UTILIZING ARTIFICIAL INTELLIGENCE TO EVALUATE STUDENTS' COMPETENCY IN WRITING SIMPLE PAST TENSE

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Abstract

This research aimed to reveal Copilot capability in evaluating student competence in writing simple past tense. The method of this research is qualitative. The population of this study is 20 Intermediate Level students in Bali International Language Center. Five student writings were gathered as part of the data collection technique; these were selected based on their representativeness across various competence levels. It was applied to guarantee that a wide variety of writings were included in the analysis. Using a rubric created by Copilot, the qualitative descriptive method was used to analyse the data. The results showed that copilot was able to create a rubric used to evaluate students' writing. It consists of content development, organization, grammar and mechanics, usage and style. The results showed that copilots were able to identify topic coverage, relevance, paragraph structure, transitions, sentence structure, spelling and punctuation, verb tense consistency and word choice. The feedback provided by Copilot is able to describe writing errors in detail. Teachers are advised to utilize artificial intelligence in evaluating student writing so that they can work more easily and effectively. The developer of AI should continuously refine AI capability to give more sophisticated feedback on complex transitions and sentence structures.

Keywords*: Writing, artificial Inteliggence, Assesment*

1. INTRODUCTION

Development of Artificial intelligence is increasing at the moment. One of these areas in which AI has been applied, and is resulting in a major impact, is the education sector (Chen et al., 2020).Artificial intelligence's emergence has opened an opportunity to address the shortcomings of traditional assessment approaches in language education. Artificial Learning Companion, using machine learning and natural language processing, can aid in human learning and interaction by making intelligent decisions and conveying them through chatbots ((Pugalenthi et al., 2021)

One artificial intelligence worth noticing is Copilot. Copilot is powered by GPT 4 and the user can choose the conversation style into more creative, balanced and more precise. Copilot is essentially ChatGPT's Microsoft equivalent. It can also be asked questions

similar to ChatGPT and it can even handle hard tasks like math problems and even make photos from the same platform using Bing's Image Creator. Copilot is available for free. Actually, the only method for consumers to get free access to GPT 4 the most sophisticated version of OpenAI's huge language modelis through Microsoft's Copilot platform. It can used for many tasks, especially to evaluate students writing.

Evaluating simple past tense is challenging to teachers because it involves the assessment of verb II (regular and irregular), punctuation, and spelling. (Fitria, 2020) stated that when students write simple past tense, they often make errors in their composition, such as in grammar, punctuation, and spelling. Therefore, the challenges students faced in writing simple past tense showed the need for further investigation into this aspect of writing competence. Moreover, students need to understand the use of verb conjugation patterns, and their application in context which also becomes a hindrance in writing simple past tense compositions. In addition to this, understanding the details of regular and irregular verbs requires not only memorizing them but also practice in

many contexts of linguistics. Assessment of student's proficiency in writing simple past tense, such as verb conjugation, and their proficiency is crucial for assessing their language proficiency. Teachers can identify students' weaknesses and provide more efficient feedback so students can achieve better outcomes in their writing endeavours.

AI-powered writing tools can significantly enhance students' writing proficiency and promote more efficient and effective teaching practices (Nazari et al., 2021)

There are some researchers conducted regarding the use of AI in language assessment. (Marzuki et al., 2023) conducts research regarding the impact of AI writing tools on the content and organization of students writing. The results showed the wide range of AI writing tools used in EFL instruction and provided insight into the methods teachers employ to incorporate these tools in order to help students with their writing difficulties. Specifically, it was discovered that the tools Quillbot, Jenni, Chat-GPT, WordTune, Copy.ai, Paperpal, and Essay Writer promote a thorough learning environment and enhance students' general academic

performance. Automated essay scoring (AES) and related technologies have revolutionized writing assessment and instruction, enabling multilingual assessment and feedback in various contexts (Shermis et al., 2009) This is aligned with (Wu & Yu, 2023), which stated that automated writing evaluation is helpful for English learning, but its effectiveness varies depending on the types of feedback and has yet to replace human feedback. Another research conducted by Abdul Rahman et al. (2022) stated that AI software Automated Writing Evaluation (AWE) effectively improves writing skills among Malaysian public university students, with positive perceptions towards its implementation in ESL writing classrooms.

