THE EFFECT OF INTEGRATION OF ENGLISH LEARNING AND CHARACTER BUILDING-BASED ARTIFICIAL INTELLIGENCE (AI) ON STUDENT LEARNING **OUTCOMES**



a Master's Degree in English Language Education (M.Pd) at Postgraduate of IAIN Parepare

THESIS

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PEDOMAN TRANSLITERASI ARAB - LATIN

1. Konsonan

Daftar huruf bahasa Arab dan transliterasinya ke dalam huruf Latin dapat dilihat pada halaman berikut:

Huruf Arab	Nama	Huruf Latin	Nama	
1	Alif	tidak dilambangkan	tidak dilambangkan	
ب	Ba	В	Be	
ت	Ta	T	Te	
ث	s∖a	s\	es (dengan titik di atas)	
7	Jim	J	Je	
7	h}a	h}	ha (dengan titik di bawah)	
خ	Kha	Kh	ka dan ha	
د	Dal	D	De	
ذ	z∖al	z\	zet (dengan titik di atas)	
ر	Ra	R	Er	
ز	Zai	Z	Zet	
س	Sin	S	Es	
ىش	Syin	Sy	es dan ye	
ص	s}ad	<u>s}</u>	es (dengan titik di bawah)	
ض	d}ad	d}	de (dengan titik di bawah)	
ض ط ظ	t}a	t}	te (dengan titik di bawah)	
ظ	z}a	z}	zet (dengan titik di bawah)	
۶	'ain	,	apostrof terbalik	
غ غ	Gain	G	Ge	
ف	Fa	F	Ef	
ق	Qaf	Q	Qi	
ع	Kaf	K	Ka	
J	Lam	ABLBAR	El	
م	Mim	M	Em	
ن	Nun	N	En	
و	Wau	W	We	
ھ	На	Н	На	
۶	Hamzah	,	Apostrof	
ی	Ya	Y	Ye	

Hamzah (*) yang terletak di awal kata mengikuti vokalnya tanpa diberi tanda apa pun. Jika ia terletak di tengah atau di akhir, maka ditulis dengan tanda (').

2. Vokal

Vokal bahasa Arab, seperti vokal bahasa Indonesia, terdiri atas vokal tunggal atau monoftong dan vokal rangkap atau diftong.

Vokal tunggal bahasa Arab yang lambangnya berupa tanda atau harakat, transliterasinya sebagai berikut:

Tanda	Nama	Huruf Latin	Nama
ĺ	fath}ah	a	a
١	kasrah	i	i
8	d}ammah	u	u

Vokal rangkap bahasa Arab yang lambangnya berupa gabungan antara harakat dan huruf, transliterasinya berupa gabungan huruf, yaitu:

Tanda	Nama Huruf Latin		Nama
ٞؽ	fath}ah dan	ai	a dan i
َـُو	fath}ah dan wau	au	a dan u

Contoh:

: kaifa

haula: هَوْ لَ

3. Maddah

Maddah atau vokal panjang yang lambangnya berupa harakat dan huruf, transliterasinya berupa huruf dan tanda, yaitu:

Harakat dan	Nama	Huruf dan	Nama
Huruf		Tanda	
ا ا	fath}ah dan alif atau	a>	a dan garis di atas
رحي	kasrah dan ya>'	i>	i dan garis di atas
' و	d}ammah dan wau	u>	u dan garis di atas

: ma>ta

: rama>

: qi>la

: yamu>tu

4. Ta marbu>t}ah

Transliterasi untuk $ta > 'marbu > t \}ah$ ada dua, yaitu: $ta > 'marbu > t \}ah$ yang hidup atau mendapat harakat $fath \}ah$, kasrah, dan $d \}ammah$, transliterasinya adalah [t]. Sedangkan $ta > 'marbu > t \}ah$ yang mati atau mendapat harakat sukun, transliterasinya adalah [h]. Kalau pada kata yang berakhir dengan $ta > 'marbu > t \}ah$ diikuti oleh kata yang menggunakan kata sandang al- serta bacaan kedua kata itu

terpisah, maka ta > 'marbu > t} ah itu ditransliterasikan dengan ha (h).

Contoh:

ي : raud} ah al-at}fa>l

al-h}ikmah: ٱلْحِكْمَةُ

5. Syaddah (Tasydi>d)

Syaddah atau tasydi>d yang dalam sistem tulisan Arab dilambangkan dengan sebuah tanda $ta \sim di>d$ ($\vec{-}$), dalam transliterasi ini dilambangkan dengan perulangan huruf (konsonan ganda) yang diberi tanda syaddah.

Contoh:

: rabbana زَبَّنا

<najjaina> نَجّيْناَ

: al-h}aqq : nu"ima : 'عُمِّمَ عُدُوُّ

Contoh:

: 'Ali> (bukan *'Aliyy* atau *'Aly*) عَلِيُّ : 'Arabi> (bu<mark>kan *'Arabiyy* atau *'Arab*y)</mark>

6. Kata Sandang

Kata sandang dalam sistem tulisan Arab dilambangkan dengan huruf (alif lam ma'arifah). Dalam pedoman transliterasi ini, kata sandang ditransliterasi seperti biasa, al-, baik ketika ia diikuti oleh huruf syamsiyah maupun huruf qamariyah. Kata sandang tidak mengikuti bunyi huruf langsung yang mengikutinya. Kata sandang ditulis terpisah dari kata yang mengikutinya dan dihubungkan dengan garis mendatar (-).

Contoh:

: al-syamsu (bukan asy-syamsu)

: al-zalzalah (az-zalzalah) الزُّلازَكة

: al-falsafah : al-bila>du تَابُلاَدُ

7. Hamzah

Aturan transliterasi huruf hamzah menjadi apostrof (') hanya berlaku bagi hamzah yang terletak di tengah dan akhir kata. Namun, bila hamzah terletak di awal kata, ia tidak dilambangkan, karena dalam tulisan Arab ia berupa alif.

Contoh:

: ta'muru>na

: al-nau : : syai 'un : : umirtu : أُمِرْتُ

8. Penulisan Kata Arab yang Lazim digunakan dalam Bahasa Indonesia

Kata, istilah atau kalimat Arab yang ditransliterasi adalah kata, istilah atau kalimat yang belum dibakukan dalam bahasa Indonesia. Kata, istilah atau kalimat yang sudah lazim dan menjadi bagian dari perbendaharaan bahasa Indonesia, atau sering ditulis dalam tulisan bahasa Indonesia, atau lazim digunakan dalam dunia akademik tertentu, tidak lagi ditulis menurut cara transliterasi di atas. Misalnya, kata al-Qur'an (dari *al-Qur'a>n*), alhamdulillah, dan munaqasyah. Namun, bila kata-kata tersebut menjadi bagian dari satu rangkaian teks Arab, maka harus ditransliterasi secara utuh. Contoh:

Fi> Z{ila>l al-Qur'a>n Al-Sunnah qabl al-tadwi>n

9. Lafz} al-Jala>lah (الله)

Kata "Allah" yang didahului partikel seperti huruf *jarr* dan huruf lainnya atau berkedudukan sebagai *mud]a>f ilaih* (frasa nominal), ditransliterasi tanpa huruf hamzah.

Contoh:

بالله billa>h بالله billa>h

Adapun ta > 'marbu > t ah di akhir kata yang disandarkan kepada lafz al-jala > lah, ditransliterasi dengan huruf [t]. Contoh:

hum fi> rah}matilla>h هُمْ فِيْ رَحْمَةِ اللهِ

10. Huruf Kapital

Walau sistem tulisan Arab tidak mengenal huruf kapital (*All Caps*), dalam transliterasinya huruf-huruf tersebut dikenai ketentuan tentang penggunaan huruf kapital berdasarkan pedoman ejaan Bahasa Indonesia yang berlaku (EYD). Huruf kapital, misalnya, digunakan untuk menuliskan huruf awal nama diri (orang, tempat, bulan) dan huruf pertama pada permulaan kalimat. Bila nama diri didahului oleh kata sandang (al-), maka yang ditulis dengan huruf kapital tetap huruf awal nama diri tersebut, bukan huruf awal kata sandangnya. Jika terletak pada awal

kalimat, maka huruf A dari kata sandang tersebut menggunakan huruf kapital (Al-). Ketentuan yang sama juga berlaku untuk huruf awal dari judul referensi yang didahului oleh kata sandang al-, baik ketika ia ditulis dalam teks maupun dalam catatan rujukan (CK, DP, CDK, dan DR). Contoh:

Wa ma> Muh}ammadun illa> rasu>l

Inna awwala baitin wud}i'a linna>si lallaz\i> bi Bakkata muba>rakan

Syahru Ramad}a>n al-laz\i> unzila fi>h al-Qur'a>n

Nas}i>r al-Di>n al-T{u>si>

Abu>> Nas }r al-Fara>bi>

Al-Gaza>li>

Al-Munqiz\ min al-D}ala>l

Jika nama resmi seseorang menggunakan kata Ibnu (anak dari) dan Abu> (bapak dari) sebagai nama kedua terakhirnya, maka kedua nama terakhir itu harus disebutkan sebagai nama akhir dalam daftar pustaka atau daftar referensi. Contoh:

Abu> al-Wali>d Muh}ammad ibn Rusyd, ditulis menjadi: Ibnu Rusyd, Abu> al-Wali>d Muh}ammad (bukan: Rusyd, Abu> al-Wali>d Muh}ammad Ibnu)

Nas}r H{a>mid Abu> Zai>d, ditulis menjadi: Abu> Zai>d, Nas}r H{a>mid (bukan: Zai>d, Nas}r H{ami>d Abu>)

a.s. = 'alaihi a<mark>l-s</mark>ala>m

H = Hijrah

M = Masehi

SM = Sebelum Masehi

1. = Lahir tahun (untuk orang yang masih hidup saja)

w. = Wafat tahun

QS .../...: 4 = QS al-Baqarah/2: 4 atau QS An/3: 4

HR = Hadis Riwaya

ABSTRACT

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Judul Thesis : The Effect of Integration of English Learning and Character

Building based Artificial Intelligence (AI) on Student Learning

Outcomes

This study aims to examine the effectiveness of integrating artificial intelligence (AI)-based English learning to students' character development, particularly in narrative text writing. AI tools such as Grammarly, QuillBot, and ProWritingAid are used to support this learning process. The research focuses on analyzing the effect of integration of English learning and character building on students' academic achievement and character building of responsibility, creativity, and confidence.

The study used a quasi-experimental design involving two groups, namely experimental and control. The experimental group received AI tools-based learning for six sessions, with each tool being used in turn to improve students' narrative texts. Data was collected through tests to evaluate students' writing skills, and observation sheets to monitor students' interactions during learning, and to measure character development. Data was analyzed using paired T-Test and independent T-Test techniques to compare the results between experimental and control groups.

The results showed that the use of AI tools had a significant or positive impact on students' character development, especially in the aspects of responsibility, creativity, and self-confidence, based on observation data. However, the impact on academic achievement was not significant or negative within the limited duration of the study. This finding confirms that the integration of AI-based technology can effectively support character learning, although optimization for academic improvement requires time and a more comprehensive strategy. The integration of technology with appropriate pedagogical approaches provides opportunities for holistic language learning.

Keywords: English Learning, Artificial Intelligence (AI) Tools, Student Achievement, Student Character.

ABSTRAK

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Judul Thesis: The effect of Integration of English Learning and Character

Building-based Artificial Intelligence (AI) on Student Learning

Outcomes

Penelitian ini bertujuan untuk mengevaluasi efektivitas integrasi pembelajaran bahasa Inggris berbasis kecerdasan buatan (AI) dengan pengembangan karakter siswa, khususnya dalam kemampuan menulis teks naratif. AI tools seperti Grammarly, Quillbot, dan ProWritingAid digunakan untuk mendukung proses pembelajaran ini. Fokus penelitian adalah menganalisis dampak integrasi pembelajaran bahasa Inggris dan pengembangan karakter terhadap pencapaian akademik siswa dan pembentukan karakter tanggung jawab, kreativitas, serta kepercayaan diri.

Penelitian menggunakan desain quasi-eksperimen dengan melibatkan dua kelompok, yaitu eksperimen dan kontrol. Kelompok eksperimen menerima pembelajaran berbasis AI tools selama enam sesi, dengan masing-masing alat digunakan secara bergantian untuk memperbaiki teks naratif siswa. Data dikumpulkan melalui tes untuk mengevaluasi kemampuan menulis siswa, dan lembar observasi untuk memantau interaksi siswa selama pembelajaran dan mengukur karakter siswa. Analisis data dilakukan menggunakan teknik paired Ttest dan independent T-test untuk membandingkan hasil antara kelompok eksperimen dan kontrol.

Hasil penelitian menunjukkan bahwa penggunaan AI tools memberikan dampak signifikan atau positif terhadap pengembangan karakter siswa, khususnya pada aspek tanggung jawab, kreativitas, dan kepercayaan diri, berdasarkan data angket dan observasi. Namun, dampaknya terhadap pencapaian akademik tidak signifikan atau negatif dalam durasi penelitian yang terbatas. Temuan ini menegaskan bahwa integrasi teknologi berbasis AI dapat mendukung pembelajaran karakter secara efektif, meskipun optimalisasi untuk peningkatan akademik memerlukan waktu dan strategi yang lebih komprehensif. Integrasi teknologi dengan pendekatan pedagogis yang tepat memberikan peluang untuk pembelajaran bahasa yang holistik.

Kata kunci: English Learning, Artificial Intelligence (AI) Tools, Student Achievement, Student Character.

CHAPTER I

INTRODUCTION

A. Background

Education must adapt to the various changes in the era of globalization and rapid technological development. One of the emerging innovations is the use of artificial intelligence (AI) in the learning process. AI offers various tools and methods that can improve learning effectiveness, especially in English language acquisition and student character building.

As an international language, English plays an important role in global communication. Mastery of this language is considered a skill, and a part of the competencies needed to compete in the world of work. Therefore, integrating English learning with AI technology-based approaches can help students understand the language more effectively and interactively.¹

On the other hand, character education is also a major focus in the education curriculum in many countries. Character education aims to shape students' personalities and morals so that they are not only academically intelligent but also have good integrity and ethics. Using AI in character education can create a more supportive learning environment where students can practice and apply character values in a more real context.

Further away, the use of AI in English teaching also has some challenges.

One of the main challenges is how AI can help students build better character.

¹ Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F., Systematic Review of Research on Artificial Intelligence in Higher Education: A review of the literature. *International Journal of Educational Technology in Higher Education*, 2019, 16(1), 39.

Character is an important part of education, as students with good character will be better able to interact with others and build better relationships.

The problem of using AI-based technology in education is important and urgently to find a solution immediately.² Based on several studies that discuss the dangers of AI-based technology, it was found that the use of AI technology in education shows at least three dangers.³ First, the use of AI technology in the world has the potential to threaten the sustainability of character education. Education is one of the most important investments for the future of mankind. One aspect that is built through education is the character of the learners. Good character values such as honesty, religiosity, justice, and self-confidence, in addition to Pancasila values, can be threatened because of the rampant use of AI technology in the world of education. The second danger is that the use of AI-based technology in education has the potential to dilute academic ethics such as honesty, academic integrity, and originality. AI-based services such as ChatGPT have been proven to be able to provide convenience to students in completing various learning tasks. Starting from simple tasks to complex tasks, the effectiveness and efficiency offered by this AIbased technology are certainly very tempting for anyone who uses it.⁴ The values of honesty, integrity, and originality can be defeated. By the value of effectiveness and efficiency offered by this AI-based service. Third, the danger of using AI-based

² Humble, N., & Mozelius, P., *The Threat, Hype, and Promise of Artificial Intelligence in Education. Discover Artificial Intelligence*, 2022, Accessed October 22, 2023, available on https://doi.org/10.1007/s44163-022-00039-z

³ UNESCO, *Artificial Intelligence: The Promises and the Threats.* UNESCO Courier: September 3, 2018, Accessed October 22, 2023.

⁴ Lund, B. D., & Wang, T., Chatting about ChatGPT: How May AI and GPT Impact Academia and Libraries? In Library Hi Tech News: September 2023. Accessed October 22, 2023, Available on https://doi.org/10.1108/LHTN

technology in education is the potential to turn off human or student creativity and critical thinking skills. Human interaction and AI technology, which are not accompanied by awareness of human autonomy, are feared to kill the creativity and critical thinking abilities of students. When faced with complex problems that require long problem-solving, it is feared that students will lose their learning motivation.⁵

Previous studies have shown that the use of AI in English teaching can improve students' motivation and proficiency in English. However, it is still unclear how AI can help students build better character. Therefore, analyzing the integration of English teaching and character building in AI-based learning is very important.

On the other hand, students' character building is also an important focus in education. Education not only aims to improve knowledge and skills but also to form individuals with integrity, responsibility, and strong moral values. The integration of English learning and character building can be an effective synergy to prepare students to be globally competitive individuals while having a good personality.

AI-based learning has the potential to facilitate the integration between English learning and character building. AI technology can be used to create an adaptive, personalized, and interactive learning environment, thus increasing student motivation and engagement. In addition, AI can also be used to analyze and

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⁵ Algabri, H. K., Kharade, K. G., & Kamat, R. K., *Promise, Threats, And Personalization in Higher Education with Artificial Intelligence.* Webology: 2021, P 18.

monitor student development, both in terms of academics and character, allowing for appropriate and timely interventions.

The Indonesian government has just made great changes in its national curriculum. One of its changes is the emphasis on character building. For Indonesian teachers, this new policy is quite a challenge. In the previous curriculum, character building was treated as a hidden curriculum and not explicitly part of the scoring system. The new curriculum explicitly states the characteristics that teachers must develop. Finding the basis to perform the teaching process to achieve the improvement of language knowledge, skills, and characters is indeed needed⁶.

Curriculum Centre Ministry of Education stated that 18 values of character education are implemented in each field of study such as; 1) Religious, 2) Honest, 3) Tolerance, 4) Discipline, 5) Hard Work, 6) Creative, 7) Independent, 8) Democratic, 9) Curiosity, 10) the Spirit of Nationality, 11) Love Homeland, 12) Rewarding Achievement, 13) Communicative, 14) Love Peace, 15) Joy of Reading, 16) Environmental Concern, 17) Social Concern, 18) Responsibility⁷.

The reason why character building should be integrated into education is that education has a purpose: to increase someone's intelligence and change human personality to have good attitudes and morals. Increasing someone's intelligence without paying attention to their character will certainly reduce the moral quality of students. That is why building students' character is also the best way to increase

⁷ Hartono, *Character Education in Curriculum 2013*, (NTB: Jnana Budaya Volume 19, Nomor 2, Agustus 2014), p. 259 – 268.

⁶ Nanik Retnowati, Integrating Character Building into English Teaching and Learning Practice in Indonesian Classroom, *Bogor: English Journal Vol. 14, No. 1; March 2020*, p. 24-35.

good moral values, so they have better personalities. Also, knowledge and character have become a unit that can increase the academic achievement of students. Knowledge, skills, and character are some of the elements in character building needed to improve student academic achievement⁸.

Character is a complex quality of ethical and mental (positive/negative) of which one forms oneself in thinking, behaving, and acting. So, the one who learns and teaches the language, the development of a good character for his/her activities, is very needed to get qualified in language learning and teaching. Based on the analysis from various references or articles, indicated that the development of the characters is included in the educational system and the domination of all countries over the world with different quality levels of application. Indonesian particularly has still been putting the "character building term" in its education vision since 2004. Furthermore, discussion and materials development of character building in language learning and teaching is still open and relevant to be done effectively such as patience, diligently, and consistency of educators and learners in implementing and assessing the character development in language learning and teaching. Positive characters include numerous traits, among which are perseverance, interpersonal communication, tolerance, emotional control, optimism, and positive thoughts. The

⁸ Aunurrahman, Fuad Abdul Hamied, and Emi Emilia, Facilitating Character Building through an Academic Writing Practice, *Arab World English Journal (AWEJ)*, Volume.7 Number, 3. September 2016. p.146 -160.

⁹ Erwin Pohan, Abdul Malik, *Implementing of Character Values in English Language Learning and Teaching*, (SEEDs: Conference Series Faculty of Teacher Training and Education Sebelas Maret University, Volume 2 Issue 1 June 2018 eISSN: 2615-4382), p. 22.

six pillars of character are trustworthiness, respect, responsibility, fairness, caring, and citizenship¹⁰.

English learning and character building in AI-based learning have significant potential to revolutionize language education. AI-powered tools can enhance language learning engagement through gamified applications, making the learning process enjoyable and immersive. These tools create a state of flow, motivating learners to stay engaged in their learning projects and language development. Additionally, AI-powered machine translation tools facilitate access to vast language resources, breaking down language barriers and providing exposure to authentic English materials, including research papers, articles, and multimedia content¹¹.

English language learning and character building in AI-based learning have significant potential to revolutionize language education. AI-powered tools can increase language learning engagement, provide personalized learning experiences, and facilitate character building. Therefore, based on the problems described above, the author is interested in conducting research with the title of the effect of integration of English learning and character-building-based artificial intelligence (AI) on student learning outcomes.

¹¹ Erna Iftanti, Arfinda Syifaa Awalin, and Fatma Nuril Izza, The Use of Artificial Intelligence as the Potential Supporting Learning Tools for Doing Learning Projects, *IAIN Kediri: ICOE*, Volume 1, 2023, p. 457.

¹⁰ Aunurrahman, Fuad Abdul Hamied, and Emi Emilia, Facilitating Character Building through an Academic Writing Practice, *Arab World English Journal (AWEJ)*, Volume.7 Number, 3. September 2016. p.146 -160.

B. Research Questions

Based on the identification of the background above, the author formulates several research questions as follows:

- 1. Is the integration of English learning and character-building-based artificial intelligence (AI) effective to improve student English achievements?
- 2. Is the integration of English learning and character-building-based artificial intelligence effective to build student English characters?

C. Research Objectives

Based on the problems formulated in this study, this research has the following objectives:

- 1. To examine the effect of integration of English learning and character-building-based artificial intelligence on student English achievements.
- 2. To examine the effect of integration of English learning and character-building-based artificial intelligence on student English characters.

D. Research Significance

This research is expected to give contributions of both theoretical and practical significance as follows:

1. Theoretical significance

a. Learning Theory Development: This research can enrich the understanding of how the integration of AI in English language learning and character education can affect student learning outcomes. It contributes to the existing educational literature, especially in the context of using technology in learning.

- b. New Learning Models: This research can develop a learning model that combines language and character learning, which can serve as a reference for future education research.
- c. Contribution to Character Education: The results can provide new insights into the importance of character education in the context of language learning, strengthening existing theories on character education.

2. Practical significance

- a. Innovation in Teaching Methods: The results of this study can provide an overview of new ways to integrate AI in English language teaching and character education, which can be implemented by teachers in the classroom.
- b. Improved Student Learning Outcomes: By understanding the effects of this integration, educators can design more effective strategies to improve student motivation and learning outcomes in English.
- c. Improved Character Skills: This research can assist schools in developing better programs for character education so that students are not only skilled in language but also have positive values that support their personal and social development.
- d. Guidance for Education Policy: The research findings can serve as a basis for policymakers to formulate better education policies that support the integration of technology in the learning process.

E. Research Scopes

In this research, the author determines the limitations in the implementation of the research, as follows:

- Student achievements: In this study, student achievement is focused on writing skills.
- 2. Student character: in this study, the characters studied are responsibility, creativity, and self-confidence.
- 3. AI integration: The AIs used in the study were Grammarly, QuillBot, and ProWritingAid.
- 4. The material in the research treatment is narrative text.
- 5. Students Learning Outcomes: in this study, the student learning outcomes are student achievement and student character.
- 6. Limited time: Learning was only conducted in 6 meetings, so long-term effects could not be measured.
- 7. External factors: Variables such as family environment that may affect learning outcomes were not fully controlled.

CHAPTER II

THEORETICAL REVIEW

A. Some Previous Related Findings

In research on character development through English language education, several studies show diverse but complementary approaches. For example, Imroatul Hasanah¹², Epafras Elbes and Lulud Oktaviani¹³ used the Research and Development method to create materials integrating character learning with English skill improvement. Their results showed that the materials successfully improved students' language skills while developing character traits such as respect and self-confidence. This approach reflects the importance of linking language teaching with essential character values.

In addition, Nanik Retnowati¹⁴, and Nur Azizah et. al.,¹⁵ applied descriptive qualitative methods and action research to explore the integration of character education in classroom English teaching practices. They found that teaching that emphasizes context as well as character development not only improves students' academic performance but also contributes to the formation of strong moral and ethical values. This suggests that a comprehensive pedagogical approach can create a better learning environment for students.

¹² Hasanah, Imroatul, Developing English Materials for Character Building Based on 2013 Curriculum for Eighth Grade Students. *IJOLTL* (2016),1(2): P. 111-126.

¹³ Elbes, E., & Oktaviani, L., Character Building in English for Daily Conversation Class Materials for English Education Freshmen Students. *Journal of English Language Teaching and Learning*, 2022, 3(1), P. 36-45.

¹⁴ Retnowati, Nanik, Integrating Character Building into English Teaching and Learning Practice in Indonesian Classroom, *English Journal*, Vol. 14, No. 1; March 2020, pp. 24-35.

¹⁵ Nur Azizah, et al, The Implementation of Contextual Teaching and Learning in Student Character Building, *Jurnal Ilmiah Lingua Idea*, Vol. 15, No. 1, June 2024, pp. 83-95. DOI: https://doi.org/10.20884/1.jli.2024.15.1.8162.

Furthermore, Hendra Heriansyah¹⁶, and Fitra Delita¹⁷ emphasized the complexity and significance of character education in shaping students' values and behavior. They used the R&D method to develop educational tools that not only focus on language skills but also on character education.

Then, Aunurahman et al¹⁸., Fatchul Mu'in¹⁹, and Frimadhona Syafri²⁰ all examined the integration of character education in English teaching with a qualitative approach. Aunurahman focuses on academic writing practices that can facilitate character-building among university students, showing that through a genre-based approach, students can improve writing skills while developing character. Meanwhile, Fatchul Mu'in explores the use of literary works as media in language teaching, which not only improves language skills but also builds character values. Frimadhona Syafri examined the use of the Storyline approach in foreign language learning, which proved effective in improving students' language learning and character. Overall, the findings of these three studies show that English language teaching integrated with character education can have a positive impact on the development of linguistic skills and the formation of moral values among students.

¹⁶ Heriansyah, Hendra, *The Importance of Character Education: The English Teacher's Efforts and Challenges in Students' Character Building*, Department of English Education, Syiah Kuala University, 2018.

¹⁷ Fitra, D., Enhancing English Competencies and Character Building through a Bilingual Book, *Advances in Social Science, Education and Humanities Research (ASSEHR)*, volume 208, 2018.

¹⁸ Aunurrahman, et., al., Facilitating Character Building through an Academic Writing Practice, *Arab World English Journal (AWEJ)*, Volume.7 Number, 3. September 2016, Pp.146 -160.

¹⁹ Mu'in, F., Developing Language Skills and Building Characters through Literature. *Arab World English Journal for Translation & Literary Studies*, 5 (1), 2021, P. 225-233. DOI: http://dx.doi.org/10.24093/awejtls/vol5no1.16

²⁰ Syafri, P., Storyline Approach as Enhancement of Learning Foreign Language and Character Building at Elementary School, ELTL Conference Proceedings.

Subsequently, several studies have explored the impact of AI tools on students' writing skills and character development. For instance, Chen et al.²¹ highlighted that using Grammarly significantly improves students' grammar and vocabulary, resulting in writing with fewer grammatical errors and a better understanding of sentence structure. Similarly, Hamed²² found that AI-based paraphrasing tools like QuillBot enhance vocabulary development and creativity, allowing students to express their ideas in varied ways without losing the original meaning. Zhou and Wang²³ further supported this by demonstrating that such tools encourage students to experiment with language, fostering both language skills and creative thinking. Bhatia's²⁴ research also indicated that regular use of AI tools cultivates a sense of responsibility among students, as they become more conscientious in correcting their writing mistakes.

In another study on writing skills, the integration of AI in English education has positively influenced students' character development. Gonzalez and Martin's²⁵ study on ProWritingAid revealed that the tool checks grammar and enhances the coherence and flow of writing, contributing to more cohesive text. Wang's²⁶ research reinforces this notion, finding that students who engage with AI tools

²¹ Chen, Y., et al. "The Impact of Grammarly on EFL Students' Writing Proficiency." *Journal of Educational Technology & Society*. 2021.

