Effects of Artificial Intelligences on the Reading and Speaking Skills of the Grade 11 Shs Learners

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Abstract

The study aimed to determine the effectiveness of artificial intelligence on the reading and speaking skills of the select senior high school learners at Laguna Senior High School in Santa Cruz, Laguna, during the Academic Year 2023-2024. To investigate the effectiveness the researcher anchors the study based on the following research objectives: first, determine the respondents' level of Artificial and Automated Intelligence which include the usage of content, grammar, and organization; second, identify the level of their speaking skills; third, identify the level of their reading skills related to fluency, accuracy, comprehension, and vocabulary; fourth, identify the significant effect of assisted and automated intelligence on speaking skills of the respondents; fifth, identify the significant effect of assisted and automated intelligence on reading skills of the respondents; lastly, identify the extent of use of Assisted intelligence and Automated intelligence usage significant predictors of reading and speaking skills

It employed a quasi-experimental design and convenient sampling techniques. It involved 106 senior high school students of LSHS. A combination of cumulative activities and a survey questionnaire were used as the main instrument. The data were treated using statistical treatments: Mean, Standard Deviation, and Multiple Regression Analysis.

According to the findings, there are significant effects of Content Assisted Intelligence in enhancing speaking skills in terms of Articulation and Organization Assisted Intelligence in terms of Pronunciation. There are also significant effects of Content, Grammar, and Organization Automated Intelligence in improving speaking skills in terms of Articulation. As well, it also implies that incorporating Content Assisted Intelligence can improve Articulation which pertains to fluidity, fluency, and voice quality while Organization Assisted Intelligence improves pronunciation. Also, Automated Intelligence enriches articulation. Hence, teachers and learners can utilize Artificial Intelligence to produce and articulate sounds, as well as gain familiarity with stress and intonation patterns. Furthermore, the researcher also found out that there are significant effects of the grammar and organization of Assisted Intelligence in enhancing reading skills in terms of Accuracy and Comprehension Assisted Intelligence in terms of Content. Moreover, Grammar Automated Intelligence has significant effects on reading skills in terms of Fluency and Accuracy. In addition, it is also sought that the Grammar whether Assisted Intelligence or Automated Intelligence indicates improvement in reading skills specifically to accuracy and fluency solely in automated intelligence. It also signifies that Comprehension is improved with the use of Content Assisted Intelligence. The DepEd administration can provide training and intervention programs so that the teachers and the learners will be equipped with the expected skills outcome promoted in DepEd order no. 35 s. 2016. By integrating AI technologies effectively, educators may boost language learning outcomes and acquire the necessary communication skills as promoted in the K-12 Program of the DepEd to be globally equipped.

Keywords: Vocabulary; Reading Skills, Intelligence

1. Introduction

The world is now living in a digital world. It is understood how children and young people are exposed to technology has a significant impact on how society evolves and communicates. The Internet is a network of interconnected, private, public, commercial, academic, and governmental networks that enables communication and data services on a global scale (Rouse,2023). Currently, the internet has become the platform for communications and information in which the large information available on the internet is written in English. According to Richter, 2022, the English Language is the lingua franca of the internet which connects people all over the world. The Internet has become a good platform to learn for the Second Language users of the said language.

Presently, the Information is just one click away because of the internet. Artificial Intelligence or AI is dominating the internet because of its feature to do certain tasks that only humans can do before thus, Artificial intelligence, or AI, is a field of technology that programs the computer to behave, think, and think like people.

The recent breakthroughs in technology are the activities aided by AI. It has cleared the path for improved electronic writing tools, as well as the development of wholly new and novel ones (Alharbi, 2023). Writing is one of the many disciplines where AI has become a crucial tool. AI tools are intended to help writers become more proficient and productive in their writing. The two types of AI tools are automated intelligence and assisted intelligence.

Assisted intelligence is intended to assist authors by providing tips and suggestions that can help them develop their writing abilities. For instance, the AI application Grammarly assists authors in locating grammatical, spelling, and punctuation issues. The program also provides advice on how to enhance vocabulary, writing styles, and sentence constructions.

On the other hand, the design of automated intelligence is to write without the help of human intelligence. Automated intelligence technologies are set up to produce material automatically for a variety of uses, such as content marketing, professional writing, and academic writing.

, In the digital world, English writing skills are essential for academic and professional growth. The students have been using AI tools to enhance their writing skills since 2009. It has been proved that AI writing tools can improve text quality and meta-linguistic knowledge of the learners (Godwin-Jones 2022).

This study aims to prove the effectiveness of exposure to artificial intelligence on the reading and speaking skills of SHS learners. The findings of this study will serve as the foundation for an intervention program that DepEd authorities, school principals, administrators, and instructors will design to benefit the learning process in the Philippine setting.

1.1 Statement of the Problem

Specifically, the study will seek to answer the following questions:

1. What is the level of the Artificial Intelligence of the respondents in terms of:
    1.1. Assisted Intelligence as to:
        1.1.1. content;
        1.1.2. grammar; and
        1.1.3. organization?
    1.2. Automated Intelligence as to:
        1.2.1 content;

1.2.2 grammar; and
1.2.3 organization?

2. What is the level of the speaking skills in Assisted Intelligence, Automated Intelligence, and a traditional class of Grade 11 students in terms:
2.2 Articulation;
2.3 Pronunciation;
2.4 Mastery; and
2.5 Diction?

3. What is the level of the reading skills in Assisted Intelligence, Automated Intelligence, and a traditional class of the Grade 11 students related to:
3.2 Fluency;
3.3 Accuracy;
3.4 Comprehension; and
3.5 Vocabulary?

4. Do Assisted and Automated intelligences have a significant effect on the speaking skills of Grade 11 students?

5. Do Assisted and Automated intelligences have a significant effect on the Reading Skills of Grade 11 students?

6. Singly or in combination, are the extent of use of Assisted intelligence and Automated intelligence usage significant predictors of reading and speaking skills?

