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Menyatakan dengan sesungguhnya bahwa karya ilmiah (skripsi) saya dengan judul di atas adalah benar hasil karya sendiri. Apabila dikemudian hari terbukti bahwa skripsi ini bukan karya penulis, maka penulis bersedia diproses sesuai hukum yang berlaku agar gelar kesarjanaan penulis dicopot sampai batas waktu yang ditentukan

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ABSTRACT

This research aims to investigate the effect of Digital Storytelling (DST) on eighth-grade students' motivation, speaking skills, and learning autonomy at SMPN 1 Bukittinggi. The study was initiated based on preliminary research that identified three major problems in the English learning classroom. First, students exhibited low levels of motivation, characterized by a lack of intrinsic drive, psychological barriers, and disinterest in speaking activities. Second, there was a low proficiency in English speaking skills, with the majority of students scoring below the Minimum Mastery Criteria (KKM) due to limited vocabulary, poor pronunciation, and high anxiety during oral performances. Third, students demonstrated a lack of autonomous learning behaviors, showing a heavy reliance on teacher-directed instruction and rarely engaging in independent self-study or utilizing digital resources to improve their proficiency.

To address these issues, the study employed a quantitative approach with a quasi-experimental design, specifically the Non-Equivalent Control Group Pretest-Posttest Design. The sample consisted of 64 eighth-grade students selected through purposive sampling, divided equally into an experimental group (receiving DST) and a control group (receiving conventional instruction). Data were collected using three main instruments: a Motivation Questionnaire adapted from the mini-AMTB, a Speaking Performance Test evaluated by three raters using an analytical rubric, and a Learning Autonomy Questionnaire adapted from the LAPQ. Following prerequisite tests that indicated a non-normal data distribution, the data were analyzed using the non-parametric Wilcoxon Signed Ranks Test to measure individual effects within the experimental group, and a Repeated Measures MANOVA to determine the simultaneous effect of the treatment across all variables.

The research findings revealed that Digital Storytelling has a highly significant effect on all three dependent variables. The Wilcoxon Signed Ranks Test confirmed significant improvements in students' motivation ($Z = -5.387$, $p < 0.05$), speaking skills ($Z = -4.947$, $p < 0.05$), and learning autonomy ($Z = -5.386$, $p < 0.05$) in the experimental class, with students shifting from lower to significantly higher score brackets post-treatment. Furthermore, the Multivariate Test (MANOVA) demonstrated a highly significant simultaneous effect of DST on motivation, speaking skills, and learning autonomy ($p < 0.05$), yielding an exceptionally large effect size (Partial Eta Squared = 0.974).

Key word: Digital Storytelling, Motivation, Speaking, Learner Autonomy

ABSTRAK

Penelitian ini bertujuan untuk menginvestigasi pengaruh Digital Storytelling (DST) terhadap motivasi, keterampilan berbicara (speaking skills), dan otonomi belajar siswa kelas delapan di SMPN 1 Bukittinggi. Penelitian ini dilatarbelakangi oleh studi pendahuluan yang mengidentifikasi tiga masalah utama dalam pembelajaran bahasa Inggris di kelas. Pertama, siswa menunjukkan tingkat motivasi yang rendah, yang ditandai dengan kurangnya dorongan intrinsik, hambatan psikologis, dan ketidaktertarikan pada aktivitas berbicara. Kedua, terdapat rendahnya kemahiran keterampilan berbicara bahasa Inggris, di mana mayoritas siswa memperoleh nilai di bawah Kriteria Ketuntasan Minimal (KKM) akibat kosakata yang terbatas, pengucapan yang kurang baik, dan tingginya kecemasan saat tampil berbicara. Ketiga, siswa menunjukkan kurangnya perilaku belajar mandiri (otonom), dengan ketergantungan yang tinggi pada instruksi berpusat pada guru serta jarang melakukan belajar mandiri atau memanfaatkan sumber daya digital untuk meningkatkan kemahiran mereka.

Untuk mengatasi permasalahan tersebut, penelitian ini menggunakan pendekatan kuantitatif dengan desain kuasi-eksperimen, secara khusus menggunakan desain Non-Equivalent Control Group Pretest-Posttest. Sampel terdiri dari 64 siswa kelas delapan yang dipilih melalui teknik purposive sampling, yang dibagi secara merata menjadi kelompok eksperimen (mendapatkan perlakuan DST) dan kelompok kontrol (mendapatkan instruksi konvensional). Data dikumpulkan menggunakan tiga instrumen utama: Kuesioner Motivasi yang diadaptasi dari mini-AMTB, Tes Kinerja Berbicara yang dievaluasi oleh tiga penilai menggunakan rubrik analitik, dan Kuesioner Otonomi Belajar yang diadaptasi dari LAPQ. Setelah uji prasyarat yang menunjukkan distribusi data tidak normal, data dianalisis menggunakan uji non-parametrik Wilcoxon Signed Ranks Test untuk mengukur pengaruh individual dalam kelompok eksperimen, dan Repeated Measures MANOVA untuk menentukan pengaruh simultan perlakuan terhadap seluruh variabel.

Hasil penelitian menunjukkan bahwa Digital Storytelling memiliki pengaruh yang sangat signifikan terhadap ketiga variabel terikat. Uji Wilcoxon Signed Ranks mengonfirmasi adanya peningkatan yang signifikan pada motivasi siswa ($Z = -5.387$, $p < 0.05$), keterampilan berbicara ($Z = -4.947$, $p < 0.05$), dan otonomi belajar ($Z = -5.386$, $p < 0.05$) di kelas eksperimen, di mana perolehan nilai siswa bergeser dari kategori rendah ke kategori yang jauh lebih tinggi pasca-perlakuan. Selanjutnya, Uji Multivariat (MANOVA) menunjukkan pengaruh simultan yang sangat signifikan dari DST terhadap motivasi, keterampilan berbicara, dan otonomi belajar ($p < 0.05$), dengan menghasilkan ukuran efek yang luar biasa besar (Partial Eta Squared = 0.974).

Key word: Digital Storytelling, Motivation, Speaking, Learner Autonomy

TABLE OF CONTENTS

SURAT PERNYATAAN ..... **i**

ABSTRACT ..... **iv**

ABSTRAK ..... **v**

TABLE OF CONTENTS ..... **vi**

LIST OF TABLES ..... **x**

CHAPTER I INTRODUCTION **1**

A. Background of the Problems 1

B. Identification of the Problems 10

C. Limitations of the Problems 10

D. Research Question 10

E. Purpose of the Research 11

F. The Significance of the Research 11

G. Definition of Key Terms 12

CHAPTERT II REVIEW OF RELATED LITERATURES **15**

A. Review of Related Theories 15

1. Communicative Language Teaching 15

a. Definition of Communicative Language Teaching 15

b. Principles of Communicative Language Teaching 16

2. Digital Storytelling (DST) 18

a. Definition of Digital Storytelling 18

b. Elements of Digital Storytelling 20
c. Benefit of Digital Storytelling..... 22
d. Procedure of Digital Storytelling 24
3. Motivation..... 30
a. Definition of Motivation 30
b. Types of Motivation 32
c. Assessing Students' Motivation 34
4. Speaking Skill..... 36
a. The Definition of Speaking Skill 36
b. Aspects of Speaking Skill 37
c. Purpose of Speaking Skill..... 39
d. Challenge in Speaking Skill..... 40
e. Principles for Teaching Speaking Skill 41
f. Assessing Speaking Skill..... 43
5. Learning Autonomy 44
a. Definition of Learning Autonomy..... 44
b. The Significance of Learning Autonomy..... 45
c. Elements of Digital Learning Autonomy 47
d. Assessing Learning Autonomy 48

B. Review of Related Studies 49

C. Conceptual Framework 56

D. Hypotheses 58

CHAPTER III RESEARCH METHOD 60

A. Design of the Research 60

B. Population and Sample 61

1. Population 61

2. Sample 62

C. Instrumentation 63

D. The Procedure of Experimental Research 67

E. Technique of the Data Collection 67

B. Technique of the Data Analysis 68

CHAPTER IV FINDINGS AND DISCUSSION 73

A. Findings 73

1. Description of the Data 73

a. Pre-test Result 73

b. Post-test Result 77

2. Analysis of the Data 81

a. Prerequisite of Data Analysis 81

b. Hypotheses Testing 84

B. Discussion 88

CHAPTER V CONCLUSION AND SUGGESTION 92

A. Conclusion 92

B. Suggestion 94

REFRENCE 96

LIST OF TABLES

Table 1 Preliminary Speaking Scores of 8th Grade Students at SMPN 1 Bukittinggi 8

Table 2 Motivation Score (Pre-test) 74

Table 3 Speaking Skill Score (Pre-test) 75

Table 4 LAPQ Score (Pre-test) 76

Table 5 Motivation Score (Post-test) 78

Table 6 Speaking Skill Score (Post-test) 79

Table 7 LAPQ Score (Post-test) 80

Table 8 Normality Result 81

Table 9 Homogeneity Test Result 83

Table 10 Hypothesis 1 Result 84

Table 11 Hypothesis 2 Result 85

Table 12 Hypothesis 3 Result 86

Table 13 Hypothesis 4 Result 87

CHAPTER I

INTRODUCTION

A. Background of the Problems

Speaking skills are fundamental in English language learning, serving as a primary means of communication that integrates linguistic knowledge with real-time interaction. In the context of English as a Foreign Language (EFL), speaking proficiency enables learners to express ideas, engage in conversations, and participate in social and academic settings effectively. It encompasses not only linguistic elements like vocabulary and grammar but also pragmatic aspects such as turn-taking and cultural appropriateness, making it a complex skill that requires practice in authentic contexts (Ghafar & Raheem, 2023). This overview highlights speaking as an interactive process essential for overall language competence, often challenging due to psychological and environmental factors.

Speaking is defined as the oral expression of words, involving communication through verbal interaction, making requests, or delivering speeches (Nunan, 1991, as cited in Torky, 2006). It is an interactive process of constructing meaning that includes producing, receiving, and processing information, dependent on context and participants (Burns & Joyce, 1997; Luoma, 2004, as cited in Torky, 2006). Furthermore, speaking involves the production of auditory signals to elicit verbal responses, combining sounds systematically to form meaningful utterances (Bygate, 1987, as cited in Torky,

2006). Building on these foundational aspects, speaking in language learning emerges as a two-way process that facilitates the true exchange of thoughts, information, or emotions, emphasizing cooperation between speakers in shared contexts (Eckard & Kearny, 1981; Florez, 1999; Howarth, 2001, as cited in Torky, 2006). It is often spontaneous, open-ended, and evolving, distinguishing it from written discourse by its real-time nature and reliance on non-verbal cues (Nunan, 1989; Brown, 2001, as cited in Torky, 2006). Operationally, it refers to expressing oneself coherently, fluently, and appropriately in meaningful contexts using correct pronunciation, grammar, and vocabulary (Torky, 2006).

Given its interactive and expressive nature, proficiency in speaking English enhances interpersonal communication, allowing individuals to convey thoughts and engage daily in various settings (Efrizal, 2012; Nasiri & Gilakjani, 2016, as cited in Ghafar & Raheem, 2023). It provides better educational opportunities, career advancement, and global interaction, as English serves as a lingua franca in business and academia (Baker, 2003; Huy et al., 2024). Speaking skills also foster creativity, critical thinking, and emotional expression, contributing to personal growth and cultural enrichment (Huy et al., 2024). Moreover, effective speaking improves confidence, social well-being, and persuasive abilities, essential for success in professional and personal endeavors (Huy et al., 2024). In EFL contexts, it enhances fluency, vocabulary, and listening skills through authentic interactions, leading to better overall language proficiency (Tran et al., 2024). Additionally, it promotes

cross-cultural awareness and motivation, making learning more engaging (Tran et al., 2024; Zhu et al., 2024).

Despite these advantages, developing speaking skills faces several hurdles, such as inhibition, where learners fear errors and negative feedback, leading to reluctance in participation (Ghafar & Raheem, 2023). Limited thematic knowledge and low engagement exacerbate difficulties, often resulting in reliance on the mother tongue (Ghafar & Raheem, 2023). Large class sizes and time constraints reduce opportunities for practice, while affective factors like anxiety and low self-confidence hinder progress (Sy & Roy, 2024). Pronunciation issues further arise from English's non-phonetic nature, and psychological barriers such as fear of criticism cause hesitation (Chand, 2021). Linguistic problems, including vocabulary limitations and mother tongue interference, combined with environmental factors like unfavorable classrooms, impede fluency (Chand, 2021; Taye & Teshome, 2025). Additionally, lack of supportive resources and high-stakes exams prioritizing reading and writing over speaking contribute to demotivation (Ying et al., 2021).

Overcoming these challenges often requires strong motivation, which in language learning is the combination of effort, desire to achieve language goals, and favorable attitudes toward learning (Gardner, 1985, as cited in Seven, 2020). It serves as a motive force that stimulates action, directing learners' behavior and energizing their pursuit of linguistic proficiency (Ai et al., 2021). Motivation is pivotal, influencing progress and achievement by

providing direction and purpose (Al-Hoorie & MacIntyre, 2019). As a complex construct, motivation encompasses internal traits and external influences, contributing to outcomes in vocabulary, grammar, pronunciation, and skills like listening and speaking (Gardner, 1985, as cited in Alizadeh, 2016). It moves individuals to make choices, engage in actions, and persist, often rooted in psychological and cognitive theories (Griffiths, 2008). In second language acquisition (SLA), it is dynamic, responsive to classroom contexts, and essential for success or failure in mastering a language (Alizadeh, 2016).

Different types of motivation play distinct roles in this process; for instance, integrative motivation involves learning a language for cultural enrichment and integration into the target community, fostering positive attitudes toward the group (Gardner & Lambert, 1959, as cited in Zareian & Jodaei, 2015). Instrumental motivation focuses on practical benefits, such as career advancement or academic success (Gardner, 2001; Dörnyei, 2005, as cited in Zareian & Jodaei, 2015). Intrinsic motivation arises from internal satisfaction, like enjoyment in acquiring knowledge (Noels et al., 2000, as cited in Zareian & Jodaei, 2015). Extrinsic motivation, on the other hand, is driven by external rewards or avoidance of punishment, ranging from regulation to identification (Deci & Ryan, 1985, as cited in Zareian & Jodaei, 2015). The L2 Motivational Self-System includes ideal L2 self (envisioning proficiency) and ought-to self (obligations to avoid failure) (Dörnyei, 2005, as cited in Wu, 2022). Performance and mastery orientations emphasize demonstrating

competence or developing skills, respectively (Ames & Archer, 1988, as cited in Zareian & Jodaei, 2015).