²² Hamed, M., "Using Paraphrasing Tools to Enhance Vocabulary and Writing Creativity Among ESL Learners." *Journal of Language and Education Research*. 2020.

²³ Zhou, X., & Wang, S., "Creative Writing with AI: Empowering Students to Think Outside the Box." *Language Learning & Technology*. 2020.

²⁴ Bhatia, P., "Building Responsibility Among Students Through AI Writing Tools." *Journal of Digital Education*. 2021.

²⁵ Gonzalez, R., & Martin, L., "Using ProWritingAid to Enhance Writing Coherence: An Experimental Study." *TESOL Quarterly*. 2021.

²⁶ Wang, H., "Artificial Intelligence in Education: Developing Skills and Character." *Journal of Educational Research*. 2019.

exhibit greater independence, confidence, and creativity. These findings collectively underscore the potential of AI technologies to not only enhance academic skills but also develop essential character traits, suggesting that when applied effectively, technology can be a powerful catalyst for holistic student development.

Finally, some studies, such as those conducted by Arita Marini²⁷, and Silvia Ade Yusfika²⁸, show that the use of multimedia tools, such as animated videos, in English language teaching can also enhance character learning. The results of these studies show that the use of technology in education can enrich students' learning experiences, both in terms of language skills and in positive character development. Overall, these studies confirm that character education and English language learning can go hand in hand, resulting in more academically and morally prepared students.

Overall, the above research findings support the premise that the integration of AI-assisted English learning not only helps to improve students' writing skills but also plays an important role in character development such as responsibility, creativity, and confidence. This research will seek to confirm these results in a more specific context, focusing on the use of Grammarly, QuillBot, and ProWritingAid as tools for learning narrative writing in the classroom.

²⁷ Marini, A., Character Building Through Teaching Learning Process: Lesson in Indonesia, *International Journal of Sciences and Research*, Vol. 73 | No. 5 | May 2017.

²⁸ Yusfika, S., A., Effective English Learning and Character Education for Young Learners through Animated Video of Indonesian Folklore, *COMSERVA: Jurnal Penelitian dan Pengabdian Masyarakat*, Volume 1 No. 8 Desember 2021 (496-503). DOI: 10.36418/comserva. v1i8.311.

B. Pertinent Ideas

The following is an explanation of the points in this study:

1. Integrated Learning

Integrated learning is an educational approach that combines various disciplines, skills, and experiences in one cohesive learning process. This approach is designed to help students link knowledge gained from different sources and contexts so that they can develop a deeper and more holistic understanding²⁹.

a. Objectives of Integrated Learning

- 1) Increase Knowledge Connectedness: Allowing students to see connections between different disciplines, for example, how science concepts can be applied in the study of history or how math is used in art. Encouraging students to create a bridge between theory and practice.
- 2) Encourages Active Learning: Invites students to engage directly in the learning process through collaborative projects, discussions, and explorations. Increases ownership of the learning process, so students are more motivated.
- 3) Develops Critical and Creative Skills: Helps students learn how to think critically and creatively in solving complex problems. Improves the ability to analyze and synthesize information from various sources.

²⁹ Fogarty, R., *Ten Ways to Integrate Curriculum*. Skylight Professional Development, 1991.

4) Prepares Students for Real Life: Teaches students to relate what they learn in school to real situations in everyday life. Equipping students with skills that can be applied in the world of work, such as interpersonal, teamwork, and communication skills.

b. Scope of Integrated Learning³⁰

- 1) Disciplines: Integrating various subjects, such as English, math, science, art, and character education, to create a more well-rounded learning experience. Example: A project that combines science and art to create an art installation based on scientific principles.
- 2) Skills: Combines academic skills with social and emotional skills, such as empathy, cooperation, and leadership. Focuses on developing 21st century skills, such as critical thinking, creativity, communication, and collaboration.
- 3) Teaching Methods: Using a variety of methods, such as project-based learning, collaborative learning, and educational technology, including the use of artificial intelligence (AI) to support learning.

 Adapting different teaching methods to meet students' diverse needs and learning styles.

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³⁰ Thomas, J. W., *A Review of Research on Project-Based Learning*. Autodesk Foundation. 2000.

c. Benefits of Integrated Learning

- Increased Understanding: Students can understand concepts better because they see how various elements are interrelated. Integrated learning helps students remember information longer because of the relevant context.
- 2) Higher Motivation: Contextualized and relevant learning can increase students' interest as they find the material useful in their daily lives. Collaborative projects create a fun and engaging learning atmosphere.
- 3) Character Development: Integrating character education in the curriculum helps students develop positive values, such as honesty, responsibility, and cooperation. Students learn the importance of ethics and social values in the context of learning.
- 4) Work Readiness: Students who engage in integrated learning are better prepared to face challenges in the world of work because they have been trained to think critically, work in teams, and adapt to changing situations. Improves skills required by industry, such as innovation and creativity.

d. The Weakness of Integrated Learning

 Complexity in Planning: Designing an integrated curriculum requires greater time, effort, and collaboration between teachers from different disciplines. This may increase the workload for educators who must adjust their teaching methods.

- 2) Limited Resources: Not all schools have access to the necessary resources, such as technology, teaching materials, or training for teachers, to effectively implement integrated learning. These limitations can hinder successful program implementation.
- 3) Difficulties in Assessment: Assessing student learning outcomes in an integrated learning context can be more difficult compared to traditional methods, as results are not only visible from test scores.
 It requires the development of more comprehensive assessment instruments to measure various aspects of learning.
- 4) Resistance from educators: Some educators may feel uncomfortable or underprepared to adopt this approach, which may hinder implementation. Lack of training or support in transitioning to new teaching methods can be a challenge.

2. English Integrated Learning (EIL)

English Integrated Learning is an educational approach that combines English language instruction with other subjects or content areas. Instead of teaching English in isolation, EIL integrates it with subjects like science, history, arts, or even moral and character education, aiming to make language learning more meaningful and contextual. Here are some key aspects of EIL:

a. Content and Language Integrated Learning (CLIL): This method involves teaching a subject (e.g., biology, geography) through English, helping students improve their language skills while learning content.
It encourages the use of English for practical communication and

- understanding complex concepts. This dual-focus approach boosts language proficiency by engaging learners in real-life situations where English is used as a tool, not just a subject³¹.
- b. Project-Based Learning (PBL): English can be integrated through projects that require students to research, collaborate, and present on various topics. For example, a project on global environmental issues could involve reading articles, writing reports, and presenting findings in English. This method fosters creativity, critical thinking, and collaboration.
- c. Character Education Integration: Some educational programs combine

 English learning with character development, focusing on building
 qualities like responsibility, creativity, and confidence. Activities and
 lessons are designed to reinforce these traits while practicing language
 skills. For example, tasks that involve leadership roles in group projects
 can help develop confidence while using English.
- d. Objectives of English Integrated Learning
 - Improve Language Proficiency: Helps students better master
 English through practical applications in various contexts.
 - 2) Promotes Contextual Learning: Linking language learning to reallife situations so that students can understand the relevance of English in their daily lives.

³¹ Coyle, D., Hood, P., & Marsh, D., *CLIL: Content and Language Integrated Learning*. Cambridge University Press. 2010.

- 3) Critical Skill Development: Encourages students to think critically and creatively when using English, whether in discussion, presentation, or collaboration.
- 4) Preparing Students for Globalization: Equipping students with the language skills necessary to communicate at an international level and understand other cultures.

e. Benefits of EIL:

- 1) Enhances language acquisition through contextual learning.
- 2) Makes learning more engaging and relevant.
- 3) Develops other skills such as critical thinking, collaboration, and problem-solving.
- 4) Provides exposure to real-world language usage.

EIL is supported by research indicating that students learn languages better when they are used in meaningful contexts, not just memorized as isolated rules. It aligns with the idea that language should be functional and interactive, helping students become more effective communicators.

There are many findings related to language integrated learning, such as the research by Dalton-Puffer, which found that content and language integrated learning (CLIL) can significantly improve students' English language skills. Students who learned with the CLIL approach showed better progress in speaking and writing skills than those who learned through the conventional approach. CLIL

also expands students' vocabulary and improves their ability to use English in real contexts³².

Other studies, such as the study by Mehisto, Marsh, and Frigols, found that EIL, especially CLIL, was able to increase students' motivation to learn. When English is used as a tool to learn specific content, students tend to be more engaged and motivated to understand the material because they are learning something more than just language. Active participation in the learning process also helps them strengthen communication skills³³. Besides helping students' communication skills, research by Coyle, Hood, and Marsh emphasized that EIL, through approaches such as CLIL and Project-Based Learning (PBL), helps students develop 21st century skills such as critical thinking, collaboration, and effective communication. This integrated learning requires students to think more deeply about the content while also practicing English as a tool to understand and convey their ideas³⁴.

A study by Lasagabaster and Sierra showed that students who engaged in integrated learning had better reading and writing skills compared to those who learned through traditional methods. This is because EIL encourages students to read more texts in English and write in various formats, from reports to essays, which enriches their learning experience³⁵. This shows that the English Integrated Learning approach has many benefits, ranging from improving language skills,

³² Dalton-Puffer, C., *Discourse in Content and Language Integrated Learning (CLIL) Classrooms*. John Benjamins Publishing. 2007.

³³ Mehisto, P., Marsh, D., & Frigols, M. J., *Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education*. Macmillan Education. 2008.

³⁴ Coyle, D., Hood, P., & Marsh, D. Loc. Cit.

³⁵ Lasagabaster, D., & Sierra, J. M., Language Attitudes in CLIL and Traditional EFL Classes. *International CLIL Research Journal*. 2009.

learning motivation, to developing non-linguistic skills such as critical thinking and collaboration.

3. Character Building

Character is the nature, temperament, and personality that everyone possesses. Each person has a unique personality. Character refers to a person's attitude, morality, and good character toward God, himself, and other humans. Character building, also known as character development, is the process of developing positive attitudes and behavioral ideals in an individual³⁶.

The objective is to cultivate moral and ethical principles, social skills, and personal characteristics that will enable us to become persons of great integrity, responsibility, empathy, and insight. Character building plays a significant role in developing, enhancing, and influencing human habits, morality, character, and social attributes to achieve excellent conduct and character.

a. Concepts and Values in Character Building

1) Character Building Concept

Character building concept is the process of educating and shaping a person's attitudes, morals, and values so that they are able to develop into individuals with integrity and responsibility and are able to contribute positively to social life. This concept focuses on developing a balanced personality between intellectual, emotional, and moral aspects so that individuals can make good decisions and show positive behavior in various situations.

³⁶ Astrid fitrani, *Pentingnya Character Building Beserta Perannya dalam Kehidupan*, available on https://www.kompasiana.com/astridfitriani/64d0ff64633ebc03df324242/, accessed on 13 October 24.

The process of character building involves the cultivation of ethical and moral values taught through education, social interaction, and life experiences. Character education does not only happen at school but also at home and other social environments. It is a collaborative effort to build a whole and dignified person.

2) Values in Character Building

Some of the core values that are typically taught in character building include:³⁷

- a) Responsibility: This value encourages individuals to take responsibility for their actions and fulfill their obligations appropriately. Students are taught to complete their tasks, keep commitments, and understand the consequences of any decisions they make.
- b) Honesty: Honesty is the foundation of good character. This value teaches the importance of being honest in word and deed. Through honesty, individuals can build trust and integrity that will help them in their personal and professional lives.
- c) Respect: Respect involves recognizing and appreciating the rights, views, and feelings of others. Students are taught to appreciate differences and treat others with courtesy, both in conversation and action.

³⁷ Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. Penguatan Profil Pelajar Pancasila. 2022.

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- d) Discipline: Discipline involves the ability to control oneself and act with order. It is important for character development as it helps individuals stay focused on goals, manage time well, and fulfill their obligations without having to be forced.
- e) Empathy: Empathy is the ability to understand and feel the feelings of others. This value helps in building better relationships and makes individuals more sensitive to the needs and situations of others, so they can show care and sympathy.
- f) Diligence: This value emphasizes the importance of perseverance, passion, and earnest effort in achieving goals. Hard work shapes the character of individuals who are persistent and do not give up easily in facing challenges.
- g) Fairness: Fairness teaches individuals to act fairly and impartially. It involves decisions based on truth and justice without taking sides or discriminating.
- h) Cooperation: Cooperation is an important value in social life. Through cooperation, students learn to work together with others, respect the team's ideas and contributions, and achieve common goals.
- 3) The importance of teaching these values in education

Teaching these values in schools is very important to form a generation that is not only academically smart but also noble. The values in character building provide guidelines for students to live with integrity and good morals, which are

much needed in the current era of globalization. Strong character education enables students to face social and cultural challenges more wisely and empathetically.

b. The Role of Character Building in Education

Character building plays an important role in education because it aims not only to develop student's academic abilities but also to form a person with integrity, ethics, and the ability to socialize well. Here are some of the main roles of character building in education:³⁸

1) Developing moral and ethical values

Character education focuses on instilling moral and ethical values such as honesty, responsibility, empathy, and respect. By teaching these values, schools help students understand what is right and wrong and how to act ethically in various situations. Students who are equipped with strong moral values will be able to make good decisions and exhibit positive behavior, both in the school environment and outside of school.

2) Forming a Balanced Personality

Strong character helps in the development of a balanced personality, where intellectual, emotional, and social aspects complement each other. Education that only focuses on the academic aspect may produce students who are smart but not necessarily wise in facing life's challenges. Character building ensures students can develop holistically and be ready to face various situations with the right attitude.

3) Preparing Students for Social and Professional Life

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³⁸ Lickona, T., Educating for Character: How Our Schools Can Teach Respect and Responsibility. Bantam. 1991.

Character values such as hard work, discipline, and the ability to work together are very important in the world of work. Character education prepares students to face challenges in the work environment and in social life. Students learn how to be good leaders, work in teams, manage conflict, and communicate effectively. These skills are in high demand in today's professional world, where technical ability alone is not enough.

4) Reducing behavioral problems in schools

Character education helps reduce behavioral problems such as bullying, violence, and indiscipline. By instilling values such as empathy and respect, students learn to appreciate differences and treat others well. This creates a school environment that is safer, more harmonious, and conducive to learning.

5) Supports the development of social and emotional skills

Character education supports the development of social and emotional skills, such as the ability to manage emotions, build healthy relationships, and empathize with others. These skills are important in building self-confidence and emotional intelligence that will be beneficial throughout life. Students who can manage their emotions well tend to be more successful in learning, working, and living socially.

6) Promoting social engagement and social responsibility

Good character encourages students to be actively involved in their communities and take responsibility for their social environment. Through activities such as social projects, community service, and charity work, students learn to contribute positively to society. This helps create a generation that cares

about social and environmental issues and is willing to work together for better solutions.

7) Supporting Holistic Curriculum Implementation

Modern education, such as the Merdeka Curriculum in Indonesia, integrates character education in every aspect of learning. Through this approach, learning not only focuses on academic material but also develops student profiles that have strong characters, such as in the Pancasila Student Profile, which includes faith and piety, global diversity, cooperation, independence, critical reasoning, and creativity. Thus, character education becomes the foundation for producing a generation that is not only smart but also moral and ethical.

c. Main Components of Character Building

Character builds over time. Character is additive. We cannot waste our youth pursuing things that neuter or subtract from our character. Equally true, we cannot spend our older years tearing down the character we built. In both cases, we are wasting time and, most importantly, damaging relationships. Legacy and trust carry a high lifetime value.

Each choice and action we take adds or subtracts from our character. On any given day, we should have more positive character choices and actions than negative ones. Getting character right is not a balanced exercise. Not even close. We should build character through our good choices and actions as often as we can. We are imperfect. How we respond to our imperfect choices and actions can add to or subtract from our character. This is the choice of our character.

No matter our age, we should never dig a big hole in our character in which we spend a lifetime trying to recover. The younger we are, the longer the lifetime of recovery. And this is why trying to make the best choices possible and take the most appropriate actions as often as possible early in our lives can make a very big difference in the quality of our overall life³⁹.

Character, in many ways, is a combination of our mind, soul, and backbone. We need to work through our thoughts and pick the ones that matter. We need to understand how the trials are impacting our souls and take the necessary steps to protect and grow. We need to know when to stand up, move on, or protect ourselves. Character is tested. How we respond and learn will determine the legacy of our character.

In times of success and prosperity, our character is at risk as well. Just because everything seems to be going very well and we are rich in what we have in our abilities and worth, too often character falters in these good times. Laziness creeps in. Thinking we are above what is normal and right invades our actions. Character loses our attention because we think we have it all.

The only time we have it all is when our character remains intact and grows in strength. In good times, we need to continue to add to our character through what we say and do. We need to pass on our lessons learned and share our wealth of experience, along with whatever else we give. People will remember your stories

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³⁹ Jhon Mertz, What Builds Character, *Thin Difference*, 9 January 2016, (https://www.thindifference.com/2016/01/what-builds-character/, accessed on 2 June 2024).

of character, and these stories deliver much more meaning than a name on a building. A legacy of character carries forward like folklore.

Character building involves various components that contribute to the development and strengthening of one's character. These components include⁴⁰:

- Work and Purpose: Engaging in meaningful work and staying focused on one's purpose helps build character by fostering a sense of responsibility and accountability.
- 2) Tough Conversations: Engaging in empathetic and action-oriented conversations, even when difficult, helps build character by promoting effective communication and conflict resolution.
- 3) Nurturing Relationships: Maintaining and strengthening relationships through good and challenging times helps build character by fostering empathy, trust, and resilience.
- 4) Personal Growth and Development: Continuously learning, improving, and adapting to new situations helps build character by promoting self-awareness, self-discipline, and emotional intelligence.
- 5) Mistakes and Learning: Embracing and learning from mistakes helps build character by promoting humility, perseverance, and adaptability.
- 6) Helping Others: Extending a helping hand and contributing to the well-being of others helps build character by fostering empathy, compassion, and a sense of responsibility.

⁴⁰ Jhon Mertz, What Builds Character, *Thin Difference*, 9 January 2016, (https://www.thindifference.com/2016/01/what-builds-character/

7) Self-Reflection and Improvement: Regularly reflecting on one's actions and striving for self-improvement helps build character by promoting self-awareness, self-discipline, and personal growth.

Furthermore, according to Lickona and Thomas, character building encompasses the holistic development of an individual's moral, ethical, social, and emotional traits. The goal is to foster positive values and behaviours that contribute to personal growth and societal well-being. Here are the main components of character-building⁴¹:

- 1) Moral and Ethical Values
 - a) Integrity: Upholding honesty and strong moral principles in all actions.
 - b) Respect: Valuing oneself and others, acknowledging the dignity of every individual.
 - c) Fairness: Ensuring impartiality and justice in dealings with others.
 - d) Responsibility: Being accountable for one's actions and obligations.
 - e) Caring: Demonstrating empathy and kindness towards others.
- 2) Social and Emotional Skills
 - a) Empathy: Understanding and sharing the feelings of others.
 - b) Self-Regulation: Managing one's emotions, thoughts, and behaviours in different situations.
 - c) Interpersonal Skills: Building healthy relationships and effectively communicating with others.

⁴¹ Lickona, T., Educating for Character: How Our Schools Can Teach Respect and Responsibility. Bantam. 1991.

- d) Conflict Resolution: Resolving disagreements in a constructive manner.
- e) Collaboration: Working effectively and harmoniously with others.
- 3) Self-Awareness and Personal Growth
 - a) Self-Understanding: Recognizing one's strengths, weaknesses, and areas for improvement.
 - b) Self-Esteem: Developing a positive view of oneself and one's abilities.
 - c) Goal Setting: Establishing and striving towards personal and professional objectives.
 - d) Resilience: Building the ability to bounce back from setbacks and challenges.
 - e) Mindfulness: Being aware of and attentive to the present moment.
- 4) Civic Responsibility and Citizenship
 - a) Community Involvement: Participating actively in community service and civic activities.
 - b) Environmental Stewardship: Demonstrating care and responsibility for the environment.
 - c) Global Citizenship: Understanding global issues and appreciating cultural diversity.
 - d) Ethical Decision-Making: Making choices that consider the broader impact on society and the world.

d. Strategies to Improve Character Building

Character building is the process of developing a variety of vital attributes that support people's personal growth. The following techniques can help with character development:

- 1) Exercise self-control⁴²
 - a) Form Virtuous Habits: Establish and uphold wholesome routines that encourage self-control. This entails creating habits, like going to the gym and eating well, and avoiding distractions, such as using social media excessively.
 - b) Exercise Self-Control: Develop self-control by using methods to improve self-awareness, such as the "pause and plan" strategy, mindfulness exercises, and meditation applications.
 - c) Create a Particular Process for Setting Goals: To give yourself direction and focus, set SMART (specific, measurable, achievable, relevant, and time-bound) goals. To keep momentum going, break down big ambitions into smaller, more doable tasks.
 - d) Step Outside Your Comfort Zone: Taking on new duties or obligations on a regular basis can push you mentally and help you become more adaptable.

⁴² Rose Leadem, *10 Real Ways to Build Self-Discipline and Reach Your Goals*, Entrepreneur, July 2023, (https://www.entrepreneur.com/growing-a-business/7-ways-to-gain-self-discipline-and-strive-towards-greatness/300212, accessed on 5 June 2024).

2) Encourage Resilience⁴³

- a) Develop robust relationships: Make the time and effort to establish and preserve positive bonds with your loved ones, friends, and coworkers.
 This network of support might assist you in overcoming obstacles in life.
- b) Put Your Physical Health First: Maintaining a healthy body can help you recover from sickness and handle stress better. Regular exercise and a balanced diet can help you do this.
- c) Find Your Mission: Determine your passions and make sure your objectives reflect them. This drive and sense of purpose might support you in maintaining concentration when things get tough.

3) Develop Empathy 44

- a) Through Practice Active Listening: Make sure to keep eye contact, pose open-ended questions, and refrain from interrupting others to completely engage with them. This promotes comprehension and trust.
- b) Demonstrate empathy: Even in trying circumstances, show others compassion and empathy. This can include being there for someone in need, supporting them, or expressing emotional affirmation.

⁴³ Chris Musonic, *how to be more Resilient: 8 Ways to Build Your Resilience*, Calm, (https://www.calm.com/blog/how-to-be-resilient, accessed on 5 June 2024).

⁴⁴ Lesson Bud, *Strategies for Teaching Empathy and Compassion*, Published on 8 December 2023, (https://lessonbud.com/blog/strategies-for-teaching-empathy-and-compassion/, accessed on 5 June 2024).

4) Grow Your Integrity⁴⁵

- a) Assign set and uphold healthy boundaries with people to safeguard your time, energy, and mental health. This assists you in avoiding overcommitting and being loyal to your principles.
- b) Exercise Accountability: Accept accountability for your choices and behaviours. This entails being open and truthful in your dealings with other people, as well as admitting your errors and growing from them.

5) Develop Courage⁴⁶

- a) Face Your Fears: Recognize and face your concerns and fears. This may entail stepping beyond of your comfort zone, searching out novel experiences, or taking measured risks.
- b) Improve Your Problem-Solving Ability: Discover practical methods for handling stress and conquering challenges. This may entail engaging in mindfulness exercises, asking for help when needed, or creating coping strategies.
- 6) Engage in self-awareness and mindfulness⁴⁷
 - a) Frequent Introspection: Examine yourself from the inside out to gain a deeper understanding of your advantages, disadvantages, and stressors.

⁴⁶ Iryna Horkovska, *12 Ways to Enhance your Resilience*, Calmerry.Blog, March 10, 2023, (https://calmerry.com/blog/psychology/10-ways-to-enhance-your-resilience/, accessed on 5 June 2024).

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⁴⁵ Breen Glesson, *9 Powerful Ways to Cultivate Extreme Self-discipline*, Forbes, 25 August 2020, (https://www.forbes.com/sites/brentgleeson/2020/08/25/8-powerful-ways-to-cultivate-extreme-self-discipline/?sh=20174ea7182d, accessed on 5 June 2024).

⁴⁷ Rose Leadem, *10 Real Ways to Build Self-Discipline and Reach Your Goals*, Entrepreneur, July 2023, (https://www.entrepreneur.com/growing-a-business/7-ways-to-gain-self-discipline-and-strive-towards-greatness/300212, accessed on 5 June 2024).

This supports you in making deliberate adjustments that fortify your character and self-control.

b) Mindfulness Practices: Use mindfulness exercises to enhance emotional control and self-awareness, such as deep breathing, guided imagery, or meditation.

7) Request assistance and input⁴⁸

- a) Seek constructive feedback: To pinpoint areas for growth and advance your character development, get input from others and take it into consideration.
- b) Embrace the Positive Influences Around You: Establish connections with those who uplift and motivate you, creating an atmosphere that is conducive to character development.

By applying these techniques to your everyday life, you can strengthen your character development and cultivate the critical qualities required for both professional and personal success.

4. Artificial Intelligence (AI)

a. The Concept of Artificial Intelligence

In the academic sector, the existence of artificial intelligence or AI-based technologies poses a significant problem.⁴⁹ In addition to providing people with

⁴⁹ Ikedinachi A. P. WOGU, Misra, S., Assibong, P. A., Olu-Owolabi, E. F., Maskeliūnas, R., & Damasevicius, R., Artificial Intelligence, Smart Classrooms and Online Education in the 21st Century, *Journal of Cases on Information Technology*, 2019, P. 66. Available on https://doi.org/10.4018/JCIT.2019070105.

⁴⁸ Kris, 20+ Strategies for Teaching Empathy, Pathway to Success, August 13, 20219, (https://www.thepathway2success.com/20-strategies-for-teaching-empathy/, accessed on 5 June 2024)

different forms of convenience, AI-based services like ChatGPT, Perplexity, Bing Chat, and other services of a similar nature also give rise to ethical dilemmas, particularly when it comes to their application in the educational sector.⁵⁰ As is now commonly known, ChatGPT has made it possible for people to communicate with "computers" by sending commands. For instance, one may ask ChatGPT to generate a 1000-word essay, and the essay would be completed instantly.⁵¹ On several social media sites, this technology is being utilized and discussed extensively, as though it is transforming how people use computers.⁵² It is indisputable that services such as this save people time and effort when they are gathering text, say, to make content for websites. Some innovative social media material has benefited in different ways from the advent of AI-powered word processing tools. Not just in the form of article writing services, but also in the shape of graphic design, presentation impression compilation, and other services. With this AI-based technology, managing a website that takes a lot of time and effort at first may be completed quickly. The same is true for design-related employment, such as creating flyers, posters, presentation impressions, and other comparable positions. This work can be completed in just an instant by utilizing AI-based technology.

⁵⁰ Tlili, A., Shehata, B., Adarkwah, M. A., Bozkurt, A., Hickey, D. T., Huang, R., & Agyemang, B., What if the devil is my guardian angel: ChatGPT as a case study of using chatbots in education. Smart Learning Environments, 2023, P.10. Available on https://doi.org/10.1186/s40561-023-00237-x

⁵¹ Lieberman, M., What Is ChatGPT and How Is It Used in Education? Education Week: 2023, P. 42. Accessed October 22, 2023, Available on https://search.ebscohost.com/login.aspx?direct=true&db=asn&AN=161354494&site=ehost-live&scope=site

⁵² Catal, C., & Tekinerdogan, B., *Aligning Education for the Life Sciences Domain to Support Digitalization and Industry 4.0*, Procedia Computer Science, 2019, P. 158, Accessed October 22, 2023, Available on https://doi.org/10.1016/j.procs.2019.09.032.

The development of computer systems that are able to carry out activities that normally require human intellect, such as learning, reasoning, problem-solving, perception, and decision-making, is known as artificial intelligence (AI). The goal of artificial intelligence (AI) is to build intelligent computers that can do cognitive tasks that humans cannot, such as learning from experience, adjusting to new inputs, and using knowledge to solve challenging issues. Like people, artificial intelligence (AI) systems are made to collect and analyse data, see patterns, make judgments, and even learn from mistakes.

The goal of computer science's artificial intelligence discipline is to create machines that are capable of activities that ordinarily require human intelligence. Learning, thinking, problem-solving, perception, and language comprehension are among these activities⁵³. Artificial intelligence aims to mimic and automate these cognitive processes by utilizing sophisticated algorithms and computer power. This will allow robots to behave like humans when making decisions, adjusting to new knowledge, and interacting with their surroundings⁵⁴.

