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The Implementation of Dialogical Approach, Artificial Intelligence, and Information Literacy in Indonesian Language Learning

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ABSTRAK

Pembelajaran bahasa Indonesia di sekolah menengah atas perlu merespons tuntutan pengembangan komunikasi, kemandirian belajar, serta kemampuan memanfaatkan teknologi dan informasi secara kritis. Namun, kajian yang mengintegrasikan pendekatan dialogis, kecerdasan buatan, dan literasi informasi dalam pembelajaran bahasa Indonesia serta mengkaji persepsi siswa dan guru terhadap penerapannya masih terbatas. Penelitian ini bertujuan menganalisis penerapan ketiga aspek tersebut dan persepsi siswa serta guru terhadapnya. Penelitian menggunakan metode campuran dengan melibatkan 140 siswa dan 16 guru dari empat sekolah menengah atas di Kota Tangerang. Data dikumpulkan selama empat minggu melalui kuesioner yang memuat pertanyaan tertutup dan terbuka. Data kuantitatif dianalisis menggunakan uji-t satu sampel untuk menguji kecenderungan rata-rata, ANOVA satu arah untuk menguji perbedaan rata-rata penerapan pendekatan dialogis, kecerdasan buatan, dan literasi informasi pada siswa di empat sekolah, serta uji post-hoc LSD untuk mengidentifikasi pasangan sekolah yang menunjukkan perbedaan signifikan. Data kualitatif dianalisis secara deskriptif untuk memperdalam interpretasi hasil kuantitatif. Hasil penelitian menunjukkan bahwa siswa dan guru memiliki sikap positif terhadap penerapan ketiga aspek tersebut. Analisis kualitatif menunjukkan adanya otonomi siswa dalam belajar serta pentingnya peran guru dalam membimbing sikap siswa terhadap teknologi dan informasi. Temuan ini menegaskan pentingnya integrasi pendekatan dialogis, kecerdasan buatan, dan literasi informasi dalam pembelajaran bahasa Indonesia yang interaktif dan berpusat pada siswa.

Kata Kunci: pendekatan dialogis; kecerdasan buatan; literasi informasi; pembelajaran bahasa Indonesia

ABSTRACT

Indonesian language instruction at the senior high school level needs to respond to the growing demands for communication skills, learner autonomy, and the critical use of technology and information. However, research integrating dialogical approaches, artificial intelligence, and information literacy in Indonesian language learning while examining students' and teachers' perceptions toward their implementation remains limited. This study aimed to analyze the implementation of these three components and examine students' and teachers' attitudes toward their use. A mixed-methods design was

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employed, involving 140 students and 16 teachers from four senior high schools in Tangerang City. Data were collected over four weeks using questionnaires containing closed- and open-ended questions. Quantitative data were analyzed using a one-sample t-test to examine mean tendencies, one-way ANOVA to determine differences in the mean implementation of dialogical approaches, artificial intelligence, and information literacy among students across the four schools, and a post-hoc LSD test to identify school pairs with significant differences. Qualitative data were analyzed descriptively to enrich the interpretation of the quantitative findings. The results showed that students and teachers expressed positive attitudes toward the implementation of the three components. The qualitative findings indicated the development of student autonomy in learning and highlighted the important role of teachers in guiding students' attitudes toward technology and information. These findings underscore the importance of integrating dialogical approaches, artificial intelligence, and information literacy to foster interactive and student-centered Indonesian language learning.

Keywords: *dialogical approach; artificial intelligence; information literacy; Indonesian language learning*

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INTRODUCTION

The field of language learning has progressed greatly with the rapid development of technology and various adaptive learning approaches. One of the latest advances today is artificial intelligence, a technological innovation oriented to facilitate human work. It provides an ease that allows every learner to utilize it as an additional source of learning (Qashou, 2020). Artificial intelligence has tremendous potential to help learners increase access to learning experiences and improve the effectiveness and efficiency of the educational process. Its flexibility in accessing information can accommodate each learner's preferences (Gazzawe et al., 2022; Ifenthaler & Schumacher, 2023).

At the same time, language education researchers and practitioners have recognized the importance of dialogical approaches as a fundamental aspect of communication in learning. The dialogical approach has been correlated with efforts to improve creative and critical thinking skills and make it an important cornerstone in dialogical learning interactions (Kuhn, 2018; Stewart, 2021; Jamil et al, 2022). This approach is particularly important in learning that utilizes technology (Heru et al, 2021).