2. Methodology

The researcher used a quantitative type of research; the Quantitative approach is the predominant research framework in the social sciences. It refers to a set of tactics, methodologies, and assumptions used to investigate by analyzing numerical patterns (Coghlan &. Brydon-Miller, 2014)

The researcher decided to employ a quasi-experimental design which is best for accounting effects and gathering accumulated data from the given activities. According to De Carlo 2018, the quasi-experimental design consists of three essential components: experimental and control groups; and independent and dependent variables; In a quasi-experiment, two groups are compared to see how an intervention affects them.

3. Results and Discussion

Level of the Artificial Intelligence

The Level of respondents' artificial intelligence includes assisted intelligence and automated intelligence as to content, grammar, and organization, and was determined by mean and standard deviation.

Table 1. Level of the Artificial Intelligence of the respondents in terms of Assisted Intelligence as to content

Indicators	Mean	SD	Remarks
1. I use paraphrasing tools like QuillBot to paraphrase my work.	3.65	1.20	Often
2. I use paraphrasing tools to improve the tone of my writing to improve the	3.47	1.21	Often

	clarity of my work.			
3.	I use copywriting applications to check my choice of words	3.29	1.22	Sometimes
4.	I use Grammarly and the like to check my content.	3.35	0.98	Sometimes
5.	I use Word applications like Microsoft Word, Google Documents, or OpenOffice to check my writing and widen my vocabulary.	3.38	1.10	Sometimes

Overall Mean = 3.43
Standard Deviation = 1.14
Verbal Interpretation = High

Table 1 shows the level of artificial intelligence (AI) usage among respondents in terms of Assisted Intelligence related to content. The indicators represent various AI tools and applications commonly used for writing and content creation. The respondents often use paraphrasing tools like QuillBot to rephrase their work (M=3.65). Likewise, respondents sometimes use copywriting applications to assess word choices (M= 3.29). The overall mean of 3.43 and standard deviation of 1.14 indicate a high level of AI usage in assisting with content-related tasks among the respondents. This means that respondents indicate a prevalent use of AI tools and utilize copywriting applications to evaluate the content of individual writing.

Table 2. Level of the Artificial Intelligence of the respondents in terms of Assisted Intelligence as to grammar

Indicators		Mean	SD	Remarks
1.	I use copywriter tools to check the words and sentence structure of my work in case of sentence fragments.	3.38	1.35	Sometimes
2.	I use Grammarly or other grammar checker applications to check my tenses.	3.56	1.02	Often
3.	I use paraphrasing to automatically correct the subject-verb agreement of my paragraphs.	3.74	0.96	Often
4.	I use applications like Grammarly and Ginger Software to check the usage of my conjunctions.	3.21	0.88	Sometimes
5.	I use Quillbot, Grammarly, and the like to correct my punctuation, capitalization, and parts of speech usage.	3.85	0.89	Often

Overall Mean = 3.55
Standard Deviation = 1.05
Verbal Interpretation = High

Table 2 displays the level of artificial intelligence (AI) usage among respondents in terms of Assisted Intelligence related to grammar. The indicators represent various AI tools and applications commonly used for grammar checking. The respondents often use copywriting tools to check the words and sentence structure in case of fragments in their work (M=3.38). Similarly, respondents sometimes use Grammarly or other grammar checker applications to check their tenses (M= 3.56). applications to check my tenses. The overall mean of 3.55 and standard deviation of 1.05 indicate high-level AI usage in assisting with content-related tasks among the respondents. This means that respondents indicate frequent usage of AI tools in checking their grammar in the given activities during the time of this study.

Table 3. Level of the Artificial Intelligence of the Respondents in terms of Assisted Intelligence as to organization

Indicators	Mean	SD	Remarks
1. I notice a big difference in my work after using applications like Quillbot, Grammarly, and the like.	3.35	0.88	Sometimes
2. I use paraphrasing tools to improve the tone of my writing to improve the clarity of my work from beginning to end.	3.18	1.29	Sometimes
3. I use Quillbot, Grammarly, and the like to make my writing coherent.	3.29	1.14	Sometimes
4. I use Quillbot, Grammarly, and the like to make my writing cohesive	3.18	1.09	Sometimes
5. I use Quillbot, Grammarly, and the like to check the smoothness and logical order of my work.	3.59	1.16	Often

Overall Mean = 3.32
Standard Deviation = 1.12
Verbal Interpretation = Moderately High

Table 3 exhibits the level of artificial intelligence (AI) usage among respondents in terms of Assisted Intelligence related to organization. The indicators represent various AI tools and applications commonly used for organizing ideas. Respondents sometimes use Grammarly to check the coherence and cohesiveness of their work with (M= 3.29) and (M= 3.18). applications to check my tenses. The use of AI tools to check the smoothness and logical order of their work achieved (M= 3.59) is frequently used by the respondents. The overall mean of 3.32 and standard deviation of 1.12 indicate moderately high-level AI usage in assisting with organization-related tasks among the respondents. This means that respondents indicate a moderate use of AI tools in improving their organization.

Table 4. Level of the Artificial Intelligence of The Respondents in terms of Automated Intelligence as to content

Indicators	Mean	SD	Remarks
1. I use the AI writer to have quality content in my writings and speeches.	3.02	0.99	Sometimes
2. I use AI writers to produce professional-grade or quality content.	2.98	0.91	Sometimes

3. I use AI writers to achieve error-free content.	3.05	1.00	Sometimes
4. I use AI writing because it is more convenient than generating my ideas.	2.95	0.86	Sometimes
5. I use AI writing to enhance the style and tone of my work	3.05	0.97	Sometimes

Overall Mean = 3.01
Standard Deviation = 0.94
Verbal Interpretation = Moderately High

Table 4 indicates the level of artificial intelligence (AI) usage among respondents in terms of Automated Intelligence related to content. The indicators represent various AI tools and applications commonly used for content. Respondents sometimes used AI writers to produce quality content in their writings and speeches (M= 3.02), used AI writers to produce professional-grade or quality content with (M= 2.98), in used AI writers to achieve error-free content with (M= 3.05), used AI writer because it is more convenient than generating their ideas with (M= 2.95), and use AI writer to enhance their style and tone of their work. The overall mean of 3.01 and standard deviation of 0.94 indicate moderately high-level AI usage in automated content-related tasks among the respondents. This means that there is a moderation of usage of AI tools in terms of content.