There are several methods and strategies used in AI, such as:

Machine learning is the process of creating statistical models and algorithms
that let computers learn from data and anticipate or decide without needing
to be explicitly programmed for every case.

⁵⁴ Sankarraman, *Sequential Decision Making with Limited Resources*, University of Maryland, 2019, https://doi.org/10.13016/tnst-gkmo, accessed on 6 June 2024.

⁵³ Gonzales, *Artificial Intelligence for Students Assessment: A systemic Review*, ppl. Sci. 2021, 11(12), 5467; https://doi.org/10.3390/app11125467, accessed on 6 June 2024.

- 2) Deep learning is a branch of machine learning that draws on artificial neural networks to simulate the functioning of the human brain to learn from massive quantities of data and make intelligent judgments.
- 3) Natural language processing (NLP) refers to methods that let computers comprehend, interpret, and produce natural language, facilitating human-machine communication.
- 4) Computer Vision: Algorithms that enable machines to emulate human vision in terms of perception, analysis, and interpretation of visual data from pictures and movies.
- 5) Robotics: The use of AI in the design and management of robots that carry out activities either independently or in conjunction with people.

AI has several uses in a wide range of sectors, including industry, entertainment, healthcare, finance, and transportation. It is always developing and changing because of continuous research and development efforts to build increasingly complex and intelligent systems.

The literature now in publication emphasizes the trend toward artificial intelligence (AI)-enabled customized and adaptive learning experiences in the field of English as a Foreign Language (EFL) training. Customizing educational content to meet the unique needs, preferences, and ability levels of individual students has been made easier to use intelligent tutoring systems and to learn algorithms.⁵⁵

⁵⁵ Yasen, Exploring the Evolution of AI Integration in English as a Foreign Language Education: A Scopus-Based Bibliometric Analysis (1997-2023), Mesopotamian journal of Computer Science Vol. (2023), 2023, pp. 149–164 DOI: https://doi.org/10.58496/MJCSC/2023/019.

The literature emphasizes how important interactive and immersive language learning environments made possible by AI-driven technologies like chatbots and virtual reality simulations are. These resources have been crucial in boosting student motivation, involvement, and engagement, thus enabling dynamic and immersive language learning experiences.

Scholars have emphasized the need for artificial intelligence (AI) technologies to be included in English as a Foreign Language (EFL) program. They have placed a strong emphasis on using AI-driven platforms to augment conventional teaching methods. The current trend emphasizes how artificial intelligence (AI) may improve language instruction and help teachers design thorough and effective language learning modules.⁵⁶

b. The Various Uses of AI in Language Education

Language learning is being completely transformed by artificial intelligence (AI), which provides gamification, real-time feedback, individualized and adaptable methods, and immersive experiences. Artificial intelligence (AI) technology such as machine learning algorithms and natural language processing (NLP) is used to construct personalized learning routes, adjust lessons, give immediate feedback, and evaluate student performance. Virtual instructors and chatbots provide individualized training, instant feedback, and the opportunity for conversation practice. By solving frequent issues, giving users access to a variety

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⁵⁶ Yasen, Exploring the Evolution of AI Integration in English as a Foreign Language Education: A Scopus-Based Bibliometric Analysis (1997-2023), Mesopotamian journal of Computer Science Vol. (2023), 2023, pp. 149–164 DOI: https://doi.org/10.58496/MJCSC/2023/019.

of resources, being available around-the-clock, and encouraging a sense of community, artificial intelligence (AI) improves language acquisition.⁵⁷

Natural Language Processing (NLP): A subfield of artificial intelligence, NLP has been widely used in language instruction. Through chatbots, virtual instructors, and language evaluation tools, NLP-powered apps make language learning easier. With the help of these tools, which provide instant feedback and correction, students may practice their grammar, vocabulary, and pronunciation in a conversational setting.

AI-powered adaptive learning platforms dynamically modify material and difficulty levels according to students' performance.⁵⁹ These systems detect areas of strength and weakness using machine learning algorithms and then provide customized activities to correct language deficits and encourage learning.

By adapting to different learning styles and demands, the focus on individualized learning using AI applications fosters improved language competency. For instance, research showed that, over the course of a school year, children with a variety of language origins improved their English proficiency levels by two grade levels thanks to adaptive learning platforms.

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⁵⁷ Microsoft Azure AI Speech Services - https://azure.microsoft.com/en-us/services/cognitive-services/speech-service/. Accessed on 7 June 2024.

⁵⁸ Tilwani et.al. *The Impact of Using TED Talks as a Learning Instrument on Enhancing Indonesian EFL Learners' Listening Skill*. Education Research International, 2022.

⁵⁹ Liu, F. et. al. Using Games to Promote English as a Foreign Language Learners' Willingness to Communicate: Potential Effects and Teachers' Attitude in Focus. Frontiers in Psychology, 2021. p. 12.

⁶⁰ Abdollahi, et. al. Psychometric Assessment of the Persian Translation of the Interpersonal Mindfulness Scale with Undergraduate Students. Frontiers in Psychiatry, 2022. p. 13.

The evaluated literature emphasizes how AI has the potential to revolutionize English language instruction.⁶¹ AI-driven tools have demonstrated great potential for improving language learning, comprehension, and fluency.⁶² These tools make use of NLP and adaptive learning. Because AI apps are customized, learners of different demographics can benefit from individualized learning experiences that raise their language proficiency levels.

Through the provision of a wide range of tools and apps that improve learning results, accessibility, and the overall learning experience, artificial intelligence (AI) is revolutionizing language teaching. The following are some of the of the major applications of AI in language learning:⁶³

- 1) AI is the engine of personalized learning experiences (PLEs), which improve retention and engagement by adapting to the demands, learning preferences, and speeds of each unique student. They provide activities, grammatical structures, and vocabulary lists that are customized depending on learning styles and competency levels.
- 2) Automated Writing Evaluation (AWE): Learners may enhance their grammar and writing abilities by using AI algorithms to evaluate and offer comments on their written work.

⁶² Vadivel, B., *English Language Significance from Ancient the Modern-A Cram.* In 2019 International Conference on Computational Intelligence and Knowledge Economy, ICCIKE: 2019. p. 587-592.

⁶¹ Liu, F. et. al. Using Games to Promote English as a Foreign Language Learners' Willingness to Communicate: Potential Effects and Teachers' Attitude in Focus. Frontiers in Psychology, 2021. p. 12.

⁶³ Jeong Bae Son, Artificial Intelligence Technologies and Applications Language Learning and Teaching, *Journal of China Computer-Assisted Language Learning*, 2023, p. 15. https://doi.org/10.1515/jccall.

- Computerized Dynamic Assessment (CDA): AI-driven tests that continually
 modify their difficulty levels and offer real-time feedback based on how
 well students do.
- 4) Intelligent Tutoring Systems (ITSs): Chatbots and virtual tutors driven by AI that mimic real-world interactions assist students in developing their speaking abilities, gaining confidence, and becoming more fluent.
- 5) Natural Language Processing (NLP): Artificial intelligence (AI) systems that interpret and analyse spoken language to provide sophisticated language learning resources and tailored feedback.
- 6) Data-Driven Learning (DDL): AI-driven systems examine student data to pinpoint areas in need of development, offering focused practice and optimizing the learning experience.
- 7) Automated Speech Recognition (ASR): AI-driven speech recognition technology gives learners immediate feedback on accent and pronunciation, assisting them in becoming more proficient speakers.
- 8) Chatbots: With the use of artificial intelligence (AI), chatbots may mimic human conversations, giving students a more dynamic and interesting way to practice speaking and listening.
- 9) Subtitling: AI-powered subtitling makes multimedia content more accessible in a variety of languages, promoting inclusivity in language learning.
- 10) Virtual and Augmented Reality (VR/AR): Immersion and interaction are key components of language learning, and AI-powered VR/AR technology

is bringing these elements to language learning to improve retention and engagement.

Through the provision of more effective, interesting, and accessible learning opportunities, these AI applications have completely transformed the teaching of languages. But to guarantee a comprehensive language learning experience, it is crucial to strike a balance between the use of AI and human contact.

c. The Potential and Benefits of AI in Enhancing English Language Learning

Artificial intelligence (AI) could completely transform the way that students learn English by giving them individualized and flexible learning opportunities. Artificial intelligence (AI) technology can improve English language learning in several ways, including:⁶⁴

- 1) Personalized Learning: AI can identify a student's language proficiency strengths and shortcomings and create a personalized learning plan based on their needs.
- 2) Interactive Learning: Students' speaking and listening abilities may be enhanced by participating in interactive discussions with the help of AI-powered technologies like chatbots and virtual instructors.
- 3) Fast Feedback: Students may quickly fix mistakes and advance their language skills with the help of AI, which can offer fast feedback on vocabulary usage, grammar, and pronunciation.

⁶⁴ Brown, H. D., & Lee, H. *Teaching by Principles: An Interactive Approach to Language Pedagogy (Print)*. Pearson Education, 2015.

- 4) Adaptive learning refers to the ability of AI algorithms to recognize the progress of students and modify the level of difficulty of exercises to get the best possible learning outcomes.
- 5) Accessibility: By providing flexible learning schedules and resources, AI technology can increase the accessibility of English language instruction to a broader spectrum of learners.
- 6) Accessibility for Students with Disabilities: Students who prefer visual assistance or who have hearing difficulties can benefit immensely from the increased accessibility of video content thanks to AI-powered technologies for video captioning and subtitling. Additionally, learners who want additional assistance comprehending spoken language might benefit from this technology.⁶⁵
- 7) Redefining the Role of Instructors: By managing repetitive duties like progress monitoring and evaluations, AI frees up instructors to concentrate on leading engaging conversations, teaching difficult language ideas, and offering students emotional support. Teachers can focus on promoting a better knowledge of the language because of this reframing of the function of the teacher.⁶⁶
- 8) Data-Driven Instruction: AI can analyse enormous volumes of data to pinpoint the most efficient teaching strategies and modify material accordingly. This data-driven method improves language learning

66 Agile District, A briefs - *Benefits of AI in Language Learning*, Linkedin, 29 October 2023, https://www.linkedin.com/pulse/brief-benefits-ai-language-learning-agiledistrict, Accessed on 11 June 2024.

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⁶⁵ TeflBarcelona, *10 Powerful AI Tools for Language Teacher*, https://teflbarcelona.net/10-powerful-ai-tools-for-language-teachers/,Aaccessed on 11 June 2024.

effectiveness and has the power to completely change the nature of education.⁶⁷

All things considered, the efficacy and efficiency of language teaching might be greatly increased by incorporating AI into the English language learning process.

d. Challenges and Limitations of Applying AI in Language Learning

Although artificial intelligence (AI) has made great strides in the field of language acquisition, there are still many obstacles and restrictions to overcome. Understanding these difficulties and constraints is essential to appreciating AI's promise and constraints for improving language learning results.⁶⁸

1) Inadequate emotional skill

Artificial intelligence (AI) language learning tools lack emotional intelligence, which is necessary for successfully communicating and comprehending the emotional nuances in language. Effective communication depends on students' ability to identify and comprehend their own and other people's emotions. This is where emotional intelligence comes in.

2) The incapacity to accommodate different learning styles

Because every student has a different learning style, AI systems find it difficult to adjust to them. To provide more individualized learning experiences,

68 Sprachlingua, *The Limitations of AI: Why Chat GPT Can't Replace Human Language Trainers*, The Language School in Chennai, https://sprachlingua.com/limitaions-of-ai-in-language-learning/, accessed on 11 June 2024.

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⁶⁷ Agile District, A briefs - *Benefits of AI in Language Learning*, Linkedin, 29 October 2023, https://www.linkedin.com/pulse/brief-benefits-ai-language-learning-agiledistrict, Accessed on 11 June 2024.

human language trainers might modify their teaching strategies to fit each student's unique learning preferences.

3) Having Trouble Answering Complicated Questions

The complicated concerns that arise often in language acquisition are difficult for AI language models to handle. AI models frequently lack the deep contextual awareness needed to answer complex queries.

4) Limited Contextual Understanding

AI models struggle to grasp context, which is important for language acquisition. Context aids in language learners' understanding of its significance and meaning, yet AI models frequently fail to capture this intricacy.

5) Inauthenticity

The absence of authenticity in AI language learning systems is detrimental to language learning effectiveness. Authenticity facilitates learners' development of useful language skills and helps them relate to real-life circumstances.

6) Limited Experience in the Real World

Limited real-world experience is provided by AI language learning technologies, which is important for language learners. Through interactive exercises like role-playing and group discussions, human language teachers may impart greater practical experience.

7) Limited Compassion

AI language learning systems are devoid of empathy, a critical component of successful communication. To communicate effectively, students need to be able to connect with people and comprehend their viewpoints, which is made possible by empathy.

8) Minimal Customization

Limited customization is offered by AI language learning technologies, which is necessary for efficient language acquisition. Human language trainers can provide more individualized learning experiences by adjusting their teaching strategies to fit each student's unique learning preferences.

9) Limited Flexibility

Limited flexibility is offered by AI language learning technologies, which is necessary for efficient language acquisition. More flexible learning opportunities may be obtained by using human language trainers, who can modify their lesson plans to meet the needs of specific students.

10) Minimal Interaction with People

Human contact is necessary for language learning to be effective, and AI language learning systems lack it. For language learners, human language trainers offer emotional support, constructive criticism, and direction.

Although AI has advanced significantly in language acquisition, there are still several obstacles and restrictions. Understanding these difficulties and constraints is essential to appreciating AI's promise and constraints in improving language learning results. For language learning to be effective, human language trainers offer greater empathy, flexibility, real-world experiences, and personalization than AI.

5. English Learning Outcomes

English Learning Outcomes refer to the expected results of the English learning process. It covers the skills and knowledge that students should master

upon completion of an English program or course. These learning outcomes are designed to provide clear guidance on what students should achieve, as well as to assist teachers in designing an effective curriculum⁶⁹.

Learning outcomes usually cover different aspects of language skills, such as:

- a. Speaking Skills: The ability to communicate orally fluently and effectively.
- b. Listening Skills: The ability to understand and analyze information conveyed orally.
- c. Reading Skills: The ability to understand and interpret texts in English, both simple and complex.
- d. Writing Skills: The ability to compose coherent and well-structured texts, including essays and reports.

The importance of learning outcomes lies in their ability to provide focus to the learning objectives so that students can more easily understand what is expected of them and how they can achieve those objectives. In addition, learning outcomes also help in the assessment and evaluation of the learning process, ensuring that students not only learn English theoretically but can also apply it in real contexts⁷⁰.

a. Speaking Skills

Speaking skills are one of the important components in the English learning outcomes. It covers students' ability to communicate orally clearly and

⁷⁰ https://www.elmhurst.edu/academics/departments/english/learning-outcomes/, Accessed on 14 October 2024.

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⁶⁹ https://esl.wisc.edu/international-students/course-outcomes/, Accessed on 14 October 2024.

effectively. Here is a further explanation of the two main aspects of speaking skills:

1) Fluent Speaking Ability

Fluent speaking refers to a student's ability to express thoughts and ideas without excessive pauses or confusion. This includes:

- a) Flexibility in Speaking: Students should be able to adapt to a variety of communication situations, such as casual conversations, formal presentations, or group discussions.
- b) Speed and Accuracy: Students need to speak at a reasonable pace, where they can convey the message without losing meaning. Accuracy in the use of vocabulary and sentence structure is also very important.
- c) Use of Intonation and Expression: Good speaking skills also involve the use of appropriate intonation and facial expressions to emphasize meaning and emotion in communication.

2) Use of Proper Vocabulary

Proper use of vocabulary is another important aspect of speaking skills. This includes:

a) Appropriate Word Selection: Students should be able to select vocabulary that is relevant and appropriate to the context of the conversation. For example, the use of technical terms in academic discussions or everyday vocabulary in casual conversations.

- b) Vocabulary Variety: Students are expected to have variety in the vocabulary used so that communication is not monotonous and more interesting. It also helps in expressing nuances and complexity of ideas.
- c) Error Avoidance: Reducing errors in the use of vocabulary is important to maintain clarity and effectiveness of communication.

Overall, good speaking skills are key to successful social and professional interactions in English. Building these abilities requires practice and experience interacting in a variety of communication contexts⁷¹.

b. Listening Skills

Listening skills are an important component of the English learning outcomes that focus on students' ability to understand and analyze information presented orally. The following is an explanation of the two main aspects of listening skills:

1) Understanding Everyday Conversation

The ability to understand everyday conversation includes:

- a) Understanding Context: Students should be able to grasp the meaning of conversations in different contexts, be it in formal or informal situations.
- b) Capturing the Main Idea: Students need to be able to identify the main idea and important details of the conversation, which helps them follow the flow of the discussion.

⁷¹ Surachmi W, S., Hidayati, N. A., Setiawan, A., Alfaridzi, Y., & Rohmah, I. F., Application of the Pragmatic Approach in Learning English for Middle School Students. *Uniglobal Journal of Social Sciences and Humanities*, 2022, p. 112–116. https://doi.org/10.53797/ujssh.v1i1.15.2022

c) Appropriate Response: The ability to give an appropriate response based on the understanding of what is heard is also very important in effective communication.

2) Capturing Information from Audio and Video

Capturing information from audio and video involves:

- a) Active Listening Skills: Students need to be able to focus and pay attention to details when listening to audio material or watching videos, such as news, movies, or presentations.
- b) Analysis and Interpretation: Students need to analyze the information heard and interpret the meaning contained in it, including understanding the tone and emotions conveyed.
- c) Use of Listening Strategies: Using strategies such as noting important points or asking questions for clarification can assist students in understanding information better.

Good listening skills are essential for effective communication and for understanding English in a wider context, such as in academic or professional situations⁷².

c. Reading Skills

Reading skills are an important component of the English Learning Outcomes, which focus on students' ability to understand and analyze texts in English. The following is an explanation of the two main aspects of reading skills:

 $^{^{72}\}mbox{https://resources.depaul.edu/teaching-commons/teaching-guides/course-design/Pages/course-objectives-learning-outcomes.aspx, Accessed on 14 October 2024.$

1) Understanding Simple Text

Understanding simple text includes:

- a) Identifying Basic Information: Students should be able to locate and understand basic information in the text, such as facts, main ideas, and important details.
- b) Use of Familiar Vocabulary: Students need to recognize and understand commonly used vocabulary in simple texts, which helps them in understanding the context and overall meaning.
- c) Reading Fluently: The ability to read a text fluently and without errors is also important, as this shows a good understanding of sentence structure and language usage.

2) More Complex Text Analysis

Analysis of more complex texts involves:

- a) Deeper Understanding of Concepts: Students should be able to analyze and understand themes, characters, and plots in more complicated texts, such as short stories, articles, or essays.
- b) Critical of the Text: Students need to develop the ability to evaluate arguments and points of view in texts, as well as compare information from different sources.
- c) Connecting to Personal Experience: The ability to relate information from the text to personal experience or prior knowledge is also an important part of text analysis.

Good reading skills are essential for academic and professional success, as much information is conveyed in the form of text. Building these skills requires practice and appropriate strategies for understanding different types of texts in English⁷³.

d. Writing Skills

Writing skills are an important component of the English learning outcomes that focus on students' ability to compose coherent and well-structured texts. The following is an explanation of the two main aspects of writing skills:

1) Constructing coherent sentences

Constructing coherent sentences includes:

- a) Correct sentence structure: Students should understand and use proper sentence structure, including subject, predicate, and object, to convey ideas clearly.
- b) Proper Use of Vocabulary: Selection of appropriate and varied vocabulary is essential to creating sentences that are interesting and easy to understand.
- c) Inter-sentence Linkage: Students need to be able to connect sentences with each other by using appropriate conjunctions and transitions so that the text written becomes more fluent and organized.
- 2) Writing Essays and Reports

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⁷³ Jennifer Himmel, Language Objectives: *The Key to Effective Content Area Instruction for English Learners*, Colorin-Colorado, 2012. Available on https://www.colorincolorado.org/article/language-objectives-key-effective-content-area-instruction-english-learners#top, Accessed on 14 October 2024.

Writing essays and reports involves:

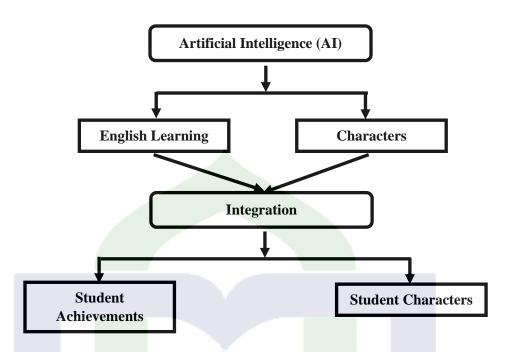
- a) Development of a Clear Argument: Students should be able to construct a logical argument and support it with relevant evidence or examples in the essay or report.
- b) Organization of Text: The ability to organize the writing well, including the introduction, body, and conclusion, is essential to conveying information effectively.
- c) Revision and Editing: Students need to learn to revise and edit their writing, paying attention to grammar, spelling, and clarity, to improve the quality of writing.

Good writing skills are essential in academic and professional contexts, as much communication is done through writing. Building these skills requires consistent practice and constructive feedback.

C. Conceptual Framework

The following is an explanation of the conceptual framework and conceptual flow:

1. Diagram of Conceptual Framework



Based on the conceptual framework of the research, the flow of thought can be explained as follows:

- a. Artificial Intelligence (AI): AI is the main technology that will be integrated into the learning process.
- b. English Learning and Characters: This research focuses on combining English learning with students' character development. The characters include responsibility, creativity, and self-confidence.
- c. Integration: The integration process between English learning and character development uses AI technology. In this process, AI is applied to help improve student learning outcomes.
- d. Student Achievements and Student Characters: The results of this integration are measured from two aspects, namely students' academic achievement in English lessons and students' character development.

Overall, this research wants to see if the use of AI in English learning can improve academic achievement as well as help build student character.

2. Conceptual Flow

The conceptual flow explanation of the figure above is as follows:

- a. Artificial Intelligence (AI): AI is the starting point of this concept. AI technology is used as a tool in the English learning process. In this research, AI is not only used to improve students' English skills but also to help develop students' character such as responsibility, creativity, and self-confidence.
- b. AI integrates two main focuses: English learning and character building.
- 1) English Learning: Involves English learning, where AI is used to improve students' ability to read, write, and understand English.
- 2) Character Building: Developing students' character traits such as responsibility, creativity, and self-confidence through interaction and learning using AI.
 - c. Integration: The center of the conceptual flow is the integration between AI, English learning, and character development. Here, AI technology plays a role in combining the two main focuses into a holistic and effective learning process. This integration allows English learning to be not only about language acquisition but also about strengthening students' character.

- d. Student Achievements and Student Characters: The outcomes of this integration process are two main aspects:
- Student Achievements: Measuring students' academic results, whether English learning using AI results in improvement in their English proficiency.
- 2) Student Characters: Measures students' character development, whether the use of AI in the learning process also improves positive character traits such as responsibility, creativity, and self-confidence.

Concept Flow: AI is used to integrate English learning and character development. This integration aims to improve two things: academic achievement in English and student character. This research focuses on the effectiveness of such integration to achieve better results in both aspects.

D. Hypothesis

The following is the hypothesis of this research:

- 1. H₀1: There is no significant difference in student achievement between the control class and the experiment class.
 - H1: There is a significant difference in student achievement between the control class and the experiment class.
- 2. H_02 : There is no significant difference in student character between the control class and the experiment class.
 - H2: There is a significant difference in student character between the control class and the experiment class.

CHAPTER III

METHOD OF THE RESEARCH

A. Research Design

This study would use a quasi-experimental design with a pre-test and post-test control group. According to Donald T. Campbell and Julian C. Stanley in the book "Experimental and Quasi-Experimental Designs for Research," A quasi-experimental design is an approach to experimentation in which experimental control or manipulation is not possible or practical⁷⁴. A quasi-experiment was chosen for this study because educational conditions often limit the randomization of participants, so researchers cannot randomly divide students into experimental and control groups. By using a quasi-experiment design, researchers can compare the learning outcomes of students exposed to AI-based integration of English learning and character-building with a group using traditional methods. This approach allows for relevant measurement of the impact of the intervention without compromising ethics and practicality within the existing classroom context.

B. Population and Sample

The following are the population and sample in this study:

1. Population

The population in this study were 11th-grade students at SMAN 4 North Luwu, totaling 153 students.

⁷⁴ Campbell, D. T., & Stanley, J. C., Experimental and Quasi-Experimental Designs for Research. 1963.

2. Sample

Two classes would be chosen through purposive sampling. One class will serve as the experimental group, which will receive AI-integrated instruction, and the other as the control group, which will not. Each class will consist of approximately 30 students, making a total sample of 60 students.

C. Location and Time of the Research

This research would be conducted at SMAN 4 North Luwu. This school is in Bonebone District, North Luwu Regency, and is one of the leading schools in North Luwu. This research will be conducted in December 2024.

D. Variables and Operational Definitions

Several variables in this study fall into the following categories:

1. Independent Variables

- a. Artificial Intelligence (AI): AI technology used to support English language learning and student character development. In this study, AI is applied through tools such as Grammarly, QuillBot, and ProWritingAid.
- b. English Learning: English learning is the focus of the subject matter.
- c. Character Building: Character development, especially the aspects of responsibility, creativity, and self-confidence.

2. Intervening Variable

a. Integration: The process of combining English learning and character development using AI technology. This is the variable that connects the independent variable with the dependent variable.

3. Dependent Variables

- a. Student Achievements: Students' academic achievement in English learning is measured by their improved English proficiency.
- b. Student Characters: Students' character development, especially in terms of responsibility, creativity, and self-confidence.

The independent variables (AI, English language learning, and character development) are integrated to influence the dependent variables (students' academic achievement and character development). This study wanted to find out if the integration was effective in improving students' learning outcomes and character.

E. Research Instruments

The study will employ the following research instruments:

1. Test

This study uses pre-tests and post-tests to assess students' English language skills, particularly in understanding and writing narrative texts. The same test will be administered before and after the intervention to measure improvement. Writing skills assessment will be conducted on both groups with narrative text learning materials. Students are asked to write a narrative story according to the prescribed structure (orientation, complication, resolution) by paying attention to grammar, vocabulary, creativity, and meeting the minimum word count of 200 words.

The assessment of learning achievements focuses on the ability to write narrative texts. The following are some of the aspects assessed and the assessment criteria:

Assessed Aspect	Description	Score							
Content & Ideas Linkage of ideas, clarity of story, and story development (plot, conflict, resolution).									
Organization	Correct narrative text structure (orientation, complication, resolution)	20							
Grammar & Language Use	Use Correct use of grammar (past tense, subject-verb agreement, etc)								
Vocabulary	Selection of words that are varied and appropriate to the context of the story	15							
Mechanic	Correct use of punctuation and spelling.	10							
Creativity	The originality of the story, innovation in plot, and character development.	10							

Table 3.1: Aspects and assessment criteria for narrative text.

Table explanation:

a. Total Score: 100

b. Grade Scale:

PAREFAR

1) 90-100: Excellent

2) 80-89: Good

3) 70-79: Fair

4) 60-69: Deficient

5) < 60: Very Poor

c. Assessment Rubric:

1) Content & Ideas (25 points)

- a) 21-25: Ideas are very clear, the story is very interesting and cohesive, and the story development is very good.
- b) 16-20: The idea is clear enough, and the story is interesting, but some parts are less cohesive.
- c) 11-15: The idea is not clear, the story is not very interesting, and story development is lacking.
- d) 6-10: Ideas are unclear, and the story is difficult to understand.
- e) 0-5: No idea development, no or very minimal story.

2) Organization (20 points)

- a) 16-20: The narrative structure is very clear and appropriate (orientation, complication, resolution).
- b) 11-15: Structure is clear, but some parts are poorly organized.
- c) 6-10: Structure is unclear, some parts are missing or incomplete.
- d) 0-5: Structure is inappropriate or missing altogether.

3) Grammar & Language Use (20 points)

- a) 16-20: Excellent grammar, no or minimal errors.
- b) 11-15: Fairly good grammar, some errors but does not interfere with understanding.
- c) 6-10: Many grammatical errors that interfere with understanding.
- d) 0-5: Grammar errors are numerous and difficult to understand.

4) Vocabulary (15 points)

- a) 13-15: Word choice is very varied and appropriate to the context.
- b) 10-12: Word choice is quite good, there is variety but still not rich enough.
- c) 7-9: Simple word choice, less varied.
- d) 0-6: Very limited and inappropriate word choice.