The impact of advances in artificial intelligence has been the topic of much recent research. One of the important issues is related to the creativity of learners in utilizing artificial intelligence (Marrone et al, 2022; Lim et al., 2023). Students have been able to access the latest developments in information and take a direct role as users of the information obtained. Students play an active role in searching for information, but have not been able to ensure the validity and usefulness of the information (Zlatkin-Troitschanskaia, 2021). Therefore, improving information literacy is an important thing to do in learning.

The main objective of this study is to identify language learning implementation and students' perceptions of learning with a dialogical approach, the use of artificial intelligence, and strengthening information literacy. This research was conducted with special emphasis on high school students and teachers. Through this research, insights into students' perspectives were gained in order to fill the gap in the literature on the application of dialogical approaches, artificial intelligence, and student-centered information literacy at the high school level that enhance successful language learning outcomes.

More specifically, by identifying the correlation between the dialogical approach, artificial intelligence, and information literacy, this research contributes to the development of the dialogical approach and technological adaptation, so that the understanding of theoretical and practical concepts in language learning can be utilized appropriately. However, there is still limited understanding of how these three aspects are interrelated in language learning, particularly regarding students' perception and comprehension of the dialogical approach, as well as their readiness to integrate artificial intelligence and information literacy.

There is also a lack of a language learning environment that encourages students to think more freely and critically. Therefore, this research is urgently needed to examine the perception and understanding of the dialogical approach among high school students in language learning, especially in relation to artificial intelligence and information literacy, in order to improve the quality of learning.

Dialogical Approach

The dialogical approach is a pedagogical approach that emphasizes dialogue as the core of the learning process, in which teachers and students engage in an open, reciprocal, and exploratory exchange of ideas to construct knowledge together rather than merely transmitting information (Dörr, 2021). This approach can be applied to various subjects and levels of education. However, it is important to note that implementing this approach requires thorough preparation and training for teachers. Teachers should have a good understanding of the dialogical philosophy and effective learning strategies, especially in language learning. Although there are some challenges in its implementation, with proper preparation and solutions, the dialogical approach can be a valuable tool to improve the quality of education (Dörr, 2021).

Several previous relevant studies have revealed that teaching and learning with dialogical approaches can improve academic achievement and social cohesion, but face challenges in implementing effective pedagogy and overcoming limitations in monological discourse (García-Carrión et al., 2020; Alexander, 2020). Zheng & Shi (2025) assert that teaching with a dialogical approach enhances cognitive activity, inquiry, and supportive classroom relationships, while engaging multiple voices and perspectives, and bringing students' ideas and contributions to life.

Artificial Intelligence

Several studies have revealed the advantages of artificial intelligence (AI) technology in education (Habib et al., 2026). Artificial intelligence technology in education has significantly improved many aspects of education, such as administration, teaching, and learning by increasing efficiency, promoting student retention, and enhancing adaptive curriculum personalization.

In language learning, the use of artificial intelligence can aid human learning and interaction by making intelligent decisions and delivering them through chatbots (Pugalenthi, 2020). Learning with the use of artificial intelligence can support language learning tasks such as providing immediate feedback and personalized assistance, but it still faces challenges in human-machine interaction and technology services (Chiu et al., 2023; Lo et al., 2024).

Artificial intelligence has the potential to revolutionize education by personalizing learning, increasing accessibility, and supporting teachers. However, it is important to address ethical challenges, access gaps, and the need for a change in culture and teaching practices. With careful planning and implementation, artificial intelligence can be a valuable tool to improve learning outcomes for all students, including in language learning.

Information Literacy

Information literacy can be defined as the ability to access, evaluate, use, and communicate information (Chourio-Acevedo et al., 2024). This ability is becoming increasingly important in today's era of rapid technological and informational development, as students are presented with information from a wide variety of sources. In learning, information literacy is an essential skill that all students must possess (Abdulakeem, 2020). It enables students to become independent and critical learners who are able to make informed decisions based on the information they obtain to support their learning. Various studies have also shown that information literacy has a positive impact on student learning outcomes, and there are many ways to implement it in learning.