Table 5. Level of the Artificial Intelligence of the Respondents in terms of Automated Intelligence as to grammar

Indicators	Mean	SD	Remarks
1. I use this because I am not confident in my grammar.	3.20	1.10	Sometimes
2. I use AI writer to achieve error tense usages.	3.10	0.89	Sometimes
3. I use AI writers because it gives flawless grammar.	3.17	1.05	Sometimes
4. I use AI writers to achieve error-free sentence structures.	3.29	0.98	Sometimes
5. I use AI writing because it is more efficient than creating my paragraphs.	2.98	1.06	Sometimes

Overall Mean = 3.15
Standard Deviation = 1.01
Verbal Interpretation = Moderately High

Table 5 indicates the level of artificial intelligence (AI) usage among respondents in terms of Automated Intelligence related to Grammar. The values represent various AI tools and applications commonly used for grammar. In all the criteria given for grammar in the use of automated artificial intelligence appears sometimes to be used by the respondents ranging from (M= 2.98) to (M= 3.20). The overall mean of 3.15 and standard deviation of 1.01 indicate moderately high-level AI usage in automated grammar-related tasks among the respondents. This means that respondents reveal a moderate use of AI tools for their grammar.

Table 6. Level of The Artificial Intelligence of The Respondents in Terms of Automated Intelligence as to Organization

Indicators		Mean	SD	Remarks
1.	I use AI writing to level the words with the audience I need which I have trouble with when writing on my own.	3.15	0.88	Sometimes
2.	I use AI writer to create outlines in my writings, speeches, and reading enhancer.	2.88	1.00	Sometimes
3.	I use AI writing to improve the tone of my writing and improve the clarity of my work from beginning to end.	3.32	0.99	Sometimes
4.	I use AI writing to generate organized Ideas.	3.29	0.98	Sometimes
5.	I use AI writing to make my writing cohesive.	3.07	1.06	Sometimes

Overall Mean = 3.14
Standard Deviation = 0.99
Verbal Interpretation = Moderately High

Table 6 implies the level of artificial intelligence (AI) usage among respondents in terms of Automated Intelligence related to organization. The values represent various AI tools and applications commonly used for organizing ideas. All the criteria given for organizations in the use of automated artificial intelligence appear sometimes to be used by the respondents ranging from (M= 2.88) to (M= 3.32). The overall mean of 3.14 and standard deviation of 0.99 indicate moderately high-level AI usage in automated organization-related tasks among the respondents. This means that respondents reveal a moderate use of AI tools for the organization of ideas in respondents exposed to automated intelligence tools.

Level of Speaking Skills

Level of the speaking skills in Assisted Intelligence, Automated Intelligence, and traditional comprises articulation, pronunciation, mastery, and diction and was measured by mean and standard deviation,

Table 7. Level of Speaking Skills in Assisted Intelligence

Indicators		**Mean**	**SD**	**Remarks**
Speech 1	Articulation	3.36	0.55	Very Satisfactory
	Pronunciation	3.24	0.56	Very Satisfactory
	Mastery	3.30	0.59	Very Satisfactory
	Diction	2.85	0.57	Very Satisfactory
Speech 2	Articulation	3.27	0.63	Very Satisfactory
	Pronunciation	3.42	0.61	Outstanding
	Mastery	3.39	0.61	Very Satisfactory
	Diction	2.73	0.67	Satisfactory
Speech 3	Articulation	3.52	0.57	Outstanding
	Pronunciation	3.42	0.56	Outstanding
	Mastery	3.42	0.56	Outstanding

	Diction	2.85	0.71	Very Satisfactory
Speech 4	Articulation	3.33	0.54	Very Satisfactory
	Pronunciation	3.39	0.56	Very Satisfactory
	Mastery	3.45	0.62	Outstanding
	Diction	2.82	0.81	Very Satisfactory
Speech 5	Articulation	3.52	0.57	Outstanding
	Pronunciation	3.45	0.56	Outstanding
	Mastery	3.48	0.57	Outstanding
	Diction	2.73	0.57	Very Satisfactory
Overall Mean	**Articulation**	**3.40**	**0.45**	**Very Satisfactory**
	Pronunciation	**3.39**	**0.43**	**Very Satisfactory**
	Mastery	**3.41**	**0.44**	**Outstanding**
	Dictin	**2.79**	**0.52**	**Very Satisfactory**

Table 7 exhibits the level of assessment of speaking skills in assisted intelligence across various indicators such as articulation, pronunciation mastery, and diction presented in five assigned speeches for the respondents. The speaking skills of the respondents are consistently impressive across various aspects. In terms of articulation, the mean scores range from 3.27 to 3.52, and pronunciation ranges from 3.24 to 3.45.

The overall (M=3.40, 3.39, 3.41, 2.29) for all indicators reveals that respondents exhibit a commendable proficiency in speaking skills when supported by assisted intelligence, with particularly strong performances in articulation, pronunciation, and mastery, and satisfactory performance in diction.

