirror what was observed firsthand in the sample classes at SMKN 1 Mojokerto, where students frequently struggled to grasp main ideas, locate specific details, draw inferences, and understand vocabulary within descriptive texts. Because these observations came from ordinary classroom activity rather than a formal diagnostic test, they describe the conditions of the participating classes only and are not intended as a broader claim. Given these difficulties, teachers need assessment approaches that go beyond simply measuring outcomes and also foster active engagement throughout the learning process. Digital assessment is one such approach, offering interactive, technology-supported activities that let teachers track student understanding more closely.

Technology is widely regarded as a way to tackle these overlapping reading comprehension difficulties, since it offers a range of tools that can shape how assessment and learning unfold.

Computers, tablets, smartphones, and internet-based applications open up possibilities for language instruction that is interactive, personalized, and engaging [4]. With these tools, teachers can deliver material through multiple modes, give feedback right away, track student progress in an organized way, and extend learning experiences past the physical classroom. Technology integration has proven especially useful for tackling motivation problems in EFL teaching, since digital tools can frame language tasks in ways that fit students' everyday familiarity with digital environments and their expectations of interactivity. Within language assessment specifically, electronic quizzes stand out as tools capable of serving both assessment and instructional purposes while potentially boosting student engagement.

Digital assessment has drawn growing interest in recent years because it lets teachers run assessments electronically while gaining immediate feedback, efficient scoring, and systematic tracking of student progress. It differs from digital learning media, whose main purpose is delivering instructional content, in that digital assessment is oriented toward measuring what students know and can do through technology-supported activities. Because of this, different digital assessment modes can create different assessment experiences, which may in turn shape students' engagement and how much they improve.

Prior studies have generally reported favorable effects of digital assessment on student engagement and academic performance, yet most of them compared students' final achievement or examined only one digital platform at a time. Few have directly compared two distinct digital assessment modes by looking at students' improvement in reading comprehension through gain scores, leaving it unclear whether different modes lead to meaningfully different degrees of improvement. This gap is the motivation for the present study, which sets gamified digital assessment against conventional digital assessment in terms of students' reading comprehension improvement. Much of the prior work, moreover, contrasted digital assessment with paper-based assessment or looked at only one digital platform, and direct comparisons between gamified and conventional digital assessment modes for improving EFL students' reading comprehension remain scarce. Further empirical work is therefore needed to establish whether different digital assessment modes lead to different degrees of student improvement as measured through gain scores.

Quizzes are a core element of language assessment, functioning both formatively, to guide ongoing instruction, and summatively, to gauge learning outcomes. A well-constructed quiz gives students a chance to practice their language skills, obtain feedback on their

understanding, and pinpoint what still needs work [7]. Within reading comprehension instruction specifically, quizzes let teachers and researchers gauge students' capacity to identify main ideas, find specific information, draw inferences, and understand how a text is organized. As quizzes have moved from paper to electronic form, these benefits have grown further, since digital formats allow automated scoring, instant feedback, and systematic data collection that can inform instructional decisions. Recent research on digital assessment describes two broad approaches to building electronic quizzes: gamified digital assessment, which layers in elements such as points, leaderboards, and instant feedback to boost learner engagement, and conventional digital assessment, which delivers the same tasks in a standard digital format without such gamification features. The distinction rests on the design of the assessment approach itself rather than on any particular platform. Building on this distinction, the present study sets these two digital assessment modes against each other to examine their effect on students' reading comprehension improvement.

Gamified digital assessment layers game-design elements, such as points, badges, leaderboards, avatars, and instant feedback, onto assessment tasks with the aim of lifting student engagement and motivation by triggering both intrinsic and extrinsic motivational mechanisms [4]. Platforms such as Wayground exemplify this approach, converting ordinary assessment into an interactive experience built around competition, recognition of achievement, and a playful interface. Conventional digital assessment, by contrast, delivers the essential functions of a digital quiz, presenting questions, collecting answers, and reporting results, without any gaming elements, as seen in platforms such as ProProfs or Google Forms [5]. Both approaches improve on paper-based assessment through immediate feedback and automated scoring, yet they diverge sharply in the underlying design philosophy and in the experience each creates for students. Studies comparing the two modes have produced mixed results: some find gamified approaches advantageous for engagement and motivation, while others report only minimal differences in actual learning outcomes [9], a pattern that points to the need for context-specific empirical investigation.