5) Mechanics (10 points)

- a) 9-10: Perfect use of punctuation and spelling, no errors.
- b) 7-8: Some errors but do not interfere with understanding.
- c) 5-6: Considerable punctuation and spelling errors.
- d) 0-4: Many spelling and punctuation errors, interfering with understanding.

6) Creativity (10 points)

- a) 9-10: Very original and creative story, interesting and unique plot.
- b) 7-8: The story is moderately creative, with some interesting elements.
- c) 5-6: The story is less creative; the plot is simple and less prominent.
- d) 0-4: The story has no creative or unique elements, very standard.

2. Observation Sheets

The observation sheet is used to monitor student engagement and behavior during the learning process. There are 12 indicators observed, with 4 indicators each for the aspects of responsibility, creativity, and confidence. Each indicator is rated based on student behavior with a scale from 1 (not...) to 5 (very...), and the filling of the observation sheet is done secretly without interrupting the learning process.

Aspects Observed	Indicators	Rating Scale				
	Completes tasks on time without reminders	1-5				
	Follows instructions accurately	1-5				
Responsibility	Consistently revises and corrects writing when given feedback	1-5				
	Shows accountability in group activities	1-5				
	Brings unique and original ideas to writing tasks	1-5				
	Demonstrates willingness to experiment with different writing styles	1-5				
Creativity	Shows flexibility in thinking and problem-solving when constructing narratives					
	Integrates creative language and descriptions effectively in writing					
	Participate actively in class discussions about writing	1-5				
	Willingly shares written work with peers and teachers	1-5				
Self- Confident	Demonstrates confidence when using AI tools for writing improvement	1-5				
	Accepts and acts on feedback positively, showing self-assurance in addressing mistakes	1-5				

Table 3.2: Indicator scale of the observation sheet

a. Rating Scale Description

- 1) Responsibility (1-5 points)
 - 5: Very Responsibility; always submits assignments on time,
 follows instructions perfectly, and actively revises writing.
 - b) 4: Fairly responsibility; turns in assignments on time, follows most instructions, and makes simple revisions.
 - 3: Slightly responsibility; sometimes late, follows instructions
 but inconsistently, rarely makes revisions.
 - d) 2: Rarely responsibility; often submits assignments late, follows instructions minimally, and makes no revisions.
 - e) 1: Not responsible; not responsible for the assignment, does not follow instructions, no revisions.

2) Creativity (1-5 points)

- a) 5: Very creative, produce a unique story with an unusual and interesting plot.
- b) 4: Fairly creative, tried some new ideas, the story plot is moderately interesting.
- c) 3: Slightly creative, some new ideas but not maximized.
- d) 2: rarely creative, rarely tries new things, the story is ordinary and less interesting.
- e) 1: There is no creativity in the story.

3) Self-Confidence (1-5 points)

- a) 5: Very confident, actively asks for feedback, dares to show his/her work.
- b) 4: Fairly confident, open to feedback, and willing to try new things.
- c) 3: Slightly confident, reluctant to show work but accepts feedback.
- d) 2: Lacks confidence, refuses feedback, does not want to show his/her work.
- e) 1: Very unconfident, rejects all feedback, unwilling to participate.

F. Research Procedures

The following research procedure is organized into three stages: preintervention, intervention, and post-intervention. Learning was conducted in 6 meetings using AI tools (Grammarly, QuillBot, and ProWritingAid), which were divided according to the objectives and materials taught.

1. Pre-Intervention Stage

a. Objective: To identify students' initial ability in writing narrative texts, especially grammar, vocabulary, and sentence structure skills, without the help of AI tools. This initial data will serve as a benchmark to assess the effectiveness of the intervention.

b. Pre-Test:

- 1) Students were asked to write a short narrative text (100–150 words) to measure their initial writing ability.
- 2) No AI tools are used at this stage so that the pre-test results purely reflect the students' basic skills.
- 3) Students were also asked to complete a questionnaire to measure their character before the intervention.

c. Observation Sheet:

Observations were made to assess students' character traits (responsibility, creativity, and confidence) at an early stage, seeing how they responded to the task without tools.

2. Intervention Stage (6 Meetings)

The intervention took place in 6 meetings, with the introduction and practice of using each AI tool at a specific meeting.

- Meetings 1 and 2: Introduction and Practice Using GrammarlyMeeting 1:
 - 1) Objective: To introduce Grammarly and practice using it to improve grammar and spelling in narrative writing.
 - 2) Content: Basic structure of narrative text, basic grammar review, and commonly used vocabulary in narrative text.
 - 3) Research Activity

- The teacher explains Grammarly's main features and how to use it to check grammar, spelling, and writing style, as follows: Getting Started:
 - (1) Download & Install: Visit Grammarly's website and download the app for desktop, install the browser extension, or add it to Microsoft Office.
 - (2) Sign Up & Login: Click on "Sign Up," enter your email, create a password, or use a Google account for quick signup. After verification, log in with your credentials.

Key Features:

- (1) Grammar Checker: Identifies grammar errors and provides real-time suggestions.
- (2) Spelling & Punctuation detects and suggests corrections.
- (3) Clarity Suggestions: Improves sentence structure, conciseness, and readability.
- (4) Tone Detector: Analyzes tone to make sure it aligns with the writer's intent.
- (5) Plagiarism Checker (Premium): Checks content originality by comparing it to a vast database.
- (6) Style Guide (Business Plan): Ensures content follows a team's specific guidelines.

Free vs. Premium:

(1) Free Mode: Basic grammar, spelling, and punctuation.

- (2) Premium Mode: Advanced clarity suggestions, tone adjustments, style enhancements, and the plagiarism checker. Premium costs around \$12/month (annually billed), while business plans offer additional features for team collaboration.
- b) Students try writing simple narrative text (100–150 words) and instantly correct errors using Grammarly.

4) Observation:

Not yet done in this meeting; focus on explaining Grammarly features and initial practice.

Meeting 2:

- 1) Objective: Apply Grammarly to improve clarity and grammatical accuracy.
- 2) Research Activity:

Students continue the text they have written in the first meeting, using Grammarly suggestions to improve grammar and spelling.

3) Observation Sheet:

Measures responsibility in correcting errors, creativity in choosing vocabulary, and confidence in utilizing Grammarly suggestions independently.

b. Meetings 3 and 4: Using QuillBot for Sentence Variation and Paraphrasing

Meeting 3:

- Objectives: Using QuillBot to assist students in paraphrasing and sentence variation.
- 2) Materials: Introduction to descriptive sentence structures in narrative texts, synonyms, and variations in sentence expressions.

3) Research Activity:

a) The teacher explains the features of QuillBot, including the paraphrasing modes (standard, fluency, and creative), as well as examples of its use in narrative texts, as follows:

Getting Started:

- (1) Download & Install: QuillBot is a web-based tool accessible at QuillBot.com, so no download is necessary.

 You can add a Chrome extension if needed.
- (2) Sign Up & Login: Register via email or Google account, verify your email, and log in.

Key Features:

- (1) Paraphrasing Tool: Provides several modes (standard, fluency, creative) to rephrase sentences.
- (2) Summarizer: Summarizes lengthy text, perfect for condensing information.

- (3) Grammar Checker (Premium): Catches grammar and spelling errors in real-time.
- (4) Citation Generator: automatically formats citations in various styles.
- (5) Translator: Offers translation into multiple languages.

Free vs. Premium:

- (1) Free Mode: Limited access to paraphrasing modes and a word cap.
- (2) Premium Mode: Full access to all paraphrasing modes, larger word limits, advanced grammar suggestions, and priority processing. Premium costs around \$9.95/month if billed annually.
- b) Students try to paraphrase a short text using QuillBot to add sentence variations and expressions.
- 4) Observation:

No observation; focus on students' understanding in changing sentences using QuillBot.

Meeting 4:

1) Objective: To use QuillBot to expand vocabulary and construct sentence variations in narrative stories.

2) Research Activity:

Students write or edit a short narrative text, using QuillBot to paraphrase sentences with a focus on sentence variety and structure.

3) Observation Sheet:

Measures creativity in choosing new expressions, responsibility in understanding and using QuillBot, and confidence in trying out language variations.

- Meetings 5 and 6: Refinement and Proofreading with ProWritingAidMeeting 5:
 - 1) Objectives: To use ProWritingAid to develop consistency and coherence in narrative texts.
 - 2) Content: consistency in writing style, use of synonyms, and coherent sentence structure.
 - 3) Research Activity:
 - a) The teacher explains the main features of ProWritingAid, such as style checking, grammar, and readability features, as follows:

Getting Started:

(1) Download & Install: Go to ProWritingAid's website to download the desktop app or use the web editor.

(2) Sign Up & Login: Sign up using an email or Google account, verify your email, and log in to access the dashboard.

Key Features:

- (1) Grammar & Style Checking: Provides in-depth reports on grammar and style.
- (2) Writing Reports: Offers 20+ writing analysis reports (grammar, style, overused words, readability).
- (3) Thesaurus: suggests alternative word choices based on context.
- (4) Consistency Checker: Ensures style consistency in punctuation, spelling, and formatting.
- (5) Integrations: Integrates with Word, Google Docs, and Scrivener.

Free vs. Premium:

- (1) Free Mode: Basic grammar and spell check with limited access to writing reports.
- (2) Premium Mode: Full access to all writing reports, integrations with third-party apps, and no word limit for checks. Premium costs around \$20/month (billed monthly) or \$79/year (billed annually).
- b) Students use it to improve a narrative text, focusing on stylistic appropriateness and coherence.

4) Observation:

No observation; focus on the initial application of ProWritingAid.

Meeting 6:

1) Objective: To use ProWritingAid to proofread and finalize a narrative text.

2) Research Activity:

Students use ProWritingAid to check their narrative text, focusing on grammar, style, and coherence to produce a more perfect text.

3) Observation Sheet:

Measures responsibility in improving the text using the tool, creativity in choosing an appropriate style, and confidence in completing the text independently.

3. Post-Intervention Stage

a. Objective: Measure the development of students' abilities after the intervention, as well as evaluate changes in their character (responsibility, creativity, and confidence).

b. Post-Test:

- 1) Students compose narrative text without the help of AI to measure the result and compare it with the pre-test score.
- 2) Post-Test: Students complete a questionnaire to measure their character traits after the intervention.

3) Final Analysis: Data from the observation sheets at meetings 2, 4, and 6, as well as the post-test results, were analyzed to identify the development of students' technical skills and character after using the AI tool.

The procedure was designed to develop students' technical writing skills and character, with continuous evaluation of three key character aspects: responsibility, creativity, and confidence.

G. Data Analysis Techniques

The following are the data analysis techniques that will be used in this study based on the research instruments mentioned, namely *tests*, and *observation sheets*. Each technique is analyzed according to the purpose and type of data generated.

- 1. Test (Pre-Test and Post-Test)
 - a. Type of Analysis: To analyze the data from the pre-test and post-test, quantitative statistical tests were used to see the differences between the experimental and control groups.
 - b. Paired T-Test Analysis:
 - 1) Objective: A paired T-Test is used to compare the pre-test and posttest results of the same group (experimental group or control group) and determine if there is a significant improvement in the results after the intervention.
 - 2) Formula

$$t = \frac{X_d}{\frac{S_d}{\sqrt{n}}}$$

- a) X_d is the average of the difference between the pre-test and post-test scores.
- b) S_d is the standard deviation of the difference.
- c) n is the number of samples.
- 3) If *t* exceeds the critical value of *t* from the *T* distribution table at a certain significance level, then the difference between the pre-test and post-test is declared significant.

c. Independent T-Test Analysis:

- 1) Objective: Used to compare the post-test results of the experimental and control groups to determine if the difference in learning outcomes between the two groups is significant.
- 2) Formula:

$$t = \frac{X_{1} - X_{2}}{\sqrt{\frac{S_{1}^{2}}{n_{1}} + \frac{S_{2}^{2}}{n_{2}}}}$$

- a) X_1 and X_2 are the means of the two groups.
- b) S_1^2 and S_2^2 are the variances of each group.
- c) n_1 and n_2 are the sample sizes of each group.

2. Observation Sheets

a. Type of Analysis: Observation data was analyzed descriptively and qualitatively. These observations measure student character (responsibility, creativity, and confidence) based on a rating scale (e.g., 1-5 scale).

b. Rating Scale:

- 1) Each character aspect is evaluated and given a score (1–5), which is then summed and averaged.
- 2) Observation Average Score Formula:

Observation Average =
$$\frac{\sum Observation\ score}{N}$$

Where Σ observation score is the total score of all observation sheets and N is the number of students.

3) Paired T-Test Analysis:

Objective: A paired T-Test is used to compare the second meeting and the sixth meeting results of experimental group and determine if there is a significant improvement in the results after the intervention.

Formula

$$t = \frac{X_d}{\frac{S_d}{\sqrt{n}}}$$

 X_d : The average of the difference between the pre-test and post-test scores.

 S_d : The standard deviation of the difference.

n: The number of samples.

 Quantitative Analysis (Independent T-Test or Mann-Whitney U Test)

Analysis Design:

- a) To compare the difference in post-test means between the experimental and control groups, the independent T-Test (if the data is normal) or the Mann-Whitney U Test (if the data is not normal) can be used.
- b) Independent T-Test Formula:

$$t = \frac{X_{1-X_2}}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

 X_1 and X_2 are the mean post-test scores of the experimental and control groups.

 S_1^2 and S_2^2 are the variances of each group.

n1 and n2 are the sample sizes of each group.



CHAPTER VI

FINDING AND DISCUSSION

A. Research Findings

In this section, the results of the findings will be presented after conducting research on the sample, namely in the form of pre-test and post-test, and then in carrying out the research, the author used two instruments, namely tests (knowledge assessment), and observation sheets (character assessment). The following are the results of the research:

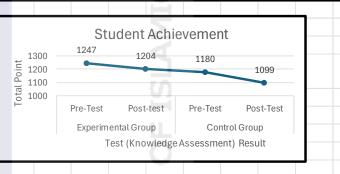
1. Test (Knowledge Assessment)

In this study, tests were conducted in the form of pre-test and post-test. The test was carried out and done by samples divided into two groups, namely the experimental group and the control group. The following are the results of the pre-test and post-test for the experimental group and the control group as follows:

PAREPARE

				Experimental Group Control Group																
Assessed		I	re-Tes	t			P	ost-Tes	st]	Pre-Tes	t			F	ost-Tes	st	
Aspect	Min	Max	Mean	Median	Modus	Min	Max	Mean	Median	Modus	Min	Max	Mean	Median	Modus	Min	Max	Mean	Median	Modus
Content & Ideas	5	15	9.6	10	10	5	20	9.5	10	10	5	15	9.533	10	10	4	13	9.3	10	10
Organization	5	12	8.333	9	10	5	12	7.7	8	8	4	12	8.267	9	10	5	13	7.033	6	5
Grammar & Language Use	5	10	6.433	5	5	5	7	5.333	5	5	5	10	5.733	5	5	5	8	5.4	5	5
Vocabulary	3	10	6.7	6	5	4	10	6.533	6	5	4	8	5.933	6	6	4	6	5.367	5	5
Mechanic	4	9	5.733	5	5	5	8	5.733	5	5	3	7	4.867	5	5	4	6	5.1	5	5
Creativity	3	8	4.767	5	5	3	8	5.333	5	5	3	8	5	5	5	3	7	4.433	4	4
Total Point	28	58	41.57 1247	41.5	40	30	51	40.13 1204	39	38	27	58	39.33 1180	39	39	27	49	36.63 1099	36	37

Cuada Caala	Experime	ntal Group	Control Group					
Grade Scale	Pre-Test	Post-Test	Pre-Test	Post-Test				
90-100 Excellent	0	0	0	0				
80-89 Good	0	0	0	0				
70-79 Fair	0	0	0	0				
60-69 Poor	0	0	0	0				
<60Very Poor	30	30	30	30				



PAREPARE

Table 4.1: Pre-test and Post-test results (knowledge assessment) of the experimental group and control group

a. Experimental Group Result

The table above is the pre-test and post-tets result of the experimental group and control group. The table shows the results of min., max., mean, median, and modus scores for the assessed aspects, namely content and ideas, organization, grammar and language use, vocabulary, mechanic, and creative.

In the experimental group table shows a comparison of the pre-test and post-test results. In the pre-test section shows a total point is 1247 points with a minimum score of 28 points, a maximum score of 58 points, a mean score of 41.57 points, a median score of 41.5 points, and a modus score of 40 points.

Then, in the post-test of experimental group, the total points were 1204 points with a minimum score of 30 points, a maximum score of 51 points, a mean score of 41.13 points, a median score of 39 points, and a modus score of 38 points.

b. Control Group Result

In the control group table also shows the results of pre-tets and post-tests. The table shows that the pre-test total points were 1180 points with a minimum score of 27 points, a maximum score of 58 points, a mean score of 39.33 points, a median score of 39 points, and a modus score of 39 points.

Next, the post-test results showed that total score of 1099 points with a minimum score of 27 points, a maximum score of 49 points, a mean score of 36.33 points, a median score of 36 points, and a modus score of 37 points.

Then, the table above also shows the grade scale that must be taken by the experimental group and control group, namely excellent, good, fair, poor, and very poor. And the table shows that the whole samples from the experimental group and control group obtained a very poor scale. Next, there is also a chart that shows a decrease in scores of both groups. In the experimental group a pre-test score of 1247 points fell to a post-test score of 1204 points, while in the control group from a pre-test score of 1180 points fell to a post-test score 1099 points.

c. Paired Sample T-Test

Objective: to analyze the difference in the mean scores of the pre-test and post-test in the experimental group to evaluate the effect of using AI tools on students' writing skills.

The following is a table of the total pre-test and post-test points in the experimental group.

Sample	Total Poin Pre-test (X1)	Total Poin Post-test (X2)	Deviation $D = X_2 - X_1$	D^2
1	50	51	1	1
2	40	49	9	81
3	42 49		7	49
4	48	44	-4	16
5	30	40	10	100
6	40	38	-2	4
7	40	38	-2	4

8	58	45	-13	169
9	53	44	-9	81
10	47	43	-4	16
11	34	39	5	25
12	38	46	8	64
13	44	41	-3	9
14	28	38	10	100
15	45	39	-6	36
16	57	47	-10	100
17	42	35	-7	49
18	36	35	-1	1
19	54	40	-14	196
20	32	38	6	36
21	41	39	-2	4
22	52	39	-13	169
23	42	45	3	9
24	35	36	1	1
25	28	34	6	36
26	36	37	1	1
27	49	34	-15	225
28	44	36	-8	64
29	28	35	7	49
30	34	30	-4	16
Sum	1247	1204	-43	1711

Table 4.2: Paired T-Test results (knowledge assessment) of the experimental group

Paired sample T-Test formula:

$$t = \frac{D}{\frac{S_D}{\sqrt{n}}}$$

Compute
$$\bar{D}$$
: $\bar{D} = \frac{D}{n} = \frac{-43}{30} = -1,43$

Compute s_{D:}
$$s_D = \sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{n}}{n-1}}$$

$$s_D = \sqrt{\frac{1711 - \frac{-43^2}{30}}{30 - 1}} = \sqrt{\frac{1711 - 61,63}{29}} = \sqrt{\frac{1649,37}{29}} = \sqrt{\frac{1649,37}{29}} = \sqrt{56,87} = 7,53$$

Compute t:

$$t = \frac{D}{\frac{S_D}{\sqrt{n}}}$$

$$t = \frac{\frac{1,43}{7,53}}{\frac{7,53}{\sqrt{30}}} = \frac{\frac{1,43}{7,53}}{\frac{7,53}{5,48}} = \frac{\frac{1,43}{1,37}}{\frac{1,37}{1,37}} = 1,04$$

Interpretasi

With the result of t statistic = 1.04, then t table = 2.04 at the degree of freedom (df = n - 1 = 30 - 1 = 29), and significance level = 0.05. If t statistic < t table, this result indicates that the use of AI tools does not have a significant effect on improving students' writing skills at a certain level of confidence.

d. Independent T-Test

Objective: Analyze the difference in average post-test scores between the experimental group and the control group. The following table shows the total points of the two groups as follows:

Sample	Experimental Group Post- Test (X1)	Control Group Post- Test (X2)	$S_1^2 = (X_1 - Average)^2$	$S_2^2 = (X_2 - Average)^2$		
1	51	51 49		152.93		
2	49	46	78.62	87.73		
3	49	39	78.62	5.60		
4	44	37	14.95	0.13		
5	40 39		0.02	5.60		
6	38 37		4.55	0.13		
7	38	38 36		0.40		
8	45	40	23.68	11.33		
9	44	37	14.95	0.13		
10	43	37	8.22	0.13		
11	39	39 33		13.20		
12	46	46 36		0.40		
13	41	43	0.75	40.53		

14	38	43	4.55	40.53
15	39	37	1.28	0.13
16	47	42	47.15	28.80
17	35	36	26.35	0.40
18	35	43	26.35	2.67
19	40	33	0.02	13.20
20	38	27	4.55	92.80
21	39	36	1.28	0.40
22	39	34	1.28	6.93
23	45	32	23.68	21.47
24	36	35	17.08	2.67
25	34	34	37.62	6.93
26	37	32	9.82	21.47
27	34	34	37.62	6.93
28	36	31	17.08	31.73
29	35	33	26.35	13.20
30	30	28	102.68	74.53
Sum	1204	1099	767.47	683.1
Average	40.13	36.63		

Table 4.3: Independent T-Test results (knowledge assessment) of the experimental group and control group.

Independent T-test formula:
$$t = \frac{X_1 - X_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

$$t = \frac{40,13 - 36,63}{\sqrt{25,747}} = \frac{3,5}{\sqrt{25,58} + 22,77} = \frac{3,5}{\sqrt{48,35}} = \frac{3,5}{6.95} = 0$$

Interpretasi

With the result of $t_{\text{statistic}} = 0.50$, then $t_{\text{table}} = 2.001$, at the degree of freedom $(df = n_1 + n_2 - 2 = 30 + 30 - 2 = 58)$, and a significance level of 0.05. If $t_{\text{statistic}} < t_{\text{table}}$, then there is no significant difference between the experimental and control groups.

2. Observation Sheet

In this study, the observation sheet was implemented to see or measure the development of student character during learning or treatment to experimental group and no treatment to control group. These observations were carried out only at the second, fourth, and sixth meetings. So, this observation took place only three times. Furthermore, the following are the results of the observations from the second, fourth, and third meetings as follows:

]	Experin	nental	Grou	ıp		Control Group						
Aspect Obserbed	- Vieeting		Max.	Mean	Median	Modus	Total Score		Min	Max.	Mean	Median	Modus	Total Score	
	The Second Meeting	9	19	14.33	14	14	4 17		9	18	13.2	13	13	386	
Responsibility	The Fourth Meeting	10	17	14	15	15	420	1266	11	15	12.7	12	12	381	1161
	The Sixth Meeting	11	18	14.3	15	15	429		10	18	13.13	13	13	394	
	The Second Meeting	8	17	12.73	13	14	382		8	17	12.07	12	12	362	
Creativity	The Fourth Meeting	9	18	13.3	14	12	399	1183	11	17	12.53	12	12	376	1103
	The Sixth Meeting	11	17	13.4	13	13	402		9	17	12.13	12	13	365	
	The Second Meeting	8	16	11.47	12	12	305		6	13	10.6	11	12	318	
Confident	The Fourth Meeting	8	16	12.6	13	13	378	1068	8	14	11.57	12	11	347	1009
	The Sixth Meeting	8	51	14.53	14	13	385		8	14	11.47	11	11	344	

Table 4.4: Scoring of observation sheet to both groups

The table above is the result of the observation sheet conducted on both groups, namely the experimental group and the control group. The table explains the minimum, maximum, mean, median, and *modus* (mode) score with the assessment aspects responsibility, creativity, and confidence. Then the table also presents the scores based on each meeting.

Based on the table above, the total score of each aspect assessed, in the responsibility aspect the total score are 1266 points, then creativity are 1183 points,

and confident are 1068 points for experimental group. Meanwhile control group the total scores for responsibility are 1161 points, then creativity are 1103 points, and confidence are 1009 points. The score above is obtained from the total scores of the second meeting, the fourth meeting, and the sixth meeting.

a. Observation Sheet Results of the Experimental Group

The following is a table and bar chart of the observation sheet results on the second, fourth, and sixth meetings, as follows:

			_						
Aspect		econd	The F		The Six	xth (X3)	Deviation		
Observed	Total score	Average	Total score	Average	Total score	Average	D=X2 -X1	D = X3 - X2	
Responsibility	417	14.33	420	14.00	429	14.30	3	9	
Creativity	382	12.73	399	13.30	402	13.40	17	3	
Confident	305	10.17	378	12.60	385	12.83	73	7	
Total Score	1104	37.23	1197	39.9	1216	40.53	93	19	

Table 4.5: Observation Sheet results of the experimental group

The table above is the total score of the observation sheet at each meeting, which is accumulated from the character aspects studied. In the table the total score at the second meeting was 1104 points with an average of 37.23 points, then at the fourth meeting the total score was 1197 points with an average of 39.90 points, and at the sixth meeting the total score was 1216 points with an average of 40.53. Furthermore, the table also shows the deviation total score on each character studied. At the second and fourth meetings, for the responsibility character, there was a difference of 3 points; for creativity, there was a difference of 17 points; and in confidence, there was a difference of 73 points. Then at the fourth and sixth

meetings, there is also a difference in responsibility; there is a difference of 9 points; in creativity, there is a difference of 3 points; and in confidence, there is a difference of 7 points.

The results of the observation sheet above can also be seen in the form of a bar chart below as follows:



Paired Sample T-Test

In this section, the use of the Paired T-Test formula is used to compare the average between meetings, namely the second meeting and the sixth meeting, based on the observation sheet data above, the following explanation:

Paired sample T-Test formula:

$$t = \frac{D}{\frac{S_D}{\sqrt{n}}}$$

$$D = X_3 - X_1 = 1216 - 1104 = 112$$

$$D^2 = 112^2 = 12544$$

Compute
$$\bar{D}$$
: $\bar{D} = \frac{D}{n} = \frac{112}{30} = 3,73$

Compute s_{D:}
$$s_D = \sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{n}}{n-1}}$$

$$s_D = \sqrt{\frac{12544 - \frac{112^2}{30}}{30 - 1}} = \sqrt{\frac{12544 - 418,13}{29}} = \sqrt{\frac{12125,87}{29}} = \sqrt{418,13} = 20,44$$

Compute *t*:

$$t = \frac{\frac{D}{\frac{S_D}{\sqrt{n}}}}{\frac{S_D}{\sqrt{n}}}$$

$$t = \frac{112}{\frac{20,44}{\sqrt{30}}} = \frac{112}{\frac{20,44}{5,48}} = \frac{112}{3,72} = 30,11$$

Interpretasi

With the results of $t_{\text{statistic}} = 30.11$, then $t_{\text{table}} = 2.04$ at the degree of freedom (df = n - 1 = 30 - 1 = 29), and significance level = 0.05. If $t_{\text{statistic}} > t_{\text{table}}$, this result indicates that the use of AI tools has a significant effect on improving student character.

b. Observation Sheet Results of the Control Group

The following is a table and bar chart of the observation sheet results on the second, fourth, and sixth meetings, as follows:

			Me	eting			Deviation				
Aspect	The Second (X1)		The Fo	urth (X2)	The Si	xth (X3)	Devi	ation			
Observed	Total score	Average	Total score	Average	Total score	Average	D = X2 - X1	D = X3 - X2			
Responsibilit y	386	13.2	381	12.70	394	13.13	-5	13			
Creativity	362	12.07	376	12.53	365	12.13	14	-11			
Confident	318	10.6	347	11.57	344	11.47	29	-3			
Total Score	1066	35.87	1104	36.8	1103	36.73	38	-1			

Table 4.6 Observation Sheet results of the control group

The table above is the total score of the observation sheet at each meeting, which is accumulated from the character aspects studied. In the table the total score at the second meeting was 1066 points with an average of 35.87 points, then the fourth meeting was 1104 points with an average of 36.8 points, and the sixth meeting was 1103 points with an average of 36.73 points.

Furthermore, the table also shows the deviation total score on each character studied. At the second and fourth meetings, for the responsibility character, there was a difference of -5 points; for creativity, there was a difference of 14 points; and in confidence, there was a difference of 29 points. Then at the fourth and sixth meetings, there is also a difference in responsibility; there is a difference of 13 points; in creativity, there is a difference of -11 points; and in confidence, there is a difference of -3 points.