Table 8. Level of Speaking Skills in Automated Intelligence

Indicators		**Mean**	**SD**	**Remarks**
Speech 1	Articulation	2.93	0.75	Very Satisfactory
	Pronunciation	3.07	0.79	Very Satisfactory
	Mastery	2.76	0.89	Satisfactory
	Diction	2.20	0.84	Fairly Satisfactory
Speech 2	Articulation	2.85	0.73	Very Satisfactory
	Pronunciation	2.93	0.75	Very Satisfactory
	Mastery	2.88	0.75	Very Satisfactory
	Diction	2.34	0.88	Satisfactory
Speech 3	Articulation	2.85	0.73	Very Satisfactory
	Pronunciation	2.95	0.71	Very Satisfactory
	Mastery	2.95	0.89	Very Satisfactory
	Diction	2.49	0.93	Satisfactory
Speech 4	Articulation	2.93	0.69	Very Satisfactory
	Pronunciation	3.07	0.75	Very Satisfactory
	Mastery	2.95	0.84	Very Satisfactory

	Diction	2.44	0.92	Satisfactory
Speech 5	Articulation	3.05	0.71	Very Satisfactory
	Pronunciation	3.17	0.74	Very Satisfactory
	Mastery	3.15	0.65	Very Satisfactory
	Diction	2.49	0.78	Satisfactory
Overall	**Articulation**	**2.92**	**0.64**	**Very Satisfactory**
	Pronunciation	**3.04**	**0.65**	**Very Satisfactory**
	Mastery	**2.94**	**0.70**	**Very Satisfactory**
	Diction	**2.39**	**0.76**	**Satisfactory**

Table 8 presents the level of assessment of speaking skills in automated intelligence across various indicators such as articulation, pronunciation mastery, and diction presented in five assigned speeches for the respondents. The speaking skills of the respondents range an average result across various aspects exempt from diction which obtained a satisfactory level (M= 2.39). In terms of articulation, the mean scores range from 3.27 to 3.52, pronunciation range from 3.24 to 3.45, mastery range from 2.76 to 3.15, and diction from 2.20- 2.39.

The overall (M=2.92, 3.04, 2.94, 2.39) for all indicators reveals that respondents exhibit an average proficiency in speaking skills when supported by automated intelligence, with particularly average performances in articulation, pronunciation, and mastery, and a fair performance in diction.

Table 9. Level of Speaking Skills in Traditional Class

Indicators		**Mean**	**SD**	**Remarks**
Speech 1	Articulation	3.45	0.62	Outstanding
	Pronunciation	3.39	0.50	Very Satisfactory
	Mastery	3.19	0.70	Very Satisfactory
	Diction	2.68	0.65	Satisfactory
Speech 2	Articulation	3.19	0.60	Very Satisfactory
	Pronunciation	3.32	0.60	Very Satisfactory
	Mastery	3.19	0.70	Very Satisfactory
	Diction	3.06	0.63	Very Satisfactory
Speech 3	Articulation	3.68	0.54	Outstanding
	Pronunciation	3.29	0.53	Very Satisfactory
	Mastery	3.65	0.61	Outstanding
	Diction	2.94	0.77	Very Satisfactory
Speech 4	Articulation	3.39	0.62	Very Satisfactory
	Pronunciation	3.26	0.58	Very Satisfactory
	Mastery	3.39	0.62	Very Satisfactory
	Diction	3.00	0.77	Very Satisfactory
Speech 5	Articulation	3.65	0.61	Outstanding
	Pronunciation	3.45	0.57	Outstanding
	Mastery	3.39	0.62	Very Satisfactory

	Diction	2.94	0.68	Very Satisfactory
Overall	**Articulation**	**3.47**	**0.46**	**Outstanding**
	Pronunciation	**3.34**	**0.43**	**Very Satisfactory**
	Mastery	**3.36**	**0.51**	**Very Satisfactory**
	Diction	**2.92**	**0.61**	**Very Satisfactory**

Table 9 states the level of assessment of speaking skills in traditional classes across various indicators such as articulation, pronunciation mastery, and diction presented in five assigned speeches for the respondents. The speaking skills of the respondents range an average result across various aspects exempt from articulation which obtained an outstanding level at (M= 3.47). In terms of articulation, the mean scores range from 3.19 to 3.65, pronunciation range from 3.26 to 3.45, mastery range from 3.19 to 3.39, and diction from 2.68 to 3.00.

The overall (M=3.37, 3.34, 3.36, 2.92) for all indicators reveals that respondents exhibit an average proficiency in speaking skills in a traditional class, with particularly outstanding performance in articulation and average performances in, pronunciation, mastery, and diction.

Level of Reading Skills

The Level of the speaking skills in Assisted Intelligence, Automated Intelligence, and traditional comprises fluency, accuracy, comprehension, and vocabulary and was determined by mean and standard deviation.

Table 10. Level of Reading Skills in Assisted Intelligence

Indicators		**Mean**	**SD**	**Remarks**
Activity 1	Fluency	2.94	0.24	Outstanding
	Accuracy	2.56	0.50	Very Satisfactory
	Comprehension	1.91	0.71	Satisfactory
	Vocabulary	2.26	0.67	Satisfactory
Activity 2	Fluency	2.97	0.17	Outstanding
	Accuracy	2.65	0.49	Very Satisfactory
	Comprehension	2.38	0.70	Fairly Satisfactory
	Vocabulary	2.12	0.69	Fairly Satisfactory
Activity 3	Fluency	3.00	0.00	Outstanding
	Accuracy	2.88	0.33	Very Satisfactory
	Comprehension	2.35	0.85	Very Satisfactory
	Vocabulary	2.06	0.74	Fairly Satisfactory
Activity 4	Fluency	2.94	0.24	Outstanding
	Accuracy	2.76	0.43	Very Satisfactory
	Comprehension	1.76	0.74	Fairly Satisfactory
	Vocabulary	1.71	0.80	Fairly Satisfactory
Activity 5	Fluency	3.00	0.00	Outstanding

	Accuracy	2.85	0.36	Outstanding
	Comprehension	2.32	0.84	Very Satisfactory
	Vocabulary	1.68	0.84	Fairly Satisfactory
Overall	**Fluency**	**2.97**	**0.10**	**Outstanding**
	Accuracy	**2.74**	**0.31**	**Very Satisfactory**
	Comprehension	**2.26**	**0.38**	**Satisfactory**
	Vocabulary	**1.96**	**0.56**	**Fairly Satisfactory**

Table 10 depicts the level of assessment of reading skills in assisted intelligence across various indicators such as fluency, accuracy, comprehension, and vocabulary presented in five assigned reading activities for the respondents. The reading skills of the respondents are consistently remarkable across various aspects. In terms of fluency, the mean scores range from 2.94 to 3.00, accuracy ranging from 2.56 to 2.88, comprehension ranging from 1.76 to 2.88, and vocabulary from 1.68 to 2.26.