Closely linked to motivation is learner autonomy, which in language education refers to the ability to take charge of one's learning, involving setting goals, selecting methods, monitoring progress, and evaluating outcomes (Holec, 1979, as cited in Rahmasari et al., 2025). It emphasizes responsibility and independence, shifting from dependence to self-direction (Little & Dam, 1998, as cited in Rahmasari et al., 2025). In EFL contexts, it enhances skills through technology and self-paced resources, fostering lifelong learning (Kelly, 2024). Autonomy promotes an internal locus of control, leading to emotional stability, higher self-esteem, and a growth mindset, reducing learned helplessness (Kelly, 2024). It involves psychological aspects like motivation and confidence, with teachers providing guidance in virtual environments (Al-Husban & Tawalbeh, 2023). Self-assessment practices significantly improve autonomy, as seen in higher post-test scores among EFL learners (Aldosari & Alsager, 2023).

One innovative approach to cultivating such autonomy, alongside motivation and speaking skills, is digital storytelling, which combines traditional narratives with multimedia elements like images, audio, and video to create engaging stories (Moradi & Chen, 2019). It serves as a pedagogical tool that enhances creativity, collaboration, and 21st-century skills in education (Dalim et al., 2019). In language contexts, it boosts information gathering, problem-solving, and literacy across visual, technology, and media domains

(Alismail, 2015). As a student-centered method, digital storytelling fosters motivation, active engagement, and diverse learning styles, allowing personalized expression. It develops multiple literacies, including digital and global, while promoting reflection and cultural awareness (Robin, 2006). Types include personal narratives, historical documentaries, and instructional stories, empowering marginalized voices (Robin, 2006).

In addition, according to the research by Kim (2014), digital storytelling (DST) serves as a potent tool for enhancing motivation, oral proficiency, and learner autonomy in second language acquisition. The study demonstrates that engaging in digital storytelling encourages self-reflection and significantly increases learners' motivation to practice speaking about personal topics. Furthermore, the findings reveal that this method leads to measurable improvements in speaking skills, specifically in areas such as vocabulary, sentence complexity, and pronunciation. Finally, Kim (2014) argues that because digital storytelling is a learner-centered activity that promotes self-evaluation and active engagement, it directly fosters the development of learner autonomy.

The benefits of digital storytelling extend particularly to learning autonomy and English speaking skills, as it promotes self-directed activities like topic selection and multimedia creation, fostering responsibility and lifelong learning (Meletiadou, 2022). It improves speaking skills through rehearsed narration, boosting fluency, pronunciation, and confidence in EFL contexts (Murad et al., 2023). In multilingual settings, it develops cultural

awareness and collaborative autonomy, with notable gains in public speaking metrics (Zhussupova & Shadiev, 2023). Furthermore, digital storytelling supports autonomy via reflective practice and reduces anxiety, while enhancing speaking fluency through scaffolded production within the Zone of Proximal Development (Agra, 2025). It integrates skills, increasing motivation and emotional intelligence, though access issues may persist (Duarte Luna, 2020; Nair & Yunus, 2021). Overall, it fosters engagement and proficiency, with empirical evidence showing improvements over extended periods (Nair & Yunus, 2021).

To implement digital storytelling effectively, procedures typically involve preproduction phases such as topic exploration, script writing, and storyboard creation, followed by production through multimedia recording, postproduction via editing, and distribution for sharing and feedback (Moradi & Chen, 2019). In language teaching, it begins with topic selection and script drafting, proceeds to audio narration and video editing, and culminates in public presentation, often spanning several weeks (Reinders, 2011; Zhussupova & Shadiev, 2023). Tools like iMovie or Canva support the creation process, with emphasis on peer review and ethical considerations (Alemi et al., 2022).

However, in practice, these elements often fall short in specific educational settings, prompting the need for targeted interventions like digital storytelling. Based on preliminary research at 8th grade students in SMPN 1 Bukittinggi, there were found some problems. First, students exhibited low levels of motivation in English language learning, often stemming from

psychological factors such as weak intrinsic drive and external pressures that hinder engagement. Observations revealed that learners frequently displayed disinterest during speaking activities, with many citing a lack of perceived relevance or enjoyment in the subject, leading to minimal effort in practicing oral skills outside class.

Second, there is a low proficiency in English speaking skills. Based on the document analysis of the students' English speaking scores provided by the English teacher of the eighth grade in the previous semester, the students' achievement is still below the Minimum Mastery Criteria (KKM). The following table presents the preliminary speaking data of the eighth-grade students:

Table 1 Preliminary Speaking Scores of 8th Grade Students at SMPN 1 Bukittinggi

Class	Total Students	Students scoring below KKM (e.g., <75)	Students scoring above KKM	Average Score
VIII-A	32	22	10	68.5
VIII-B	32	20	12	70.2

The data above indicates that the majority of students have not yet achieved the target speaking proficiency. Common issues observed include insufficient vocabulary, poor pronunciation, and high anxiety during oral performances. Students often hesitate or revert to their mother tongue due to fear of making mistakes.

Third, there is a lack of autonomous learning behaviors among students. Interviews with the teacher revealed that learners rarely engage in independent activities like self-study or utilizing online resources. They demonstrate heavy

reliance on teacher-directed instruction, which limits their capacity to set personal goals or monitor their own progress.

Third problem is the lack of autonomous learning behaviors among students, who demonstrate heavy reliance on teacher-directed instruction rather than self-initiated efforts to improve their English proficiency. Preliminary findings indicate that learners rarely engage in independent activities like self-study or utilizing online resources, partly due to low confidence and unfamiliarity with self-assessment techniques. This dependency limits their capacity to set personal goals or monitor progress, perpetuating a cycle of underachievement in speaking and motivation.

Based on the problems above, the researcher is interested in finding out the effect of DST in fixing the problems above; hence, this research is entitled "The Effect of Digital Story Telling towards Students' Motivation, Speaking Skill, and Learning Autonomy in SMPN 1 Bukittinggi" Because digital storytelling fosters learning autonomy and speaking proficiency by empowering students through self-directed narration and multimedia production (Meletiadou, 2022; Murad et al., 2023). Additionally, it has been shown to boost student motivation and reduce anxiety by providing a scaffolded, reflective environment that enhances both communicative confidence and emotional intelligence (Agra, 2025; Nair & Yunus, 2021)

B. Identification of the Problems

Based on the background of the problems above, the problems are identified into the following statements:

1. Students have low levels of motivation in English language learning
2. Students have low proficiency in English speaking skills
3. Students have a lack of autonomous learning behaviours

C. Limitations of the Problems

Based on the identification of the problems above, this research is focused on finding out the effect of Digital Story Telling (DST) toward students' motivation, speaking skills, and their learning autonomy. Furthermore, the experiment period is limited, potentially restricting the observation of long-term, sustained impacts on motivation and speaking proficiency, which typically develop gradually. Methodologically, the research exclusively investigates the influence of Digital Storytelling without comparing its effectiveness against other digital tools, and relies partly on self-reported measures for affective variables like motivation and autonomy, which introduces the possibility of response bias.

D. Research Question

Based on the limitations of the problems above, the research questions are constructed into the following questions:

1. Is there a significant effect of DST toward students' motivation?
2. Is there a significant effect of DST toward students' speaking skills?

3. Is there a significant effect of DST toward students' learning autonomy?
4. Is there a significant effect of DST toward students' motivation, speaking skills, and learning autonomy simultaneously?

E. Purpose of the Research

Based on the research question above, the purpose of this research are:

1. To find out whether there is a significant effect of DST toward students' motivation
2. To find out whether there is a significant effect of DST toward students' speaking skills
3. To find out whether there is a significant effect of DST toward students' learning autonomy
4. To find out whether there is a significant effect of DST toward students' motivation, speaking skills, and learning autonomy simultaneously

F. The Significance of the Research

The findings of this research are expected to provide valuable contributions to both the theory and practice of English as a Foreign Language (EFL) instruction.

1. Theoretically, this study will contribute empirical evidence regarding the application of Digital Storytelling specifically as a pedagogical tool for simultaneously addressing motivation, speaking proficiency, and learning autonomy. Then, by examining the simultaneous effects, the research offers a new perspective on the interrelationship between affective

variables (motivation and autonomy) and linguistic competence (speaking skills), supporting the theory that motivational strategies are crucial prerequisites for effective language skill development. Finally, **t**he findings will enrich theoretical models of second language acquisition (SLA) by validating the use of technology-mediated activities for junior high school learners.

2. Practically, the results will provide concrete, evidence-based instructional guidelines and a practical model for integrating Digital Storytelling into the English curriculum. This offers an innovative alternative to traditional methods to boost student engagement and encourage authentic language use. Then, Students will benefit directly from a more engaging and relevant learning experience, leading to increased intrinsic motivation, reduced speaking anxiety, and the development of essential 21st-century digital literacy and autonomous learning habits. Finally, the research provides data to support the decision-making process regarding the adoption and investment in digital tools and project-based pedagogies. It justifies the inclusion of creative, student-centered activities in the junior high school English curriculum.

G. Definition of Key Terms

1. Digital Storytelling (DST)

Digital Storytelling (DST) refers to the practice of using computer-based tools to tell a narrative. It involves students creating a short story (typically 2-10 minutes long) that combines narrative voice-

over (the student's recorded speech), images (scanned photos, drawings, or digital graphics), music, and sometimes video clips. In this research, Digital Storytelling (DST) is positioned as a teaching method (instructional strategy) that utilizes digital media tools. It is not merely the media itself, but the pedagogical approach where students create short multimedia narratives to practice and demonstrate their language skills.

2. Motivation

Motivation in this research is defined as the intensity and direction of students' desire to learn English. Drawing from the identified preliminary problems. In this study, motivation serves as a dependent variable and will be quantified through a validated questionnaire instrument administered to both the experimental and control groups.

3. Speaking Skill

Speaking Skill is defined as the productive ability of 8th-grade students to express ideas, feelings, and thoughts coherently and appropriately in spoken English. In this research, speaking skill is a dependent variable measured through structured oral performance tasks assessed by qualified raters using an analytical rubric.

4. Learning Autonomy

Learning Autonomy refers to the capacity of the students to take charge of their own learning. In the context of this study, it is a dependent

variable measured through a specific questionnaire designed to assess self-initiated learning behaviors both inside and outside the classroom.

CHAPTER II

REVIEW OF RELATED LITERATURES

A. Review of Related Theories

1. Communicative Language Teaching

a. Definition of Communicative Language Teaching

Communicative Language Teaching (CLT) is fundamentally defined as an approach to language teaching that emphasizes the use of the target language for meaningful communication and real-world interaction. Rather than focusing solely on the explicit teaching of grammatical structures, CLT posits that language is successfully acquired when learners are engaged in communicative tasks that require them to negotiate meaning and exchange information. According to Richards and Rodgers (2014), the core objective of CLT is to develop the learner's communicative competence, which entails not only knowing the rules of grammar but also knowing how to use language appropriately in various social contexts to achieve specific communicative goals.

Furthermore, CLT is conceptualized as a shift from viewing language as a set of structural rules to understanding it as a system for the expression of meaning. In this paradigm, the primary function of language is seen as interaction and communication, which necessitates a classroom environment where students actively use the language to

perform real-life functions such as requesting, apologizing, or expressing opinions. Harmer (2007) asserts that in a communicative approach, activities should be designed so that learners have a genuine desire to communicate, focusing on the meaning they want to convey rather than just the linguistic forms they are producing, thereby making the learning process more relevant and engaging.

Finally, CLT is defined as a highly learner-centered methodology that integrates the four language skills—listening, speaking, reading, and writing—into cohesive, communicative tasks. This approach recognizes that language skills should not be taught in isolation but rather combined in ways that mirror real-life communication. Nunan (1991) explains that teaching language communicatively requires educators to provide authentic materials and foster an environment where learners can practice language in contexts that reflect real-world situations, ultimately empowering them to use the language autonomously and confidently outside the classroom.

b. Principles of Communicative Language Teaching

One of the foundational principles of CLT is the integration of authentic materials and real-world contexts into the language classroom. This principle dictates that learners should be exposed to language that is naturally produced for native speakers, such as newspaper articles, podcasts, or real-life dialogues, rather than

artificially constructed textbook sentences. Ur (2012) emphasizes that using authentic texts not only motivates learners by connecting the language to their real-world interests but also equips them with the pragmatic competence needed to understand and produce language in genuine social situations, thereby bridging the gap between classroom learning and actual language use.

Another crucial principle of CLT is the careful balancing of fluency and accuracy through interactive, meaning-focused tasks. While traditional methods often prioritized grammatical accuracy at the expense of oral fluency, CLT asserts that both are necessary for effective communication and should be developed in tandem. Brown (2007) argues that teachers must design activities that encourage learners to initiate oral communication and negotiate meaning, providing appropriate feedback that guides improvement without stifling the students' confidence or interrupting the natural flow of communication. This principle ensures that learners can maintain a conversation fluidly while gradually refining their grammatical precision.

Finally, CLT is guided by the principle of redefining the roles of both the teacher and the learner to foster a highly learner-centered environment. In this framework, the teacher transitions from being the sole source of knowledge and the center of classroom interaction to acting as a facilitator, needs analyst, and co-communicator. Richards

(2006) notes that this shift requires teachers to create opportunities for pair and group work, allowing learners to take greater responsibility for their own learning process, while the teacher monitors, guides, and provides support, thereby promoting learner autonomy and active engagement in communicative tasks.