METHODS

This study adopted a mixed-methods design to investigate the implementation of dialogical approaches, artificial intelligence (AI), and information literacy in Indonesian language learning, as well as students' and teachers' perceptions toward their implementation. Quantitative data were collected through structured questionnaires, while qualitative data were obtained from open-ended questionnaire responses. The integration of quantitative and qualitative data was intended to provide a more comprehensive understanding of the implementation of the three components and the factors influencing students' learning experiences. To examine the relationship among the three aspects, correlation analysis was performed on the quantitative data, specifically to measure the extent to which the dialogical approach, AI, and information literacy are interrelated in the context of Indonesian language learning.

The participants were 140 senior high school students in Grades X and XI and 16 Indonesian language teachers from four senior high schools in Tangerang City, Indonesia (SM3, SM10, SM12, and Sm13). The students, aged approximately 15–16 years, were selected through multistage random sampling: four schools were first selected, followed by the random selection of Grade X and XI, and finally the random selection of students from each class. The 16 teachers were purposively selected based on two criteria: they taught Indonesian language at the participating schools and were willing to provide complementary perspectives on the implementation of dialogical approaches, AI, and information literacy in Indonesian language learning.

Data were collected over a period of four weeks through questionnaires administered to both students and teachers. The student questionnaire measured perceptions of the implementation of dialogical approaches, AI, and information literacy in Indonesian language learning using Likert-scale items. The teacher questionnaire examined teachers' perceptions of the implementation of the same components in classroom instruction. Both questionnaires also included open-ended questions to obtain qualitative information concerning students' learning autonomy and the role of teachers in supporting the learning process.

Quantitative data from the student questionnaire were analyzed using descriptive and inferential statistics. Descriptive statistics were used to summarize the participants' responses and overall patterns of perception. A one-sample t-test was conducted to examine whether the mean scores differed significantly from the predetermined reference value. One-way analysis of variance (ANOVA) was used to examine differences in the mean scores of the implementation of dialogical approaches, AI, and information literacy among students across the four schools (SM3, SM10, SM12, and Sm13). When significant differences were identified, a post-hoc least significant difference (LSD) test was conducted to determine which pairs of schools differed significantly. Teacher responses were analyzed descriptively to provide complementary evidence regarding classroom implementation. Qualitative responses were analyzed thematically to identify recurring themes related to student autonomy, learning experiences, and the teacher's role. The qualitative findings were then integrated with the quantitative results to strengthen the interpretation of the overall findings.

RESULTS AND DISCUSSION

This section describes the results of research findings based on a description of descriptive findings and inferential findings. The following is a description of these findings.

Descriptive Findings

In order to understand the nature of the research variables, it is necessary to describe the three variables in this study. This aims to recognize the variables before analyzing the data because the statistical description of the data precedes statistical inference and helps identify patterns that govern the data. In this part of the findings,

we used several indicators of central and dispersion. Therefore, the descriptive features of these three research variables are examined separately for each research question. For the quantitative analysis, student participants were grouped according to their respective schools, namely SM3, SM10, SM12, and SM13 in Tangerang City. The grouping criterion was based on school affiliation rather than differences in students' individual characteristics or predetermined levels of technology integration. This grouping was established to examine whether the implementation of, and perceptions toward, dialogical approaches, artificial intelligence, and information literacy differed significantly across the four participating school contexts. The four school groups were subsequently compared using one-way analysis of variance (ANOVA), followed by a post-hoc Least Significant Difference (LSD) test when statistically significant differences were identified.

The descriptive indices related to the three research variables of dialogical approach, artificial intelligence, and information literacy in the 2 groups of students and teachers. The following is presented in **Table 1** and **Figure 1** as a visualization of the comparison of the means of the pre-test and post-test.

Table 1. Statistical data description of dialogical approach, artificial intelligence, and information literacy

	Group	N	Minimum	Maximum	Mean	Std. Deviation
Dialogical	Grade X Students	70	2.8	4.5	3.21	0.413
Approach	Grade XI Students	70	2.8	4.5	3.31	0.446
	Teacher	16	2.4	4.7	3.67	0.473
Artificial	Grade X Students	70	2.6	4.4	3.42	0.413
Intelligence	Grade XI Students	70	2.6	4.5	4.36	0.483
	Teacher	16	2.4	4.5	4.47	0.557
Information	Grade X Students	70	2.3	4.3	3.37	0.591
Literacy	Grade XI Students	70	2.8	4.5	3.31	0.446
	Teacher	16	1.6	4.4	3.87	0.507