The results of the observation sheet above can also be seen in the form of a bar chart below as follows:



Paired Sample T-Test

In this section, the use of the Paired T-Test formula is used to compare the average between meetings, namely the second meeting and the sixth meeting, based on the observation sheet data above, the following explanation:

Paired sample T-Test formula:

$$t = \frac{D}{\frac{S_D}{\sqrt{n}}}$$

$$D = X_3 - X_1 = 1103 - 1066 = 37$$

$$D^2 = 37^2 = 1369$$

Compute
$$\overline{D}$$
: $\overline{D} = \frac{D}{n} = \frac{37}{30} = 1,23$

Compute
$$s_{D:}$$
 $s_D = \sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{n}}{n-1}}$

$$s_D = \sqrt{\frac{1369 - \frac{37^2}{30}}{30 - 1}} = \sqrt{\frac{1369 - 45,63}{29}} = \sqrt{\frac{1323,37}{29}} = \sqrt{45,63} = 6,75$$

Compute *t*:

$$t = \frac{D}{\frac{S_D}{\sqrt{n}}}$$

$$t = \frac{37}{\frac{6,75}{\sqrt{30}}} = \frac{37}{\frac{6,75}{5,48}} = \frac{37}{1,23} = 30,08$$

With the results of $t_{\text{statistic}} = 30.08$, then $t_{\text{table}} = 2.04$ at the degree of freedom (df = n - 1 = 30 - 1 = 29), and significance level = 0.05. If $t_{\text{statistic}} > t_{\text{table}}$, this result indicates that the use of AI tools has a significant effect on improving student character.

c. Independent T-Test

Objective: Analyze the difference in total scores between the experimental group and the control group. The following table shows the total points of the two groups as follows:

Aspect Assessed	Experiment al Group (X1)	Contro 1 Group (X2)		$S_1^2 = (X_1 - Average)$	$S_2^2 = (X_2 - Average)^2$
D '1 '1'	417	386	D A	25	1
Responsibili ty	420	381		4	36
cy	429	394		49	49
Average	422	387	Sum	78	86
	382	362		152.11	32.11
Creativity	399	376		21.78	69.44
	402	365		58.78	7.11
Average	394.33	367.67	Sum	232.67	108.67
	305	318		2601	336.11
Confidence	378	347		484	113.78
	385	344		841	58.78
Average	356	336.33	Sum	3926	508.67

Table 4.7: Independent T-Test Result

Independent T-test formula:
$$t = \frac{X_{1} - X_{2}}{\sqrt{\frac{S_{1}^{2}}{n_{1}} + \frac{S_{2}^{2}}{n_{2}}}}$$

1) Responsibility

$$t = \frac{422 - 387}{\sqrt{\frac{25}{30} + \frac{1}{30}}} = \frac{35}{\sqrt{0,83} + 0,03} = \frac{35}{\sqrt{0,86}} = \frac{35}{0,927} = 37.75$$

2) Creativity

$$t = \frac{394.33 - 367.67}{\sqrt{\frac{232.67}{30} + \frac{108.67}{30}}} = \frac{26.66}{\sqrt{7.75} + 3.62} = \frac{26.66}{\sqrt{11.37}} = \frac{26.66}{3,37} = 7.91$$

3) Confidence

$$t = \frac{356 - 336.33}{\sqrt{\frac{3926}{30}} + \frac{508.67}{30}} = \frac{19.67}{\sqrt{130.86} + 16.95} = \frac{19.67}{\sqrt{147.81}} = \frac{19.67}{12,15} = 1.62$$

Interpretasi

With the result of responsibility $t_{\text{statistic}} = 37.75$, creativity $t_{\text{statistic}} = 7.91$, and confident $t_{\text{statistic}} = 1.62$. Next, $t_{\text{table}} = 2.001$, at the degree of freedom ($df = n_1 + n_2 - 2 = 30 + 30 - 2 = 58$), and a significance level of 0.05. If $t_{\text{statistic}} > t_{\text{table}}$, then there is significant difference between the experimental group and control groups. Resposibility and Creativity aspect menunjukkan higher than t_{table} , and confidence shows slightly less than t_{table} .

B. Discussion

In this section, the author will analyze and map the discussion based on the results obtained from both groups. The discussion is mapped based on the instrument implemented in this study, which leads to research objectives, namely student achievement, student character, and character development observation.

1. Student Achievement

Based on the data on findings, it explains that the experimental group showed a decrease in the total score from pre-test to post-test in the experimental group (1247 \rightarrow 1204), indicating that the use of AI tools did not provide significant improvement in the study period. This is reflected in the paired T-test results ($t = 1.04 < t_{\text{table}} = 2.04$), which means that the null hypothesis (H_0) is accepted, stating that there is no significant difference in achievement before and after the AI tools intervention. This decrease could be due to students' difficulties in initial adaptation to AI tools or the complexity of narrative text material that requires tiered development.

Furthermore, in the control group there was a decrease in the total score from pre-test to post-test (1180 \rightarrow 1099) indicating that the conventional learning method may not support the development of complex writing skills. This is also supported by the results of the Independent T-test between the experimental and control groups showing t = 0.50 < ttable = 2.001, stating that there is no significant difference between the two groups in writing achievement.

On pages 19-20 of chapter II, Dalton-Puffer's^{75,} and Lasagabaster and Sierra's⁷⁶ research highlights that language integration-based learning is more effective when done in a real context. This approach supports the development of students' language skills, especially in narrative writing tasks. However, the short duration and lack of familiarization with AI tools may limit its impact, as seen in the results of this study. Students in the experimental groups using Grammarly, Quillbot and ProWritingAid did not show significant improvement in their academic achievement tests. This may be due to the lack of contextual dimension in their tasks compared to traditional teacher-guided learning

Then, Chen Y., et al.⁷⁷ on page 12 states that automatic feedback from AI tools, such as Grammarly, can help students recognize grammatical errors directly. However, the effectiveness of these tools largely depends on students' understanding of the corrections provided and the extent to which they apply them in their writing. The results of this study support these findings; although students received automated feedback, their writing scores did not improve significantly. Gonzalez and Martin⁷⁸ on page 12 further explain that the use of educational technology requires adaptation time for students to get used to the features of the tool. The short duration of the study is a limiting factor that might explain this result, as seen in the experimental group in this study.

⁷⁵ Dalton-Puffer, C., *Discourse in Content and Language Integrated Learning (CLIL) Classrooms*. John Benjamins Publishing. 2007.

⁷⁶ Lasagabaster, D., & Sierra, J. M., Language Attitudes in CLIL and Traditional EFL Classes. *International CLIL Research Journal*. 2009.

⁷⁷ Chen, Y., et al. "The Impact of Grammarly on EFL Students' Writing Proficiency." Journal of Educational Technology & Society. 2021

⁷⁸ Gonzalez, R., & Martin, L., "Using ProWritingAid to Enhance Writing Coherence: An Experimental Study." *TESOL Quarterly*. 2021.

The findings indicate that the integration of AI tools requires a sustained approach to have a significant impact on students' academic achievement. The limited duration of the study is an important limitation in this context. Similarly, the study of Chen et al.⁷⁹ states that the use of Grammarly has a more significant impact if applied to repeated learning sessions, allowing students to become more familiar with autocorrect and grammar suggestions.

This study shows that the use of AI technology in learning does not have a significant impact or even a negative impact on student learning achievement. Some factors that may explain this finding include:

- a. Students do not understand how to utilize the features of AI tools optimally; hence, the learning effectiveness will decrease⁸⁰. Students in the experimental group needed more time and training to master the AI tools. This may divert students' attention from the main learning process; hence the writing achievement results did not improve significantly.
- b. The use of AI tools requires technological devices such as laptops, computers, or stable internet access. This inequality of access to technology could be one reason why the experimental group's results were not much different from the control group's or even decreased.
- c. AI tools, while effective for auto-correction and style suggestion, do not always provide contextualized learning or fit the needs of the curriculum. In

Suyuti, et., al., Analisis Efektivitas Penggunaan Teknologi dalam Pendidikan Terhadap Peningkatan Hasil Belajar, *Journal on Education*, Volume 06, No. 01, September-Desember 2023, pp. 1-11. E-ISSN: 2654-5497, P-ISSN: 2655-1365, Website: http://jonedu.org/index.php/joe

⁷⁹ Chen, Y., et al. "The Impact of Grammarly on EFL Students' Writing Proficiency." *Journal of Educational Technology & Society*. 2021

writing narrative texts, students need guidance that is not only technical but also creative. If AI tools are used without adequate teacher guidance, students may find it difficult to connect the AI inputs to the larger learning goals; hence, their writing outcomes do not improve.

In addition, a recent study found that college students who used generative AI tools such as ChatGPT tended to score lower compared to those who did not, suggesting that the use of AI may hinder the learning process if not used wisely⁸¹. To overcome these challenges, educational institutions must ensure that the integration of AI technology in learning is done with careful planning, adequate training for teachers and students, and constant monitoring of its effectiveness in improving learning outcomes.

Although the results showed that student achievement did not increase significantly or even decrease, this does not mean that learning did not occur during the study. On the contrary, in both experimental and control groups, there were relevant and valuable learning processes. The following is an explanation of the learning process that occurred:

a. In the experimental group, the use of AI tools such as Grammarly, QuillBot, and ProWritingAid provided new learning experiences for students. Students learnt how to use AI tools to support their writing process, such as getting automatic corrections, reordering sentences, or understanding feedback from AI tools. AI tools provide immediate correction of grammar

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⁸¹ Janik Ole, *Generative AI Usage and Exam Performance*, Faculty of Business Studies and Economics, University of Bre-men, Max-von-Laue-Str. 1, 28213

and sentence structure errors. Although it does not always have a significant impact on the result, students are exposed to the process of error identification and correction. AI tools allowed students to experiment with sentence variations and language styles, which encouraged students to think more creatively and innovatively in their writing.

b. In the control group, despite not using modern technology, the learning process still occurred through conventional methods such as discussion-based learning and manual feedback from the teacher: Students received direct correction from the teacher, which provided an in-depth understanding of their mistakes. This process involves a two-way discussion, which helps students understand the concepts of grammar and narrative structure better. In the control group, students tended to interact more with classmates to complete the task. This develops communication and cooperation skills. Students went through a manual revision process, which involved a deep understanding of narrative text structure. Although the results were not significant, this experience was still part of their learning.

Although student achievement decreased, students learnt from the mistakes they made during the writing and revision process. Mistakes become an important part of the learning process, where students understand what to improve. In both the experimental and control groups, students were actively involved in learning the elements of narrative text, such as orientation, complication, and resolution. This provides a basic understanding that is beneficial for subsequent learning.

2. Student Character (Observation Sheet)

Based on the data on the findings above, the increase in student responsibility can be seen from the consistent completion of revision tasks. The total score is 1206 points, indicating that the use of AI tools helped students to be more focused and organized. Then, students' creativity developed along with their ability to explore sentence variations and writing styles supported by QuillBot. The increase in scores from 382 to 402 with a total score is 1183 points. Subsequently, students' self-confidence increased significantly, as seen from the score that rose from 305 to 385 with a total score is 1068 points. This is consistent with other research showing that automated feedback helps students believe more in the quality of their work.

Based on the review of the data above, the use of AI tools such as Grammarly plays an important role in increasing student responsibility. Bhatia⁸² on page 12 explains that Grammarly encourages students to revise their writing independently, building a sense of responsibility through auto-correction. This is in line with the observation results of this study, where students' responsibility scores in the experimental group increased gradually during the intervention. Students showed higher initiative to complete tasks on time after receiving feedback from the AI tools. This aligns with Lickona's⁸³ perspective on page 24 that integrates technology-based learning with character education to foster positive behaviors, such as student responsibility in learning.

⁸² Bhatia, P., "Building Responsibility Among Students Through AI Writing Tools." *Journal of Digital Education*. 2021.

⁸³ Lickona, T., Educating for Character: How Our Schools Can Teach Respect and Responsibility. Bantam. 1991.

In addition, students' creativity is supported by QuillBot's ability to suggest sentence variations and language styles. Hamed⁸⁴ on pages 12-13 emphasizes that AI tools such as QuillBot provide wider opportunities for stylistic exploration, encouraging students to think creatively in composing texts. This finding was reflected in the observation sheet data, which showed a significant increase in creativity in the experimental group. This increase indicates that QuillBot facilitated the exploration of sentence structure, in line with Fogarty's⁸⁵ theory of integrated learning on page 15, which states that learning tools that support creative exploration can enrich students' thinking processes.

Furthermore, students' confidence also increased significantly using ProWritingAid, as explained by Gonzalez and Martin⁸⁶ on page 12. This AI tool provides detailed feedback, helping students understand the strengths and weaknesses of their writing. In this study, the increase in student confidence in the experimental group was monitored through observation results, especially in the final session. Zhou and Wang⁸⁷ on page 12-13 also noted that the positive feedback from the AI tools was able to motivate students to be more confident and dare to try variations of more complex writing styles. This finding supports Vygotsky's⁸⁸

⁸⁴ Hamed, M., "Using Paraphrasing Tools to Enhance Vocabulary and Writing Creativity Among ESL Learners." *Journal of Language and Education Research*. 2020.

⁸⁵ Fogarty, R., Ten Ways to Integrate Curriculum. Skylight Professional Development, 1991.

⁸⁶ Gonzalez, R., & Martin, L., "Using ProWritingAid to Enhance Writing Coherence: An Experimental Study." *TESOL Quarterly*. 2021.

⁸⁷ Zhou, X., & Wang, S., "Creative Writing with AI: Empowering Students to Think Outside the Box." *Language Learning & Technology*. 2020.

⁸⁸ L. S. Vygotsky, Mind in Society the Development of Higher Psychological, *Processes Amerika*, 1979, p. 85.

theory about the zone of proximal development (ZPD), where AI tools serve as scaffolding to help students reach their full potential.

Therefore, based on the data, it shows that AI tools effectively contribute to students' character development, in line with the principles of character-based learning in Coyle, Hood, and Marsh's research⁸⁹ on page 17.

Integrated learning, according to Fogarty⁹⁰ on pages 14-15, facilitates students' character development through tasks that involve cooperation and exploration. In the context of this study, the increase in students' responsibility is evident from the observation scores that continued to increase during the intervention sessions. The use of AI tools such as Grammarly helped students take the initiative in revising their writing, thus supporting the development of responsibility. In addition, Fogarty's collaboration theory states that interaction and discussion in integrated learning contribute to positive character building. In this study, although students used technology more than traditional discussion, AI tools replaced this function by providing relevant and personalized automated feedback.

Then, the integration of technology and character education as described by Lickona⁹¹ on page 24 allows students to learn through direct experience that is relevant to their lives. The results showed that the experimental group was superior in character development compared to the control group. The increase in students' creativity, as observed through questionnaires and observations, is supported by

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⁸⁹ Coyle, D., Hood, P., & Marsh, D., *CLIL: Content and Language Integrated Learning*. Cambridge University Press. 2010

⁹⁰ Fogarty, R., *Ten Ways to Integrate Curriculum*. Skylight Professional Development, 1991.

⁹¹ Lickona, T., Educating for Character: How Our Schools Can Teach Respect and Responsibility. Bantam. 1991.

QuillBot, which provides a variety of sentence structures and vocabulary. This supports the theory that technology-based tools can expand students' exploration space, thus encouraging innovation in writing tasks. In addition, ProWritingAid provides detailed and real-time feedback, which helps students increase their confidence, as stated by Zhou and Wang⁹² on pages 12-13.

Furthermore, Vygotsky's⁹³ Zone of Proximal Development (ZPD) theory explains how technology can serve as scaffolding to help students reach their zone of potential development. AI tools such as Grammarly and ProWritingAid provide appropriate support at students' ability levels, allowing them to complete more complex tasks with more confidence. In this study, observations supported this theory, with a significant increase in students' confidence in the experimental group. This positive change indicates that the use of AI tools not only supports technical ability in writing but also develops students' character holistically through an integrated approach to technology.

The results of this study that improved student character are in line with the findings of Mujahidah et al., which showed that artificial intelligence (AI)-based technology has a high level of acceptance among university students. The study highlighted four main aspects of technology acceptance using the TAM (Technology Acceptance Model) model, namely Perceived Ease of Use (PEU), Perceived Usefulness (PU), Attitude Toward Using (ATU), and Behavioral Intention (BI). These results are relevant to the research conducted, where AI tools

⁹³ L. S. Vygotsky, Mind in Society the Development of Higher Psychological, *Processes Amerika*, 1979, p. 85.

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⁹² Zhou, X., & Wang, S., "Creative Writing with AI: Empowering Students to Think Outside the Box." *Language Learning & Technology*. 2020.

such as Grammarly, QuillBot, and ProWritingAid were found to be easy to use by students, increase their confidence, and provide effective feedback for AI-based English language learning and character development⁹⁴.

In addition, Mujahidah et al. emphasized that students tend to perceive AI as a useful tool in supporting English learning. The data showing the highest mean score for Perceived Usefulness (PU) in their study reinforces the view that this technology not only helps the technical aspects of learning but also encourages students to be more actively engaged and independent. In the context of this study, the role of AI tools as a means of developing student character traits such as responsibility and creativity show similar results, where students can explore language styles and narrative structures more independently.

Furthermore, the article also notes that students have a strong intention to continue using AI tools in the future due to their clear benefits in English language learning. This correlates with your research results, which show that the use of technology supports holistic learning, although its impact on academic achievement requires a longer adaptation time. Therefore, students' positive acceptance of AI in the context of learning can serve as a foundation for further implementation across different levels of education.

⁹⁴ Mujahidah, et., al., The Students' Perception of Artificial Intelligence-Based Instruction in Speaking Class, *ELITE Journal*; e-ISSN: 2580-9946 p-ISSN: 2580-9938; Vol. 5, No. 3, Oktober 2023, pp. 593-604, Available online at https://www.elitejournal.org/index.php/ELITE

3. Experimental Group and Control Group

This study showed that although students' character traits improved significantly, academic achievement did not show positive results. A possible factor for this was the limited adaptation time to the AI tools, which reduced their effectiveness in students' writing skills. As stated by Chen et al., educational technology requires sufficient time for students to understand and utilize the features optimally 95. In addition, AI tools often provide technical feedback without considering the writing context, which may hinder the development of students' narrative skills. This research could be strengthened by adding an in-depth analysis of the reasons why the academic achievement results were not significant, despite the improvement in students' characters.

This research can also provide concrete examples of how each AI tool contributes to students' character development. Grammarly, for example, helps students become more responsible by correcting their own grammatical errors, while QuillBot encourages creativity through the exploration of sentence structures and vocabulary variations. ProWritingAid, on the other hand, boosts students' confidence through detailed feedback that allows them to understand the strengths and weaknesses of their writing. According to Gonzalez and Martin, a combination of technologies like these can encourage the development of cognitive as well as affective skills⁹⁶. By providing specific examples, this research can further clarify the contribution of each tool to students' character building.

⁹⁵ Chen, Y., et al. "The Impact of Grammarly on EFL Students' Writing Proficiency." *Journal of Educational Technology & Society*. 2021

⁹⁶ Gonzalez, R., & Martin, L., "Using ProWritingAid to Enhance Writing Coherence: An Experimental Study." *TESOL Quarterly*. 2021.

In addition, it is important to discuss the limitations of AI tools and how these technologies can be practically integrated in classroom learning. Wright et al., note that AI tools often lack contextualization and tend to create students' dependence on autocorrect, which can inhibit independent learning. Therefore, teachers should play an important role in guiding students to utilize these technologies wisely, for example, by combining AI tools with group discussions or hands-on guidance. These recommendations highlight the importance of a balanced pedagogical strategy between technology and traditional approaches to ensure optimal outcomes.

One way to increase the relevance of this research is to expand the discussion on how each group learned despite the decline in academic achievement. In the experimental group, students learned the use of new technologies, which encouraged them to be more responsible and creative in completing their tasks. Grammarly, for example, provided a learning experience that trained students to focus on autocorrect, while QuillBot allowed students to experiment with variations in language style. This is in line with the views of Zhou and Wang, who note that exploration through technology facilitates the development of non-academic skills such as creativity. In the control group, direct interaction with teachers and classmates remained an important element in building understanding and collaboration⁹⁷.

 $^{^{97}}$ Zhou, X., & Wang, S., "Creative Writing with AI: Empowering Students to Think Outside the Box." Language Learning & Technology. 2020.

This research can also be optimized by adding a discussion on the psychological impact of using AI tools on students. As noted by Hamed, technology that provides automated feedback can boost students' confidence as they feel their work is noticed and appreciated⁹⁸. However, the use of technology without adequate guidance can also lead to anxiety or frustration, especially if students struggle to understand the corrections provided. Therefore, it is important to evaluate the emotional impact of this technology and how teachers can help students overcome such challenges during the learning process.

In addition, including comparisons with similar studies can strengthen your research results. Research by Chen et al., showed that while Grammarly helped improve grammar skills, its impact on creative writing ability took longer to become visible⁹⁹. This result is relevant to your findings, where students need more adaptation time to optimize the benefits of technology in the context of narrative learning. By comparing your research results with these findings, the discussion can be more in-depth and make a new contribution to existing literature.

Finally, this research could be expanded to include a section on limitations and cultural factors that may have influenced the results. Mujahidah et al., ¹⁰⁰pointed out that technology acceptance is highly dependent on the cultural context and learning habits of students. Factors such as unequal access to technology,

⁹⁸ Hamed, M., "Using Paraphrasing Tools to Enhance Vocabulary and Writing Creativity Among ESL Learners." *Journal of Language and Education Research*. 2020.

⁹⁹ Chen, Y., et al. "The Impact of Grammarly on EFL Students' Writing Proficiency." Journal of Educational Technology & Society. 2021

¹⁰⁰ Mujahidah, et., al., The Students' Perception of Artificial Intelligence-Based Instruction in Speaking Class, *ELITE Journal*; e-ISSN: 2580-9946 p-ISSN: 2580-9938; Vol. 5, No. 3, Oktober 2023, pp. 593-604, Available online at https://www.elitejournal.org/index.php/ELITE

preference for traditional learning methods, or local curriculum expectations may influence how AI tools are used and accepted by students. Including a discussion on this aspect not only provides a richer context for the research results but also increases their relevance on a global level. In this way, this study can make a more comprehensive contribution to the literature on the use of technology in education.



CHAPTER V

CONCLUSIONS AND IMPLICATIONS

A. Conclusions

The following are the conclusion of this study as follows:

The test results showed that the use of AI tools (Grammarly, QuillBot, ProWritingAid) did not have a significant impact on students' writing achievement within the limited time of the study. The experimental and control groups showed no significant difference in narrative text writing ability. This indicates that the duration of adaptation to technology as well as the complexity of the writing task were factors that influenced the results. Furthermore, these results answer hypothesis 1 in this study, namely H_0I is accepted. There is no significant difference between the control and experimental groups in students' writing achievement based on the test results.

The use of AI tools had a significant impact on students' character development, especially responsibility, creativity, and self-confidence. Observation data showed that students in the experimental group experienced consistent character improvement during the learning session. This proves that technology does not only function as a learning tool but also to shape student character. These results answer hypothesis 2 in this study, namely H_02 is rejected. The data shows that the experimental group experienced significant character improvement compared to the control group, proving that the integration of AI tools is effective in building student character.

Furthermore, this research offers new insights into the strategic combination of AI tools to meet multidimensional learning needs. Grammarly supports responsibility through auto-correction, QuillBot enhances creativity through language exploration, and ProWritingAid builds student confidence through detailed feedback. The findings confirm the importance of technological integration in holistic learning that includes both cognitive and affective dimensions.

B. Implications

- 1. Implications for Education
 - a. Holistic Learning Strategy:

Teachers can use AI tools as character-based learning support tools, focusing on developing students' responsibility, creativity, and confidence. However, direct assistance from teachers is still needed to ensure students understand the corrections and suggestions from AI tools.

b. Improving Learning Methods:

This study shows that technology integration needs to be accompanied by contextual learning approaches to optimize its impact on academic achievement. Teachers can combine the use of AI tools with class discussions or collaboration-based projects to add a contextual dimension.

2. Implications for Further Research

a. Duration and Scope of Research:

Future research can extend the duration of the study to evaluate the longterm impact of AI tools on students' academic achievement. In addition, research with a larger sample size may provide more generalizable results.

b. Emphasis on Character:

The impact of AI tools on student character development opens opportunities for further exploration of the role of technology in character-based education. Future research could focus on specific aspects such as digital ethics and technological literacy relevant to 21st-century needs.



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APPENDICES



Appendix 1

LESSON PLAN

LESSON PLAN

Satuan Pendidikan : SMA Negeri 4 Luwu Utara

Mata Pelajaran : Bahasa Inggris (English Learning)

Kelas/Semester : XI/1

Materi pokok : Narrative Text

Alokasi waktu : 12 JP (6 Pertemuan)

AI Integrasi : Grammarly, Quillbot, dan ProWritingAid

A. OBJECTIVES OF LEARNING

1. Knowledge Objectives:

- a. Students will understand the structure and elements of Narrative text (orientation, complication, resolution).
- b. Students can write coherent and cohesive narrative texts, applying proper grammar, punctuation, and vocabulary.

2. Character Objectives:

- a. **Responsibility:** Students will demonstrate responsibility by completing writing tasks on time, following instructions, and revising their work based on feedback from AI tools.
- b. **Creativity:** Students will develop creativity by crafting engaging and original stories, using diverse vocabulary and expressions.

c. **Self-Confidence:** Students will build self-confidence by using AI tools to refine their writing, reducing fear of making mistakes, and improving their overall writing skills.

3. Skill Objectives:

- a. Students will enhance their writing skills, focusing on narrative structure, grammar accuracy, and vocabulary use.
- Students will learn to effectively use AI tools (Grammarly, QuillBot,
 ProWritingAid) to improve their writing.

B. BASIC COMPETENCES AND COMPETENCE ACHIEVEMENT INDICATORS

1. Basic Competences:

- a. Write well-structured and clear narrative texts.
- b. Utilize digital tools to enhance language learning.

2. Competence Achievement Indicators:

a. Student Achievements:

- 1) Students can identify the main elements of a narrative text (orientation, complication, resolution).
- 2) Students can compose a narrative text with a clear

b. Student Characters:

 Responsibility: Students submit completed writing assignments by the given deadline and make improvements based on feedback.

- structure and appropriate
 use of grammar and
 vocabulary.
- 3) Students can independently
 use AI tools to check
 grammar, rephrase
 sentences, and enhance
 vocabulary.
- 2) Creativity: Students produce original and imaginative stories, exploring different themes, plots, and characters.
- 3) Self-Confidence: Students show reduced hesitation in writing tasks, evidenced by their increased willingness to revise and improve their drafts.

C. LEARNING MATERIALS

- 1. Topic: Narrative Text
- 2. Focus: Writing Skills
- 3. Materials for Six Sessions:
 - a. Introduction to Narrative Text: Structure, key elements, and examples.
 - b. Writing Orientation: Crafting engaging introductions and setting up the story.
 - c. Developing Complications: Building conflict and making the story interesting.
 - d. Writing Resolutions: Concluding the story effectively.

- e. Grammar and Vocabulary Enhancement: Using AI tools to refine language use.
- f. Complete Narrative Writing and Post-Test: Final writing project and assessment.

D. LEARNING STEPS

Meeting 1: Introduction to Narrative Text and using Grammarly

1. **Pre-Test**: An initial test to measure students' basic skills in writing narrative text.

2. Materials:

- a. Introduction to narrative text, including basic structure (Orientation,
 Complication, Resolution) and key elements (character, plot, and setting).
- b. Examples of simple narrative texts and analysis together.

3. Use of Grammarly:

- a. Download and Install Grammarly: Guide to downloading and installing Grammarly as a browser extension or app.
- b. Sign Up and Login: Students create an account and log in to access basic Grammarly features.
- c. Grammarly Integration with Materials: Students write an opening paragraph for a narrative text (Orientation) and use Grammarly to check for grammar and vocabulary errors.

4. **Exercise (Homework)**: Students draft an orientation paragraph and use Grammarly to check for language errors and provide feedback.