The overall (M=2.97, 2.74, 2.26, 1.96) for all indicators reveals that respondent assessment of reading skills in assisted intelligence is quite positive. While the overall reading skills are remarkable, the specific scores highlight areas of strength, and areas that may require improvement such as fluency and accuracy tend to score higher, indicating proficiency in these areas, whereas comprehension and vocabulary show slightly lower scores, suggesting potential areas for further development.

Table 11. Level of Reading Skills in Automated Intelligence

Indicators		**Mean**	**SD**	**Remarks**
Activity 1	Fluency	2.68	0.47	Outstanding
	Accuracy	2.54	0.55	Very Satisfactory
	Comprehension	1.93	0.82	Satisfactory
	Vocabulary	2.02	0.96	Fairly Satisfactory
Activity 2	Fluency	2.71	0.51	Outstanding
	Accuracy	2.46	0.60	Very Satisfactory
	Comprehension	1.80	0.78	Fairly Satisfactory
	Vocabulary	1.88	0.90	Fairly Satisfactory
Activity 3	Fluency	2.73	0.45	Outstanding
	Accuracy	2.56	0.59	Very Satisfactory
	Comprehension	2.39	0.80	Very Satisfactory
	Vocabulary	1.78	0.81	Fairly Satisfactory
Activity 4	Fluency	2.71	0.46	Outstanding
	Accuracy	2.59	0.55	Very Satisfactory
	Comprehension	1.80	0.81	Fairly Satisfactory
	Vocabulary	1.73	0.81	Fairly Satisfactory

	Activity				
5		Fluency	2.73	0.45	Outstanding
		Accuracy	2.68	0.47	Outstanding
		Comprehension	2.41	0.81	Very Satisfactory
		Vocabulary	1.78	0.79	Fairly Satisfactory
	Overall	**Fluency**	**2.71**	**0.39**	**Outstanding**
		Accuracy	**2.57**	**0.49**	**Very Satisfactory**
		Comprehension	**2.13**	**0.57**	**Satisfactory**
		Vocabulary	**1.84**	**0.72**	**Fairly Satisfactory**

Table 11 depicts the level of assessment of reading skills in automated intelligence across various indicators such as fluency, accuracy, comprehension, and vocabulary presented in five assigned reading activities for the respondents. The reading skills of the respondents are consistently remarkable across various aspects. In terms of fluency, the mean scores range from 2.59 to 2.73, accuracy ranging from 2.46 to 2.68, comprehension ranging from 1.08 to 2.41, and vocabulary from 1.73 to 1.88.

The overall (M=2.71, 2.57, 2.13, 1.96) for all indicators reveals that respondent assessment of reading skills in automated intelligence is quite positive. While the overall reading skills are remarkable, the specific scores highlight areas of strength and areas that may require improvement such as fluency and accuracy tend to score higher, indicating proficiency in these areas, whereas comprehension and vocabulary show slightly lower scores, suggesting potential areas for further improvement.

Table 12. Level of The Reading Skills in Traditional Class

	Indicators		**Mean**	**SD**	**Remarks**
	Activity				
1		Fluency	2.94	0.24	Outstanding
		Accuracy	2.56	0.50	Very Satisfactory
		Comprehension	1.91	0.71	Satisfactory
		Vocabulary	2.26	0.67	Very Satisfactory
	Activity				
2		Fluency	2.97	0.17	Outstanding
		Accuracy	2.65	0.49	Very Satisfactory
		Comprehension	2.38	0.70	Fairly Satisfactory
		Vocabulary	2.12	0.69	Satisfactory
	Activity				
3		Fluency	3.00	0.00	Outstanding
		Accuracy	2.88	0.33	Very Satisfactory
		Comprehension	2.35	0.85	Very Satisfactory
		Vocabulary	2.06	0.74	Satisfactory
	Activity				
4		Fluency	2.94	0.24	Outstanding
		Accuracy	2.76	0.43	Very Satisfactory
		Comprehension	1.76	0.74	Fairly Satisfactory
		Vocabulary	1.71	0.80	Fairly Satisfactory
	Activity				
5		Fluency	3.00	0.00	Outstanding

	Accuracy	2.85	0.36	Outstanding
	Comprehension	2.32	0.84	Very Satisfactory
	Vocabulary	1.68	0.84	Fairly Satisfactory
Overall	**Fluency**	**2.97**	**0.10**	**Outstanding**
	Accuracy	**2.74**	**0.31**	**Very Satisfactory**
	Comprehension	**2.26**	**0.38**	**Satisfactory**
	Vocabulary	**1.96**	**0.56**	**Satisfactory**

Table 12 depicts the level of assessment of reading skills in traditional classrooms across various indicators such as fluency, accuracy, comprehension, and vocabulary presented in five assigned reading activities for the respondents. The reading skills of the respondents varied across various aspects. The mean scores range fluency range from 2.94 to 3.00, accuracy range from 2.57 to 2.88, comprehension range from 1.76 to 2.38, and vocabulary range from 1.68 to 2.12.

The total (M=2.97, 2.76, 2.26, 1.84) for all indicators has revealed that respondent assessment of reading skills in traditional classrooms has a satisfactory result. Fluency obtained the outstanding result with median scores of 2.97, while comprehension and vocabulary demonstrate slightly lower scores, indicating potential areas for further improvement and investigations.