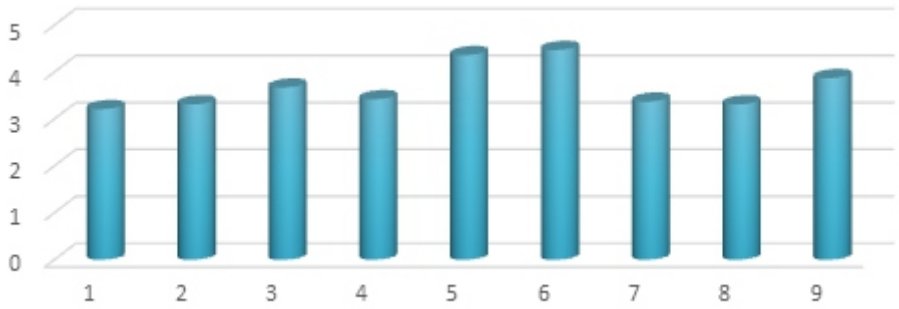


Figure 1. Group mean scores

Inferential Findings

This section outlines the normality of the research sample before further investigation. The t-test was used to compare the sample mean with the theoretical mean to determine whether to accept or reject the hypothesis. The sample size of the student groups was quite large, with each school group exceeding 30 participants (SM3: n =35; SM10: n = 36; SM12: n = 34; SM13: n = 35; total N = 140). Based on the central limit theorem, normality can be assumed for sufficiently large samples; hence, the normality assumption for the student data in this study was considered acceptable. Accordingly, parametric tests were conducted to test the hypotheses concerning the student group. The teacher data (N = 16), by contrast, were analyzed descriptively only and were not included in the inferential analysis.

Students' and teachers' perceptions regarding the application of the dialogical approach are desirable. One-Sample T-test results were conducted to test the hypotheses on this variable. The corresponding hypotheses for the comparison of practical and theoretical means are as follows:

H_0 : The mean value is less than or equal to 3 (Students' and teachers' perceptions regarding the use of artificial intelligence in language learning are undesirable).

H_1: The mean value is greater than 3 (Students' and teachers' perceptions regarding the use of dialogical approach in language learning are desirable).

Mathematically, this can be expressed as:

$H_0 : \mu \leq 3$

$H_1 : \mu > 3$

This indicates that μ represents the population mean. The following One-Sample T-test results are presented in **Table 2**.

Table 2. One-Sample T-test Results of Dialogical Approach

Group	t	df	Test Value = 2	Sign.
Grade X Students	Dialogical Approach	16.375	139	0
Grade XI Students	Dialogical Approach	16.375	139	0
Teachers	Dialogical Approach	4.283	15	0

Based on **Table 2**, it can be seen that in both research groups, the significance level (Sig) is 0.00. Thus, the null hypothesis is rejected at the 0.01 error level. This indicates that the perceptions of students and teachers regarding the application of dialogical approach in language learning are positive.

Furthermore, students' and teachers' perceptions regarding the advantages and disadvantages of using artificial intelligence in language learning are positive. One-Sample T-test results were conducted to test the hypotheses on this variable. The corresponding hypotheses for the comparison of practical and theoretical means are as follows:

H_0 : The mean value is less than or equal to 3 (Students' and teachers' perceptions of the advantages and

disadvantages of using artificial intelligence in language learning are undesirable).

H_1: The mean value is greater than 3 (Students' and teachers' perceptions of the advantages and disadvantages of using artificial intelligence in language learning are desirable).

Mathematically, this can be expressed as:

$H_0 : \mu \leq 3$

$H_1 : \mu > 3$

This indicates that μ represents the population mean. The following One-Sample T-test results are presented in **Table 3**.

Table 3. Results of One-Sample T-test of Artificial Intelligence

Group	t	df	Test Value = 2 Sign.	
Grade X Students	Artificial Intelligence	19.235	139	0
Grade XI Students	Artificial Intelligence	19.235	139	0
Teachers	Artificial Intelligence	3.251	15	0.02

Based on **Table 3**, it can be seen that in both research groups, the significance level (Sig) is 0.02. Thus, the null hypothesis is rejected at the 0.01 error level. This indicates that the perceptions of students and teachers regarding the advantages and disadvantages of using artificial intelligence in language learning are positive.