2. Digital Storytelling (DST)

a. Definition of Digital Storytelling

Digital Storytelling (DST) is defined as a modern pedagogical practice that bridges the ancient art of oral storytelling with a variety of digital tools and multimedia resources. At its core, digital storytelling refers to the use of real-life experiences, stories, and adventures, combining narrative structure with digital content such as images, sound, and video to create a short movie, typically with a strong emotional component (Robin, 2016). This definition emphasizes that DST is not merely about the technology itself but about the convergence of narrative and media to convey deep personal meaning. Scholars argue that digital storytelling transforms students from passive consumers of information into active co-producers of knowledge, allowing them to use digital tools to identify problems, brainstorm solutions, and provide feedback in real-time (Ohler, 2008). By engaging in this multimodal literacy practice, learners are able to synthesize information and emotion, creating a lasting digital artifact

that can be shared and reviewed, which significantly differentiates it from ephemeral oral presentations (Robin, 2016).

From an educational perspective, digital storytelling is viewed as a powerful vehicle for student-centered learning that facilitates the integration of technology into instruction. It assists learners in writing creatively and more effectively by visualizing their writing, resulting in an additional level of perception and authentic personal learning that enhances the writing process and effective learning experience (Robin, 2008). This visualization process is crucial for language learners as it bridges the gap between abstract linguistic concepts and concrete visual representations. Furthermore, DST provides a systematic procedure that helps educators design effective instructional activities based on learning objectives, ensuring that the technology serves the pedagogy rather than the other way around (Smeda, Dakich, & Sharda, 2014). The practice allows students to organize and express their knowledge and point of view in an individually significant way, capturing the imagination of both students and teachers to elevate the educational experience (Robin, 2016).

In the specific context of language education, DST is defined by its ability to support differentiated instruction and personalize the learning journey. As Schuch (2020) argues, digital storytelling naturally allows for differentiated instruction, providing educators

with the opportunities to cater to a range of student needs, interests, and learning styles. This flexibility makes it an ideal tool for diverse classrooms where students may have varying levels of proficiency and different cultural backgrounds. Through digital storytelling, students are encouraged to express their creativity, share their experiences, and reflect on their learning in a personalized and meaningful way (Lambert, 2013). It functions as a "narrative pedagogy" where the process of making meaning is as critical as the final product, fostering an environment where learners can experience the power of personal expression and connect emotionally with the content (Benmayor, 2008).

b. Elements of Digital Storytelling

The framework for creating effective digital stories is universally grounded in the "Seven Elements of Digital Storytelling" developed by Joe Lambert and the Center for Digital Storytelling. The first and perhaps most critical element is the Point of View, which refers to the specific realization or main point that the student tries to communicate within his or her story (Lambert, 2010). This element ensures that the narrative has a clear purpose and a unique perspective, allowing the writer to experience the power of personal expression (Robin, 2016). Closely related is the Dramatic Question, which serves as the narrative hook that holds the attention of the audience and is resolved by the end of the story (Lambert, 2013). A story without a

dramatic question often fails to sustain interest, as it lacks the structural arc that creates anticipation and engagement (Ohler, 2008).

The emotional and auditory components of DST are essential for transforming a simple slideshow into a compelling narrative. Emotional Content is the element that connects the story to the audience, as the most effective digital stories evoke an emotion from the viewer (Lambert, 2010). This is often achieved through the Gift of Your Voice, which refers to the pitch, inflection, and timbre of the storyteller's voice used to convey meaning (Robin, 2008). In the language classroom, this element is particularly valuable as it encourages students to record a voiceover, often requiring multiple takes to get the pronunciation and intonation "just right" (Smeda et al., 2014). The Power of the Soundtrack further supports the storyline; properly employed music can enhance and underscore the accompanying story, adding complexity and depth to the narrative (Lambert, 2013). Together, these elements teach students about the multimodal nature of communication, where audio cues alter the interpretation of spoken words (Ohler, 2013).

Finally, the structural elements of Economy and Pacing govern the flow and efficiency of the digital story. Economy involves using just the necessary elements to tell the story, challenging students to illustrate and tell their narratives efficiently without cognitive overload (Lambert, 2010). This element forces learners to edit their

work ruthlessly, a critical skill in academic writing and speaking where conciseness is valued (Robin, 2016). Pacing controls the rhythm of the story and determines how slowly or quickly it unfolds (Lambert, 2013). Pacing is the rhythm that sustains interest, much like the beat in music, and is determined by the speed of the voiceover, the duration of image transitions, and the timing of sound effects (Robin, 2008). Mastering pacing indicates a high level of control over the language, as it requires the speaker to pause for effect, stress key words, and breathe naturally within the flow of the narrative (Ohler, 2008).

c. Benefit of Digital Storytelling

The implementation of Digital Storytelling in educational settings yields profound benefits, particularly in the enhancement of linguistic skills. Research consistently demonstrates positive effects of digital stories on improving language learners' written and oral skills (Yang & Wu, 2012). By engaging in DST, students have more opportunities for cooperative and discovery learning, which provides them with cognitive and social development through using language skills (Robin, 2016). The process assists learners in writing creatively and more effectively by visualizing their writing, which results in an additional level of perception and authentic personal learning (Sylvester & Greenidge, 2009). Furthermore, studies show that DST improves oral comprehension and speaking performance, specifically

in areas of fluency and pronunciation, as students are motivated to practice their narration repeatedly until they are satisfied with the output (Smeda et al., 2014).

Beyond linguistic proficiency, DST significantly impacts student motivation and engagement. DST captures the imagination of students and creates meaningful digital stories that elevate the learning experience (Robin, 2008). It has been found to increase students' motivation to write "unconsciously," stimulating even those who lack confidence or a natural tendency toward literacy tasks (Sylvester & Greenidge, 2009). The "fun" factor creates an atmosphere of excitement that fosters a positive attitude toward the target language, reducing anxiety and increasing the willingness to communicate (Gregori-Signes, 2008). This emotional investment is crucial; as students see their own lives and cultures reflected in their work, they become more intrinsically motivated to master the language necessary to tell their stories (Benmayor, 2008).

Finally, DST facilitates the development of essential 21st-century skills such as critical thinking, problem-solving, and digital literacy. Creating a digital story requires students to synthesize information, make design choices, and solve technical and narrative problems (Robin, 2008). This aligns with the requirements of modern literacy, which demands that students be proficient not just in consuming media but in producing it (Ohler, 2008). The collaborative

nature of many DST projects further enhances social skills, as students must negotiate meaning, share responsibilities, and provide peer feedback (Robin, 2016). This collaborative aspect transforms the classroom into a community of practice where students learn from each other, fostering a deeper understanding of both the content and the digital tools used to convey it (Smeda et al., 2014).

d. Procedure of Digital Storytelling

The procedure for implementing Digital Storytelling in the classroom is a structured process that typically begins with a robust pre-production phase. This phase is critical for establishing the narrative foundation and involves brainstorming, topic selection, and scriptwriting (Robin, 2016). Teachers often guide students to choose personal topics to ensure a strong connection to the content, and then assist them in drafting a script that addresses the "Dramatic Question" and establishes a clear "Point of View" (Lambert, 2013). Following the script, students engage in storyboarding, where they create a visual plan of their story, matching specific text segments with proposed images or video clips (Ohler, 2008). This step helps students visualize the "Economy" of their story and plan the flow of information before they ever touch a computer (Robin, 2008).

The production phase involves the creation and digitization of the story elements. Students gather multimedia resources, such as copyright-free images, background music, and sound effects, and then

proceed to the most linguistically significant step: the voiceover recording (Robin, 2016). In this stage, students record themselves reading their scripts, often using the "Gift of Your Voice" to convey emotion and meaning (Lambert, 2010). This stage typically involves multiple takes, allowing students to self-monitor and self-correct their pronunciation and fluency, effectively turning the production process into a rigorous speaking drill (Smeda et al., 2014). Students then use video editing software to integrate the audio, visual, and textual elements, adjusting the timeline to ensure proper pacing and synchronization (Ohler, 2013).

The final post-production phase closes the learning loop through presentation and reflection. This involves the sharing of the final digital stories with an audience, which could be the class, the whole school, or an online community (Robin, 2016). This sharing session is vital for establishing a sense of audience and purpose, validating the students' hard work. Following the viewing, a reflection session is conducted where students reflect on their own work and provide feedback to their peers (Lambert, 2013). This reflection allows students to analyze what they learned, the challenges they faced, and how they solved them, thereby solidifying the autonomous learning skills and critical thinking developed throughout the project (Ohler, 2008).

In order to experiment with it in the 8th grade of Junior High School in Indonesia, the implementation of Digital Storytelling (DST) must be meticulously mapped to the Phase D Capaian Pembelajaran (CP) to ensure that the creative process directly supports the national English proficiency standards. By integrating these structured procedures, teachers can transform a multimedia project into a comprehensive language learning journey that hits every required literacy element—from interactive speaking to structured writing.

1) Pre-Production: Writing and Planning

The pre-production phase, which involves brainstorming and scriptwriting (Robin, 2016), serves as the foundation for the Writing – Presenting element.

a) Students communicate their ideas and personal experiences through structured paragraphs.

b) As they draft their scripts, they utilize specific vocabulary and transition from simple to compound sentences.

c) The requirement to address a "Dramatic Question" (Lambert, 2013) encourages students to use language to explain or defend a specific point of view or argument.

d) Storyboarding allows students to plan informational or imaginative texts using visual aids, fulfilling the requirement to present organized content.

2) Production: Reading, Viewing, and Speaking

The production phase involves gathering resources and recording audio, which aligns with the Reading – Memirsa and Menyimak – Berbicara elements.

a) Students must search for and evaluate main ideas and specific information within digital, visual, and multimodal texts while gathering copyright-free images (Ohler, 2013).

b) The voiceover recording is a critical speaking exercise where students explain their ideas using simple sentence structures and verbs.

c) Through multiple takes, students practice their fluency to ensure their message is understood within familiar school or home contexts.

d) This stage requires students to identify the purpose of their visual choices, performing a basic level of inference to ensure the images match the narrated text.

3) Post-Production: Listening and Interacting

The final phase of sharing and reflection (Robin, 2016) directly addresses the Menyimak – Berbicara objectives for social interaction.

a) Sharing digital stories in class creates a context where students use English to interact and exchange ideas, opinions, and views with their peers and teachers.

b) During reflection sessions, students engage in active discussions, providing opinions and making comparisons between different works.

c) Listeners are challenged to understand the main ideas and relevant details of their classmates' presentations.

d) Students clarify their answers to peer feedback using simple structures, solidifying their ability to use English in both formal and informal classroom settings

In addition, based on Kim's (2014) study, implementing digital storytelling for oral proficiency development involves a structured yet flexible autonomous learning framework. The process begins by selecting learner-centered storytelling tasks that connect to students' personal experiences—such as weekly topics about daily life, preferences, or cultural events (e.g., "Chinese New Year," "My favorite book"). These topics serve as prompts to motivate authentic language production and self-expression outside the classroom.

Three key digital tools form the technological foundation of this implementation: Vocaroo (a simple online voice recording tool), vozMe (a text-to-speech program that allows learners to hear their

written text spoken aloud), and VoiceThread (a multimedia platform for sharing and commenting on visual content with audio narration).

1) Learners first practice speaking using Vocaroo and vozMe at home—recording themselves, listening to playback, and self-correcting before submitting final recordings. For formal assessments, instructors upload culturally neutral visual prompts (such as Charlie Chaplin silent movie clips) to VoiceThread, giving learners 3 days to view the clips before recording their narrated stories. These silent films are particularly effective because they lack preauthorized dialogue, empowering learners to creatively construct their own narratives and develop communicative competence (Kim, 2014).
2) To foster autonomy while maintaining instructor support, learners document their independent study time weekly using a shared Google Spreadsheet, tracking minutes spent on practice, recording, and listening activities. Though submissions are voluntary (not mandatory), learners email their Vocaroo recording links to the instructor to receive personalized feedback. The instructor functions as a facilitator—providing holistic feedback plus targeted guidance in four areas (discourse, pronunciation, vocabulary, and sentence complexity)—and supplements this with learning resources like sentence-combining worksheets and vocabulary websites. Crucially, all VoiceThread recordings are shared among

participants, enabling peer monitoring and collaborative learning as students can listen to and learn from each other's progress (Kim, 2014).

3) Assessment occurs at strategic intervals (e.g., weeks 1, 5, 10, and 14) using consistent visual prompts to measure longitudinal improvement. Complementing performance data, three reflective questionnaires administered throughout the process help gauge learners' evolving confidence, motivation, and self-assessment abilities. This cyclical process—practice with self-study tools → self-monitoring → instructor/peer feedback → reflection—creates a sustainable model where learners gradually develop metacognitive awareness and ownership of their oral proficiency development. The success of this approach hinges on balancing learner autonomy with strategic instructor guidance, ensuring students have both freedom to explore language independently and support to address specific weaknesses (Kim, 2014).

3. Motivation

a. Definition of Motivation

Motivation is a complex and multifaceted psychological construct that is widely regarded as a primary determinant of success in educational settings. It is defined as the internal process that activates, guides, and maintains overt behavior, serving as the "why" behind human actions (Dörnyei, 2001). Without motivation,

learning—particularly the complex and long-term process of language acquisition—is likely to be inefficient or unsuccessful. Motivation directs and energizes the behavior of humans, acting as a need or desire that propels individuals toward a specific goal (Brown, 2000). It is not a static trait but a dynamic process that fluctuates over time and across different contexts, influenced by a myriad of internal and external factors (Gardner, 1985).

In the specific context of Second Language Acquisition (SLA), motivation is considered one of the most important factors, often cited as the primary explanation for the failure or success of a language learner (Dörnyei, 2005). Dörnyei (2001) describes motivation as the primary impetus to initiate learning and the driving force to sustain the long and often tedious learning process. It determines the extent of active, personal involvement in L2 learning; high motivation can compensate for deficiencies in language aptitude or learning conditions, while low motivation can hinder even the most talented learners (Gardner & Lambert, 1972). Thus, motivation provides the necessary energy for students to persist in the face of difficulties and to actively engage with the target language (Oxford & Shearin, 1994).