At the same time, gamification should not be assumed to outperform conventional approaches in every educational setting. Several studies report that gamified methods do not consistently beat conventional ones on actual learning outcomes, particularly once the novelty wears off or when students become more focused on competing than on engaging meaningfully with the material [9]. How well gamification works appears to hinge on contextual factors, including the nature of the learning task, the instructional goals, and characteristics of

individual learners such as their prior exposure to digital tools, intrinsic motivation, and attitude toward competition. In reading comprehension, where deep cognitive engagement with text is essential, adding game elements may help some learners while pulling others away from the sustained processing that genuine comprehension demands. For this reason, the present study makes no prior assumption that gamified e-quizzes outperform conventional ones; instead, it sets out to test empirically whether gamification produces measurable differences in reading comprehension improvement among tenth-grade vocational students at SMKN 1 Mojokerto, letting the data reveal the direction and significance of any effect.

A preliminary classroom observation carried out during the researcher's *Praktik Pengalaman Lapangan* (PPL) at SMKN 1 Mojokerto, from September 1 to October 31, 2025, surfaced several reading comprehension difficulties among tenth-grade students in the selected TKR (*Teknik Kendaraan Ringan*) classes. Because these observations came from regular English lessons rather than a formal diagnostic assessment, they describe the general classroom situation rather than precise diagnostic data.

While studying descriptive texts, many students had trouble picking out main ideas and the details that support them. Classroom observation further suggested that a good number of students could not answer literal comprehension questions correctly even when the answer was stated plainly in the text. Many also struggled to draw inferences, showing limited skill at reading between the lines and connecting different sections of a descriptive text.

These observed problems prompted the researcher to examine whether different digital assessment modes lead to different degrees of improvement in reading comprehension among vocational students. Wayground stands as an example of the gamified digital assessment mode, incorporating real-time feedback, visual progress indicators, customizable avatars, and achievement rewards to build an engaging, game-like assessment environment [10]. ProProfs, on the other hand, represents the conventional digital assessment mode, offering a clean, distraction-free interface centered purely on delivering questions and measuring performance, with no competitive or motivational gaming elements [8]. The central question this study investigates empirically is whether the assessment mode itself, rather than the content being tested, shapes students' improvement in reading comprehension. For vocational students, and the TKR program at SMKN 1 Mojokerto in particular, no prior study has compared these two digital assessment modes in relation to descriptive text comprehension, which makes this an area worth examining.

Wayground is a gamified digital assessment platform built specifically for educational use, turning ordinary multiple-choice assessments into engaging, interactive activities. It gives teachers customizable tools for building quizzes, including the option to add images, videos, and varied question formats, all while retaining the game elements central to the gamified mode [11]. Its interface tracks progress, provides instant feedback on correctness, and offers optional competitive features, such as leaderboards, that teachers can turn on or off depending on their instructional goals. Wayground was chosen to represent the gamified digital assessment mode in this study because its design, marked by immediate reinforcement, time-based scoring, and a visually engaging format, clearly embodies the gamification principles that set this mode apart from conventional alternatives. ProProfs, in contrast, delivers the core functions of digital assessment without any of the game elements found on gamified platforms. It provides simple quiz-building tools, automated scoring, and basic reporting, features that already make it more efficient than paper-based assessment for producing immediate results [12]. ProProfs was chosen as the representative of the conventional digital assessment mode because it exemplifies the kind of straightforward digital assessment commonly used in schools, delivering reliable question presentation and answer collection without any of the motivationally confounding elements that gamification introduces. Comparing students' reading comprehension achievement under Wayground and under ProProfs during the treatment sessions allows this research to isolate the effect of the digital assessment mode itself on reading comprehension improvement among vocational students.