Furthermore, students' and teachers' perceptions regarding the strengthening of information literacy in language learning are highly desirable. One-Sample T-test results were conducted to test the hypotheses on this variable. The corresponding hypotheses for the comparison of practical and theoretical means are as follows:

H_0 : The mean value is less than or equal to 3 (Students' and teachers' perceptions of strengthening information literacy in language learning are undesirable).

H_1: The mean value is greater than 3 (Students' and teachers' perceptions of strengthening information literacy in language learning are desirable).

Mathematically, this can be expressed as:

$H_0 : \mu \leq 3$

$H_1 : \mu > 3$

This indicates that μ represents the population mean. The following One-Sample T-test results are presented in **Table 4**.

Table 4. One-Sample T-test Results of Information Literacy

Group	t	df	Test Value = 2 Sign.	
Grade X Students	Information Literacy	18.453	153	0
Grade XI Students	Information Literacy	18.233	153	0
Teachers	Information Literacy	5.132	15	0

Based on **Table 4**, it can be seen that in both research groups, the significance level (Sig) is 0.00. Thus, the null hypothesis is rejected at the 0.01 error level. This indicates that the perceptions of students and teachers regarding the strengthening of information literacy in language learning are positive.

Furthermore, there is a significant difference between students and teachers regarding the implementation of the dialogical approach is desirable. One-Sample T-test results were conducted to test the hypotheses on this variable. The corresponding hypotheses for the comparison of practical and theoretical means are as follows:

H_0 : The mean value of the variable of the application of the dialogical approach in both groups is the same.

H_1 : There is a significant difference between the mean values of the variables of the application of the dialogical approach in the two groups.

To be able to test the hypothesis, the mean scores of the three independent groups were compared. Since the samples from the three communities showed a normal distribution, a one-way analysis of variance (ANOVA) was used.

Table 5. ANOVA results of Dialogical Approach

	Sum of Square	df	Mean Square	F	Sig.
Between Group	11.212	2	4.234	15.531	0.000
Within Group	87.355	153	.214		
Total	98.567	155			

Based on the **Table 5** these data, there is a significant difference in the mean self-regulation between the two groups. The null hypothesis value of Sig = 0.000, the hypothesis of equality in the mean scores of the two research groups is rejected at the 0.01 error level. So, it can be concluded that there is a significant difference between the means of at least two groups. LSD post-hoc test was conducted to identify significant differences between the groups which can be seen in **Table 6**.

Table 6. Comparison of Dependent Variables: Dialogical Appro

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Result
Grade X Students	Teachers	0.523*	0.081	0.000	Significant
	Grade XI Students	-0.546	0.081	0.000	Not Significant
Grade XI Students	Teachers	0.512*	0.081	0.000	Significant
	Grade X Students	0.546	0.041	0.443	Not Significant
Teachers	Grade X Students	-0.040*	0.081	0.000	Significant
	Grade XI Students	-0.546*	0.041	0.443	Significant

*Notes. *The mean difference is significant at the 0.05 level.*

Based on the results of the post-hoc test, there is no significant difference in the average self-regulation between the Xth and XIth grade student groups, but there is a significant difference in the average self-regulation in the teacher group.

Furthermore, there is a significant difference between students and teachers regarding the use of artificial intelligence is expected. One-Sample T-test results were conducted to test the hypotheses on this variable. The corresponding hypotheses for the comparison of practical and theoretical means are as follows:

H_0 : The mean values of the variable on the use of artificial intelligence in both groups are the same.

H_1 : There is a significant difference between the mean values of the variable of the use of artificial intelligence in the two groups.

To be able to test the hypothesis, the mean values of the three independent groups are compared. Since the samples of the three groups showed a normal distribution, a one-way analysis of variance (ANOVA) was used.

Table 7. ANOVA Results of Artificial Intelligence

	Sum of Square	df	Mean Square	F	Sig.
Between Group	11.212	2	4.234	15.531	0.000
Within Group	87.355	153	0.214		
Total	98.567	155			

Based on the data above, there is a significant difference between the average variables of artificial intelligence in the three groups. The identified significant differences are evidenced through the analysis of variance test presented in **Table 7**. Considering the significance level (Sig) of 0.001, the null hypothesis of equal means among the three research groups is rejected at the 0.01 error level. This has shown a significant difference between the means of at least two of the three groups presented in **Table 8**.