Meeting 2: Writing orientation and observation sheets

1. Materials:

- a. Feedback from the teacher and classmates on orientation writing using Grammarly.
- b. Revision is based on feedback from Grammarly and the class discussion.
- 2. **Observation Sheets**: Observe student behavior to measure responsibility, creativity, and self-confidence in using Grammarly and collaborating with classmates.
- 3. Exercise: No homework; focus on revision and in-class discussion.

Meeting 3: Writing the Complication Section and Using QuillBot

1. Material:

a. Discussion on complications in narrative text: conflict development and how to make the story more interesting.

2. Use of QuillBot:

- a. Access and Login: Guidance on accessing QuillBot, logging in, and introducing the paraphrasing feature.
- Integration of QuillBot with Materials: Students input their Complication section text into QuillBot to reorganize sentences with better structure and expand vocabulary.

3. **Exercise** (**Homework**): Students write a Complication passage and use QuillBot to refine the language and improve sentence variety.

Meeting 4: Development of Resolution & Observation Sheets

1. Materials:

- a. Resolution writing: How to structure an effective and interesting story resolution.
- b. Teacher feedback on revision results using QuillBot.
- 2. **Observation Sheets**: The observation sheets showed how responsibility, creativity, and self-confidence were applied when using QuillBot to improve writing skills.
- 3. **Exercise**: No homework; focus on feedback and revision of results in class.

Meeting 5: Grammar and Vocabulary Enhancement with ProWritingAid

1. Materials:

a. Emphasis on using proper grammar and vocabulary in writing narrative texts.

2. Use of ProWritingAid:

- a. Download and Installation: Guide to downloading ProWritingAid as an app or extension.
- b. Login and Use: Students create a ProWritingAid account and use the grammar and style analysis features.

- c. ProWritingAid Integration with Materials: Students enter their narrative texts to check for grammar errors, vocabulary, and provide better style.
- 3. **Exercise** (**Homework**): Students complete writing a narrative text and use ProWritingAid for final revision.

Meeting 6: Narrative Text Preparation Final & Post-Test

- 1. Material:
 - a. Composing a complete narrative text using all the elements learned.
 - b. Final review using ProWritingAid to ensure minimal grammar, style, and vocabulary errors.
- 2. **Observation Sheets**: Final observation to measure responsibility, creativity, and self-confidence in using AI tools.
- 3. **Post-Test**: Students were asked to write a complete narrative text without teacher assistance and without using AI tools.

E. MEDIA AND RESOURCES

1. Media:

- a. Laptops/computers with internet access.
- b. AI Tools: Grammarly,QuillBot, ProWritingAid.

2. Resources:

- a. Handouts on narrative text structures and examples.
- b. Online tutorials and guidesfor using Grammarly,QuillBot, and ProWritingAid.

- c. Projector for presentationsand interactivediscussions.
- c. Sample narrative texts for practice and analysis.

F. ASSESSMENT METHOD

- 1. Knowledge Assessment:
 - a. Pre-test and post-test

 results to measure

 improvements in writing

 skills.
 - b. Ongoing evaluation of narrative writing drafts.
- C. Character Assessment

 (Responsibility, Creativity, SelfConfidence), (Questionnaire, and
 Observation Sheets):
- a. Responsibility: Attendance records, timely submission of drafts, and response to feedback.
- b. Creativity: Evaluation of originality and diversity in narrative ideas, vocabulary, and sentence structures.
- c. Self-Confidence: Observation of students' willingness to make edits, ask questions, and actively participate in discussions.

Appendix 2

LEARNING MATERIALS: NARRATIVE TEXT

A. What is Narrative Text?

1. **Definition:** A narrative text is a form of writing that tells a story. It can be fictional (e.g., fairy tales, short stories, novels) or based on real events (e.g., biographies, anecdotes). The purpose of a narrative text is to entertain, inform, or convey a message to the reader through a series of events.

2. Characteristics:

- a. Focuses on a specific story with a clear sequence of events.
- b. Involves characters, settings, conflicts, and resolutions.
- c. Uses descriptive language to create imagery and engage the reader.

B. Structure of Narrative Text

1. Orientation:

- a. Introduction of characters, setting (time and place), and the main situation.
- b. This part sets up the scene and gives readers a sense of what to expect.

2. Complication:

- a. The main problem or conflict is introduced.
- b. This is the most crucial part of the narrative as it drives the story forward and creates tension.

3. Resolution:

a. The problem is resolved, and the story comes to an end.

 It may include a moral lesson or a message that the author wants to convey.

4. (Optional) Re-orientation / Coda:

a. Sometimes used to conclude the story by providing additional information or a moral lesson.

C. Types of Narrative Text

- 1. Folktales: Stories passed down through generations, often with moral lessons (e.g., "The Tortoise and the Hare").
- 2. Fairy Tales: Stories involving magical elements (e.g., "Cinderella").
- 3. **Fables:** Short stories with animals as characters, conveying a moral lesson (e.g., "The Fox and the Grapes").
- 4. **Legends:** Stories that are partly based on real events but exaggerated over time (e.g., "Robin Hood").
- 5. **Myths:** Traditional stories involving gods, goddesses, and supernatural events (e.g., "Pandora's Box").
- 6. **Personal Anecdotes:** Short stories about personal experiences.

D. Language Features of Narrative Text

- 1. **Past Tense:** The narrative is often told in the past tense.
 - a. Example: "Once upon a time, there *was* a young girl who *lived* in a village."
- 2. **Action Verbs:** Words that express actions, which drive the story forward.
 - a. Example: "The boy ran, jumped, and hid from the monster."

- Adjectives and Adverbs: Used to describe characters, settings, and actions, creating vivid imagery.
 - a. Example: "The dark forest was eerily quiet."
- 4. **Time Connectives:** Words that show the sequence of events.
 - a. Example: Then, after that, finally, once upon a time.

E. Writing Guide: How to Write a Narrative Text

1. Step 1: Planning Your Story

- a. Decide on the main theme or message of the story.
- b. Outline the story's key components: characters, setting, plot (beginning, middle, end).

2. Step 2: Writing the Orientation

- a. Start by introducing the characters and the setting.
- b. Provide enough details to help the reader understand the context.

3. Step 3: Developing the Complication

- a. Introduce the conflict or problem.
- b. Build up the tension or excitement, leading to the climax.

4. Step 4: Writing the Resolution

- a. Resolve the conflict.
- b. Offer a satisfying conclusion that ties up loose ends.

5. Step 5: Revising and Editing

- a. Check the narrative for grammar, punctuation, and spelling errors.
- b. Use AI tools (Grammarly, QuillBot, ProWritingAid) to improve the quality of the writing.

c. Revise the text to enhance clarity, coherence, and engagement.

F. Examples of Narrative Text

- 1. Example 1: Simple Folktale Once upon a time, in a small village, there lived a clever fox. The fox always managed to outsmart the other animals.

 One day, he decided to trick a farmer... (Continue with complication and resolution).
- 2. Example 2: Personal Anecdote Last summer, I went to the beach with my family. It was supposed to be a perfect day, but something unexpected happened... (Continue with complication and resolution).

G. Practice Activities

- 1. Activity 1: Identifying Elements
 - a. Read a sample narrative text and identify the orientation, complication, and resolution.
- 2. **Activity 2:** Writing Prompts
 - a. Write a short narrative based on the prompt: "Write a story about a day when everything went wrong."
 - b. Use AI tools to refine your draft and share it with peers for feedback.
- 3. Activity 3: Story Expansion
 - Expand a simple storyline by adding more details, descriptions, and dialogues to make it more engaging.

H. Using AI Tools to Enhance Narrative Writing

Grammarly: Focus on correcting grammar, punctuation, and style errors.
 Pay attention to suggestions for sentence structure and clarity.

- 2. **QuillBot:** Experiment with rephrasing and expanding sentences to make the narrative richer and more varied.
- ProWritingAid: Analyze overall readability, sentence variety, and tone.
 Use the tool to refine the final version of the story.



Appendix 3

SCORE ASSIGNMENT

1. Knowledge Assessment (Student Achievements)

The assessment of learning achievements focuses on the ability to write narrative texts. The following are some of the aspects assessed and the assessment criteria:

Assessed Aspect	Description	Score
Content & Ideas	Linkage of ideas, clarity of story, and story development (plot, conflict, resolution).	25
	development (plot, conflict, resolution).	
Organization	Correct narrative text structure (orientation, complication, resolution)	20
Grammar & Language Use	Use Correct use of grammar (past tense, subject-verb agreement, etc)	20
Vocabulary	Selection of words that are varied and appropriate to the context of the story	15
Mechanic	Correct use of punctuation and spelling.	10
Creativity	The originality of the story, innovation in plot, and character development.	10

a. Total Score: 100

b. Grade Scale:

1) 90-100: Excellent

2) 80-89: Good

- 3) 70-79: Fair
- 4) 60-69: Deficient
- 5) < 60: Very Poor

c. Assessment Rubric:

- 1) Content & Ideas (25 points)
 - a) 21-25: Ideas are very clear, the story is very interesting and cohesive, and the story development is very good.
 - b) 16-20: The idea is clear enough, and the story is interesting, but some parts are less cohesive.
 - c) 11-15: The idea is not clear, the story is not very interesting, and story development is lacking.
 - d) 6-10: Ideas are unclear, and the story is difficult to understand.
 - e) 0-5: No idea development, no or very minimal story.
- 2) Organization (20 points)
 - a) 16-20: The narrative structure is very clear and appropriate (orientation, complication, resolution).
 - b) 11-15: Structure is clear but some parts are poorly organized.
 - c) 6-10: Structure is unclear, some parts are missing or incomplete.
 - d) 0-5: Structure is inappropriate or missing altogether.
- 3) Grammar & Language Use (20 points)
 - a) 16-20: Excellent grammar, no or minimal errors.
 - b) 11-15: Fairly good grammar, some errors but does not interfere with understanding.

- c) 6-10: Many grammatical errors that interfere with understanding.
- d) 0-5: Grammar errors are numerous and difficult to understand.

4) Vocabulary (15 points)

- a) 13-15: Word choice is very varied and appropriate to the context.
- b) 10-12: Word choice is quite good, there is variety but still not rich enough.
- c) 7-9: Simple word choice, less varied.
- d) 0-6: Very limited and inappropriate word choice.
- 5) Mechanics (10 points)
 - a) 9-10: Perfect use of punctuation and spelling, no errors.
 - b) 7-8: Some errors but do not interfere with understanding.
 - c) 5-6: Considerable punctuation and spelling errors.
 - d) 0-4: Many spelling and punctuation errors, interfering with understanding.
- 6) Creativity (10 points)
 - a) 9-10: Very original and creative story, interesting and unique plot.
 - b) 7-8: The story is moderately creative, with some interesting elements.
 - c) 5-6: The story is less creative; the plot is simple and less prominent.
 - d) 0-4: The story has no creative or unique elements, very standard.

To calculate a student's final score based on the assessment rubric that has been given, you can use the following formula:

$$Total Score = \frac{Total \ Point \ Earned}{Maximum \ Points} x \ 100$$

- Total Points Earned: The number of points earned by the student from each aspect assessed (content & ideas, organization, grammar & language use, vocabulary, mechanics, creativity).
- Maximum Points: The maximum total points that can be earned, which is 100.

2. Character Assessment (Responsibility, Creativity, Self-Confidence)

Character assessment is carried out through direct observation during learning activities and filling out questionnaires by students. The following are the assessment criteria for each character:

Character Aspect	Description	Scale
Responsibility	Punctuality in submitting assignments, following instructions well, and making revisions according to feedback.	1-5
Creativity	Ability to generate new ideas and explore different writing styles and story themes.	1-5
Self-Confidence	Confidence in writing, openness to feedback, and courage to participate.	1-5

- a. Rating Scale:
 - 1) 5: Excellent
 - 2) 4: Good
 - 3) 3: Fair
 - 4) 2: Deficient
 - 5) 1: Very Poor

b. Scale Explanation:

- 1) Responsibility (1-5 points)
 - a) 5: Always submits assignments on time, follows instructions perfectly, and actively revises writing.
 - b) 4: Turns in assignments on time, follows most instructions, and makes simple revisions.
 - c) 3: Sometimes late, follows instructions but inconsistently, rarely makes revisions.
 - d) 2: Often submits assignments late, follows instructions minimally, and makes no revisions.
 - e) 1: Not responsible for the assignment, does not follow instructions, no revisions.

2) Creativity (1-5 points)

- a) 5: Very creative, produce a unique story with an unusual and interesting plot.
- b) 4: Fairly creative, tried some new ideas, the story plot is moderately interesting.
- c) 3: Slightly creative, some new ideas but not maximized.
- d) 2: Rarely tries new things, the story is ordinary and less interesting.
- e) 1: There is no creativity in the story.
- 3) Self-Confidence (1-5 points)
 - a) 5: Very confident, actively asks for feedback, dares to show his/her work.

- b) 4: Fairly confident, open to feedback, and willing to try new things.
- c) 3: Slightly confident, reluctant to show work but accepts feedback.
- d) 2: Lacks confidence, refuses feedback, does not want to show his/her work.
- e) 1: Very unconfident, rejects all feedback, unwilling to participate.

For character assessment, you can calculate the average score of each character based on a 1–5 rating scale. Then, add the average scores of the three aspects (responsibility, creativity, and self-confidence) and divide by the total aspects assessed.

 $Average\ Character\ Score = \frac{Responsibility\ Score + Creativity\ Score + Self - Confident\ Score}{2}$



Appendix 4

PRE-TEST & POST-TEST

Pre-Test and Post-Test for Experimental and Control Groups

1. Pre-Test for Both Groups (Writing Skill Assessment)

Instructions: Write a narrative story based on the prompt provided below. Follow the narrative structure (orientation, complication, resolution). Focus on using correct grammar, vocabulary, and creativity. Minimum word count: 200 words.

Prompt: *Imagine you are on a school trip, and suddenly, you get separated from your group. Describe what happens next and how you handle the situation.*

Guidelines:

- a. Orientation: Introduce the setting (the school trip) and characters (yourself and others, if any).
- b. Complication: Describe how you got separated and what happens during this unexpected situation.
- c. Resolution: Explain how you resolved the situation and found your way back to your group.

Assessment Criteria:

- a. Content & Ideas: Coherence, clarity, and development of ideas.
- b. Organization: Logical flow following the narrative structure.
- c. Grammar & Language Use: Correct use of past tense, subject-verb agreement, and general grammar.
- d. Vocabulary: Use of varied and context-appropriate words.

- e. Mechanics: Correct spelling, punctuation, and capitalization.
- f. Creativity: Originality and uniqueness of the story.

2. Post-Test for Both Groups (Writing Skill Assessment)

Instructions: Write a narrative story based on the following prompt. Follow the same structure and focus on creativity, grammar, and vocabulary. Minimum word count: 200 words.

Prompt: You are walking through a park one afternoon and find a mysterious box hidden under a bench. Write a story about what happens when you open the box.

Guidelines:

- a. Orientation: Set the scene in the park and describe your character.
- b. Complication: Explain what you found in the box and how it changes the situation.
- c. Resolution: Describe how the story concludes after discovering the contents of the box.

Assessment Criteria:

- a. Content & Ideas
- b. Organization
- c. Grammar & Language Use
- d. Vocabulary
- e. Mechanics
- f. Creativity

3. Pre-Test and Post-Test (Character Assessment - Questionnaire)

Instructions: Rate each statement based on how strongly you agree or disagree. Use a scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

Pre-Test Questionnaire (for Both Groups)

a. Responsibility:

- 1) I always complete my writing assignments on time.
- 2) I pay close attention to the instructions given for writing tasks.
- 3) I try to improve my writing when I receive feedback.

b. Creativity:

- 1) I often come up with new ideas when writing stories.
- 2) I enjoy exploring different styles and themes in my writing.
- 3) I am confident in creating unique and engaging plots.

c. Self-Confidence:

- 1) I feel confident about my writing skills.
- 2) I am not afraid to make mistakes when writing.
- 3) I am comfortable sharing my written stories with others.

4. Post-Test Questionnaire (for Both Groups)

a. Responsibility:

- After this learning period, I am more disciplined in completing writing assignments.
- 2) I have improved my ability to follow instructions carefully for writing tasks.

 I actively make corrections and revisions based on feedback received.

b. Creativity:

- I have become more creative in choosing themes and plots for my stories.
- 2) I am now more willing to explore new ideas and writing styles.
- I feel more comfortable experimenting with different narratives in my writing.

c. Self-Confidence:

- 1) I feel more confident in my writing after the learning sessions.
- 2) I am more open to feedback and suggestions about my writing.
- 3) I am confident that I can write interesting and meaningful stories.

Scale:

- a. 1: Strongly Disagree
- b. 2: Disagree
- c. 3: Neutral
- d. 4: Agree
- e. 5: Strongly Agree

Notes on Application:

- a. The **pre-test** is administered before the sessions begin to gauge the baseline abilities and characteristics of the students in both groups.
- The post-test is given after all sessions to measure improvements in writing skills and character development.

- c. The experimental group will experience treatment with AI tools (Grammarly, QuillBot, and ProWritingAid) during their learning sessions, while the control group will follow the traditional method of learning without these tools.
- d. By comparing the pre-test and post-test results, the effectiveness of the integration of AI in improving student outcomes and character can be evaluated.



Appendix 5
Observation Sheet

Exp	erimental Class / Control Class														Nar	ne of	stu	dent	S												
Date:	AI Tools:																		ď	pl											
Aspects Observed	Indicators	1	2	3	4	5	6	7	8	9	10	11	12	13		15 ating			18	19	20	21	22	23	24	25	26	27	28	29	30
	Completes tasks on time without reminders														1	<u> </u>		<u> </u>	Ш	Т									П	\Box	\blacksquare
	Follows instructions accurately																		F										П		
Responsibility	Consistently revises and corrects writing when given feedback																			2											
	Shows accountability in group activities																		F	1									П		
	Score	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Brings unique and original ideas to writing tasks					N									Ï	Ī		Î	V	7									П		T
	Demonstrates willingness to experiment with different writing styles																		1												
Creativity	Shows flexibility in thinking and problem-solving when constructing narratives																		4	2											
	Integrates creative language and descriptions effectively in writing						PAT		RE										2												
	Score	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Participates actively in class discussions about writing																		ŭ												
	Willingly shares written work with peers and teachers																		Ц												
	Demonstrates confidence when using AI tools for																			Ľ											
	writing improvement.														-				Ш	Н									Ш	\parallel	_
	Accepts and acts on feedback positively, showing self-assurance in addressing mistakes																														
	Score	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Instructions for Observer:

- Use the observation sheet during each lesson session to evaluate each student's behaviors.
- Score each indicator based on the student's observed behavior using the
 Rating Scale provided.
- c. Add any additional notes in the "Additional Observational Notes" section if specific behaviors or incidents need further explanation.
- d. Observation sheets should be completed discreetly without interrupting the learning process.
- e. Review and analyze the scores to identify any improvements in responsibility, creativity, and self-confidence across the sessions.

Assessment and Analysis:

- a. Calculate the **average score** for each character aspect (Responsibility, Creativity, Self-Confidence) based on the observed indicators.
- b. Compare the scores across different sessions to determine the effectiveness of the learning approach in building these character traits.
- c. For the experimental group, focus on changes seen when integrating AI tools into the writing sessions, noting any significant improvement in character aspects compared to the control group.

Raw Data of Research Results

		Data of Pr	e-Test Res	ult of Exp	perimenta	l Group			
le		A	Assessed A	Aspect			oint	ıge	
Sample	Content & Ideas	Organizatio	Grammar & Langguag e Use	Vocabulary	Mechanic	Creativity	Total Point	% Average	
1	15	10	5	10	5	5	50	8.33	
2	10	10	5	5	5	5	40	6.67	
3	10	9	5	7	6	5	42	7.00	
4	12	9	8	9	5	5	48	8.00	
5	5	5	5	5	5	5	30	5.00	
6	8	7	5	7	7	6	40	6.67	
7	9	5	5	6	9	6	40	6.67	
8	10	12	10	10	8	8	58	9.67	
9	12	10	9	9	8	5	53	8.83	
10	9	10	8	8	7	5	47	7.83	
11	8	8	5	5	4	4	34	5.67	
12	10	9	5	6	5	3	38	6.33	
13	12	8	8	6	5	5	44	7.33	
14	5	5	5	5	5	3	28	4.67	
15	12	10	5	8	5	5	45	7.50	
16	15	12	10	10	5	5	57	9.50	
17	10	9	8	5	5	5	42	7.00	
18	9	8	5	5	4	5	36	6.00	
19	12	10	8	10	7	7	54	9.00	
20	9	5	5	5	4	4	32	5.33	
21	10	5	8	8	6	4	41	6.83	
22	10	10	10	8	8	6	52	8.67	
23	8	10	8	5	6	5	42	7.00	
24	9	9	5	5	4	3	35	5.83	
25	5	5	5	5	5	3	28	4.67	
26	8	9	5	5	5	4	36	6.00	
27	10	10	8	8	8	5	49	8.17	
28	12	8	5	8	6	5	44	7.33	
29	5	5	5	5	5	3	28	4.67	
30	9	8	5	3	5	4	34	5.67	
Sum	288	250	193	201	172	143	1247	207.8	
			rage total F			2.10		567	

		Data of Post-	Test Result of	f Experir	nental gr	roup		
		Ass	sessed Aspe	ct			nt	e
Sample	Content & Ideas	Organization	Grammar & Langguage Use	Vocabulary	Mechanic	Creativity	Total Point	% Average
1	20	8	5	6	8	4	51	8.50
2	15	10	5	8	6	5	49	8.17
3	13	12	6	6	5	7	49	8.17
4	10	7	5	10	6	6	44	7.33
5	10	6	5	8	6	5	40	6.67
6	10	5	5	5	5	- 8	38	6.33
7	8	8	5	5	6	6	38	6.33
8	10	10	5	9	5	6	45	7.50
9	9	8	6	9	6	6	44	7.33
10	10	10	5	7	5	6	43	7.17
11	8	5	6	8	7	5	39	6.50
12	13	5	5	9	8	6	46	7.67
13	9	9	5	8	6	4	41	6.83
14	8	5	5	8	6	6	38	6.33
15	10	8	P/5 EPARE	6	5	5	39	6.50
16	12	8	5	7	8	7	47	7.83
17	8	6	5	6	5	5	35	5.83
18	10	5	5	5	5	5	35	5.83
19	10	5	5	9	5	6	40	6.67
20	10	7	5	6	5	5	38	6.33
21	10	7	7	5	5	5	39	6.50
22	10	8	6	5	5	5	39	6.50
23	9	12	6	5	7	6	45	7.50
24	7	8	7	5	5	4	36	6.00
25	8	5	6	6	5	4	34	5.67
26	5	10	5	6	6	5	37	6.17
27	5	9	5	5	5	5	34	5.67
28	5	10	5	5	5	6	36	6.00
29	8	8	5	4	6	4	35	5.83
30	5	7	5	5	5	3	30	5.00
Sum	285	231	160	196	172	160	1204	200.7
		Averag	e total Poin				40.	133

		Data of Pre	e-Test Resul	t of Cor	ntrol Gro	oup		
		Acc	essed Aspe	ect			t	
Sample	Content & Ideas	Organization	Grammar &	Vocabulary	Mechanic	Creativity	Total Point	Average
1	10	10	8	8	5	5	46	7.67
2	15	10	10	8	7	8	58	9.67
3	10	10	5	7	4	5	41	6.83
4	12	8	7	7	5	5	44	7.33
5	9	9	5	7	5	4	39	6.5
6	5	5	5	6	4	5	30	5
7	10	7	5	7	5	5	39	6.5
8	12	10	6	7	5	5	45	7.5
9	10	9	6	5	5	4	39	6.5
10	5	8	5	5	4	4	31	5.17
11	8	5	5	4	5	5	32	5.33
12	9	8	5	6	4	5	37	6.17
13	15	10	8	8	5	7	53	8.83
14	10	10	5	6	4	4	39	6.5
15	12	10	6	6	5	4	43	7.17
16	10	9	5	5	5	5	39	6.5
17	9	9	5	6	5	5	39	6.5
18	15	12	9	5	7	7	55	9.17
19	5	5	5	6	5	4	30	5
20	5	4	5	6	5	4	29	4.83
21	12	10	7	6	6	5	46	7.67
22	10	9	5	6	5	4	39	6.5
23	9	10	5	5	4	4	37	6.17
24	9	10	5	5	4	5	38	6.33
25	10	10	5	6	5	5	41	6.83
26	10	9	5	6	5	5	40	6.67
27	12	9	5	5	6	6	43	7.17
28	8	5	5	5	4	5	32	5.33
29	5	4	5	4	5	6	29	4.83
30	5	4	5	5	3	5	27	4.5
Sum	286	248	172	178	146	150	1180	196.7
		Averag	ge total Poin				39.	333

		Data of Post	-Test Resul	t of Cor	ntrol Gr	oup		
		Ass	sessed Aspe	ct			п	
Sample	Content & Ideas	Organization	Grammar &	Vocabulary	Mechanic	Creativity	Total Poin	Average
1	13	12	7	6	4	7	49	8.17
2	10	13	8	5	5	5	46	7.67
3	8	10	6	6	5	4	39	6.50
4	10	7	5	5	5	5	37	6.17
5	10	6	6	5	6	6	39	6.5
6	10	5	6	6	5	5	37	6.17
7	13	5	5	5	4	4	36	6
8	12	10	5	5	4	4	40	6.67
9	10	7	5	6	4	5	37	6.17
10	8	7	6	6	5	5	37	6.17
11	7	6	5	6	5	4	33	5.50
12	10	5	5	6	6	4	36	6.00
13	13	9	6	6	5	4	43	7.17
14	12	12	6	5	5	3	43	7.17
15	10	8	5 FARE	6	5	3	37	6.17
16	13	6	6	6	5	6	42	7
17	8	7	5	5	5	6	36	6
18	12	10	5	6	5	5	43	7.17
19	8	6	5	6	5	3	33	5.5
20	4	5	5	5	5	3	27	4.50
21	10	6	5	6	5	4	36	6.00
22	8	5	5	5	6	5	34	5.67
23	7	5	5	5	5	5	32	5.33
24	8	7	5	5	6	4	35	5.83
25	9	6	5	5	5	4	34	5.67
26	8	5	5	5	6	3	32	5.33
27	10	5	5	4	6	4	34	5.67
28	5	6	5	5	6	4	31	5.17
29	8	5	5	5	5	5	33	5.50
30	5	5	5	4	5	4	28	4.67
Sum	279	211	162	161	153	133	1099	183.2
		Average	e total Poin				36.	633

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Data of Observation Sheet of Experimental Group (The Second Meeting)

	Experimental Class														Nan	ne of	stuc	lents	•				V								
Date:	AI Tools: Grammarly																					Г									
Aspects Observed	Indicators	1	2	3	4	5	6	7	8	9	10	11	12	13	_	15 ating	_	_	18	19	20	21	22	23	24	25	26	27	28	29	30
	Completes tasks on time without reminders	4	4	4	4	3	4	5	4	3	2	4	5	3	2	2	4	2	3	5	5	4	3	5	3	3	3	4	5	5	3
PHI.	Follows instructions accurately	5	4	4	3	3	3	5	5	3	4	3	4	3	3	3	3	3	4	3	4	5	3	5	4	3	4	3	4	4	3
Responsibility	Consistently revises and corrects writing when given feedback	4	5	3	3	2	3	4	4	4	3	4	3	3	3	2	4	2	3	3	5	3	4	4	4	3	3	3	3	5	3
•	Shows accountability in group activities	4	4	3	3	3	3	5	5	4	4	3	4	4	2	2	4	3	4	3	4	4	5	3	3	3	4	3	4	4	4
	Score	17	17	14	13	11	13	19	18	14	13	14	16	13	10	9	15	10	14	14	18	16	15	17	14	12	14	13	16	18	13
	Brings unique and original ideas to writing tasks	3	4	3	2	2	2	3	4	3	2	3	5	3	5	2	4	4	4	3	2	3	2	3	2	4	3	4	3	4	5
	Demonstrates willingness to experiment with different writing styles	2	3	4	2	3	2	3	3	4	3	3	4	3	4	3	4	4	3	4	3	2	2	4	3	5	4	3	4	3	4
Creativity	Shows flexibility in thinking and problem- solving when constructing narratives	2	3	2	3	3	2	2	4	3	2	3	3	4	3	3	3	4	4	3	3	3	2	3	3	4	3	4	3	3	3
	Integrates creative language and descriptions effectively in writing	3	4	2	2	2	3	3	2	3	3	4	5	4	3	3	4	2	5	4	4	2	2	3	3	3	4	4	4	3	5
	Score	10	14	11	9	10	9	11	13	13	10	13	17	14	15	11	15	14	16	14	12	10	8	13	11	16	14	15	14	13	17
	Participates actively in class discussions about writing	3	3	4	2	2	2	4	4	3	3	3	3	3	3	2	2	3	3	2	3	2	3	2	3	4	3	4	4	3	4
) lept	Willingly shares written work with peers and teachers	4	3	3	3	4	3	4	3	3	2	2	3	2	3	2	3	2	2	2	3	4	2	2	4	3	3	3	2	2	3
Self-Confident	Demonstrates confidence when using AI tools for writing improvement	3	2	3	3	2	2	5	3	4	3	3	4	2	3	3	3	2	3	3	3	3	2	2	2	3	2	4	3	2	3
٦	Accepts and acts on feedback positively, showing self-assurance in addressing mistakes	2	3	2	4	4	4	3	3	3	2	3	2	2	3	2	2	3	2	2	3	2	3	2	3	4	3	4	4	3	4
	Score	12	11	12	12	12	11	16	13	13	10	11	12	9	12	9	10	10	10	9	12	11	10	8	12	14	11	15	13	10	14
	Aspect Observed	Tot	tal sc	ore	Α	vera	ge																								
	Responsibility		417			14.33	3																H								
	Creativity		382			12.73	*****															1									
	Confident		344			11.4	7															1									
	Total		1143	3	3	38.53	3																								
								ų .																							