Significant effect of Assisted and Automated Intelligence on Speaking Skills

In determining the significant effects of Assisted Intelligence, Automated Intelligence, and traditional class on Speaking Skills, the data gathered by the researcher were computed electronically and treated statistically using regression analysis.

Table 13. Significant effect of Assisted Intelligence on the Speaking Skills of Grade 11 students

Assisted Intelligence	**Speaking Skills**	**Beta**	***SE***	**95 % CI**		**β**	***p***
				LL	***UL***		
Content	Articulation	0.016	0.162	-0.316	0.349	0.030	0.02*
Grammar		0.034	0.222	-0.489	0.420	0.053	0.879
Organization		0.120	0.191	-0.272	0.511	0.189	0.537
Content	Pronunciation	0.015	0.145	-0.280	0.311	0.030	0.916
Grammar		-0.209	0.198	-0.613	0.196	-0.344	0.300
Organization		0.344	0.170	-0.004	0.692	0.574	0.003*
Content	Mastery	0.079	0.153	-0.234	0.393	0.147	0.610
Grammar		-0.261	0.210	-0.690	0.168	-0.415	0.224
Organization		0.28	0.18	-	0.65	0.45	0.13

		1	1	0.088	0	3	1
Content		0.114	0.178	-0.250	0.477	0.180	0.528
Grammar	Diction	-0.190	0.243	-0.688	0.307	-0.259	0.440
Organization		0.281	0.209	-0.147	0.709	0.387	0.190

Note: * p < .05. significant

Table 13 exhibits the results of a statistical analysis examining the effect of Assisted Intelligence on the Speaking Skills of grade 11 students. Assisted intelligence specifies different aspects such as content, grammar, and organization. Moreover, speaking skills being assessed include articulation, pronunciation mastery, and diction.

For some aspects, such as organization in the content category, there appears to be a significant positive effect on speaking skills (p = 0.003). On the other hand, certain aspects like grammar in the content category don't seem to have a significant effect on Speaking Skills (p = 0.879). Other aspects, such as content mastery or diction, also don't show significant effects on speaking skills based on the provided p-values. This means that, while organizational aspects seem beneficial, other specific elements like grammar, content mastery, and diction may not contribute significantly to the enhancement of speaking skills in Grade 11 students.

Table 14. Significant effect of Automated Intelligence on the Speaking Skills of Grade 11 students

				95 % CI			
Automated Intelligence	**Speaking Skills**	**Beta**	***SE***	***LL***	***UL***	**β**	***p***
Content		0.162	0.267	0.703	0.379	0.196	0.048*
Grammar	Articulation	0.171	0.259	0.697	0.355	0.221	0.013*
Organization		0.228	0.290	0.360	0.816	0.286	0.038*
Content		0.277	0.267	0.817	0.264	0.332	0.036*
Grammar	Pronunciation	0.176	0.259	0.701	0.349	0.224	0.002*
Organization		0.355	0.290	0.233	0.942	0.441	0.029*
Content		-0.329	0.285	-0.906	0.247	-0.368	0.255
Grammar	Mastery	0.091	0.277	-0.469	0.652	0.109	0.743
Organization		0.028	0.309	-0.599	0.655	0.032	0.928
Content	Diction	-0.194	0.307	-0.816	0.427	-0.201	0.53

Grammar	-0.370	0.298	-0.974	4	0.23	-0.407	0.220
Organization	0.413	0.334	-0.263	9	1.08	0.443	0.223

Note: * p < .05. significant

Table 14 shows the results of a statistical analysis examining the effect of Automated Intelligence on the Speaking Skills of grade 11 students. Automated intelligence specifies different aspects such as content, grammar, and organization. Moreover, speaking skills being assessed include articulation, pronunciation mastery, and diction.

Some features, such as Articulation appear significant to the content with (p= 0.048), grammar with (p= 0.013), and organization with (p= 0.038) automated intelligences, thus, a significant relevant effect on speaking skills. On the other hand, certain aspects like pronunciation; content (p= 0.036), grammar (p =0.002), and organization (p= 0.029). Other facets don't seem to have a significant effect on Speaking Skills (p = 0.928). Other aspects, such as content mastery or diction, also don't show significant effects on speaking skills based on the provided p-values. This means that, while organizational aspects seem beneficial, other specific elements like grammar, content mastery, and diction may not contribute significantly to the enhancement of speaking skills in Grade 11 students.

Significant Effect of Assisted and Automated Intelligence on Reading Skills

In concluding the significant effects of Assisted Intelligence, Automated Intelligence, and traditional class on Reading Skills, the data gathered by the researcher were computed electronically and treated statistically using regression analysis.

Table 15. Significant Effect of Assisted intelligence on the Reading Skills of Grade 11 students

				95 % CI			
Assisted Intelligence	**Reading Skills**	**Beta**	***SE***	***LL***	***UL***	**β**	***p***
Content	Fluency	0.055	0.035	-0.016	0.127	0.044	0.126
Grammar		-0.038	0.048	-0.136	0.060	-0.262	0.436
Organization		-0.004	0.041	-0.088	0.080	0.029	0.921
Content	Accuracy	0.072	0.101	-0.135	0.280	0.186	0.482
Grammar		-0.337	0.139	-0.621	-0.053	-0.745	0.021*
Organization		0.302	0.119	0.059	0.545	0.678	0.016*
Content	Comprehension	0.261	0.117	0.023	0.500	0.549	0.033*

Grammar		-0.227	0.160	-0.553	0.100	-0.409	0.166
Organization		0.206	0.137	-0.073	0.486	0.378	0.142
Content		0.038	0.201	-0.373	0.448	0.055	0.852
Grammar	Vocabulary	-0.012	0.275	-0.574	0.550	-0.015	0.965
Organization		0.106	0.236	-0.375	0.587	0.133	0.657

Note: * p < .05. significant

Table 15 exhibits the results of a statistical analysis examining the effect of Assisted Intelligence on the reading skills of grade 11 students. Assisted intelligence specifies different aspects such as content, grammar, and organization. Likewise, reading skills being assessed include fluency, accuracy, comprehension, and vocabulary.