The use of AI such as Copilot is very essentials in assessing students writing. This is for several reasons, such as overcoming an increase in writing volume faced by the teacher, so that they can work more efficiently, the second one is artificial intelligence can provide more consistent and objective assessment and more on time feedback to students writing. Therefore, the objectives of this research are to reveal the criteria that copilot assess in evaluating students'

competence in writing simple past tense such as content development, organization, grammar and mechanics, usage and style. Second, to reveal the feedback given to students writing such as topic coverage, relevance, paragraph structure, transitions, spelling and punctuation, verb tense consistency, word choice. The significance of this research is to provide automated writing assessment, which is more objective and consistent, improving the efficiency of assessment, save time and educator resources.

2. METHOD

The research is conducted in Bali International Language Center (BILCEN). BILCEN is part of Triatma Mulya University which held English courses for students. The population was 20 Intermediate level students and the sample was 5 students' writings. The 5 writings chosen because they represent different writing skills. The design of this study is a qualitative study. Data was collected using random sampling by selecting 5 students essays about simple past tense. There some steps conducted to use this tool in assessing students' writing. First, Copilot were given a prompt to act as a professional English teacher. Then, it

is asked to make English writing rubrics. The last step is asked Copilot to evaluate the writing based on the rubric made and finally make compete revision based on the feedback from each criterion. From the Copilot's analysis, then the result is summarized to reveal its overall capability in assessing students writing. The data was analysed descriptive qualitatively to get deeper analysis regarding the implementation of Copilot in assessing students' composition before drawing a conclusion.

3. RESULTS AND DISCUSSION

There are four criterias analyzed in the students writing, such as content development, organization, grammar and mechanics, usage and style. The comprehensive analysis of Copilot ability in assessing students' writing can be seen di data 1,2,3,4, and 5.

Data 1.

During yesterday's holiday. I did many activitie which one, of which was last activitie one of which was. last month, my family and I went to kuta Beach for our year-and vacation. We left payangan at 6:30 and arrived in kuta at 8:30 am. We stayed in a hotel near kuta beach. Upon arrival , my mother , my brother and I didn't rest immediately, but to by walk to kuta beach with the blue sky and cool breeze , we enjoyed walking around the beach. althought it was party in the morning, there were alredy many people on the beach. some were sunbathing, some were playing in the water. I wanted to swim, but I was alone with my sister and she just swim, after that we all my vacation story, thank you.

The analysis done by copilot can be seen in the following explanations.

Content and Development (4/4)

Topic Coverage: The essay should focus on a specific event or series of events. In this case, the essay covers the personal experience of visiting Kuta Beach, which is appropriate for the topic.

Relevance: All information provided in the essay should directly relate to the main topic. The essay maintains this relevance throughout.

Organization (2/4)

Paragraph Structure: A well-organized essay should have a clear introduction, body, and conclusion. The

original essay was one long paragraph, which made it difficult to follow.

Transitions: Effective transitions help the reader move smoothly from one idea to the next. The original essay had abrupt transitions, such as *"Upon arrival, my mother, my brother and I didn't rest immediately, but to by walk to kuta beach."* The revised essay uses smoother transitions, like *"Without a moment's rest, my mother, brother, and I eagerly made our way to the beach."*

Grammar and Mechanics (2/4)
Sentence Structure: The essay should have a variety of sentence structures that are grammatically correct. The original essay had issues like run-on sentences*: "I wanted to swim, but I was alone with my sister and she just swim, after that we all my vacation story, thank you."* The revised essay corrects these into proper sentences.

Spelling and Punctuation: Correct spelling and punctuation are essential for readability. The original essay had several spelling errors, such as *"activitie"* instead of *"activities,"* and punctuation errors, like missing

commas. These have been corrected in the revised essay.

Usage and Style (2/4)
Verb Tense Consistency: The essay should consistently use the simple past tense for events that have already occurred. The original essay had inconsistencies, such as *"didn't rest immediately, but to by walk,"* which was corrected to *"didn't rest immediately, but walked"* in the revision.

Word Choice: Word choice should be precise and clear. The original essay had unclear phrasing like "which one, of which was last activitie," which was removed for clarity in the revision.

Full Revision
The revised essay has been structured into three paragraphs to improve clarity.

My Holiday at Kuta Beach
During yesterday's holiday, I engaged in many activities, one of which was a memorable trip to Kuta Beach. Last month, my family and I decided to visit Kuta Beach for our year-end vacation.We left Payangan at 6:30 AM

and arrived in Kuta at 8:30 AM. The journey was comfortable, and the excitement was palpable. Upon reaching our destination, we checked into a hotel conveniently located near Kuta Beach.

Without a moment's rest, my mother, brother, and I eagerly made our way to the beach. With the blue sky above us and a cool breeze accompanying us, we enjoyed a leisurely walk along the shore. Although it was still early in the morning, the beach was bustling with activity. Some visitors were sunbathing, while others played in the water.