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Data of Observation Sheet of Experimental Group (The Fourth Meeting)

	Experimental Class			_]	Nam	e of	stud	lents	6					N						_	
ate:	AI Tools: QuilBoot																					Ï									
Aspects	Indicators	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			18	19	20	21	22	23	24	25	26	27	28	29	30
Observed															_	_	Sca							Λ							
	Completes tasks on time without reminders	5	4	4	3	3	3	5	5	3	4	3	4	3	3	3	3	3	4	3	4	5	3	5	4	3	4	3	4	4	3
Triff?	Follows instructions accurately	3	4	3	2	4	2	3	4	3	2	3	5	3	5	3	4	4	4	3	4	3	5	3	4	4	3	4	3	4	5
Responsibility	Consistently revises and corrects writing when given feedback	4	4	3	3	4	4	5	3	4	3	5	3	4	4	3	3	3	3	4	3	5	3	5	3	3	2	4	3	4	3
Υ	Shows accountability in group activities	3	3	4	2	2	3	4	4	3	3	4	3	3	3	2	2	3	4	4	3	2	4	2	5	4	3	4	4	3	4
	Score	15	15	14	10	13	12	17	16	13	12	15	15	13	15	11	12	13	15	14	14	15	15	15	16	14	12	15	14	15	15
	Brings unique and original ideas to writing tasks	2	3	4	2	3	2	3	3	4	3	3	4	3	4	3	4	2	5	4	4	2	2	3	3	3	4	4	4	5	5
. يحد	Demonstrates willingness to experiment with different writing styles	3	4	4	2	4	3	3	2	3	3	4	5	4	4	3	4	3	5	4	4	2	2	3	3	3	4	4	4	3	5
Creativity	Shows flexibility in thinking and problem- solving when constructing narratives	4	4	3	3	3	3	3	4	4	4	5	3	4	3	4	3	3	4	2	3	4	3	2	3	5	3	5	2	4	3
	Integrates creative language and descriptions effectively in writing	3	3	4	4	2	3	3	3	3	4	3	4	2	3	2	2	4	4	4	3	3	2	2	2	4	3	4	2	3	4
	Score	12	14	15	11	12	11	12	12	14	14	15	16	13	14	12	13	12	18	14	14	11	9	10	11	15	14	17	12	15	17
	Participates actively in class discussions about writing	3	4	3	2	2	2	3	4	3	2	3	5	3	5	2	4	4	4	3	2	3	2	3	2	4	3	4	3	4	5
) Legit	Willingly shares written work with peers and teachers	2	3	4	2	3	2	3	3	4	3	3	4	3	4	3	4	4	3	4	3	2	2	4	3	5	5	3	4	3	4
Self-Confident	Demonstrates confidence when using AI tools for writing improvement	5	3	2	2	3	2	3	2	3	2	2	2	3	2	3	2	3	4	3	4	5	3	5	4	3	4	4	5	4	3
۵	Accepts and acts on feedback positively, showing self-assurance in addressing mistakes	3	2	2	3	4	2	3	3	3	2	3	3	3	4	3	3	2	2	3	3	2	4	2	4	3	4	2	3	5	3
	Score	13	12	11	9	12	8	12	12	13	9	11	14	12	15	11	13	13	13	13	12	12	11	14	13	15	16	13	15	16	15
	Aspect Observed	Tot	tal sc	ore	A	vera	ge																								
	Responsibility		420			14.0																		Ш							
	Creativity		399			13.30																									
	Confident Total	_	378 1197		_	12.60 39.90	-																	ч							

Data of Observation Sheet of Experimental Group (The Sixth Meeting)

	Experimental Class														Nam	e of	stud	ents						ñ							
Date:	AI Tools: ProWritingAids																								ì						
Aspects	Indicators	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Observed															Ra	ating	Sca	_													
	Completes tasks on time without reminders	3	4	4	2	4	3	3	4	3	3	4	5	4	4	3	4	3	5	4	4	2	2	3	_3	3	4	4	4		5
nitit!	Follows instructions accurately	4	3	3	4	2	3	4	3	2	3	5	3	5	2	4	3	3	4	3	4	5	3	5	4	3	4	3	4	4	3
Responshifts	Consistently revises and corrects writing when given feedback	4	4	5	3	4	3	4	4	4	2	3	4	3	4	3	5	3	5	3	4	4	4	3	4	3	5	4	3	5	4
•	Shows accountability in group activities	3	4	3	3	3	2	3	4	3	4	5	3	4	3	5	3	4	4	3	3	3	3	4	3	5	3	4	3	3	5
	Score	14	15	15	12	13	11	14	15	12	12	17	15	16	13	15	15	13	18	13	15	14	12	15	14	14	16	15	14	15	17
	Brings unique and original ideas to writing tasks	3	3	4	2	2	2	4	4	3	3	3	3	3	3	2	2	3	4	2	3	2	3	2	3	4	3	4	4	3	4
Px.	Demonstrates willingness to experiment with different writing styles	4	4	3	3	4	4	5	3	4	3	5	3	4	4	3	3	3	3	4	3	5	3	5	3	3	2	4	3	4	3
Creativity	Shows flexibility in thinking and problem- solving when constructing narratives	3	4	3	4	4	2	3	4	3	4	3	3	4	5	4	4	4	5	3	3	4	3	3	2	3	3	4	4	4	5
	Integrates creative language and descriptions effectively in writing	3	4	2	2	2	3	3	2	3	3	4	5	4	3	3	4	2	5	4	4	2	2	3	3	3	4	4	4	3	5
	Score	13	15	12	11	12	11	15	13	13	13	15	14	15	15	12	13	12	17	13	13	13	11	13	11	13	12	16	15	14	17
	Participates actively in class discussions about writing	5	4	4	3	3	3	5	5	3	4	3	4	3	3	3	4	2	5	4	4	4	2	3	3	3	4	4	4	5	5
Jent	Willingly shares written work with peers and teachers	2	4	2	3	3	5	3	4	4	4	3	3	4	3	5	3	2	2	2	3	2	2	2	2	3	3	3	2	2	3
Self-Confident	Demonstrates confidence when using AI tools for writing improvement	3	4	3	4	2	3	3	4	3	2	3	5	3	5	4	4	4	4	3	3	3	2	3	44	4	3	4	3	4	5
,	Accepts and acts on feedback positively, showing self-assurance in addressing mistakes	3	3	4	4	2	3	3	3	3	4	3	4	3	3	2	2	4	4	4	3	3	2	2	2	4	3	4	2	3	4
			نيا									_						_	_	_		_		_	_	_	_	_			
	Score	13	15	13	14	10	14	14	16	13	14	12	16	13	14	14	13	12	15	13	13	12	8	10	51	14	13	15	11	14	17
	Score	13	15	13	14	10	14	14	16	13	14	12	16	13	14	14	13	12	15	13	13	12	8	10	51	14	13	15	11	14	17
	Score Aspect Observed		15 tal sc			10 vera		14	16	13	14	12	16	13	14	14	13	12	15	13	13	12	8	10	51	14	13	15	11	14	17
		Tot	tal sc 429	core	A	vera 14.3	ge)	14	16	13	14	12	16	13	14	14	13	12	15	13	13	12	8	10	51	14	13	15	11	14	17
	Aspect Observed Responsibility Creativity	Tot	tal sc 429 402	core	A	vera 14.3 13.4	ge)	14	16	13	14	12	16	13	14	14	13	12	15	13	13	12	8	10	51	14	13	15	11	14	17
	Aspect Observed Responsibility	Tot	tal sc 429	core	A	vera 14.3	ge () ()	14	16	13	14	12	16	13	14	14	13	12	15	13	13	12	8	10	51	14	13	15	11	14	17

Data of Observation Sheet of Control Group (The Second Meeting)

	Control Class				``								<u></u>		Nan	ne of	stud	lents	1					П							
Date:	AI Tools: Grammarly																								Ø.						
Aspects	Indicators	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Observed	indicators														R	ating	Sca	le						(3							
	Completes tasks on time without reminders	3	4	3	2	2	2	3	4	3	2	3	5	3	5	2	4	2	3	2	4	4	3	4	3	3	3	4	5	5	3
ilit!	Follows instructions accurately	4	4	4	3	3	3	5	2	3	4	3	4	3	3	3	3	3	4	3	4	3	2	3	3	2	3	2	4	4	3
Responshifts	Consistently revises and corrects writing when given feedback	4	5	3	3	4	3	3	4	3	4	3	4	4	3	2	4	2	3	3	3	2	2	3	3	3	4	4	4	5	3
•	Shows accountability in group activities	4	4	2	4	3	2	3	3	4	3	3	3	4	2	2	4	3	4	3	4	4	5	3	3	3	4	3	4	4	4
	Score	15	17	12	12	12	10	14	13	13	13	12	16	14	13	9	15	10	14	11	15	13	12	13	12	11	14	13	17	18	13
	Brings unique and original ideas to writing tasks	3	4	3	2	2	2	3	4	3	2	3	5	3	2	3	4	3	3	2	2	3	2	3	2	1	4	3	4	4	5
.14	Demonstrates willingness to experiment with different writing styles	2	3	5	3	5	2	3	2	3	2	3	4	3	2	2	3	3	2	2	3	2	2	3	3	2	3	3	3	2	4
Creativity	Shows flexibility in thinking and problem- solving when constructing narratives	2	3	4	3	3	3	3	3	4	3	3	3	4	3	3	3	4	4	3	3	3	2	3	3	2	3	2	4	3	3
	Integrates creative language and descriptions effectively in writing	3	3	4	4	3	2	4	2	3	3	4	3	4	3	3	4	2	2	4	4	2	2	3	3	3	4	4	4	3	5
	Score	10	13	16	12	13	9	13	11	13	10	13	15	14	10	11	14	12	11	11	12	10	8	12	11	8	14	12	15	12	17
	Participates actively in class discussions about writing	3	3	3	2	3	3	3	3	3	2	3	2	3	3	3	3	3	3	3	3	2	2	2	1	3	3	3	3	3	3
) lept	Willingly shares written work with peers and teachers	2	3	3	3	3	2	2	2	3	3	3	2	3	3	3	3	2	2	2	3	2	1	2	2	3	3	3	2	2	3
Self-Confident	Demonstrates confidence althought without using AI tools for writing improvement	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	1	2	1	2	3	2	3	3	2	3
٩	Accepts and acts on feedback positively, showing self-assurance in addressing mistakes	2	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2	2	3	1	1	2	2	3	3	3	2	3	4
	Score	10	12	11	11	12	11	11	11	12	11	12	10	12	12	12	12	10	10	10	12	6	6	7	7	12	11	12	10	10	13
	Aspect Observed	To	tal sc	ore	A	vera	ge																								
	Responsibility		383		_	13.20																									
	Creativity		362	*****		12.0																		ш							
	Confident		318			10.60																									
	Total		1063	3		35.8																		ď							
								Ų																							

Data of Observation Sheet of Control Group (The Fourth Meeting)

	Control Class														Nan	ne of	stuc	lent	;			N									
ate:	AI Tools: QuilBoot																														
Aspects	Indicators	1	2	3	4	5	6	7	8	9	10	11	12	13	14		16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Observed															R	ating	g Sca	ıle				W.							-		
	Completes tasks on time without reminders	2	4	2	3	4	2	3	2	3	3	3	4	3	3	3	3	3	4	3	2	4	3	4	4	3	4	4	3	4	3
diliti	Follows instructions accurately	3	4	5	3	2	2	2	2	3	2	2	2	3	5	3	4	4	4	3	4	3	4	2	2	3	3	4	3	4	5
Responsition	Consistently revises and corrects writing when given feedback	4	4	3	3	4	4	3	3	4	3	2	3	2	4	3	3	3	3	4	3	5	3	3	4	4	2	2	3	4	3
*	Shows accountability in group activities	3	3	4	2	2	3	4	4	3	3	4	3	3	3	2	2	3	4	2	3	2	4	2	3	4	3	4	4	3	4
	Score	12	15	14	11	12	11	12	11	13	11	11	12	11	15	11	12	13	15	12	12	14	14	11	13	14	12	14	13	15	15
	Brings unique and original ideas to writing tasks	2	3	4	2	3	2	3	3	4	3	3	4	3	4	3	4	2	5	4	4	2	2	3	3	3	4	4	4	5	5
.,x4	Demonstrates willingness to experiment with different writing styles	3	2	4	3	3	2	3	2	3	2	2	5	4	4	3	4	3	5	4	4	2	2	3	3	4	3	3	3	3	4
Creativity	Shows flexibility in thinking and problem- solving when constructing narratives	4	3	5	4	2	2	2	4	3	4	4	3	4	4	3	4	3	2	2	4	3	3	2	3	3	2	2	3	4	4
	Integrates creative language and descriptions effectively in writing	3	3	2		2	3	2	2	2	3	2	3	2	3	4	3	4	3	3	4	2	2	3	4	4	3	3	2	3	4
	Score	12	11	15	12	10	9	10	11	12	12	11	15	13	15	13	15	12	15	13	16	9	9	11	13	14	12	12	12	15	17
			_	_		_	_		_	_		_			_			-		_	_		-		10		_		_	_	
	Participates actively in class discussions about writing	3	3	3	T	3	2	3	3	2	3	4	4	4	3	4	3	3	3	4	4	3	4	4	3	4	3	2	4	4	2
Jerk	writing Willingly shares written work with peers and	2	3		2	3		3	3	2	3	3	3	3		3	3	3	3	3	2	3	4	3			3	3	-	ł.	2
c. M. Confident	writing Willingly shares written work with peers and			3	2		2								3									_	3	4	Ľ		-	3	2 4 3
S. M. Confident	writing Willingly shares written work with peers and	2	4	3	2	3	3	2	3	2		3	3	3	3	3	3	3	2	3	2	3	2	3	3	3	Ľ	3	3	3	2 4 3 3
_{\$\text{3}\text{4}\text{Confident}}	writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively,	2	4	3 2 4	2 3 4	3 2 3	2 3 3 2	2	3 2	2 2	3 4 2	3 2	3 4 3	3 3	3 4 2 3	3	3 3	3 2	2	3 3	2 2 3	3 2	2 2 3	2	3 4 2 4	3 3	4 2	3 2	3 2 3	3	3
_{\$\text{3}\text{d}\text{Considered}}}	writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively, showing self-assurance in addressing mistakes	3	2	3 2 4 3	2 3 4	3 2 3	2 3 3 2	3	3 2	2 2	3 4 2	3 2	3 4 3	3 3	3 4 2 3	3	3 3	3 2	2 2	3 3	2 2 3	3 2	2 2 3	2	3 4 2 4	3 3	4 2	3 2	3 2 3	3 4 2	3
÷#Confident	writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively, showing self-assurance in addressing mistakes	2 3 3	2	3 2 4 3	2 2 3 4	3 2 3	2 3 3 2	3	3 2	2 2	3 4 2	3 2	3 4 3	3 3	3 4 2 3	3	3 3	3 2	2 2	3 3	2 2 3	3 2	2 2 3	2	3 4 2 4	3 3	4 2	3 2	3 2 3	3 4 2	3
÷#Confident	writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively, showing self-assurance in addressing mistakes Score	2 3 3 11	4 2 2	3 2 4 3 12	2 2 3 4 111 A	3 2 3	2 3 2 10	3	3 2	2 2	3 4 2	3 2	3 4 3	3 3	3 4 2 3	3	3 3	3 2	2 2	3 3	2 2 3	3 2	2 2 3	2	3 4 2 4	3 3	4 2	3 2	3 2 3	3 4 2	3
_{\$\text{3}\text{3}\text{Considers}\$}	writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively, showing self-assurance in addressing mistakes Score Aspect Observed	2 3 3 11	4 2 2 11 tal so	3 2 4 3 12 Core	2 2 3 4 111	3 2 3 11	2 3 2 10	3	3 2	2 2	3 4 2	3 2	3 4 3	3 3	3 4 2 3	3	3 3	3 2	2 2	3 3	2 2 3	3 2	2 2 3	2	3 4 2 4	3 3	4 2	3 2	3 2 3	3 4 2	3
÷#Confident	writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively, showing self-assurance in addressing mistakes Score Aspect Observed Responsibility	2 3 3 11	4 2 2 11 tal sc 381	3 2 4 3 12 12 Core	2 2 3 4 111	3 2 3 11 12.7	2 3 2 10 10 3	3	3 2	2 2	3 4 2	3 2	3 4 3	3 3	3 4 2 3	3	3 3	3 2	2 2	3 3	2 2 3	3 2	2 2 3	2	3 4 2 4	3 3	4 2	3 2	3 2 3	3 4 2	3

Data of Observation Sheet of Control Group (The Sixth Meeting)

	Control Class			_		_									Nam	e of	stud	lents	_		_	_		ñ	1		-					
Date:	AI Tools: ProWritingAids																											T				
Aspects	Indicators	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	_	18	19	20	21	22	23	24	25	20	6 2	27	28	29	30
Observed		Щ													Ra	ating	Sca	le					,				_					
	Completes tasks on time without reminders	3	4	4	2	4	3	3	4	3	3	4	5	4	4	3	4	3	5	4	3	2	2	3	3	3	4	1	4	4		5
nitity.	Follows instructions accurately	4	3	3	3	4	3	4	3	2	4	2	3	4	2	4	3	3	4	3	4	3	2	3	4	2	3	3	3	2	4	3
Responshifts	Consistently revises and corrects writing when given feedback	2	4	3	4	2	3	3	4	3	2	3	4	3	2	3	3	3	5	3	3	2	3	3	3	2	4	ţ	2	3	5	2
•	Shows accountability in group activities	3	4	3	2	3	2	3	4	3	4	5	3	4	3	5	3	4	4	3	3	3	3	4	3	5	3	3	4	3	3	5
	Score	12	15	13	11	13	11	13	15	11	13	14	15	15	11	15	13	13	18	13	13	10	10	13	13	12	14	4 !	13	12	15	15
	Brings unique and original ideas to writing tasks	3	3	4	2	2	2	2	4	3	3	3	4	3	4	3	5	3	5	3	4	4	3	2	3	4	3	3	4	4	3	4
,x4	Demonstrates willingness to experiment with different writing styles	4	2	3	3	3	4	4	3	4	3	2	3	4	4	3	3	3	3	4	3	2	3	2	3	3	2	2	2	3	4	3
Creativity	Shows flexibility in thinking and problem- solving when constructing narratives	3	2	2	2	3	3	2	3	3	4	2	2	4	4	2	2	3	3	2	3	2	4	3	3	2	3	3	3	5	3	5
	Integrates creative language and descriptions effectively in writing	3	2	3	2	4	3	3	3	2	3	2	2	2	3	2	3	2	2	2	3	3	3	2	3	5	3	3	5	2	4	5
							_	_		_	_	_	_	_	_	_								_	_	_	_					
	Score	13	9	12	9	12	12	11	13	12	13	9	11	13	15	10	13	11	13	11	13	11	13	9	12	14	1	1	14	14	14	17
	Score Participates actively in class discussions about writing	3		12 4	3	3	3	3	13 2	3	13	9	11 4	3	15 3	3	13 4	2		3	13	2	13 2	3	12 2	3	Ť			4	3	17 4
let	Participates actively in class discussions about writing Willingly shares written work with peers and							3				ŕ												ŕ			3	3	3		3	
Cost Considerat	Participates actively in class discussions about writing Willingly shares written work with peers and	3	4	4	3	3	3		2	3	4	3	4	3	3	3	4	2	3	3	4	2	2	3	2	3	3	3	3	4	2	4
34 Constitute	Participates actively in class discussions about writing Willingly shares written work with peers and	2	4	2	3	3	3	3	3	3	3	3	3	3	3	2	3	2	3	3	3	2	2	3	2	3	3	3 3	3 4	2	2	3
34 Confident	Participates actively in class discussions about writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively,	3 3	2	4 2 3	3 3 2 4	3 2	3 2 3	3	3 3	3 4 2 3	3	3 3 3	3 2	3 3	3 3	3 3 3	4 3 2 2	2 3 3	3 3	3 3 2	3	2 3 3	2 3 4	3 2 4	2 2	3 2 4	3	3 3 3 3	3 3 4 3	4 2 3 2	3 2 4	4 3 2 4
Self Confedent	Participates actively in class discussions about writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively, showing self-assurance in addressing mistakes	3 3	4 2 4	4 2 3	3 3 2 4	3 2 2	3 2 3	3 3 2	3 3	3 4 2 3	3 3 4	3 3 3	4 3 2 3	3 3	3 3	3 3 3	4 3 2 2	2 3 3	3 3	3 3 2	3 3 4	2 3 3	2 3 4	3 2 4 2	2 2 2	3 2 4	3 3 3	3 3 3 3	3 3 4 3	4 2 3 2	3 2 4 3	4 3 2 4
God Confident	Participates actively in class discussions about writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively, showing self-assurance in addressing mistakes	3 2 3 3	4 2 4	4 2 3 2	3 2 4	3 2 2	3 2 3	3 3 2	3 3	3 4 2 3	3 3 4	3 3 3	4 3 2 3	3 3	3 3	3 3 3	4 3 2 2	2 3 3	3 3	3 3 2	3 3 4	2 3 3	2 3 4	3 2 4 2	2 2 2	3 2 4	3 3 3	3 3 3 3	3 3 4 3	4 2 3 2	3 2 4 3	4 3 2 4
Gad Confident	Participates actively in class discussions about writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively, showing self-assurance in addressing mistakes Score	3 2 3 3 11	4 2 4 3	4 2 3 2 11 11 core	3 2 4	3 2 2	3 2 3 11	3 3 2	3 3	3 4 2 3	3 3 4	3 3 3	4 3 2 3	3 3	3 3	3 3 3	4 3 2 2	2 3 3	3 3	3 3 2	3 3 4	2 3 3	2 3 4	3 2 4 2	2 2 2	3 2 4	3 3 3	3 3 3 3	3 3 4 3	4 2 3 2	3 2 4 3	4 3 2 4
ş əb Confident	Participates actively in class discussions about writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively, showing self-assurance in addressing mistakes Score Aspect Observed	3 3 3 11	4 2 4 3 13 13	4 2 3 2 11 11 core	3 2 4	3 2 2 10 vera	3 2 3 11 11 3	3 3 2	3 3	3 4 2 3	3 3 4	3 3 3	4 3 2 3	3 3	3 3	3 3 3	4 3 2 2	2 3 3	3 3	3 3 2	3 3 4	2 3 3	2 3 4	3 2 4 2	2 2 2	3 2 4	3 3 3	3 3 3 3	3 3 4 3	4 2 3 2	3 2 4 3	4 3 2 4
3. M. Constituted	Participates actively in class discussions about writing Willingly shares written work with peers and teachers Demonstrates confidence althought without using AI tools for writing improvement Accepts and acts on feedback positively, showing self-assurance in addressing mistakes Score Aspect Observed Responsibility	3 2 3 3 11	4 2 4 3 13 13 394	4 2 3 2 11 11 core	3 2 4 12	3 2 2 10 vera	3 2 3 11 11 2 3 3 3	3 3 2	3 3	3 4 2 3	3 3 4	3 3 3	4 3 2 3	3 3	3 3	3 3 3	4 3 2 2	2 3 3	3 3	3 3 2	3 3 4	2 3 3	2 3 4	3 2 4 2	2 2 2	3 2 4	3 3 3	3 3 3 3	3 3 4 3	4 2 3 2	3 2 4 3	4 3 2 4

	One-Tailed Test													
df	0,25	0.10	0,05	0,025	0,01	0,005	0,001							
ai				Two-Tailed To	d Test									
	0,50	0,20	0,10	0.05	0,02	0,01	0,002							
1	1,000000	3,077684	6,313752	12,706205	31,820516	63,656741	318,30883							
2	0,816497	1,885618	2,919986	4,302653	6,964557	9,924843	22,327125							
3	0,764892	1,637744	2,353363	3,182446	4,540703	5,840909	10,214532							
4	0.740697	1,533206	2,131847	2,776445	3,746947	4,604095	7,173182							
5	0,726687	1,475884	2,015048	2,570582	3,364930	4,032143	5,893430							
6	0,717558	1,439756	1,943180	2,446912	3,142668	3,707428	5,207626							
7	0,711142	1,414924	1,894579	2,364624	2,997952	3,499483	4,785290							
8	0,706387	1,396815	1,859548	2,306004	2,896459	3,355387	4,500791							
9	0,702722	1,383029	1,833113	2,262157	2,821438	3,249836	4,296806							
10	0,699812	1,372184	1,812461	2,228139	2,763769	3,169273	4,143700							
11	0,697445	1,363430	1,795885	2,200985	2,718079	3,105807	4,024701							
12	0,695483	1,356217	1,782288	2,178813	2,680998	3,054540	3,929633							
13	0,693829	1,350171	1,770933	2,160369	2,650309	3,012276	3,851982							
14	0,692417	1,345030	1,761310	2,144787	2,624494	2,976843	3,787390							
15	0,691197	1,340606	1,753050	2,131450	2,602480	2,946713	3,732834							
16	0,690132	1,336757	1,745884	2,119905	2,583487	2,920782	3,686155							
17	0,689195	1,333379	1,739607	2,109816	2,566934	2,898231	3,645767							
18	0,688364	1,330391	1,734064	2,100922	2,552380	2,878440	3,610485							
19	0,687621	1,327728	1,729133	2,093024	2,539483	2,860935	3,579400							
20	0,686954	1,325341	1,724718	2,085963	2,527977	2.845340	3,551808							
21	0,686352	1,323188	1,720743	2,079614	2,517648	2,831360	3,527154							
22	0,685805	1.321237	1,717144	2,073873	2,508325	2,818756	3,504992							
23	0,685306	1,319460	1,713872	2,068658	2,499867	2,807336	3,484964							
24	0,684850	1,317836	1,710882	2,063899	2,492159	2,796940	3,466777							
25	0,684430	1.316345	1,708141	2,059539	2,485107	2,787436	3,450189							
26	0,684043	1,314972	1,705618	2,055529	2,478630	2,778715	3,434997							
27	0,683685	1,313703	1,703288	2,051831	2,472660	2,770683	3,421034							
28	0,683353	1,312527	1,701131	2,048407	2,467140	2,763262	3,408155							
29	0,683044	1,311434	1,699127	2,045230	2,462021	2,756386	3,396240							
30	0,682756	1,310415	1,697261	2,042272	2,457262	2,749996	3,385185							
31	0,682486	1,309464	1,695519	2,039513	2,452824	2,744042	3,374899							
32	0,682234	1,308573	1,693889	2,036933	2,448678	2,738481	3,365306							
33	0,681997	1,307737	1,692360	2,034515	2,444794	2,733277	3,356337							
34	0,681774	1,306952	1,690924	2,032245	2,441150	2,728394	3,347934							
35	0,681564	1,306212	1,689572	2,030108	2,437723	2,723806	3,340045							
36	0,681366	1,305514	1,688298	2,028094	2,434494	2,719485	3,332624							
37	0,681178	1,304854	1,687094	2,026192	2,431447	2,715409	3,325631							
38	0,681001	1,304230	1,685954	2,024394	2,428568	2,711558	3,319030							
39	0,680833	1,303639	1,684875	2,022691	2,425841	2,707913	3,312788							
40	0,680673	1,303077	1,683851	2,021075	2,423257	2,704459	3,306878							