Certain facets of assisted intelligence, specifically grammar, and organization, have a significant effect on students' reading skills, particularly in terms of accuracy (p = 0.021) for grammar, (p = 0.016) for organization, and comprehension (p = 0.033) for content. However, other aspects of assisted intelligence do not exhibit a significant effect on reading skills, as indicated by p-values greater than the 0.05 level of significance.

Table 16. Significant effect of Automated Intelligence on the Reading Skills of Grade 11 students

				95 % CI			
Automated Intelligence	**Reading Skills**	**Beta**	***SE***	***LL***	***UL***	**β**	***P***
Content		0.095	0.162	-0.233	0.423	0.189	0.561
Grammar	Fluency	0.201	0.157	0.520	0.117	0.426	0.029*
Organization		0.096	0.176	-0.260	0.453	0.199	0.588
Content		-0.015	0.201	-0.423	0.394	-0.023	0.942
Grammar	Accuracy	217.000	0.196	-0.613	0.180	0.364	0.026*
Organization		0.101	0.219	-0.343	0.545	0.165	0.648
Content		0.037	0.238	-0.444	0.519	0.051	0.877
Grammar	Comprehension	-0.136	0.231	-0.604	0.332	-0.200	0.559
Organization		0.055	0.258	-0.469	0.578	0.078	0.834
	Vocabulary	-	0.3	0.6	0.5	0.0	

Content	0.050	00	58	59	54	0.007
Grammar	-0.194	0.292	-0.785	0.397	-0.224	0.510
Organization	0.257	0.326	-0.405	0.918	0.289	0.437

Note: * p < .05. significant

Table 16 exhibits the results of a statistical analysis examining the effect of Assisted Intelligence on the reading skills of grade 11 students. Assisted intelligence specifies different aspects such as content, grammar, and organization. Equally, reading skills being assessed include fluency, accuracy, comprehension, and vocabulary.

Certain facets of assisted intelligence, specifically grammar, have a significant effect on students' reading skills, particularly in terms of fluency (p= 0.029) and accuracy (p = 0.026) However, other aspects of assisted intelligence do not exhibit a significant effect on reading skills, as indicated by p-values greater than the 0.05 level of significance.

Table 17. Extent of Assisted intelligence usage as a significant predictors of speaking skills

Assisted intelligence	Articulation			Pronunciation			Mastery			Diction		
	Beta	t-value	p-value	Beta	t-value	p-value	Beta	t-value	p-value	Beta	t-value	p-value
Content	0.03	5.101	0.02*	0.03	0.107	0.916	0.147	0.516	0.61	0.18	0.639	0.528
Grammar	0.053	0.154	0.879	0.344	-1.055	0.3	0.415	-1.243	0.224	0.259	-0.783	0.44
Organization	0.189	0.625	0.537	0.574	3.02	0.003*	0.453	1.556	0.131	0.387	1.341	0.19

Note: * p < .05. significant

Table 17 presents the extent of assisted intelligence usage as a significant predictor of speaking skills, with different aspects of Assisted Intelligence such as content, grammar, and organization. The speaking skills components include articulation, pronunciation, mastery, and diction.

Assisted intelligence in terms of content indicates a significant effect on articulation skills (p = 0.02). Moreover, in terms of organization assisted intelligence also shows a significant effect on pronunciation skills (p = 0.003). In summary, different aspects of assisted intelligence usage have varying effects on different components of speaking skills. While content content-assisted intelligence significantly predicts articulation skills and organization-assisted intelligence significantly predicts pronunciation skills, grammar Assisted Intelligence does not show significant effects on any speaking skills components in this analysis.

Table 18. Extent of Automated intelligence usage as a significant predictors of speaking skills

Automated intelligence	Articulation			Pronunciation			Mastery			Diction		
	Beta	t-value	p-value	Beta	t-value	p-value	Beta	t-value	p-value	Beta	t-value	p-value
Content	0.196	4.607	0.048	0.332	3.038	0.036	-0.368	-1.157	0.255	-0.201	-0.633	0.53
Grammar	0.	7.	0.0	0.	12.	0.0	0.	0.	0.	-	-	0.

	221	66	13*	224	679	02*	109	331	743	0.407	1.242	222
Organization	0.286	2.785	0.038*	0.441	5.224	0.029*	0.032	0.091	0.928	0.443	1.239	0.223

Note: * p < .05. significant

Table 18 displays the extent of automated intelligence usage as a significant predictor of speaking skills, with different aspects of Automated Intelligence such as content, grammar, and organization. The speaking skills components include articulation, pronunciation, mastery, and diction.

Automated intelligence in the aspect of grammar shows a significant effect on articulation skills (p = 0.013) and pronunciation skills (p= 0.002). Likewise in organization, it shows significant effects on articulation with (p= 0.038) and pronunciation (p= 0.029). In brief, different aspects of automated intelligence usage have contrasting effects on different components of speaking skills. Whereas grammar automated intelligence significantly predicts articulation skills and pronunciation skills, as well as organization automated intelligence significantly predicts articulation and pronunciation skills. However, content-assisted intelligence does not show significant effects on any speaking skills components in this analysis.

The findings on the contribution of supported intelligence to speaking abilities, content to articulation, and organization to punctuation are significant. While automated intelligence improved speaking skills, content, grammar, and organization appeared to have a substantial impact on articulation and pronunciation.