Furthermore, motivation in SLA is viewed as a "hybrid concept," combining internal attributes such as personal desire and curiosity with external forces such as social context, teacher influence, and rewards (Dörnyei, 2001). Models of motivation, such as Gardner's

Socio-Educational Model and Dörnyei's Process-Oriented Model, emphasize that motivation is constructed through the interaction of the learner with the learning environment, the teacher, and the task (Gardner, 1985). The learner is in control of their learning as a result of their cognitive processing and the context in which they are learning, meaning that motivation is both a prerequisite for and a product of successful language learning (Ushioda, 2011).

b. Types of Motivation

Motivation in language learning is commonly categorized into Intrinsic and Extrinsic motivation. Intrinsic motivation refers to the desire to engage in an activity for its own sake, driven by personal interest, enjoyment, or the satisfaction derived from the activity itself (Deci & Ryan, 1985). Learners with high intrinsic motivation experience "internally rewarding consequences" such as feelings of competence and self-determination (Ryan & Deci, 2000). They are more likely to adopt deep learning strategies, seek out authentic materials, and achieve better long-term retention because they enjoy the process of learning (Brown, 2007). Conversely, extrinsic motivation is influenced by external factors such as rewards, recognition, grades, or the avoidance of punishment (Deci & Ryan, 2000). While typically considered weaker than intrinsic motivation due to its dependence on external stimuli, it plays a significant role in

formal education where grades and certificates are prevalent (Brown, 2000).

Another significant distinction in SLA is between Integrative and Instrumental motivation, a concept proposed by Gardner and Lambert. Integrative motivation reflects a sincere and personal interest in the people and culture represented by the target language (Gardner & Lambert, 1972). It involves a desire to integrate into the L2 community, fostering social ties and cultural understanding (Gardner, 1985). This type of motivation is often associated with higher levels of proficiency and long-term success because it connects the learner's identity with the target language (Dörnyei, 2005). Learners with integrative motivation are driven by a genuine interest in the culture and the speakers of the language, making the learning process more personal and meaningful (Gardner, 2001).

Instrumental motivation, on the other hand, pertains to the potential pragmatic gains of L2 proficiency, such as getting a better job, passing a required examination, or achieving a higher salary (Gardner & Lambert, 1972). It concerns the concrete benefits that second language learning may bring to a language learner (Gardner, 1985). While early research favored integrative motivation, modern studies acknowledge that instrumental motivation is a powerful and often primary driver in EFL contexts where learners may not have direct access to the target culture (Dörnyei, 1990). For many students,

the desire to pass an exam or secure a future career is a highly effective motivator that sustains their effort in the classroom (Warden & Lin, 2000).

c. Assessing Students' Motivation

Assessing student motivation is a complex task as it involves measuring an internal psychological state that cannot be directly observed. The most established method for assessing motivation is the use of standardized self-report questionnaires, such as Gardner's Attitude/Motivation Test Battery (AMTB). The AMTB assesses various dimensions including integrative and instrumental orientation, attitudes toward the learning situation, and language anxiety (Gardner, 1985). It uses Likert scales to quantify students' responses to items such as "I want to learn English to get a good job" or "I enjoy my English class," providing reliable, quantifiable data on student motivation levels (Gardner, 2001). These questionnaires are rigorously tested for internal consistency and validity, making them a staple in motivational research (Dörnyei, 2001).

In addition to the AMTB, researchers employ other instruments like the Motivated Strategies for Learning Questionnaire (MSLQ), which is designed to assess the motivational orientation and learning strategy use of students based on a social-cognitive framework (Pintrich, Smith, Garcia, & McKeachie, 1991). This instrument measures constructs such as self-efficacy, intrinsic value,

and test anxiety, offering a broader view of the learner's motivational profile (Pintrich et al., 1991). Teachers and researchers also use adapted questionnaires that focus on specific aspects of motivation relevant to their context, such as the Motivation for Classroom Discussion Questionnaire, which assesses language-efficacy, value, and interest (Dörnyei, 2001). These tools allow for a detailed analysis of the specific factors driving student behavior in the classroom.

Beyond quantitative surveys, motivation is also assessed through qualitative observations and interactions. Behavioral indicators such as engagement in discussions, frequency of participation, and willingness to take risks are strong proxies for motivation (Guilloteaux & Dörnyei, 2008). Teachers can assess motivation by observing how students handle autonomy; for example, asking students to formulate their own goals, choose their work methods, or decide how they want to be assessed provides insight into their intrinsic drive (Ushioda, 2011). Techniques such as letting students choose the format of their assignments or asking for their input into lesson plans reveal their level of interest and commitment (Reeve, 2009). These qualitative methods complement survey data, providing a more holistic understanding of the student's motivational state.

4. Speaking Skill

a. The Definition of Speaking Skill

Speaking is widely defined as an interactive process of constructing meaning that involves producing, receiving, and processing information (Brown, 1994; Burns & Joyce, 1997). It is not merely the oral production of written language; rather, it is a complex cognitive and physical act where the speaker must articulate ideas, feelings, and intentions in real-time. Ideally, speaking is defined as the ability to effectively convey information and interact with others through the use of appropriate vocabulary, grammar, and pronunciation, while simultaneously demonstrating an understanding of the social and cultural context of the communication (Richards, 2008). This definition highlights that speaking requires both linguistic competence and sociolinguistic competence (Hymes, 1972).

Scholars emphasize that speaking differs significantly from writing in its spontaneity and interactivity. It requires learners to possess the ability to articulate ideas clearly and maintain coherent discourse under time pressure (Thornbury, 2005). Burns and Joyce (1997) describe speaking as a process that is often co-constructed with a listener, meaning the speaker must constantly adjust their message based on the listener's reaction. This interactive nature means that speaking is a two-way street where "meaning" is negotiated rather

than simply transmitted, requiring the speaker to be sensitive to the listener's needs and the immediate context (Bygate, 1987).

Furthermore, speaking is often cited as the most important of the four language skills because it is the primary mode of communication in daily life. It is the active form of language whereby EFL learners produce the language, a process that goes through a mental connection with other skills (Nunan, 1991). Being able to speak a language is synonymous with knowing that language for many learners, as they evaluate their progress based on their ability to speak fluently (Richards, 2008). Therefore, speaking is not just a skill but a fundamental representation of language proficiency and a critical tool for social interaction and professional success (Ur, 1996).

b. Aspects of Speaking Skill

To be considered a proficient speaker, a learner must demonstrate competence in several distinct but interrelated aspects, primarily Fluency and Accuracy. Fluency is defined as the ability to speak communicatively and fluidly without excessive hesitation or pauses that disrupt the flow of communication (Thornbury, 2005). It implies a natural rhythm where the speaker can keep the conversation going and express themselves spontaneously (Richards, 2008). Accuracy, on the other hand, refers to the correct use of the language system, encompassing the precise application of grammar rules and the correct choice of vocabulary (Brown, 2001). A speaker must

balance these two; focusing too much on accuracy can hinder fluency, while neglecting accuracy can lead to misunderstanding (Harmer, 2001).

Pronunciation is another critical aspect, involving the production of clear language including the correct articulation of phonemes, stress, intonation, and rhythm (Kelly, 2000). Good pronunciation ensures that the speaker is intelligible to the listener; it is not about eliminating an accent entirely but about achieving a level of clarity that does not impede understanding (Harmer, 2007). Alongside pronunciation, Vocabulary is essential because, without words, learners cannot express the functions or ideas they wish to convey (Wilkins, 1972). An extensive vocabulary allows speakers to choose the appropriate words for the specific context, audience, and topic, enhancing the precision and richness of their communication (Thornbury, 2002).

Grammar and Comprehension round out the key aspects of speaking. Grammatical competence allows speakers to arrange words into meaningful sentences and use English language structures accurately (Nunan, 2003). It provides the structural framework for the vocabulary. Comprehension, while often associated with listening, is integral to speaking because a speaker must understand the listener's response to maintain the interaction (Bygate, 1987). The mastery of all these language components presented in terms of accurate and fluent

features of the language leads learners to the ability to decode, transmit, share, and negotiate information effectively (Brown, 2004).

c. Purpose of Speaking Skill

The primary purpose of speaking is communication—the exchange of information, ideas, and feelings between people. In daily life, speaking is the number one way we communicate, used twice as often as reading and writing (Rivers, 1981). It serves both interactional functions, which help maintain social relationships, and transactional functions, which facilitate the exchange of goods and services (Brown & Yule, 1983). Without the ability to speak, an individual's capacity to function effectively in society is severely limited.

In an academic and professional context, the purpose of speaking extends to public speaking, which aims to educate, teach, or influence an audience (Lucas, 2009). Mastery of public speaking allows individuals to relate to an audience, gain their trust, and inspire action (Nikitina, 2011). It is a critical skill for career advancement and leadership, as oral communication skills are often cited as the number one skill college graduates find useful in the business world (Zekeri, 2004). Public speaking allows individuals to have a "voice" in the world, impacting their environment by voicing their thoughts and knowledge in an exciting way (Lucas, 2009).

For students, the purpose of speaking in the classroom is also to demonstrate learning and build confidence. It is often the medium through which their understanding of content is assessed and how they participate in the construction of knowledge (Nunan, 1991). Speaking activities improve classroom dynamics and student engagement, as close to 100% of the learning environment involves some form of speaking (Richards, 2008). By practicing speaking, students not only learn the language but also learn through the language, developing critical thinking and social skills that are essential for their overall development (Harmer, 2007).

d. Challenge in Speaking Skill

EFL learners face numerous challenges in developing speaking skills, often categorized into linguistic and psychological factors. Linguistically, students often struggle with a lack of vocabulary, poor grammar, and poor pronunciation (Thornbury, 2005). They may find it difficult to retrieve words quickly or construct complex sentences in real-time, leading to pauses and breakdowns in communication (Ur, 1996). The use of the native tongue in the classroom and a poor accent can further stress learners, making the correct production of the English language complicated (Harmer, 2001).

Psychologically, anxiety is a pervasive problem that can cripple a learner's ability to speak. Factors such as "communication apprehension," fear of making mistakes, and lack of self-confidence

can silence students (Horwitz, Horwitz, & Cope, 1986). Students often feel insecure and afraid of being laughed at by their peers, leading to a reluctance to speak in front of the class (Young, 1991). This anxiety acts as an affective filter, blocking the input and output of language and preventing students from practicing the very skill they need to improve (Krashen, 1982).

Environmental factors also play a significant role. In EFL settings, English is a foreign language not used in daily life, meaning students' exposure and practice time are severely limited (Nunan, 2003). The dominance of the mother tongue in the classroom and the lack of authentic opportunities to speak with native speakers further exacerbate the problem (Brown, 2001). Additionally, students may face practical challenges such as not using the right tools or not finding good content at the right level, which can lead to a lack of motivation and consistency in their learning (Richards, 2008).

e. Principles for Teaching Speaking Skill

H. Douglas Brown (2001) outlines seven key principles for designing effective speaking techniques. First, teachers must use techniques that cover the spectrum of learner needs, balancing accuracy-based activities (focusing on grammar and form) with message-based activities (focusing on interaction, meaning, and fluency) (Brown, 2001). This ensures that students develop both the structural knowledge and the communicative ability required for

proficiency. Second, instruction must provide intrinsically motivating techniques that appeal to students' goals and interests, making them want to participate rather than feeling forced (Brown, 2001).

Third, teachers should encourage the use of authentic language in meaningful contexts rather than isolated, artificial drills (Brown, 2001). This helps students prepare for real-world communication. Fourth, it is crucial to provide appropriate feedback and correction; teachers must capitalize on the natural link between speaking and listening and provide feedback that guides improvement without crushing confidence (Brown, 2001). Brown emphasizes that the classroom should be a place where students can experiment with language without fear of immediate punitive correction.

Finally, teachers must give students opportunities to initiate oral communication and encourage the development of speaking strategies (Brown, 2001). Instruction should move beyond teacher-led questions to allow students to start conversations and negotiate meaning. This includes teaching strategies like asking for clarification, using fillers, or circumlocution to handle communication breakdowns (Brown, 2001). These principles collectively aim to create a supportive and interactive environment where students can develop fluency and accuracy in tandem (Goh & Burns, 2012).

f. Assessing Speaking Skill

Assessing speaking is inherently difficult due to its transient and subjective nature. To ensure reliability and validity, educators typically use rubrics that break down the skill into measurable criteria. Common criteria include Fluency (flow, hesitation), Grammar and Vocabulary (accuracy, range), Pronunciation (intelligibility, stress), and Interactive Communication (turn-taking, response appropriateness) (Brown, 2004). These rubrics allow for a criterion-referenced assessment where students are judged against specific standards rather than against each other (Fulcher, 2003).

Detailed descriptors are used for each level of performance. For example, a student with "Good" fluency might speak mostly fluidly with only semi-frequent pauses, while a student with "Weak" fluency would have frequent short and long breaks (Brown, 2004). Similarly, grammar is assessed by looking at the complexity and accuracy of the structures used, while vocabulary is judged on its variety and appropriateness (Luoma, 2004). Discourse Management is another key criterion, assessing the coherence and cohesion of the speech and the speaker's ability to organize their thoughts logically (Underhill, 1987).

Effective assessment also involves providing students with detailed and timely feedback. Teachers should use the assessment process to prompt self-reflection, helping students become more

objective judges of their own work and that of their classmates (Black & Wiliam, 1998). By using clear rubrics, teachers can facilitate communication with students about their progress and help refine teaching skills and learning activities to better meet student needs (Brown, 2004). This transparency turns assessment into a learning tool rather than just a measurement exercise.

5. Learning Autonomy

a. Definition of Learning Autonomy

The concept of learner autonomy was first formally defined by Henri Holec (1981) as the "ability to take charge of one's own learning". This definition posits that autonomy is not an inborn talent but an ability that must be acquired through formal or natural learning. It involves holding the responsibility for all decisions concerning learning, including determining objectives, defining content and progressions, selecting methods and techniques, monitoring the procedure, and evaluating what has been acquired (Holec, 1981). Ideally, the learner becomes the active agent in the learning process, rather than a passive recipient of instruction.