Next, an LSD post-hoc test was conducted to identify specific group differences. Based on the results of the post-hoc test, there was no significant difference between the means of artificial intelligence in the two groups of grade X and grade XI students, but there was a significant difference between the means of artificial intelligence variables in the teacher group.

Table 8. Comparison of Dependent Variables: Artificial Intelligence

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Result
Grade X Students	Teachers	0.523*	0.111	0.000	Significant
	Grade XI Students	-0.121	0.031	0.000	Not Significant
Grade XI Students	Teachers	0.512*	0.111	0.000	Significant
	Grade X Students	0.420	0.031	0.443	Not Significant
Teachers	Grade X Students	-0.316*	0.111	0.000	Significant
	Grade XI Students	-0.421*	0.111	0.443	Significant

*Notes. *The mean difference is significant at the 0.05 level.*

Furthermore, there is a significant difference between grade X, grade XI, and teachers regarding the strengthening of information literacy in language learning.

H_0 : The mean scores of information literacy variables in the three groups are the same.

H_1 : There is a significant difference between the mean values of information literacy variables in the two groups.

To test this hypothesis, it aims to compare the means of three independent groups. Since the samples of the three groups showed normal distribution, one-way analysis of variance (ANOVA) was used.

Based on the above data, there are significant differences among the means of the constructivism variables in the three study groups. According to **Table 9**, the significant differences are documented in the results of the analysis of variance test.

Table 9. Results of ANOVA Information Literacy

	Sum of Square	df	Mean Square	F	Sig.
Between Group	11.212	2	4.234	15.531	0.000
Within Group	87.355	167	0.214		
Total	98.567	169			

Based on the significance level (Sig) of 0.000, the null hypothesis of equal means among the three groups was rejected at the 0.01 error level. From this procedure, there is a significant difference between the means of at least two groups. The LSD post-hoc test was also conducted to identify significant differences among the three groups. The results of this test are presented in **Table 9**.

Table 10. Comparison of Dependent Variables: Information Literacy

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	Result
Grade X Students	Teachers	.43711*	.11030	.000	Significant
	Grade XI Students	-.00316	.03273	.733	Not Significant
Grade XI Students	Teachers	.51233*	.11030	.000	Significant
	Grade X Students	.00316	.03273	.733	Not Significant
Teachers	Grade X Students	-.48372*	.11030	.000	Significant
	Grade XI Students	-.49231*	.11030	.000	Significant

*Notes. *The mean difference is significant at the 0.05 level.*

Based on the data in **Table 10**, the results of the post-hoc test show that there is no significant difference between the average information literacy in the grade X and grade XI student groups. However, there is a significant difference between the average information literacy variables in the teacher group.

In this section, the results of the descriptive and inferential findings above are discussed. Referring to the research questions posed has the aim of being able to assess students' and teachers' perceptions of the application of the dialogical approach, the use of artificial intelligence, and the improvement of information literacy in

language learning. Based on the findings of the quantitative data, it was revealed that grade X and XI students were very positive about the application of the dialogical approach. In addition, the dialogical approach allows teachers to be controlled by the learning process that occurs. Furthermore, the mindset among the participants of this study perceived a positive attitude through the application of the dialogical approach, the use of artificial intelligence, and the improvement of information literacy.

This study's investigation of the dialogical approach was motivated by research conducted by Guzmán & Larrain (2021). The sophistication of artificial intelligence for students using can facilitate their language learning (Crezo, 2020). Adhikari & Joshi (2024) investigated classes that reinforce information literacy emphasizing critical thinking and problem solving skills. Their research recognized the importance of such literacy comprehension skills for language learning. While there are barriers and challenges for students and teachers in the implementation of the dialogical approach, the use of artificial intelligence and the enhancement of information literacy, this study adds a group of teachers for comparison in these three factors.

Therefore, this study is oriented to provide positive attitudes and motivation for the application of dialogical approach, the use of artificial intelligence, and the improvement of information literacy in language learning for students and teachers. The impact of implementing dialogical approach on perception in this study shows students' perception in the learning process that empowers them to freely and actively participate in achieving their language learning goals. This study is in line with previous research conducted (Simpson, 2016). In addition, dialogical interaction skills and learning flexibility are inherent in the dialogical approach thus allowing students to adapt their strategies to the language learning context. The development of this dialogical interaction ability includes the management of self-assessment of knowledge and understanding (Teo, 2019).