Educational research has paid growing attention to digital assessment tools, yet most existing studies either set digital assessment against paper-based assessment or examined a single gamified platform without systematically comparing it to a conventional digital counterpart. Few studies have compared gamified and conventional digital assessment specifically within vocational school settings, particularly for assessing comprehension of descriptive texts. Since descriptive texts hold a prominent place in the vocational curriculum and demand that students pick out detailed information and recognize text organization, it is worth examining whether the two digital assessment modes differ in how much improvement they support for this text type. Three specific research gaps emerge from this. First, as far as the researcher is aware, few studies have directly compared Wayground (gamified) and ProProfs (conventional) as competing modes within the same controlled quasi-experimental design in an EFL setting. Second, few empirical studies have looked at how these two particular platforms differentially affect descriptive text reading comprehension among EFL vocational

high school students in Indonesia. Third, most existing gamification research in EFL learning centers on motivation and perception rather than on measurable improvement, especially within the vocational student population, whose distinctive motivational and content background may moderate how gamification actually works. Together, these three gaps justify the present empirical investigation, which the study addresses by carrying out a quasi-experimental investigation at SMKN 1 Mojokerto.

This study accordingly examined how much tenth-grade vocational students at SMKN 1 Mojokerto improved in reading comprehension of descriptive texts, as reflected in their gain scores, when assessed through the gamified digital assessment mode (Wayground) compared with the conventional digital assessment mode (ProProfs) during the treatment sessions. The intended contribution is both to add to what is known about digital assessment mode in language learning and to offer practical guidance for implementing assessment in comparable educational settings. Although earlier research points to potential benefits of digital assessment and gamified e-quizzes for English language learning, that body of work has notable limitations: most studies pitted digital assessment against traditional paper-based assessment or examined only one digital platform. As a result, there is still limited empirical evidence on whether different digital assessment modes, gamified versus conventional in particular, produce meaningfully different degrees of improvement in reading comprehension gain scores. Research involving Indonesian vocational high school students remains scarce as well, despite their distinctive learning profile and curriculum requirements.

Rather than comparing students' post-test scores directly, this study centers on measuring how much students' reading comprehension improved after undergoing different digital assessment treatments, with that improvement captured through gain scores calculated as the difference between pre-test and post-test results.

What sets this study apart is its direct, controlled comparison of one gamified digital assessment mode (Wayground) and one conventional digital assessment mode (ProProfs), using gain score analysis to isolate students' improvement rather than their final achievement, within a population that has received little research attention: EFL vocational high school students in Indonesia.

1.2 Research Questions

Does students' improvement in reading comprehension from pre-test to post-test differ significantly between the gamified (Wayground) and conventional (ProProfs) digital assessment modes?

1.3 The Objectives of the Research

Building on the research question above, this study aims to determine whether a statistically significant difference exists in students' reading comprehension improvement between those assessed through the gamified digital assessment mode and those assessed through the conventional digital assessment mode.

1.4 Significance of the Study

The significance of the research:

1.4.1 Theoretically

This study adds to the expanding body of knowledge in English Language Teaching, particularly in the areas of digital assessment and reading comprehension, by supplying empirical evidence, drawn from gain score analysis, on students' reading comprehension improvement under gamified versus conventional digital assessment modes. It also builds on the existing digital assessment literature, which has largely centered on students' final improvement or on a single assessment platform, by comparing two modes through an improvement-based lens. In doing so, the findings offer a fuller picture of how assessment design may shape reading comprehension improvement in EFL settings generally and in vocational high schools specifically, extending the literature on digital assessment design with empirical evidence on how different assessment modes may influence reading comprehension improvement in EFL vocational education.

1.4.2 Practically

From a practical standpoint, this study offers valuable insights for multiple stakeholders in English language education.

1. For English Teachers

This research offers evidence on whether gamified and conventional digital assessment modes differ in the improvement they foster, which can help teachers make more informed choices when selecting a digital assessment platform.

2. For Students

This research can also help students strengthen their reading comprehension experience by exposing them to different digital assessment modes suited to how they learn.

3. For the Next Researchers

For future researchers, this study can serve as a reference point for comparable comparative work on digital assessment modes within language learning.

1.5 Scope and Limitation of the Research

This study centered on comparing improvement in students' reading comprehension after being assessed through two digital assessment modes, Wayground for the gamified mode and ProProfs for the conventional mode, among tenth-grade students at SMKN 1 Mojokerto. Reading comprehension was assessed through descriptive texts across six indicators: identifying the main idea, identifying specific information, understanding vocabulary in context, making inferences, drawing conclusions, and recognizing text organization, with improvement captured through gain scores derived from the difference between pre-test and post-test results.