David Little expanded on this by defining autonomy as essentially a matter of the learner's psychological relation to the process and content of learning (Little, 1991). For Little, autonomy involves a capacity for detachment, critical reflection, decision-

making, and independent action (Little, 1991). It is not just about doing things alone (self-instruction) but about having the psychological agency to manage one's own learning journey, whether inside or outside the classroom (Dam, 1995). This psychological dimension emphasizes that autonomy is a mindset as much as it is a set of behaviors.

Other scholars have added nuance to these definitions. For instance, autonomy is described as the recognition of learner's rights within the educational system, moving the focus from teaching to learning (Benson & Voller, 1997). It is also seen as a dynamic process where learners plan, implement, monitor, and evaluate their own learning, often in collaboration with others (Benson, 2011). This collaborative aspect is crucial; autonomy does not mean isolation, but rather the ability to work in partnership with teachers and other students while maintaining ownership of one's learning path (Little, 1991).

b. The Significance of Learning Autonomy

Learner autonomy is widely regarded as a critical goal of education, particularly in language learning, because it leads to lifelong learning. Autonomy shifts the focus from teaching to learning, empowering students to become active participants who can continue to learn long after they have left the classroom (Benson, 2011). Because language acquisition is a long process that extends far

beyond the hours available in a classroom, students must be able to continue learning independently to achieve high proficiency (Little, 1991).

Furthermore, autonomy is linked to higher motivation and well-being. When learners feel a sense of ownership and control (internal locus of control), they are more engaged, resilient, and confident in the face of challenges (Deci & Ryan, 2000). Autonomous learners are able to personalize their learning, making it more relevant to their needs and interests, which sustains long-term interest and commitment (Little, 2007). They tend to work hard to achieve the things they want and feel more confident in their ability to succeed (Ushioda, 2011).

In the context of the rapidly evolving digital economy, the significance of autonomy is even greater. The ability to adapt, innovate, and learn autonomously is an essential survival skill in a world where knowledge and skills become obsolete quickly (Reinders & White, 2016). Learner autonomy equips individuals with the human-centered skills—such as creativity, empathy, and problem-solving—that are necessary to navigate a transformational world (Benson, 2011). It fosters a sense of responsibility and self-discipline that is valued in both higher education and the workplace (Little, 1991)

c. Elements of Digital Learning Autonomy

In the digital age, learner autonomy involves specific elements related to the use of technology. Agency, competence, and self-efficacy are critical components that play key roles in autonomy development in digital environments (Han & Reinhardt, 2022). Agency enables learners to act upon their awareness and take control of digital tools; competence allows them to use these tools effectively; and self-efficacy provides the confidence to persist in the face of technical challenges (Lai, 2017). These elements are inextricably intertwined with the learner's digital identity and their ability to navigate the "digital wilds" of informal learning spaces (Reinders & White, 2016).

A framework for digital learner autonomy also includes Self-Direction and Reflection. Learners must be able to identify and set their own learning goals, plan their activities, and reflect on their progress using digital tools (Tassinari, 2012). This involves a cycle of planning, performing, and evaluating, where the learner constantly monitors their own learning process (Holec, 1981). Digital tools facilitate this by providing platforms for blogging, digital storytelling, and portfolio creation, which allow for deep reflection and self-assessment (Chik, 2014).

Social Connectivity and Collaboration are also essential elements. Digital autonomy is not solitary; it involves "social

connectivity" where learners negotiate meaning and share resources with others in online communities (Murray, 2014). The ability to collaborate, communicate, and solve problems with peers in digital spaces is a hallmark of the autonomous digital learner (Benson, 2011). This connects to the concept of "interdependence," where learners use their autonomy to contribute to and benefit from a learning community (Little, 1991)

d. Assessing Learning Autonomy

Assessing learner autonomy is challenging as it measures a capacity or disposition rather than a simple skill. Researchers often use self-report instruments such as the Learner Autonomy Perception Questionnaire (LAPQ) to gauge students' perceptions of their autonomy. The LAPQ assesses dimensions such as goal setting, self-evaluation, and strategy use, asking students to rate their agreement with statements like "I identify my weaknesses in English" (Oguz, 2013). These questionnaires provide quantitative data on the learner's psychological readiness for autonomy (Murase, 2015).

Other assessment methods include qualitative tools like portfolios, interviews, and observations. Portfolios allow students to document their learning journey and reflection over time, providing evidence of their ability to plan and evaluate their work (Little, 2007). Interviews can provide deeper insight into students' attitudes and decision-making processes, revealing the "why" behind their

autonomous behaviors (Benson, 2011). Teachers also use observation to look for behavioral indicators of autonomy, such as the student's initiative in choosing tasks or their persistence in problem-solving (Dam, 1995).

Assessment can also be integrated into the learning process itself. For example, teachers can ask students to formulate their own goals, choose their work methods, or decide how they want to be assessed (Tassinari, 2012). This "assessment as learning" approach not only measures autonomy but also fosters it by giving students a voice in the evaluation process (Little, 2007). By using a combination of these methods, educators can build a comprehensive picture of a learner's autonomy profile (Reinders & Lazar, 2011)

B. Review of Related Studies

1. **Amaliah, Sultan, and Amrullah (2022)** Amaliah, Sultan, and Amrullah conducted a study titled *"The Use of Digital Storytelling as A Strategy to Improve Students' English Speaking Skill at SMKN 1 Wajo"* in 2022. The aim of this research was to determine the effectiveness of digital storytelling in improving English speaking skills and to analyze students' perceptions of its use. The researchers employed a pre-experimental design involving 27 students from the Computer and Network Engineering class. Data were collected using speaking pre-tests, post-tests, and questionnaires, and analyzed using a paired sample t-test. The findings revealed a statistically significant improvement in students' speaking

skills, with the mean score rising from 17.59 in the pre-test to 21.52 in the post-test (sig. 0.000 < 0.05). Furthermore, the questionnaire responses indicated that digital storytelling successfully boosted students' confidence and was perceived as a potential strategy for enhancing speaking abilities (Amaliah et al., 2022).

2. **Adara and Haqiyyah (2021)** In a study titled *"The Effects of Integrating Digital Storytelling to Students' Motivation,"* published in 2021, Adara and Haqiyyah aimed to analyze the impact of DST on the motivation of Indonesian EFL learners. This study utilized a quasi-experimental design with 19 college students divided into experimental and control groups. The researchers collected data using questionnaires adapted from Deci & Ryan's Self-Determination Theory and semi-structured interviews. The findings demonstrated that the experimental class exhibited a slightly higher level of motivation compared to the control class. Specifically, the respondents considered DST beneficial for improving their English skills and creativity. The study concluded that digital storytelling has positive effects on students' motivation by fostering an environment that supports creativity and engagement (Adara & Haqiyyah, 2021).
3. **Fitri, Mohamad, Harianingsih, and Wadi (2022)** Fitri et al. published a study in 2022 titled *"Digital Storytelling-Based Tasks on Speaking Classroom; Seen from ESL Learners' Lenses."* The aim of this quantitative study was to survey ESL students' perspectives on DST-based tasks in a speaking classroom, specifically addressing the gap in research regarding

realistic everyday depictions by ESL learners. The method involved a survey of thirty-four students at Universiti Sultan Zainal Abidin, Malaysia, utilizing an instructional approach based on Task-Based Language Teaching (TBLT). The findings indicated that ESL students perceive the implementation of digital storytelling-based tasks as highly effective for improving their motivation. Additionally, the study found that DST allowed students to better develop ideas and collaborate effectively among groupmates, highlighting the social and cognitive benefits of the approach (Fitri et al., 2022).

4. **Zhussupova and Rustam (2023)** In their 2023 article *"Digital storytelling to facilitate academic public speaking skills: case study in culturally diverse multilingual classroom,"* Zhussupova and Rustam aimed to determine the impact of DST implementation on academic public speaking skills within culturally diverse classrooms. The researchers used a mixed-methods approach, combining qualitative focus groups with quantitative questionnaires and rubrics. The experimental teaching involved three phases: introductory (drafting), verification (tutor review), and presentation (performance). The findings showed that DST provided an opportunity to make students' speech more coherent and cohesive. Specifically, descriptors such as fluency, coherence, and cohesion improved significantly by 15%. The study concluded that the constant reiteration of academic vocabulary and grammar required by DST was

effective in enhancing public speaking performance (Zhussupova & Rustam, 2023).

5. **Nisa (2023)** Nisa conducted a thesis research titled *"The Effect of Digital Storytelling on Students' Speaking Skill at the Eleventh Grade of SMAN 4 Jember"* in 2023. The objective was to determine the significant effect of digital storytelling on students' speaking skills in a senior high school setting. Nisa employed a quantitative quasi-experimental research design using a non-equivalent group design with eleventh-grade students. Data were collected via pre-test and post-test and analyzed using Independent Sample T-tests in SPSS. The findings revealed a significant difference: the experimental class's post-test mean was 84.29, compared to 75.71 in the control class. The significance value ($0.000 < 0.05$) led to the acceptance of the alternative hypothesis, confirming that digital storytelling significantly improved students' speaking ability compared to traditional methods (Nisa, 2023).
6. **Setiyorini (2025)** Setiyorini's study, *"Digital Storytelling to Improve Learners' Motivation in Learning Speaking,"* published in 2025, aimed to investigate whether DST could increase learners' motivation to speak. The researcher utilized a descriptive case study method with 36 learners in Class X Social 1 at a private Islamic senior high school in Central Java, Indonesia. Data collection involved close-ended questionnaires and focus group interviews. The findings showed a significant improvement in learners' motivation. Notably, the study distinguished between motivation

types, finding that students' *intrinsic* motivation was higher than their extrinsic motivation after the intervention, with over 66% of students agreeing with statements regarding intrinsic interest. The interview results corroborated that DST successfully heightened students' internal drive to learn speaking (Setiyorini, 2025).

7. **Imama and Pusparini (2025)** In their 2025 study *"Exploring the Implementation and Outcomes of a Digital Storytelling Project in an EFL Secondary School Speaking Class,"* Imama and Pusparini aimed to explore the implementation process and outcomes of a DST project in an Indonesian secondary school. They used a qualitative interpretive case study design, gathering data through classroom observations and rubric-based assessments of 21 eighth-grade students. The findings revealed that the project stimulated student engagement, collaboration, and creativity. While the study noted challenges such as insufficient scaffolding during the planning phase, it confirmed that students' speaking performance improved, particularly in fluency and pronunciation. The study concluded that DST aligns with the Indonesia Independent Curriculum by emphasizing student agency and creativity (Imama & Pusparini, 2025).
8. **Yunita and Lestari (2025)** Yunita and Lestari conducted a Research and Development (R&D) study titled *"Developing Digital Storytelling Based on Indonesian Culture to Enhance Students' Independent Learning in the Society 5.0"* in 2025. The aim was to develop a culturally relevant DST product to enhance students' learning independence (autonomy). Using the

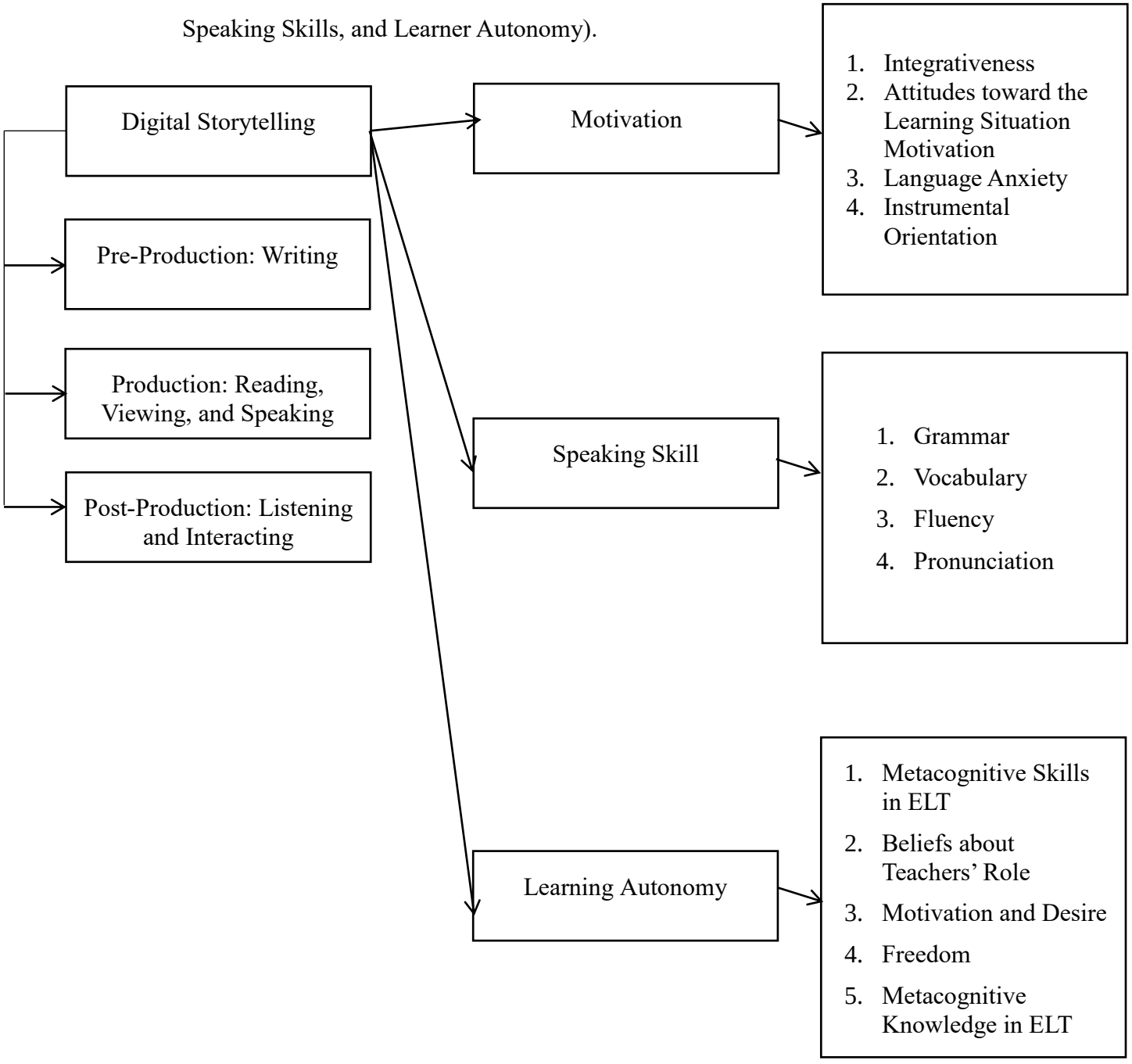
Borg and Gall model, they developed a product that underwent expert validation and field testing. The method included practicality tests and a one-group pre-test/post-test effectiveness test. The findings showed that the product was highly practical (82% score) and effective, with a statistically significant improvement in students' learning independence ($t = 9.85$, $p = 0.000$). This study uniquely links DST with local wisdom and learner autonomy (Yunita & Lestari, 2025).