Furthermore, this study's findings on students' and teachers' perceptions in using the dialogical approach confirm Zheng and Shi's (2025) findings that students' persistence often positively indicates increased motivation and active engagement in learning, active participation in setting goals, and being able to track progress. However, potential challenges must be considered. Local cultural norms can influence students' perceptions of dialogical approaches, especially in contexts where teacher-centered approaches are customary (Liu et al., 2021). This research reveals that teachers can play an important role in helping students identify effective learning methods and enabling students to customize their learning strategies to suit their unique strengths and needs. In conclusion, students' desires in language learning and teachers' perceptions of implementing a dialogical approach to learning revolve around empowerment, lifelong skill development, individualized learning, and learning motivation. This study explores grade X and grade XI high

school students' perceptions of the advantages and disadvantages of dialogical approach in language learning which highlights important considerations in today's modern education. The discussion relates to the desirability of perceiving something, taking into account the potential benefits and challenges associated with dialogical approaches (Guzmán & Larrain, 2021). Therefore, this study has confirmed by the aforementioned research that students can engage with learning materials according to their learning schedule with their own individual preferences and desires.

In addition, Rapanta and Felton (2021) investigated dialogical approaches should strive to personalize the learning journey, catering to individual performance levels and preferences. In another finding, Cui and Teo (2020) showed that both teachers and students responded to the limitations of e-learning with their anxiety about online learning and limited teacher competence in the use of learning applications, limited resources, and lack of student focus on learning and other issues. Therefore, these findings contradict our findings on the use of e-learning. Surprisingly, Doo and Zhu (2023) maintained self-discipline and motivation without the direct presence of teachers and peers who can be demanding, potentially influencing learning progress with satisfactory individual learning performance.

Our investigation into students' and teachers' perceptions of the application of the dialogical approach is motivated and confirmed by the study conducted by Boyd et al. (2022), who investigated the theory that dialogical approaches to university students have a very positive impact with regard to critical and reflective thinking. Furthermore, their research found that the dialogical approach to learning prepares students to practice critical reflection and apply it to their perspective on learning.

Not all students in language learning may respond well and openly to dialogical approaches. Each student's preference for a more structured, teacher-guided approach may influence perceptions of the desirability of discretion and openness in interactions during learning. An effective dialogical approach involves guiding students through their centered learning, which requires appropriate training for teachers to facilitate the experience in language learning.

The same results of relevant research indicate that dialogical approaches must be used correctly to achieve beneficial goals and are in line with the findings of our study. Moreover, students' desires and teachers' perceptions of the dialogical approach can enhance classroom activity and productivity in different contexts. Thus, the results of our study on the theory of dialogical approaches in high school students are commensurate with the results of Steen-Utheim and Wittek (2017). In conclusion, by finding common ground and adapting the principles of the dialogical approach to meet various needs, teachers can maximize the potential advantages of the dialogical approach, ensuring an enriching and effective language learning experience for students and teachers at the high school level.

CONCLUSION

Through this study we examined the interaction between the three variables with the aim of gaining valuable insights into how the three variables collectively influence students' attitudes and perceptions in the current era. While these findings provide significant insights into perception, the generalizability of these findings in other contexts may still be limited. It would be beneficial to replicate this study on college students taking different majors to verify its applicability both at home and abroad.

In addition, future research could examine students' and teachers' abilities in language learning with various teaching methods. Through this study we concluded and underlined the potential of integrating dialogical approach, the use of artificial intelligence and enhancing information literacy in language learning to improve students' attitudes and perceptions. Thus, the results of this study indicate that these variables can contribute significantly to creating a more effective and engaging learning environment in language learning.

The implications of this research are very important. First, the application of the dialogical approach: The research findings show that the dialogical approach can be an effective strategy to enhance students' language learning. Teachers are encouraged to apply the dialogical approach in their learning, and students are encouraged to take an active role in their learning. Second, the use of artificial intelligence: Artificial intelligence has the potential to enhance language learning in a variety of ways. Teachers are encouraged to explore and apply artificial intelligence technologies in their learning, and students are encouraged to use these technologies to enhance their learning experience. Third, strengthening information literacy: Information literacy is an essential skill that students must have in the digital age. Teachers are encouraged to integrate information literacy into their language learning, and students are encouraged to develop information literacy skills.

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