I had a strong desire to swim, but since I was only with my sister, who couldn't swim, I decided against it. Instead, we spent the time building sandcastles and collecting seashells, creating memories that would last a lifetime.

Thank you for allowing me to share my vacation story.

Data 2

My yesterday activities. Yesterday i woke up at 05:00 am, after that i went to bathroom to take a shower, washed my face and brushed my tooth. After i take a shower, maybe at 06:30 am, i have changed chlots and then prepared my self to come to the campus. Yesterday i just get " Religion" studied. I finish studied around 10:00 Am and after that i went back to my boarding house and i prepared my self to went back to my hometown. From Dalung to my hometown maybe arond one hours. I went at 10:15 am and i arrived there at 11:10 AM. At my hometown i helped parents in the field, i helped to bring snack fruits and "wani". We call it wani. i don't know in English.

After that my mother tell me to bought some snacks to Galungan prepare. After I bought that i went back to my home and cheat-chat with parents till 07:00 pm, and next i went back to my boarding house. I arrived at my boarding house arround 08:00 pm, after that i cooked for my breakfast today and after that I toke a shower and arround at 11 pm i went to slept.

Content and Development (3/4)
Topic Coverage: The narrative should stay focused on the assigned topic without deviating. The text does this

well by recounting the activities of a single day.

Relevance: Each sentence should contribute to the overall narrative. The text maintains relevance by discussing only activities related to "yesterday."

Organization (2/4)

Paragraph Structure: Effective writing is organized into paragraphs that group related ideas together. The text is presented as one block, which can overwhelm the reader. It should be divided into paragraphs, such as one for morning activities, another for afternoon activities, and a final one for evening activities.

Transitions: Smooth transitions guide the reader from one idea to the next. The text uses basic transitions like "after that," but could use more varied transitions for better flow, such as "later in the morning" or "subsequently."

Grammar and Mechanics (1/4)

Sentence Structure: Sentences should be complete and grammatically correct. The text contains errors such as "brushed my tooth," which should be "brushed my teeth" to reflect the plural form.

Spelling and Punctuation: Proper spelling and punctuation are crucial for clarity. The text has misspellings like "chlots" instead of "clothes" and "arond" instead of "around." Capitalization is inconsistent, and periods are missing at the end of some sentences.

Usage and Style (1/4)

Verb Tense Consistency: The past tense should be used uniformly throughout a past narrative. The text inconsistently uses "i have changed chlots," which mixes present perfect and past simple tenses. It should be "I changed clothes" to maintain past tense consistency.

Word Choice: Words should be chosen for clarity and accuracy. The text uses "cheat-chat," which is likely a typo for "chit-chat," and "toke a shower," which should be "took a shower."

Complete Revision

My Activities Yesterday

Yesterday, I woke up early at 5:00 AM. After getting out of bed, I went to the bathroom to take a shower, wash my face, and brush my teeth. By 6:30 AM, I had changed into my clothes and was

preparing myself to head to campus. The only class I had was "Religion," which concluded around 10:00 AM.

After class, I returned to my boarding house to pack my things for a trip back to my hometown. The journey from Dalung to my hometown takes about an hour. I left at 10:15 AM and arrived there at 11:10 AM.

In my hometown, I assisted my parents in the field. I helped carry snacks, fruits, and a local fruit we call "wani" (I'm not sure of its English name). Later, my mother asked me to buy some snacks in preparation for Galungan. After purchasing the snacks, I returned home and spent the evening chatting with my parents until 7:00 PM.

Then, I made my way back to the boarding house, arriving around 8:00 PM. I cooked food for today's breakfast and took another shower. Finally, around 11:00 PM, I went to bed.

Data 3

Last holiday activities, I'am stay at home because I'am boring, at home I clean my badroom and I'am clean my schoose and at 9:30 0'clock am I'am wash my body for I went to the church. I am ruterned home at 12 0'clock and I

eat and break. I got up at 5 o 'clock p.m. I went to the toilet , after toilet I'am play my phone and my laptop after I play phone I'am eat and watching video's in the laptop. after eat I'am wash my body and went to chuch, after in the church I'am back to home at 10 o'clock p.m and I'am went to bed and sleep.

Content and Development (3/4)

Topic Coverage: The narrative should focus on a specific event or series of events. In this case, the narrative covers the activities of the holiday, which is appropriate for the topic.

Relevance: All information provided in the narrative should directly relate to the main topic. The narrative maintains this relevance throughout by discussing activities done during the last holiday.

Organization (2/4)

Paragraph Structure: A well-organized narrative should have a clear introduction, body, and conclusion. The original narrative was one long paragraph, which made it difficult to follow. It should be structured into paragraphs to improve clarity.