9. **Usmani, Ali, and Kottaparamban (2025)** In *"The Impact of Digital Storytelling on EFL Learners' Speaking and Writing Skills"* (2025), Usmani et al. investigated DST as a pedagogical modality to enhance speaking and writing. The study employed a mixed-methods approach, incorporating thematic analysis of secondary literature and a survey of 20 EFL participants. The findings indicated a significant improvement in oral fluency, accuracy, and learner confidence, as well as enhancements in grammatical accuracy in writing. The study also highlighted the emerging integration of AI in DST. However, it noted challenges regarding infrastructural constraints and the need for students to effectively utilize educational technologies, suggesting that while DST is effective, technical barriers remain a hurdle for full autonomy (Usmani et al., 2025).
10. **Zamzam (2020)** Fadhilah Zamzam conducted a study titled *"Digital Storytelling to Improve Speaking Skill"* in 2020. The research aimed to address the poor speaking ability and lack of bravery in expressing opinions among first-semester international class students at Tadulako

University. Zamzam used a quasi-experimental non-equivalent control group design with 20 students over 16 meetings. The variable measured was speaking skill. The findings showed that the t-counted score (3.3) was higher than the t-table (2.00), leading to the acceptance of the hypothesis. The study concluded that digital storytelling significantly improves speaking skills and helps students overcome the psychological barrier of being "silent" during the learning process (Zamzam, 2020).

C. Conceptual Framework

This diagram illustrates the relationship between the Independent Variable (Digital Storytelling) and the Dependent Variables (Motivation, Speaking Skills, and Learner Autonomy).



The conceptual framework above illustrates the hypothesized causal relationship between the implementation of Digital Storytelling (DST) and the improvement of students' English speaking skills, motivation, and learner autonomy at SMPN 1 Bukittinggi.

The framework begins with the Independent Variable, Digital Storytelling, which acts as the pedagogical intervention. As defined by Robin (2016), DST is not a singular event but a process comprising three distinct phases: Pre-production, Production, and Post-production.

1. In the Pre-production phase, students engage in brainstorming and scriptwriting, which fosters organizational skills and linguistic planning (Lambert, 2013).
2. The Production phase is critical for Speaking Skills (Dependent Variable 1); during this stage, students utilize the "Gift of Voice" to record narrations. Unlike spontaneous speech, this allows for rehearsal, self-monitoring, and re-recording, which directly enhances pronunciation and fluency by reducing performance anxiety (Smeda et al., 2014; Ohler, 2008).
3. The Post-production phase, involving sharing and feedback, reinforces confidence and communicative competence (Brown, 2004).

Simultaneously, the framework posits that DST impacts Motivation (Dependent Variable 2). By integrating personal narratives with multimedia (images and music), DST taps into Intrinsic Motivation, making the learning

process enjoyable and relevant to the students' digital lives (Robin, 2008; Sylvester & Greenidge, 2009). The "fun factor" and the desire to produce a high-quality video for an audience also stimulate Extrinsic Motivation and potentially Integrative Motivation, as students strive to express their identity in the target language (Gardner, 1985).

Finally, the entire process is underpinned by Learner Autonomy (Dependent Variable 3). Because DST is a project-based task that requires students to make decisions about their story's content, visual design, and pacing, it shifts the locus of control from the teacher to the learner. This aligns with Holec's (1981) definition of autonomy as "taking charge of one's own learning." The framework suggests that navigating the technical and creative challenges of DST fosters self-direction, digital literacy, and agency, equipping SMPN 1 Bukittinggi students with the skills necessary for lifelong autonomous learning (Benson, 2011).

D. Hypotheses

1. Ha: There is significant effect of using DST toward students' motivation

   Ho: There is no significant effect of using DST toward students' motivation

2 Ha: There is significant effect of using DST toward students' speaking skill

Ho: There is no significant effect of using DST toward students' speaking skill

3 Ha: There is significant effect of using DST toward students' learner autonomy

Ho: There is no significant effect of using DST toward students' learner autonomy

4 Ha: There is significant effect of using DST toward students' motivation, speaking skills, and learning autonomy

Ho: There is no significant effect of using DST toward students' motivation, speaking skills, and learning autonomy

CHAPTER III

RESEARCH METHOD

A. Design of the Research

This research used an experimental research as the design of the research. There are two major classes of experimental designs: single-variable designs, which involve one independent variable, and factorial designs, which involve two or more independent variables. Factorial designs are classified as pre-experimental, true experimental, and quasi-experimental.

Based on the research objectives to determine the effect of Digital Storytelling (DST) on students' motivation, speaking skills, and learning autonomy, the most appropriate methodological framework is a Quasi-Experimental Design. This specific design, known as the Non-Equivalent Control Group Pretest-Posttest Design, is highly suitable because it utilizes two pre-existing, intact 8th-grade classes at SMPN 1 Bukittinggi, thereby addressing the practical constraint of not being able to randomly assign individual students (Campbell & Stanley, 1963; Creswell, 2014). One class will serve as the Experimental Group, receiving the DST intervention (treatment), while the other class will serve as the Control Group, receiving conventional English instruction. To measure the impact, both groups will first undergo a Pretest to establish baseline scores for all three dependent variables. Following the intervention period, both groups will be administered a Posttest. The causality will be inferred by statistically comparing the gain scores (the

difference between the posttest and pretest scores) of the two groups, allowing the researcher to determine if the improvement attributed to DST is significantly greater than the improvement resulting from conventional instruction.

The research is described as following table:

Table 3.1 Non-Equivalent Control Group Pretest-Posttest Design

	Pre-test	Treatment	Post-test
Experimental Group	Pre test	DST	Post test
Control Group	Pre test	Conventional	Post test

The post-test was conducted simultaneously in both the experimental and control groups to assess the final status of the three dependent variables: motivation, speaking skill, and learning autonomy. The primary purpose of conducting the post-test is to statistically compare the mean scores of the two groups. This comparison is necessary in order to know if the difference in scores between the experimental group (DST) and the control group (conventional instruction) is statistically significant.

B. Population and Sample

1. Population

Population is the all subjects of the research. Gay said that the population is the groups of interest to the researcher, the group to which she or he will like the result of the study to be generalize (Gay, 2012). It

means that the population is the group that used by the researcher. The population in this research is all of second grade in SMPN 1 Bukittinggi in the academic year 2025/2026. The population is described in the table 3.2:

Table 3.2. The Population of The Research

Class	Students' totality
VIII-A	32
VIII-B	32
VIII-C	32
VIII-D	31
VIII-E	33
VIII-F	33
VIII-G	31
VIII-H	30
VIII-I	31
Total	285

Source: Administration staff

From the table above, the population in this research is all students of second grade at SMPN 1 Bukittinggi. They all are 285 students.

2. Sample

Sample is part of population that uses in the research. According to Sugiyono, sample is a part number and characteristic of population (Sugiono, 2009). The sampling technique employed in this research must align with the chosen Non-Equivalent Control Group Pretest-Posttest Design, which requires the selection of intact classes rather than individual students (Creswell, 2014). From the nine available 8th-grade classes, the researcher will then use a Purposive Sampling technique to select two

specific classes to serve as the research sample: one Experimental Group (receiving DST) and one Control Group (receiving conventional instruction) (Gay et al., 2012). This selection was done non-randomly, often based on practical considerations like teacher availability, similar academic profile (e.g., matching average scores from the previous semester), or administrative convenience. This combined method ensures that the school's existing schedule and class structure are maintained, while still providing the two pre-existing groups necessary for the quasi-experimental comparison. The total sample size therefore was the combined number of students in the two selected classes.

C. Instrumentation

The researcher used research instruments for collecting and measuring the data on the dependent variables: students' motivation, speaking skills, and learning autonomy. An instrument is defined as the tool used for gathering data and measuring the value of variables (Sugiono, 2009). The instruments specifically used in this research are a Speaking Performance Test and Questionnaires designed to assess students' motivation and learning autonomy. These instruments are conducted as pretests and posttests to identify and measure the effect of using Digital Storytelling (DST) on students’ motivation, speaking skills, and learning autonomy..

1. Motivation Questionnaire

The questionnaire used to quantitatively assess the students' motivation levels, a validated **Motivation Questionnaire** will be

employed. This instrument will be adopted from established psychological tools, drawing primarily on the dimensions relevant to English as a Foreign Language (EFL) context that can be found in Gardner's Attitude/Motivation Test Battery (AMTB) (Gardner, 2001). The original version of AMTB, including 109 items with Likert-type scale. This extensive nature presented a major challenge, as it required participants to sustain attention over prolonged periods to complete all the questions. Gardner and MacIntyre proposed a shortened version known as the S-AMTB (mini-version).

The mini-AMTB is adopted from Effendi (2015), This simplified Attitude-Motivation Test Battery (AMTB) is adapted from Gardner's original AMTB (Gardner, 2004). The questionnaire consists of four sections (attitude towards English mastery, attitude towards the learning process, internal motivation, and external motivation) that are used to understand ESL learners' motivation and attitude towards English which affect their proficiency in English especially in academic institution. Four points of Likert scale is highly suggested to be paired with the questionnaire as it is easily understood and demands less effort therefore easy to be done by respondents (Nemoto & Beglar, 2013). The purpose of this simplified AMTB is to provide comprehensible questionnaire that is also accessible to be analysed by researchers, particularly in Indonesia.

The guideline of the mini AMTB can be seen below

Motivation Questionnaire Guideline

Indicator	**Sub-indicator**	**Item Number**
Integrativeness (INTEG)	IO + IFL + AFC	Item 1 + Item 3 + Item 2
Attitudes toward the Learning Situation (ALSIT)	PROF + COURSE	Item 6 + Item 9
Motivation (MOTIV)	MI + D + ALF	Item 11 + Item 4 + Item 5
Language Anxiety (ANX)	FUA + FCA	Item 8 + Item 10
Instrumental Orientation	INST	Item 7 (tunggal)

Integrativeness (INTEG = IO + IFL + AFC), Attitudes toward the Learning Situation (ALSIT = PROF + COURSE), Motivation (MOTIV = MI + D + ALF) and Language Anxiety (ANX = FUA + FCA). One item (INST) was used to assess instrumental orientation.

2. **Speaking Test**

The speaking test that will be given to the sample classes is about conversation or dialogue that students should do in front of the class. Furthermore, to assess the speaking ability of the students, the researcher will use 3 raters which are researcher herself and 2 English teachers in SMPN 1 Bukittinggi. The rubric scoring that will be used is the one that was proposed by Haris can be seen on Appendix 3.

3. **Learning Autonomy Questionnaire**

This questionnaire will be used to measure the students' capacity and disposition for self-directed learning, a Learning Autonomy Questionnaire

will be utilized. This instrument is designed to quantitatively assess self-management behaviours, aligning with tools like the Learner Autonomy Perception Questionnaire (LAPQ) (Oguz, 2013). In this research, the questionnaire is adopted from Dermitas (2010). It can be seen at Appendix 4

Furthermore, the test was through the validity process. Validity concerns with a test which measures what is supposed to be measured and for whom it is appropriate. In another word, test is valid if it measures accurately what is intended to be measured. In this research, the validity that was used was the expert validity (Hughes, 2003). In this case, the researcher uses the experts validity by consulting the instrumentation to the experts which are the lecturers and English teachers.

Learner Autonomy Perception Questionnaire Guideline (Adopted from Nguyen & Habok, 2021)

Indicator	**Sub-indicator**	**Item Number(s)**
1. Metacognitive Skills in ELT	**Planning**	2, 3, 6, 7, 9
	Monitoring	1, 4, 5, 8, 10, 12, 13, 15
	Evaluating	11, 14
2. Beliefs about Teachers' Role	**Beliefs about teachers' role**	16, 17, 18, 19, 20, 21, 22, 23
3. Motivation and Desire	**Motivation**	26, 27
	Desire	24, 25, 28
4. Freedom	**Freedom**	29, 30, 31, 32, 33, 34, 35
5. Metacognitive Knowledge in ELT	**About self as a learner**	36, 38, 39
	About the learning process	37
	About the learning context	40

D. The Procedure of Experimental Research

a. The Procedure of Experimental Research

The procedure of experiment research is as follows:

1. Pre-test

   The researcher gave the pre-test to the sample class before teaching. This pre-test was given to the second-grade students on SMPN 1 Bukittinggi

2. Treatment

   The researcher used DST in teaching Speaking using the correct procedure provided by the theory.

3. Post-test

   After teaching, the researcher gave the post-test to the sample group.

E. Technique of the Data Collection

Before the data analysis phase, the researcher must systematically collect the necessary data through several steps that adhere to the Quasi-Experimental Design:

1. Instrument Validation: The researcher will first validate all research instruments. This includes submitting the Speaking Performance Rubric and the two Questionnaires (for Motivation and Learning Autonomy) to a panel of experts, typically consisting of three lecturers from the English Education Department, to establish Content and Construct Validity.

2. Pre-Test Administration: The validated instruments will be administered as a pre-test to both the Experimental Group and the Control Group. This step

is crucial to establish the baseline scores for the students' initial motivation levels, speaking skills, and learning autonomy *before* any intervention is given, allowing the researcher to statistically account for pre-existing differences between the non-equivalent groups.