	0.25	0.10		One-Tailed Te	*	0.005	0.001
df	0,25	0,10	0,05	wo-Tailed Te	0,01	0,005	0,001
	0.70	0.01	0.000				
	0,50	0,20	0,10	0,05	0,02	0,01	0,002
41	0,680521	1,302543	1,682878	2,019541	2,420803	2,701181	3,30127.
42	0,680376	1,302035	1,681952	2,018082	2,418470	2,698066	3,29595
43	0,680238	1,301552	1,681071	2,016692	2,416250	2,695102	3,29089
44	0,680107	1,301090	1,680230	2,015368	2,414134	2,692278	3,28607
45	0,679981	1,300649	1,679427	2,014103	2,412116	2,689585	3,28148
46	0,679861	1,300228	1,678660	2,012896	2,410188	2,687013	3,27709
47	0,679746	1,299825	1,677927	2,011741	2,408345	2,684556	3,27291
48	0,679635	1,299439	1,677224	2,010635	2,406581	2,682204	3,26891
49	0,679530	1,299069	1,676551	2,009575	2,404892	2,679952	3,265079
50	0,679428	1,298714	1,675905	2,008559	2,403272	2,677793	3,26140
51	0,679331	1,298373	1,675285	2,007584	2,401718	2,675722	3,25789
52	0,679237	1,298045	1,674689	2,006647	2,400225	2,673734	3,25451
53	0,679147	1,297730	1,674116	2,005746	2,398790	2,671823	3,25126
54	0,679060	1,297426	1,673565	2,004879	2,397410	2,669985	3,24814
55	0,678977	1,297134	1,673034	2,004045	2,396081	2,668216	3,24514
56	0,678896	1,296853	1,672522	2,003241	2,394801	2,666512	3,24226
57	0,678818	1,296581	1,672029	2,002465	2,393568	2,664870	3,23947
58	0,678743	1,296319	1,671553	2,001717	2,392377	2,663287	3,23679.
59	0,678671	1,296066	1,671093	2,000995	2,391229	2,661759	3,23420
60	0,678601	1,295821	1,670649	2,000298	2,390119	2,660283	3,23170
61	0,678533	1,295585	1,670219	1,999624	2,389047	2,658857	3,22929
62	0,678467	1,295356	1,669804	1,998972	2,388011	2,657479	3,22696
63	0,678404	1,295134	1,669402	1,998341	2,387008	2,656145	3,22470
64	0,678342	1,294920	1,669013	1,997730	2,386037	2,654854	3,22252
65	0,678283	1,294712	1,668636	1,997138	2,385097	2,653604	3,22041
66	0.678225	1,294511	1,668271	1,996564	2,384186	2,652394	3,21836
67	0,678169	1,294315	1,667916	1,996008	2,383302	2,651220	3,21638
68	0,678115	1,294126	1,667572	1,995469	2,382446	2,650081	3,21446
69	0,678062	1,293942	1,667239	1,994945	2,381615	2,648977	3,21259
70	0,678011	1,293763	1,666914	1,994437	2,380807	2,647905	3,21078
71	0,677961	1,293589	1,666600	1,993943	2,380024	2,646863	3,20903
72	0,677912	1,293421	1,666294	1,993464	2,379262	2,645852	3,20732
73	0,677865	1,293256	1,665996	1,992997	2,378522	2,644869	3,20566
74	0,677820	1,293097	1,665707	1,992543	2,377802	2,643913	3,20405
75	0,677775	1,292941	1,665425	1,992102	2,377102	2,642983	3,202489
76	0,677732	1,292790	1,665151	1,991673	2,376420	2,642078	3,20096
77	0,677689	1,292643	1,664885	1,991254	2,375757	2,641198	3,19948
78	0,677648	1,292500	1,664625	1,990847	2,375111	2,640340	3,19948
79	0,677608	1,292360	1,664371	1,990847	2,374482	2,639505	3,19662
80	0,677569	1,292360	1,664125	1,990063	2,374482	2,638691	3,19525



	1 1000			one-Tailed Te	st	e accesses in	00000						
df	0,25	0,10	0,05	0,025	0,01	0,005	0,001						
ai	Two-Tailed Test												
	0,50	0,20	0,10	0,05	0,02	0,01	0,002						
81	0,677531	1,292091	1,663884	1,989686	2,373270	2,637897	3,19392						
82	0,677493	1,291961	1,663649	1,989319	2,372687	2,637123	3,19261						
83	0,677457	1,291835	1,663420	1,988960	2,372119	2,636369	3,19134						
84	0,677422	1,291711	1,663197	1,988610	2,371564	2,635632	3,19011						
85	0,677387	1,291591	1,662978	1,988268	2,371022	2,634914	3,18890						
86	0,677353	1,291473	1,662765	1,987934	2,370493	2,634212	3,18772						
87	0,677320	1,291358	1,662557	1,987608	2,369977	2,633527	3,18656						
88	0,677288	1,291246	1,662354	1,987290	2,369472	2,632858	3,18544						
89	0,677256	1,291136	1,662155	1,986979	2,368979	2,632204	3,18434:						
90	0,677225	1,291029	1,661961	1,986675	2,368497	2,631565	3,18327						
91	0,677195	1,290924	1,661771	1,986377	2,368026	2,630940	3,18222						
92	0,677166	1,290821	1,661585	1,986086	2,367566	2,630330	3,18119						
93	0,677137	1,290721	1,661404	1,985802	2,367115	2,629732	3,18019						
94	0,677109	1,290623	1,661226	1.985523	2,366674	2,629148	3,17920						
95	0,677081	1,290527	1,661052	1.985251	2,366243	2,628576	3,17824						
96	0,677054	1,290432	1,660881	1,984984	2,365821	2,628016	3,17730						
97	0,677027	1,290340	1,660715	1,984723	2,365407	2,627468	3,17638						
98	0,677001	1,290250	1,660551	1.984467	2,365002	2,626931	3,17548						
99	0,676976	1,290161	1,660391	1.984217	2,364606	2,626405	3,17460						
100	0,676951	1,290075	1,660234	1,983972	2,364217	2,625891	3,17373						
101	0,676927	1,289990	1,660081	1.983731	2,363837	2,625386	3,17289						
102	0,676903	1,289907	1,659930	1,983495	2,363464	2,624891	3,17206						
103	0,676879	1,289825	1,659782	1,983264	2,363098	2,624407	3,17125						
104	0,676856	1,289745	1,659637	1,983038	2,362739	2,623932	3,17045						
105	0,676833	1,289666	1,659495	1.982815	2,362388	2,623465	3,16967						
106	0,676811	1,289589	1,659356	1.982597	2,362043	2,623008	3,16890						
107	0,676790	1,289514	1,659219	1,982383	2,361704	2,622560	3,16815						
108	0,676768	1,289439	1,659085	1.982173	2,361372	2,622120	3,16741						
109	0,676747	1.289367	1,658953	1.981967	2,361046	2,621688	3,16669						
110	0,676727	1,289295	1,658824	1,981765	2,360726	2,621265	3,16597						
111	0,676706	1,289225	1,658697	1,981567	2,360412	2,620849	3,16528						
112	0,676687	1,289156	1,658573	1.981372	2,360104	2,620440	3,16459						
113	0,676667	1,289088	1,658450	1,981180	2,359801	2,620039	3,16392						
114	0,676648	1,289022	1,658330	1,980992	2,359504	2,619645	3,16326						
115	0,676629	1,288957	1,658212	1,980808	2,359212	2,619258	3,16261						
116	0,676611	1,288892	1,658096	1,980626	2,358924	2,618878	3,16197						
117	0,676592	1,288829	1,657982	1,980448	2,358642	2,618504	3,16135						
118	0,676575	1,288767	1,657870	1,980272	2,358365	2,618137	3,16073						
119	0,676557	1,288706	1,657759	1,980100	2,358093	2,617776	3,16013						
120	0,676540	1,288646	1,657651	1,979930	2,357825	2,617421	3,15953						



				one-Tailed Te	st	n Antonomia III						
df	0,25	0,10	0,05	0,025	0,01	0,005	0,001					
	Two-Tailed Test											
	0,50	0,20	0,10	0,05	0,02	0,01	0,002					
121	0,676523	1,288587	1,657544	1,979764	2,357561	2,617072	3,15895					
122	0,676506	1,288529	1,657439	1,979600	2,357302	2,616729	3,15838					
123	0,676490	1,288472	1,657336	1,979439	2,357047	2,616392	3,15781					
124	0,676473	1,288416	1,657235	1,979280	2,356797	2,616060	3,15725					
125	0,676458	1,288361	1,657135	1.979124	2,356550	2,615733	3,15671					
126	0,676442	1,288307	1,657037	1,978971	2,356307	2,615412	3,15617					
127	0,676426	1,288253	1,656940	1,978820	2,356069	2,615096	3,15564					
128	0,676411	1,288200	1,656845	1.978671	2,355834	2,614785	3,15512					
129	0,676396	1,288149	1,656752	1,978524	2,355602	2,614479	3,15461					
130	0,676382	1,288098	1,656659	1,978380	2,355375	2,614177	3,15410					
131	0,676367	1,288047	1,656569	1,978239	2,355150	2,613880	3,15361					
132	0,676353	1,287998	1,656479	1,978099	2,354930	2,613588	3,15312					
133	0,676339	1,287949	1,656391	1,977961	2,354712	2,613300	3,15264					
134	0,676325	1,287901	1,656305	1,977826	2,354498	2,613017	3,15216					
135	0,676311	1,287854	1,656219	1,977692	2,354287	2,612738	3,15169					
136	0,676298	1,287807	1,656135	1,977561	2,354079	2,612463	3,15123					
137	0,676285	1,287762	1,656052	1,977431	2,353875	2,612192	3,15078					
138	0,676272	1,287716	1,655970	1,977304	2,353673	2,611925	3,15033					
139	0,676259	1,287672	1,655890	1,977178	2,353474	2,611662	3,14989					
140	0,676246	1,287628	1,655811	1,977054	2,353278	2,611403	3,149466					
141	0,676234	1,287585	1,655732	1,976931	2,353085	2,611147	3,14903					
142	0,676221	1,287542	1,655655	1,976811	2,352895	2,610895	3,14861					
143	0,676209	1,287500	1,655579	1,976692	2,352707	2,610647	3,14820					
144	0,676197	1,287458	1,655504	1,976575	2,352522	2,610402	3,14779					
145	0,676185	1,287417	1,655430	1,976460	2,352340	2,610161	3,14738					
146	0,676174	1,287377	1,655357	1,976346	2,352160	2,609923	3,14699					
147	0,676162	1,287337	1,655285	1,976233	2,351983	2,609688	3,14659					
148	0,676151	1,287298	1,655215	1,976122	2,351808	2,609456	3,14621					
149	0,676140	1.287259	1,655145	1,976013	2,351635	2,609228	3,14582					
150	0,676129	1,287221	1,655076	1,975905	2,351465	2,609003	3,14545					
151	0,676118	1,287183	1,655007	1.975799	2,351297	2,608780	3,14508					
152	0,676107	1,287146	1,654940	1,975694	2,351131	2,608561	3,14471					
153	0,676097	1,287109	1,654874	1,975590	2,350967	2,608344	3,14435					
154	0,676086	1,287073	1,654808	1,975488	2,350806	2,608131	3,14399					
155	0,676076	1,287037	1,654744	1,975387	2,350646	2,607920	3,14364					
156	0,676066	1,287002	1,654680	1,975288	2,350489	2,607712	3,14329					
157	0,676056	1,286967	1,654617	1,975189	2,350334	2,607506	3,14295					
158	0,676046	1,286933	1,654555	1,975092	2,350180	2,607304	3,14261					
159	0,676036	1,286899	1,654494	1,974996	2,350029	2,607103	3,14227					
160	0,676026	1,286865	1,654433	1,974902	2,349880	2,606906	3,14194					

	One-Tailed Test												
df	0,25	0,10	0,05	0,025	0,01	0,005	0,001						
ar													
	0,50	0,20	0.10	0,05	0,02	0,01	0,002						
161	0,676017	1,286832	1,654373	1,974808	2,349732	2,606711	3,14162						
162	0,676007	1,286799	1,654314	1,974716	2,349586	2,606518	3,14130						
163	0,675998	1,286767	1,654256	1,974625	2,349442	2,606328	3,14098						
164	0,675989	1,286735	1,654198	1,974535	2,349300	2,606140	3,14066						
165	0,675980	1,286703	1,654141	1.974446	2,349160	2,605954	3,14035						
166	0,675971	1,286672	1,654085	1,974358	2,349021	2,605770	3,14005						
167	0,675962	1,286641	1,654029	1,974271	2,348884	2,605589	3,13974						
168	0,675953	1,286611	1,653974	1,974185	2,348749	2,605410	3,13945						
169	0,675944	1,286581	1,653920	1,974100	2,348615	2,605233	3,13915						
170	0,675936	1,286551	1,653866	1,974017	2.348483	2,605058	3,13886						
171	0,675927	1,286522	1,653813	1,973934	2,348352	2,604886	3,13857						
172	0,675919	1,286493	1,653761	1,973852	2,348223	2,604715	3,13829						
173	0,675911	1,286464	1,653709	1,973771	2,348096	2,604546	3,13800						
174	0,675902	1,286436	1,653658	1,973691	2,347970	2,604379	3,13772						
175	0,675894	1,286408	1,653607	1,973612	2,347845	2,604215	3,13745						
176	0,675886	1,286380	1,653557	1.973534	2,347722	2,604052	3,13718						
177	0,675878	1,286353	1,653508	1,973457	2,347600	2,603891	3,13691						
178	0,675871	1,286326	1,653459	1,973381	2,347479	2,603731	3,13664						
179	0,675863	1,286299	1,653411	1,973305	2,347360	2,603574	3,13638						
180	0,675855	1,286272	1,653363	1,973231	2,347243	2,603418	3,13612						
181	0,675848	1,286246	1,653316	1,973157	2,347126	2,603264	3,13586						
182	0,675840	1,286220	1,653269	1,973084	2,347011	2,603112	3,13561						
183	0,675833	1,286195	1,653223	1,973012	2,346897	2,602961	3,13536						
184	0,675825	1,286169	1,653177	1,972941	2,346785	2,602813	3,13511						
185	0,675818	1,286144	1,653132	1,972870	2,346673	2,602665	3,13486						
186	0,675811	1,286120	1,653087	1,972800	2,346563	2,602520	3,13462						
187	0,675804	1,286095	1,653043	1.972731	2,346454	2,602376	3,13438						
188	0,675797	1,286071	1,652999	1,972663	2,346346	2,602233	3,13414						
189	0,675790	1,286047	1,652956	1,972595	2,346240	2,602092	3,13391						
190	0,675783	1,286023	1,652913	1,972528	2,346134	2,601952	3,13367						
191	0,675776	1,286000	1,652871	1,972462	2,346030	2,601814	3,13344						
192	0,675770	1,285976	1,652829	1,972396	2,345926	2,601678	3,13322						
193	0,675763	1,285953	1,652787	1,972332	2,345824	2,601543	3,13299						
194	0,675756	1,285931	1,652746	1,972268	2,345723	2,601409	3,13277						
195	0,675750	1,285908	1,652705	1,972204	2,345623	2,601276	3,13255						
196	0,675744	1,285886	1,652665	1,972141	2,345524	2,601145	3,13233						
197	0,675737	1,285864	1,652625	1,972079	2,345425	2,601016	3,13211						
198	0,675731	1,285842	1,652586	1,972017	2,345328	2,600887	3,13190						
199	0,675725	1,285820	1,652547	1,971957	2,345232	2,600760	3,13169						
200	0,675718	1,285799	1,652508	1,971896	2,345137	2,600634	3,13148						



REPUBLIK INDONESIA KEMENTERIAN HUKUM

SURAT PENCATATAN CIPTAAN

Dalam rangka pelindungan ciptaan di bidang ilmu pengetahuan, seni dan sastra berdasarkan Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta, dengan ini menerangkan:

Nomor dan tanggal permohonan

: EC00202506384, 14 Januari 2025

Pencipta

Nama

Alamat

Kewarganegaraan

Pemegang Hak Cipta

Nama

Alamat

Kewarganegaraan

Jenis Ciptaan

Judul Ciptaan

Tanggal dan tempat diumumkan untuk pertama kali di wilayah Indonesia atau di luar wilayah Indonesia

Jangka waktu pelindungan

COVO .

1. Muh. Saiful Anwar, S.Pd., 2. Dr. Zulfah, M.Pd., 3. Dr. H. Ambo Dalle, S.Ag., M.Pd., 4. Dr. Mujahidah, M.Pd., 5. Dr. Magdahalena Tjalla, M.Pd.

Dusun 3, RT/RW 000/000, Desa Labota, Bahodopi, Morowali, Sulawesi Tengah, 94974

: Indonesia

1. Muh. Saiful Anwar, S.Pd., 2. Dr. Zulfah, M.Pd., 3. Dr. H. Ambo Dalle, S.Ag., M.Pd., 4. Dr. Mujahidah, M.Pd., 5. Dr. Magdahalena Tjalla, M.Pd.

: Dusun 3, RT/RW 000/000, Desa Labota, Bahodopi, Morowali, Sulawesi Tengah, 94974

: Indonesia

: Karya Tulis (Artikel)

The Effect Of Integration Of English Learning And Character
Building Based Artificial Intelligence (AI) On Student Learning
Outcomes

: 14 Agustus 2024, di Parepare

Berlaku selama hidup Pencipta dan terus berlangsung selama 70 (tujuh puluh) tahun setelah Pencipta meninggal dunia, terhitung mulai tanggal 1 Januari tahun berikutnya.

: 000845747

adalah benar berdasarkan keterangan yang diberikan oleh Pemohon.

Surat Pencatatan Hak Cipta atau produk Hak terkait ini sesuai dengan Pasal 72 Undang-Undang Nomor 28 Tahun 2014 tentang Hak Cipta.



Nomor pencatatan

a.n. MENTERI HUKUM DIREKTUR JENDERAL KEKAYAAN INTELEKTUAL

u

Direktur Hak Cipta dan Desain Industri

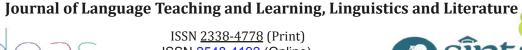


Agung Damarsasongko,SH.,MH. NIP. 196912261994031001

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IDEAS



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Kampus IAIN Palopo Jln. Agatis, Balandai, Telp. 0417-22076 fax 0471-325195 Kota Palopo

LETTER OF ACCEPTANCE

No. 304.1301/In.19/IDEAS/I/2025

Kepada Yth.

Muh. Saiful Anwar, Zulfah Fakhruddin, Ambo Dalle

muhsaifulan12@gmail.com

BAHASA INGGRIS, IAIN PAREPARE, PAREPARE, SULAWESI SELATAN

Assalamu'alaikum Warahmatullaahi Wabarakaatuh

Dengan hormat kami sampaikan bahwa tim redaktur telah menerima artikel ID 6139 yang berjudul "THE EFFECT OF INTEGRATION OF ENGLISH LEARNING AND CHARACTER BUILDING BASED ARTIFICIAL INTELLIGENCE (AI) ON STUDENT LEARNING OUTCOMES" dan dinyatakan layak diterbitkan pada Jurnal Ideas Bulan June 2025, Volume 13 Nomor 1.

Demikian penyampaian ini, atas perhatiannya kami ucapkan terima kasih.

Wassalamu'alaikum Warahmatullaahi Wabarakaatuh

Cek Status Naskah

Pa<mark>lop</mark>o, 13 Januari 2025 Tim Redaksi

Dr. Masruddin., SS., M.Hum. NIP. 19800613 200501 1 005



KEMENTERIAN AGAMA REPUBLIK INDONESIA INSTITUT AGAMA ISLAM NEGERI PAREPARE UNIT PELAKSANA TEKNIS BAHASA



Jalan Amal Bakti No. 8 Soreang, Kota Parepare 91132 Telepon (0421) 21307, Fax. (0421) 24404 PO Box 909 Parepare 91100, website: www.iainpare.ac.id, email: mail@iainpare.ac.id

SURAT KETERANGAN

Nomor: B-187/In.39/UPB.10/PP.00.9/12/2024

Yang bertanda tangan dibawah ini,

Nama

: Hj. Nurhamdah, M.Pd.

NIP

: 19731116 199803 2 007

Jabatan

: Kepala Unit Pelaksana Teknis (UPT) Bahasa

Dengan ini menerangkan bahwa berkas sebagai berikut atas nama,

Nama

: Muh. Saiful Anwar

Nim

2220203879102020

Berkas

Abstrak

Telah selesai diterjemahkan dari Bahasa Indonesia ke Bahasa Inggris dan Bahasa Arab pada tanggal 27 Desember 2024 oleh Unit Pelaksana Teknis Bahasa IAIN Parepare.

Demikian surat keterangan ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

Parepare, 27 Desember 2024

RIAN AGAM, Kepala,

UPT. BANK HE Murhamdah, M.Pd.

19731116 199803 2 007



KEMENTERIAN AGAMA REPUBLIK INDONESIA INSTITUT AGAMA ISLAM NEGERI PAREPARE PASCASARJANA

Jalan Amal Bakti No. 8 Soreang, Kota Parepare 91132 Telepon (0421) 21307, Fax. (0421) 24404 PO Box 909 Parepare 91100 website: www.iainpare.ac.id, email: mail@iainpare.ac.id

Nomor

B-1365/In.39/PPS.05/PP.00.9/12/2024

- 02 Desember 2024

Lampiran

Perihal :

Permohonan Izin Penelitian

Yth. Bapak Bupati Luwu

Cq. Dinas Penanaman Modal Dan Pelayanan

Terpadu Satu Pintu

Di

Tempat

Assalamu Alaikum Wr. Wb.

Sehubungan dengan rencana penelitian untuk Tesis mahasiswa Pascasarjana IAIN Parepare tersebut di bawah ini :

Nama

: MUHAMMAD SAIFUL ANWAR

NIM

: 2220203879102020

Program Studi

: Tadris Bahasa Inggris

Judul Tesis

: The Effect of Integration of English Learning and

Character Building- Based Atificial Intelligence (AI) on

Student Learning Outcomes.

Untuk keperluan Pengurusan segal<mark>a sesuatuny</mark>a yang berkaitan dengan penelitian tersebut akan diselesaikan oleh mahasiswa yang bersangkutan. Pelaksanaan penelitian ini direncanakan pada bulan Desember s/d Februari Tahun 2024

Sehubungan dengan hal tersebut diharapkan kepada bapak/ibu kiranya yang bersangkutan dapat diberi izin dan dukungan seperlunya.

Assalamu Alaikum Wr. Wb.

Direktur,

Dr. H. IslamuNHaq, Lc.,M.A NIP 198403 201503 1 004

UBLIK INDO



PEMERINTAH KABUPATEN LUWU UTARA

DINAS PENANAMAN MODAL DAN PELAYANAN TERPADU SATU PINTU (DPMPTSP)

Jl. Simpurusiang Nomor.27 Masamba, Telp: (0473) 21000 Fax: (0473) 21000 Kode Pos: 92966 Email: dpmptsp@luwuutarakab.go.id Website: http://dpmptsp.luwuutarakab.go.id

SURAT KETERANGAN PENELITIAN

Nomor: 03040/01641/SKP/DPMPTSP/XII/2024

Membaca Menimbang Mengingat Permohonan Surat Keterangan Penelitian an. MUH. SAIFUL ANWAR beserta lampirannya.

Rekomendasi Badan Kesatuan Bangsa dan Politik Kabupaten Luwu Utara 1. Undang-Undang Nomor 39 Tahun 2008 tentang Kementrian Negara;

2. Undang-Undang Nomor 23 Tahun 2014 tentang Pemerintahan Daerah;

3. Peraturan Pemerintah Nomor 12 Tahun 2007 tentang Pembinaan dan Pengawasan Penyelenggaraan Pemerintah Daerah;

4. Peraturan Presiden Nomor 97 Tahun 2014 tentang Penyelenggaraan Pelayanan Terpadu Satu Pintu;

5. Peraturan Menteri Dalam Negeri Republik Indonesia Nomor 3 tahun 2018 tentang Penerbitan Surat Keterangan Penelitian;

 Peraturan Bupati Nomor 17 Tahun 2020 tentang Perubahan Kedua atas Peraturan Bupati Luwu Utara Nomor 11 Tahun 2018 tentang Pelimpahan Kewenangan Perizinan, Non Perizinan dan Penanaman Modal Kepada Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu.

MEMUTUSKAN

Menetapkan : Memberikan Surat Keterangan Penelitian Kepada :

Nama : MUH. SAIFUL ANWAR Nomor Telepon : 085340528801

Alamat : Lorong 7 Dusun Pembasean Desa Patila Kec. Tana Lili, Kab. Luwu

Utara

Sekolah / Instansi : Institut Agama Islam Negeri ParePare

Judul Penelitian : The Effect Of Integration Of English Learning And Character Building-

Based Artificial Intelligence (AI) On Student Learning Outcomes

Lokasi Penelitian : SMAN 4 Luwu Utara

Dengan ketentuan sebagai berikut:

- 1. Surat Keterangan Penelitian ini mulai berlaku pada tanggal 2024-12-13 s/d 2025-01-10.
- 2. Mematuhi semua peraturan Perundang-Undangan yang berlaku.
- 3. Surat Keterangan Penelitian ini dicabut kembali dan dinyatakan tidak berlaku apabila pemegang surat ini tidak mematuhi ketentuan peraturan perundang-undangan yang berlaku.

Surat Keterangan Penelitian ini diberikan kepada yang bersangkutan untuk dipergunakan sebagaimana mestinya dan batal dengan sendirinya jika bertentangan dengan tujuan dan/atau ketentuan berlaku.

Diterbitkan di : Masamba

Pada Tanggal : 16 Desember 2024

An. BUPATI LUWU UTARA KEPALA DINAS PENANAMAN MODAL DAN PELAYANAN TERPADU SATU PINTU



Ditanda tangani secara elektronik oleh: Kepala Dinas Penanaman Modal Dan Pelayanan Terpadu Satu Pintu Luwu Utara Ir. Alauddin Sukri, M.Si 16/12/2024 08:51:07

Ir. Alauddin Sukri, M.Si
NIP: 196512311997031060

Disampaikan kepada:

- 1. Lehriba ini Piertaman yang delesia ng leunaha, Sertifikat Elektronik
- yang dierbikan oleh Balai Serlinkasi Elektronik (BSTE), Badan Siper dan Sandi Negara (BSSN)

 2. Lembar Kedua Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu;



KEMENTERIAN AGAMA REPUBLIK INDONESIA INSTITUT AGAMA ISLAM NEGERI PAREPARE

LEMBAGA PENELITIAN DAN PENGABDIAN KEPADA MASYARAKAT (LP2M)

Jalan Amal Bakti No. 8 Soreang, Kota Parepare 91131 Telepon (0421) 21307, Fax. (0421) 24404 PO Box 909 Parepare 91100 website: lp2m@iainpare.ac.id

SURAT PERNYATAAN

No. B.033/In.39/LP2M.07/01/2025

Saya yang bertanda tangan di bawah ini :

Nama : Muhammad Majdy Amiruddin, M.MA.

NIP : 19880701 201903 1 007

Jabatan : Kepala Pusat Penerbitan & Publikasi LP2M IAIN Parepare

Institusi : IAIN Parepare

Dengan ini menyatakan bahwa naskah dengan identitas di bawah ini :

Judul : The Effect of Integration of English Learning and Character

Building based Artificial Intelligence (AI) on Student Learning

Outcomes

Penulis : Muh. Saiful Anwar

Afiliasi : IAIN Parepare

Email muhsaifulan12@gmail.com

Benar telah diterima pada Jurnal IDEAS (Journal of Language Teaching and Learning, Linguistic and Literature Nomor 1 Volume 13 Tahun 2025 yang telah terakreditasi SINTA 3

Demikian surat ini disampaikan, atas partisipasi dan kerja samanya diucapkan terima kasih.

epala Pusat Penerbitan & Publikasi

ERKETUA LP2M

Muhammad Majdy Amiruddin, M.MA. NIP.19880701 201903 1 007