Transitions: Effective transitions help the reader move smoothly from one idea to the next. The original narrative

had abrupt transitions, such as "I'am stay at home because I'am boring," which could be improved to "I stayed at home because I was bored."

Grammar and Mechanics (1/4)

Sentence Structure: The narrative should have a variety of sentence structures that are grammatically correct. The original narrative had issues like "I clean my badroom," which should be "I cleaned my bedroom."

Spelling and Punctuation: Correct spelling and punctuation are essential for readability. The original narrative had several spelling errors, such as "schoose" instead of "shoes," and punctuation errors, like the misuse of apostrophes and periods.

Usage and Style (1/4)

Verb Tense Consistency: The narrative should consistently use the simple past tense for events that have already occurred. The original narrative had inconsistencies, such as "I'am stay at home," which should be "I stayed at home."

Word Choice: Word choice should be precise and clear. The original narrative had unclear phrasing like "I'am clean my schoose," which should be "I cleaned my shoes."

Full Revision

My Last Holiday Activities

During my last holiday, I stayed at home because I was feeling bored. At home, I cleaned my bedroom and my shoes. At 9:30 AM, I took a shower before going to church. I returned home at 12:00 PM, had lunch, and took a break. I got up at 5:00 PM, went to the bathroom, and afterward, I played on my phone and laptop. After playing, I had dinner while watching videos on my laptop. After dinner, I took another shower and went to church. I came back home at 10:00 PM and went to bed to sleep.

Data 4

My last holiday activities is I'm make ogoh- ogoh on the bale banjar. I'm go to banjar at 16:00 o'clock em because I'm is a leader of all sections. I'm very fun make ogoh-ogoh with my friend because im play music in the sound system. I'm make ogoh-ogoh until 7 pm because Im to learn Playing balinese music, I'm very seriously to learn after I'm playing Balinese music I'm very

seriously to learn after I'm learn playing balinese music Im go to banjar make ogoh-ogoh again until 3 o'clock Am.

Content and Development (3/4)

Topic Coverage: The narrative should focus on a specific event or series of events. The text does this well by discussing the process of making ogoh-ogoh.

Relevance: Each sentence should contribute to the overall narrative. The text maintains relevance by discussing activities related to the last holiday.

Organization (2/4)

Paragraph Structure: Effective writing is organized into paragraphs that group related ideas together. The text is presented as one block, which can overwhelm the reader. It should be divided into paragraphs, such as one for the beginning of the activity, another for the main event, and a final one for the conclusion.

Transitions: Smooth transitions guide the reader from one idea to the next. The text uses basic transitions like "after," but could use more varied transitions for better flow, such as "subsequently" or "later."

Grammar and Mechanics (1/4)

Sentence Structure: Sentences should be complete and grammatically correct. The text contains errors such as "I'm make ogoh-ogoh," which should be "I made ogoh-ogoh."

Spelling and Punctuation: Proper spelling and punctuation are crucial for clarity. The text has misspellings like "o'clock em" instead of "PM" and punctuation errors like missing periods at the end of sentences.

Usage and Style (1/4)

Verb Tense Consistency: The past tense should be used uniformly throughout a past narrative. The text inconsistently uses "I'm" (a contraction for "I am") instead of the simple past tense. It should be "I went" to maintain past tense consistency.

Word Choice: Words should be chosen for clarity and accuracy. The text uses "I'm very fun make ogoh-ogoh," which should be "I had a lot of fun making ogoh-ogoh."

Complete Revision

My Last Holiday Activities

On my last holiday, I made an ogoh-ogoh at the bale banjar. I went to the banjar at 4:00 PM because I am the leader of all sections. Making ogoh-ogoh with my friends was a lot of fun, especially since

we played music on the sound system. I worked on the ogoh-ogoh until 7:00 PM because I had to learn to play Balinese music. I took my music practice very seriously. After practicing Balinese music, I returned to the banjar to continue making ogoh-ogoh until 3:00 AM.

Data 5

My activities yesterday:

Yesterday, I woke up at 6 o'clock a.m. and took a bath. After took a bath, I prepared myself to went to the campus. Then I went to the campus. I arrive in the campus at 7 o' clock. Then I had studied until 9:30 a.m. Then i and my friend had lunch and after that came back to the class to studied. After finish the class, I went back home and when I arrive in my house , i change my clothes and then had a dinner, After that , i went to the bathroom to took a bath and after that I wear a daster and went to my bed to sleep. That's is my activities yesterday.