3. Treatment Implementation: Following the pre-test, the researcher will conduct the treatment. The Experimental Group will receive instruction integrated with Digital Storytelling (DST) over a set period (e.g., 6-8 meetings), while the Control Group will receive the same curriculum content using the Conventional Teaching Method.
4. Post-Test Administration: Finally, after the treatment period is complete, the researcher will administer the post-test to both groups using the same set of validated instruments. This final assessment is necessary to find out the effect of DST by comparing the difference in the post-test scores (gain scores) between the Experimental and Control groups on the three dependent variables: motivation, speaking skills, and learning autonomy.

B. Technique of the Data Analysis

This study employed quantitative data analysis techniques using t-tests to examine the effectiveness of the DST and to compare the performance between groups. The analysis was conducted in two stages: (1) a paired samples t-test to evaluate the improvement within the experimental group from pretest to posttest, and (2) an independent samples t-test to compare the posttest results betwee n the experimental and control groups.

The data analyis is aimed to test the hypothesis of the research. The researcher use the t-test in analyzing the data. Arikunto stated that in experimental research, the researcher used t-test to analyze the data (Arikunto, 1995). For hypotheses, the researcher used SPSS 22 to do the t-test. SPSS is statistic program that can run in any windows. According to Dan Flynn SPSS is a powerful program which provides many ways to rapidly examine data and test scientific hunches. SPSS can produce basic descriptive statistics, such as averages and frequencies, as well as advanced tests such as time-series analysis and multivariate analysis. The program also is capable of producing high- quality graphs and tables(Flynn, 2003).

Here are the procedure of how to calculate both t-test using SPSS:

1. Data Entry

a) The pretest and posttest scores of both the experimental and control groups were entered into SPSS Data View.

b) Each row represented one student, and columns included:

- Group (coded as 1 = Experimental, 2 = Control)
- Pretest (score out of maximum)
- Posttest (score out of maximum)

c) Variable names and labels were defined in Variable View for clarity

2. Paired Samples t-test (Within-Group Analysis)

To determine the effect of the treatment within the experimental group, a paired samples t-test is used to compare the mean scores of the

pretest and posttest. This test evaluates whether the intervention led to a significant improvement.

SPSS Steps:

a) Go to Analyze → Compare Means → Paired-Samples T Test.
b) Select Pretest and Posttest from the experimental group (or filter data accordingly).
c) Move both variables into the Paired Variables box.
d) Click OK.

Check the p-value (Sig. 2-tailed) in the output table. If $p < 0.05$, reject the null hypothesis means there is a significant difference between pretest and posttest scores. Also examine the mean difference and t-value to assess the magnitude and direction of change.

3. Independent Samples t-test (Between-Group Analysis)

This test compares the posttest scores of the experimental and control groups to determine if the treatment had a significantly greater effect on the experimental group.

SPSS Steps:

a) Go to Analyze → Compare Means → Independent-Samples T Test.
b) Move Posttest to the Test Variable(s) box.
c) Move Group to the Grouping Variable box.
d) Click Define Groups and enter: Group 1 = 1 (Experimental), Group 2 = 2 (Control).

e) Click Continue, then OK.

Then, check the Sig. (2-tailed) value. If $p < 0.05$, reject the null hypothesis → there is a significant difference between the two groups. The mean scores and t-value indicate the size and direction of the difference.

4. MANCOVA (Multivariate Analysis of Covariance)

To examine the effect of the Digital Storytelling (DST) intervention (X) on the posttest scores of the three dependent variables—motivation (Y1), speaking skills (Y2), and learning autonomy (Y3)—while statistically controlling for any pre-existing group differences, a Multivariate Analysis of Covariance (MANCOVA) will be conducted (Hair et al., 2010). This analysis is chosen because it allows the researcher to simultaneously test the differences between the experimental and control groups across *multiple* outcome variables, effectively increasing the statistical power and reducing the chance of Type I error (false positive). The analysis will determine whether the experimental group showed significantly greater improvement across the combined dependent variables, after controlling for the baseline scores established in the pretest.

a. Go to Analyze → General Linear Model →Multivariate.
b. Move the Posttest variables (Motivation Post, Speaking Post, Autonomy Post) into the Dependent Variables box.

c. Move Group (coded as 1 = Experimental, 2 = Control) into the Fixed Factor(s) box.
d. Move the Pretest variables (Motivation Pre, Speaking Pre, Autonomy Pre) into the Covariate(s) box.
e. Click Model, select Full factorial, and ensure that both Group and the three Pretest scores (covariates) are included in the model.
f. Click Options, then move Group to the Display Means for box.
g. Check the boxes for Descriptive statistics, Estimates of effect size, and Homogeneity tests (Levene's and Box's M).
h. Click Continue, then OK.

CHAPTER IV

FINDINGS AND DISCUSSION

A. Findings

1. Description of the Data

a. Pre-test Result

1) Students' Motivation

Before the implementation of the Digital Storytelling (DST) treatment, a pre-test was conducted to measure the initial baseline of students' motivation in both the control and experimental classes at SMPN 1 Bukittinggi. This preliminary measurement is crucial to ensure that both groups possess a comparable starting point before the intervention begins. The distribution of the pre-test scores is categorized into several intervals to illustrate the frequency of students within each range. The following table presents the detailed breakdown of the pre-test results for students' motivation in both the control and experimental groups, each consisting of 32 students.

To determine the appropriate number of intervals for the frequency distribution shown below, Sturges' Rule was applied. This statistical formula is used to calculate the optimal number of classes (K) based on the total sample size (N) and is expressed as $K=1+3.3\log(N)$. In this specific analysis, the total number of

observations (N) is 128 (the sum of all participants across the pre-test and post-test groups). Consequently, the data in the table is organized into 8 distinct score ranges (classes), beginning with 31-32 and ending with 45-47, to effectively display the distribution of scores for both the Control and Experimental groups.

Table 2 Motivation Score (Pre-test)

Score Range	Pre-test	
	Control	Exp
31-32	7	2
33-34	12	20
35-36	7	6
37-38	3	2
39-40	3	2
41-42	0	0
43-44	0	0
45-47	0	0
total	32	32

Based on the data presented in the table above, it can be observed that the distribution of motivation scores in both classes is relatively similar prior to the treatment. The majority of the students in both the control class (12 students) and the experimental class (20 students) are clustered in the 33-34 score range, indicating a moderate level of initial motivation. Furthermore, the overall score distribution across both groups shows a parallel pattern without any extreme outliers. This comparable distribution confirms that there is no significant initial disparity in motivation levels between the two groups. Therefore,

both classes are considered to have equivalent baseline characteristics, making them highly suitable for the subsequent application of the Digital Storytelling treatment in the experimental class and for further statistical hypothesis testing.

2) Students' Speaking Skill

In addition to motivation, the students' baseline speaking skills were assessed prior to the Digital Storytelling intervention. The pre-test for speaking skills was administered to both the control and experimental classes to map their initial oral proficiency levels. The scores are grouped into specific intervals to clearly display the frequency distribution of the students' speaking capabilities before any treatment is applied. The table below outlines the pre-test score distribution for students' speaking skills.

Table 3 Speaking Skill Score (Pre-test)

Score Range	Pre-test	
	Control	Experiment
5--6.99	14	13
7--8.99	18	19
9--10.99	0	0
11--12.99	0	0
13--14.99	0	0
total	32	32

The table reveals that the initial speaking skills of the students in both classes were predominantly clustered in the lower to moderate score ranges. Specifically, the control class had 14

students scoring between 5-6.99 and 18 students scoring between 7-8.99. Similarly, the experimental class had 13 students in the 5-6.99 range and 19 students in the 7-8.99 range. Notably, no students in either class achieved a score of 9 or above during the pre-test. This uniform distribution across the lower brackets confirms that both groups shared an equivalent, foundational level of speaking proficiency before the DST treatment was introduced.

3) Students' Learning Autonomy

To evaluate the students' capacity for independent learning before the intervention, a pre-test measuring Learning Autonomy (likely utilizing a Learner Autonomy Questionnaire or LAPQ) was administered to both groups. Establishing this baseline is essential to determine whether the Digital Storytelling method later fosters greater self-directed learning behaviors. The frequency distribution of the autonomy scores for both the control and experimental classes is detailed in the following table.

Table 4 LAPQ Score (Pre-test)

Score Range	Pre-test	
	Control	Exp
126-131	16	19
132-137	9	9
138-143	0	0
144-149	4	2
150-155	0	0
156-161	3	2
162-167	0	0
168-173	0	0
total	32	32

As shown in the table, the pre-test results for learning autonomy indicate a highly comparable baseline between the two groups. The largest concentration of students in both the control class (16 students) and the experimental class (19 students) falls within the 126-131 score interval. The remaining students are scattered across the higher intervals (144-149 and 156-161) in very similar, small frequencies. This data confirms that the students' initial levels of learning autonomy were homogenous, ensuring that any post-test variations can be more reliably attributed to the experimental treatment rather than pre-existing differences.

b. Post-test Result

1) Students' Motivation

Following the completion of the Digital Storytelling treatment in the experimental class and conventional teaching in the control class, a post-test was administered to measure any shifts in students' motivation. Comparing these results against the pre-test data allows for an evaluation of the intervention's effectiveness in boosting students' drive and enthusiasm for learning. The distribution of the post-test motivation scores for both classes is presented in the table below.

Table 5 Motivation Score (Post-test)

Score Range	Post-test	
	Control	Exp
31-32	3	0
33-34	16	0
35-36	7	0
37-38	3	2
39-40	3	17
41-42	0	6
43-44	0	5
45-47	0	2
total	32	32

The post-test data illustrates a stark divergence in motivation levels between the two groups following the treatment. The control class's scores remained largely stagnant, with the majority of students (16 students) still clustered in the 33-34 range. In contrast, the experimental class showed a dramatic upward shift; zero students remained in the lower brackets (31-36), and the vast majority clustered in the highest ranges, specifically 39-40 (17 students), 41-42 (6 students), 43-44 (5 students), and 45-47 (2 students). This significant positive shift strongly suggests that the Digital Storytelling method effectively enhanced the students' learning motivation.

2) Students’ Speaking Skill

To assess the impact of the Digital Storytelling intervention on oral proficiency, a post-test for speaking skills was conducted after the treatment period. This assessment aims to

determine whether the DST method facilitated measurable improvements in the students' ability to articulate ideas verbally compared to the control group. The frequency distribution of the post-test speaking scores is detailed in the following table.

Table 6 Speaking Skill Score (Post-test)

Score Range	Post-test	
	Control	Experiment
5--6.99	2	0
7--8.99	26	0
9--10.99	4	5
11--12.99	0	15
13--14.99	0	12
total	32	32

The post-test results demonstrate a substantial improvement in the speaking skills of the experimental group. While the control class remained mostly confined to the 7-8.99 score range (26 students), the experimental class completely vacated the lower brackets (5-8.99). Instead, the experimental students surged into the higher proficiency ranges, with 15 students scoring between 11-12.99 and 12 students scoring between 13-14.99. This clear upward mobility in the experimental group provides compelling descriptive evidence that Digital Storytelling significantly improves students' speaking skills.

3) Students’ Learning Autonomy

The final post-test metric evaluates the students' Learning Autonomy following the Digital Storytelling intervention. This

measurement seeks to identify whether engaging with DST encouraged students to take more responsibility for and initiative in their own learning processes. The score distribution for both the control and experimental classes is outlined in the table below.

Table 7 LAPQ Score (Post-test)

Score Range	Post-test	
	Control	Exp
126-131	18	0
132-137	7	0
138-143	0	4
144-149	4	24
150-155	0	0
156-161	3	0
162-167	0	2
168-173	0	2
total	32	32

The data reveals a profound effect of the treatment on the experimental students' learning autonomy. The control class remained heavily anchored in the lowest score bracket, with 18 students scoring between 126-131. Conversely, the experimental class exhibited a massive shift toward higher autonomy; the majority of the students (24 students) scored in the 144-149 range, with others reaching as high as the 162-173 bracket. Furthermore, zero students in the experimental class remained in the lowest 126-131 range. This indicates that the DST method successfully fostered a much higher degree of independent learning behavior among the students.

2. Analysis of the Data

a. Prerequisite of Data Analysis

1) Normality Test

Before proceeding to hypothesis testing, a prerequisite normality test was conducted to determine the distribution of the research data. The Kolmogorov-Smirnov and Shapiro-Wilk tests were utilized to assess whether the pre-test and post-test scores for motivation, speaking skill, and learning autonomy in both classes were normally distributed. The results of these normality tests are summarized in the table below.

Table 8 Normality Result

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Motivation_Pre_Cont	.192	32	.004	.890	32	.003
Motivation_Post_Cont	.218	32	.001	.828	32	.000
Motivation_Pre_Exp	.305	32	.000	.786	32	.000
Motivation_Post_Exp	.273	32	.000	.855	32	.001
LAPQ_Pre_Cont	.335	32	.000	.764	32	.000
LAPQ_Post_Cont	.355	32	.000	.714	32	.000
LAPQ_Pre_Exp	.362	32	.000	.642	32	.000
LAPQ_Post_Exp	.384	32	.000	.615	32	.000
Speaking_Pre_Cont	.142	32	.099	.950	32	.144
Speaking_Post_Cont	.154	32	.052	.909	32	.010
Speaking_Pre_Exp	.192	32	.004	.900	32	.006
Speaking_Post_Exp	.135	32	.147	.956	32	.211

a. Lilliefors Significance Correction

Based on the normality test results, the decision to use parametric or non-parametric statistics is determined by the

significance (Sig.) value, with a threshold of 0.05. The data shows that the majority of the variables—particularly Motivation and Learning Autonomy (LAPQ) across both pre-test and post-test phases—yielded a Sig. value of less than 0.05 for both Kolmogorov-Smirnov and Shapiro-Wilk tests. This indicates that the data for these variables is not normally distributed. Because the assumption of normality is violated for the majority of the dataset, non-parametric statistical tests, specifically the Wilcoxon Signed Ranks Test, are required and justified for the subsequent hypothesis testing.

2) Homogeneity Test

Following the normality test, a homogeneity test was conducted to determine whether the variances of the data from both the control and experimental groups were equal or homogeneous. Levene's Test for Equality of Variances was employed to assess this prerequisite, examining the variance distribution across the groups based on different statistical measures (mean, median, and trimmed mean). This test is essential to ensure that the groups being compared have similar variance characteristics before proceeding with hypothesis testing. The results of the homogeneity test are presented in the table below.