Table 19. Extent of Assisted intelligence usage as a significant predictors of reading skills

Assisted intelligence	**Articulation**			**Pronunciation**			**Mastery**			**Diction**		
	Beta	t-value	p-value	Beta	t-value	p-value	Beta	t-value	p-value	Beta	t-value	p-value
Content	0.444	1.573	0.126	0.186	0.712	0.482	0.549	2.236	0.033*	0.055	0.188	0.852
Grammar	-0.262	-0.79	0.436	-0.745	-2.427	0.021*	-0.409	-1.418	0.166	-0.015	-0.044	0.965
Organization	-0.029	-0.101	0.921	0.678	2.541	0.016*	0.378	1.508	0.142	0.133	0.449	0.657

Note: * p < .05. significant

Table 19 demonstrates the extent of assisted intelligence usage as a significant predictor of reading skills, with distinctive aspects of Assisted Intelligence such as content, grammar, and organization. The reading skills components include fluency, accuracy, comprehension, and vocabulary.

Assisted intelligence in terms of content indicates a significant effect on comprehension skills (p = 0.033). Furthermore, in terms of grammar assisted intelligence also shows a significant effect on accuracy skills (p = 0.021). Likewise, organization-assisted intelligence shows significant effects on accuracy skills with (p= 0.016) In summary, different aspects of assisted intelligence usage have varying effects on different components of reading skills. Though Assisted Intelligence significantly predicts accuracy skills and comprehension skills, Assisted Intelligence does not show significant effects on fluency skills vocabulary skills, or reading skills in this analysis.

Table 20. Extent of Automated intelligence usage as a significant predictors of reading skills

Automated intelligence	**Articulation**			**Pronunciation**			**Mastery**			**Diction**		
	B	t-	p-	B	t-	p-	B	t-	p-	B	t-	p-

	eta	value	value	eta	value	value	eta	value	value	eta	value	value
Content	0.189	0.587	0.561	-0.023	-0.073	0.942	0.051	0.156	0.877	0.054	4.165	0.007*
Grammar	0.426	4.28	0.029*	0.364	3.106	0.026*	-0.2	-0.59	0.559	-0.224	-0.666	0.51
Organization	0.199	0.547	0.588	0.165	0.461	0.648	0.078	0.211	0.834	0.289	0.786	0.437

Note: * p < .05. significant

Table 20 validates the extent of automated intelligence usage as a significant predictor of reading skills, with distinctive aspects of Automated Intelligence such as content, grammar, and organization. The reading skills components include fluency, accuracy, comprehension, and vocabulary.

Automated intelligence in terms of content, only vocabulary suggests a significant effect with (p= 0.007). Furthermore, grammar suggests a significant effect on fluency (p= 0.29) and accuracy (p= 0.26). However, in terms of organization, assisted intelligence does not reveal a significant effect on any reading skills. In summary, solely grammar-assisted intelligence usage has significant effects on reading skills.

It is revealed that content to articulation and organization to pronunciation are significantly good predictors of speaking skills in assisted intelligence, whereas articulation and pronunciation to pronunciation and articulation are significantly good predictors of speaking skills in automated intelligence. In addition, content and comprehension are important in Assisted Intelligence reading skills, as are grammar accuracy and order. However, reading abilities contribute significantly to artificial intelligence in terms of content, vocabulary, and fluency.

4. Conclusion and Recommendations

By the findings, the conclusions were made:

There are significant effects of Content Assisted Intelligence in enhancing speaking skills in terms of Articulation and Organization Assisted Intelligence in terms of Pronunciation. Furthermore, there are also significant effects of Content, Grammar, and Organization Automated Intelligence in improving speaking skills in terms of Articulation. It can be inferred that with the 0.05 level of significance, the hypothesis of 'Artificial Intelligence has no significant effect on speaking skills' was accepted in some aspects of speaking skills and was rejected in Articulation and Pronunciation. It implies that incorporating Content Assisted Intelligence can improve Articulation which pertains to fluidity, fluency, and voice quality while Organization Assisted Intelligence improves pronunciation. Automated Intelligence enriches articulation. Hence, teachers and learners can use Artificial Intelligence to improve speaking skills.

Furthermore, The researcher also found out that there are significant effects of the grammar and organization of Assisted Intelligence in enhancing reading skills in terms of Accuracy and Comprehension Assisted Intelligence in terms of Content. Moreover, the Grammar Automated Intelligence has significant effects on reading skills in terms of Fluency and Accuracy. It can be inferred that with the 0.05 level of significance, the hypothesis of 'Artificial Intelligence has no significant effect on the speaking skills' was accepted in some aspects of reading skills and was rejected in Accuracy and Fluency which means that the Grammar whether Assisted Intelligence or Automated Intelligence indicates improvement to reading skills specifically to accuracy and fluency in automated intelligence. It also signifies that Comprehension is improved with the use of Content Assisted Intelligence. By integrating AI technologies effectively, educators

may boost language learning outcomes and acquire the necessary communication skills in this fast-paced world.

Based on the conclusions drawn from the study, the following are recommended:

1. The School Heads may include Artificial Intelligence Integration training and intervention programs so that the teachers and the learners will be equipped with the expected skills outcome with the advancement of the technology as promoted in DepEd order no. 35 s. 2016.

2. Language teachers may include the use of AI in their learning process. It is explicit that improvement in various speaking skills and reading skills appears relevant. Using technology inside the classroom may implicate the development of the students' Language competencies and be globally competitive as aimed in DepEd order no. 31 s. 2012, the K-12 Program.

3. Teachers may use AI technology to achieve their learning objectives for this research has shown that it promotes the development of the desired learning competencies.

References:

Rouse, M. (2023, June 26). Techdictionary. Retrieved from Technopedia: https://www.techopedia.com/definition/2419/internet

Richter, F. (2022, February 21). Statista. Retrieved from https://www.statista.com/chart/26884/languages-on-the-internet/

Alharbi, W. (2023). AI in the foreign language classroom: A pedagogical overview of automated writing assistance tools. Education Research International, 2023, 1-15.

Godwin-Jones, R. (2023). Presence and agency in real and virtual spaces: The promise of extended reality for language learning.