Content and Development (4/4)

Topic Coverage: The essay should focus on a specific event or series of events. The essay does this well by discussing the activities of a single day.

Relevance: All information provided in the essay should directly relate to the main topic. The essay maintains this relevance throughout by discussing "My activities yesterday."

Organization (3/4)

Paragraph Structure: A well-organized essay should have a clear introduction, body, and conclusion. The essay is organized into one paragraph, which is acceptable for a short narrative but could be improved with clearer separation of ideas, such as separating the morning, afternoon, and evening activities into different paragraphs.

Transitions: Effective transitions help the reader move smoothly from one idea to the next. The essay uses "Then" frequently, which can be repetitive. Using varied transitions like "Afterward," "Later," or "In the evening," would improve the flow.

Grammar and Mechanics (2/4)

Sentence Structure: The essay should have a variety of sentence structures that are grammatically correct. The essay contains errors such as "After took a bath," which should be "After taking a bath," indicating a need for past participle usage after prepositions.

Spelling and Punctuation: Correct spelling and punctuation are essential for readability. The essay has minor punctuation errors, such as missing commas after introductory phrases, and capitalization inconsistencies, such as "i" instead of "I."

Usage and Style (2/4)

Verb Tense Consistency: The essay should consistently use the simple past tense for events that have already occurred. The essay has inconsistencies, such as "I prepared myself to went to the campus," which should be "I prepared myself to go to the campus," mixing the infinitive with the past tense.

Word Choice: Word choice should be precise and clear. The essay has awkward or incorrect word choices, such as "had a dinner," which should be "had dinner," and "wear a daster," which should be "put on a daster."

Complete Revision

My Activities Yesterday

Yesterday, I woke up at 6:00 AM and took a bath. After bathing, I prepared myself to go to campus. I arrived at campus at 7:00 AM and studied until 9:30 AM. Afterward, my friend and I had lunch before returning to class to continue studying. Once classes were finished, I went back home. Upon arriving at my house, I changed my clothes and had dinner. Later, I went to the bathroom to take another bath. Finally, I put on a daster and went to bed.

From the five analysis we can see that the integration of artificial intelligence in education has opened a new door for teaching and learning. One of the integrations is the through the use of artificial intelligence to help learning and language assessment. Based on the analysis, the Copilot can identify and correct students' mistakes in writing simple past tense. The Copilot recognized inconsistencies in using tenses and suggested correct feedback. It also shows proficiency in detecting grammar mistakes, such as incorrect sentence and verb structure. The Copilot gives clear feedback about how good students are on a topic and maintains coherent narration, which is crucial for effective communication. The ability of this tool to analyze essay organization is prominent; it identifies the lack of paragraph structure and suggests or provides feedback for better flow and readability. This is aligned with the research conducted by Zawacki-Richter et al. (2019)which showed that AI applications can perform assessment and

evaluation tasks at very high accuracy and efficiency levels.

AI writing assistants (augmented writing) guide users through different stages of the writing process using NLP and machine learning. By using AI systems, they can use written texts to repair grammatical problems (by doing a continual error analysis), offer suggestions for future improvements, and supply more resources for additional research (Pokrivcakova, 2019). AI's performance in identifying errors related to tenses and suggesting a correction is evidence of its potential as a teaching aid. However, this study also revealed its limitation in providing nuanced feedback to more complex transitions and sentence structures.

The implication of this research is the potency of copilot to provide high quality feedback to students. By providing consistent and immediate feedback, the implementation of artificial intelligence can bridge the gap in which the feedback provided by teachers can be limited because the large amount of writing they should assess due to high teacher ratio or other limitations.

4. CLOSING

The following conclusions and recommendations can be drawn from the discussion above.

Conclusion

Artificial intelligence is a tool which can be utilized by teacher in the classroom to help students improving their language skills. Teachers can explore the use of artificial intelligence and its capability in language learning so that they can work more simple and more effective. Copilot was used in this research to analyze five students' writing in simple past tense and it shows tremendous result. It was able to create rubrics which consist of content development, organization, grammar and mechanics, usage and style. The use of Copilot in education shows hope to help students improve their writing skills, particularly grammar and mechanics. The effectiveness of these tools in giving detailed feedback regarding the use of simple past tense is a valuable asset for students and teachers.

Suggestion

It is suggested that teachers integrate AI tools such as Copilot into the assessment process, particularly grammar and tenses.

The developer of AI should continuously refine AI capability to give more sophisticated feedback on complex transitions and sentence structures. Further research is needed to explore the long-term impact of AI-assisted writing assessment on students' language development. Moreover, it can investigate the integration of AI feedback

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