Table 9 Homogeneity Test Result

		Levene Statistic	df1	df2	Sig.	
variable	Based on Mean	3.159	14	113	0.000	
	Based on Median	0.983	14	113	0.475	
	Based on Median and with adjusted df	0.983	14	63.678	0.480	
	Based on trimmed mean	2.880	14	113	0.001	

The homogeneity test results reveal varied outcomes depending on the statistical measure used. The Levene's test based on the mean yielded a significance value of 0.000, and the trimmed mean test showed 0.001, both below the 0.05 threshold, suggesting unequal variances. However, the tests based on the median produced significance values of 0.475 and 0.480 (with adjusted df), both well above 0.05, indicating homogeneous variances. Given that the normality test previously demonstrated that the data was not normally distributed, the median-based tests are considered more robust and appropriate for this dataset. Therefore, based on the median results (Sig. > 0.05), it can be concluded that the variances between the control and experimental groups are homogeneous, satisfying this prerequisite for further statistical analysis and supporting the validity of the comparative hypothesis testing.

b. Hypotheses Testing

1) DST toward Motivation

To test the first hypothesis regarding the effect of Digital Storytelling on students' motivation, a Wilcoxon Signed Ranks Test was employed. This non-parametric test compares the pre-test and post-test motivation scores specifically within the experimental class to determine if the observed improvements are statistically significant. The output of the Wilcoxon test for motivation is presented in the table below.

Table 10 Hypothesis 1 Result

Test Statistics[a]	
	Motivation_Post_Exp - Motivation_Pre_Exp
Z	-5.387[b]
Asymp. Sig. (2-tailed)	0.000
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

The table displays a Z-value of -5.387 and an Asymp. Sig. (2-tailed) value of 0.000. Because the significance value (0.000) is strictly less than the alpha level of 0.05, the null hypothesis (H0) is rejected and the alternative hypothesis (Ha) is accepted. This statistical result confirms that there is a significant effect of Digital Storytelling on the students' motivation at SMPN 1 Bukittinggi.

2) DST toward Speaking Skill

The second hypothesis, which posits that Digital Storytelling affects students' speaking skills, was also tested using the Wilcoxon Signed Ranks Test. By analyzing the differences between the experimental class's pre-test and post-test speaking scores, the test determines the statistical significance of the oral proficiency gains. The results of this analysis are detailed in the following table.

Table 11 Hypothesis 2 Result

Test Statistics[a]	
	Speaking_Post_Exp - Speaking_Pre_Exp
Z	-4.947[b]
Asymp. Sig. (2-tailed)	0.000
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

According to the test statistics, the analysis yielded a Z-value of -4.947 and an Asymp. Sig. (2-tailed) of 0.000. Given that the probability value (0.000) is well below the 0.05 threshold, the null hypothesis is rejected. This provides strong statistical evidence that the implementation of Digital Storytelling has a significant positive effect on improving the students' speaking skills.

3) DST toward Learning Autonomy

To address the third hypothesis concerning the impact of Digital Storytelling on learning autonomy, the Wilcoxon Signed Ranks Test was applied to the LAPQ scores of the experimental group. This test evaluates whether the shift in autonomy levels from the pre-test to the post-test is statistically meaningful. The summary of the test statistics is provided in the table below.

Table 12 Hypothesis 3 Result

Test Statistics[a]	
	LAPQ_Post_Exp - LAPQ_Pre_Exp
Z	-5.386[b]
Asymp. Sig. (2-tailed)	0.000
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

The output reveals a Z-value of -5.386 with an Asymp. Sig. (2-tailed) of 0.000. Since the significance value is less than 0.05, the null hypothesis is conclusively rejected. This finding statistically validates that Digital Storytelling significantly influences and enhances the learning autonomy of the students.

4) DST toward Motivation, Speaking Skill, and Learning Autonomy Simultaneously

Finally, to test the overarching hypothesis regarding the simultaneous effect of Digital Storytelling on all three dependent variables (Motivation, Speaking Skill, and Learning Autonomy), a

Multivariate Test (Repeated Measures MANOVA) was conducted. This analysis specifically looks at the interaction effect of "time * variables" to see if the treatment caused a combined, significant shift across all metrics simultaneously over the duration of the study. The results of the multivariate tests are presented in the table below.

Table 13 Hypothesis 4 Result

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
time	Pillai's Trace	0.997	9278.529[b]	1.000	31.000	0.000	0.997
	Wilks' Lambda	0.003	9278.529[b]	1.000	31.000	0.000	0.997
	Hotelling's Trace	299.307	9278.529[b]	1.000	31.000	0.000	0.997
	Roy's Largest Root	299.307	9278.529[b]	1.000	31.000	0.000	0.997
variables	Pillai's Trace	0.997	5046.207[b]	2.000	30.000	0.000	0.997
	Wilks' Lambda	0.003	5046.207[b]	2.000	30.000	0.000	0.997
	Hotelling's Trace	336.414	5046.207[b]	2.000	30.000	0.000	0.997
	Roy's Largest Root	336.414	5046.207[b]	2.000	30.000	0.000	0.997
time * variables	Pillai's Trace	0.974	567.676[b]	2.000	30.000	0.000	0.974
	Wilks' Lambda	0.026	567.676[b]	2.000	30.000	0.000	0.974
	Hotelling's Trace	37.845	567.676[b]	2.000	30.000	0.000	0.974
	Roy's Largest Root	37.845	567.676[b]	2.000	30.000	0.000	0.974

a. Design: Intercept
Within Subjects Design: time + variables + time * variables

b. Exact statistic

The multivariate analysis for the "time * variables" interaction effect shows highly significant results across all test

statistics (Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root). Specifically, the significance value (Sig.) is 0.000, which is less than 0.05, leading to the rejection of the null hypothesis. Furthermore, the Partial Eta Squared value of 0.974 indicates a massive effect size. This conclusively proves that the Digital Storytelling method has a highly significant simultaneous effect on improving students' motivation, speaking skills, and learning autonomy collectively.

B. Discussion

The research findings demonstrate that Digital Storytelling (DST) significantly enhances students' motivation at SMPN 1 Bukittinggi, as evidenced by a dramatic shift in post-test scores and a highly significant Wilcoxon Signed Ranks Test result ($p < 0.05$). This improvement aligns with Self-Determination Theory and Dörnyei’s motivational framework, indicating that DST fosters intrinsic motivation by allowing students to express creativity and share personal experiences. Elements such as "Point of View," "Emotional Content," and the "Gift of Your Voice" transform learners into active co-producers, reducing anxiety and creating a genuine desire to participate, which corroborates previous studies highlighting DST's positive impact on EFL learners' engagement and intrinsic drive.

Similarly, DST exerted a highly significant effect on students' speaking skills, with experimental students surging into higher proficiency brackets while the control group remained stagnant. Theoretically, this

supports the view of speaking as an interactive meaning-construction process. The DST voiceover recording process functions as a rigorous, low-anxiety speaking drill, enabling students to self-monitor and refine their pronunciation, fluency, and accuracy through multiple takes. By synchronizing narration with visual elements and adhering to the "Economy" of storytelling, students master pacing and inflection, validating prior research that confirms DST's efficacy in overcoming psychological barriers and significantly improving oral proficiency.

Furthermore, the study revealed a profound and significant improvement in students' learning autonomy, with the experimental class completely vacating the lowest score brackets to achieve high levels of self-directed learning. This aligns with Holec's and Little's conceptualizations of autonomy, as the DST process inherently requires students to take charge of their learning across pre-production, production, and post-production phases. By navigating digital tools, making creative decisions, and engaging in self-evaluation, students develop the agency, competence, and self-efficacy necessary for digital learner autonomy, preparing them with the metacognitive awareness essential for lifelong learning in a rapidly evolving digital economy.

Crucially, the Multivariate Tests revealed an exceptionally large simultaneous effect of DST on all three variables, with a Partial Eta Squared of 0.974, meaning 97.4% of the variance is attributed to the intervention. This holistic transformation occurs because motivation, speaking skill, and

autonomy operate in a synergistic feedback loop within the DST framework. As meaningful tasks boost intrinsic motivation, students invest more effort into speaking practice; improved speaking skills build confidence and competence, which in turn fosters greater autonomy and further enhances motivation. This multimodal approach effectively lowers Krashen's "affective filter," creating optimal conditions for comprehensive language acquisition.

These comprehensive outcomes provide strong empirical support for Communicative Language Teaching (CLT) as the underlying theoretical framework for DST implementation. CLT emphasizes using the target language for authentic, real-world communication rather than isolated grammatical drills. By creating personal digital stories, students engage in genuine communicative acts that bridge the gap between classroom learning and actual language use. The integration of authentic materials and real-world contexts not only develops pragmatic competence but also ensures that the focus remains on conveying personal meaning, thereby fulfilling CLT's core objective of developing holistic communicative competence.

The successful operationalization of CLT through DST also necessitates a fundamental redefinition of teacher and learner roles. Teachers transition from being the sole directors of knowledge to facilitators and co-communicators, while students assume full responsibility for their learning trajectories. This learner-centered environment naturally balances fluency and accuracy; students practice repeatedly for linguistic precision without sacrificing the communicative flow of their personal narratives.

Consequently, DST not only improves immediate language skills but also cultivates the independent, self-directed mindset required to navigate the "digital wilds" of informal learning spaces.

In conclusion, the significant and simultaneous effects of Digital Storytelling on motivation, speaking skills, and learning autonomy demonstrate its value as a transformative pedagogical modality in the Indonesian EFL context. By seamlessly integrating authentic, meaning-focused, and learner-centered tasks, DST successfully operationalizes the core principles of Communicative Language Teaching. Ultimately, this approach does more than enhance isolated linguistic abilities; it fosters a holistic transformation that empowers students with the communicative competence, intrinsic drive, and autonomous capacity necessary for continuous, lifelong language learning.

CHAPTER V

CONCLUSION AND SUGGESTION

A. Conclusion

Based on the findings of the research, the first research question regarding the effect of Digital Storytelling (DST) on students' motivation is answered affirmatively. The statistical analysis using the Wilcoxon Signed Ranks Test yielded a Z-value of -5.387 with a significance value of 0.000 ($p < 0.05$), indicating a highly significant effect. The post-test results demonstrated a dramatic upward shift in the experimental class, where students moved from lower motivation score ranges to significantly higher brackets, while the control class remained stagnant. This confirms that DST serves as a powerful motivational tool by providing meaningful, personalized tasks that connect to students' lives, thereby fostering intrinsic motivation and reducing language learning anxiety.

Regarding the second research question, the research concludes that there is a significant effect of Digital Storytelling on students' speaking skills. The Wilcoxon Signed Ranks Test produced a Z-value of -4.947 with a significance value of 0.000 ($p < 0.05$), leading to the rejection of the null hypothesis. The data revealed a remarkable transformation in the experimental group, as students completely vacated the lower proficiency brackets and surged into the higher score ranges (11-14.99) post-treatment. This significant improvement is attributed to the iterative voiceover recording process and the multimodal nature of DST, which allowed students to self-monitor, practice

fluency and pronunciation in a low-anxiety environment, and ultimately achieve higher oral proficiency.

In response to the third research question, the findings confirm that there is a significant effect of Digital Storytelling on students' learning autonomy. The Wilcoxon Signed Ranks Test resulted in a Z-value of -5.386 with a significance value of 0.000 ($p < 0.05$). The post-test data showed a profound shift in the experimental class, with the majority of students clustering in the higher autonomy score ranges (144-173) and zero students remaining in the lowest bracket. This indicates that DST successfully transforms students from passive recipients into active co-producers of knowledge, fostering self-directed learning, independent decision-making, and technological competence as they navigate the pre-production, production, and post-production phases of their digital stories.

Finally, addressing the fourth research question, the research concludes that there is a highly significant simultaneous effect of Digital Storytelling on students' motivation, speaking skills, and learning autonomy. The Multivariate Tests (Repeated Measures MANOVA) revealed that the interaction effect of time and variables yielded a significance value of 0.000 ($p < 0.05$) with an exceptionally large effect size (Partial Eta Squared = 0.974). This demonstrates that DST does not merely improve isolated variables but creates a holistic, synergistic transformation in students' language learning capabilities. Within a Communicative Language Teaching framework, the intrinsic motivation generated by DST drives the effort to improve speaking skills, which in turn

builds the confidence and competence necessary for greater learning autonomy, creating a positive and comprehensive feedback loop.

B. Suggestion

1. English Teacher

For English teachers, it is highly recommended to integrate Digital Storytelling into the regular curriculum as a core communicative language teaching strategy. Teachers should transition from being the sole source of knowledge to acting as facilitators, providing adequate scaffolding during the pre-production phase (such as brainstorming and scriptwriting) and offering technical guidance during the production phase. To maximize the benefits of DST, teachers should ensure that the storytelling topics are personally relevant and culturally engaging for the students, thereby naturally stimulating intrinsic motivation and encouraging active, autonomous participation in the learning process.

2. Students

For students, it is suggested to actively embrace Digital Storytelling not merely as a technological assignment, but as a valuable opportunity to take ownership of their English language learning. Students should fully utilize the iterative nature of the voiceover recording process to self-monitor and self-correct their pronunciation, grammar, and fluency without the fear of immediate peer judgment. Furthermore, students are encouraged to leverage the autonomy granted by this method to

independently explore digital resources, collaborate effectively with their peers, and engage in deep reflection on their own progress, thereby cultivating the self-directed learning habits necessary for lifelong language acquisition.

3. Next Researcher

For next researchers, it is recommended to expand the scope of this study by employing a larger sample size or a longitudinal research design to observe the long-term retention of speaking skills and autonomous behaviors after the intervention has ended. Future studies could also explore the integration of emerging educational technologies, such as Artificial Intelligence (AI) tools or virtual reality, within the DST framework to further enhance student engagement and personalize the learning experience. Additionally, investigating the impact of Digital Storytelling on other language skills, such as writing or reading comprehension, or applying it in different educational contexts and age groups, would provide valuable insights into the broader versatility and effectiveness of this pedagogical approach.

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