

CHAPTER IV

FINDINGS AND DISCUSSION

4.1 Findings

The study was conducted at two elementary schools in Ponorogo Regency, namely SD Muhammadiyah Ponorogo and SDMT Ponorogo. Both schools were selected because they provide diverse linguistic landscape elements that support daily teaching and learning activities. The observations were conducted in classrooms, corridors, stairways, libraries, school yards, and other public spaces where written texts were displayed. These environmental texts included classroom labels, educational posters, motivational quotations, multilingual signs, information boards, students' work, and school regulations, creating literacy-rich environments that support contextual learning.

Although both schools shared similar educational purposes, each school displayed different characteristics of linguistic landscape. SD Muhammadiyah Ponorogo featured a wider variety of English vocabulary posters, mathematical learning displays, motivational quotations, environmental awareness stickers, and multilingual signs integrated throughout the school environment. Meanwhile, SDMT Ponorogo emphasized informational boards, hygiene instruction posters, maps, classroom rules, and students' artwork that supported students' daily learning experiences. These differences provided a broader understanding of how linguistic landscape was implemented across the two research settings.

The findings of this study are based on observation and interview data collected from two elementary schools in Ponorogo Regency, namely SD Muhammadiyah Ponorogo and SDMT Ponorogo. The findings are presented according to the research questions and the themes that emerged from the data analysis.

4.1.1 Types of Linguistic Landscape Supporting the Deep Learning-Based Teaching and Learning Process

The first research question aims to identify the types of linguistic landscape that support the deep learning-based teaching and learning process in elementary schools in Ponorogo Regency. The findings were obtained through classroom observations, documentation, and semi-structured interviews conducted at SD Muhammadiyah and SDMT. Based on the educational classification of linguistic landscape proposed by Gorter (2023) and Cenoz and Gorter (2024), the observation and interview data revealed four forms of linguistic landscape found in the participating schools. These consisted of informational texts, motivational and character-building texts, literacy and educational displays, and multilingual linguistic resources. The categories were used as an analytical framework for organizing and interpreting the findings.

4.1.1.1 Literacy and Educational Displays

The observation findings revealed that literacy and educational displays were among the most dominant forms of linguistic landscape found in both selected schools. These displays included English vocabulary posters, bilingual vocabulary

stickers, educational illustrations, students' work, and other literacy-oriented visual texts placed in classrooms and school corridors.

This finding is consistent with Gorter (2023), who explains that literacy and educational displays refer to written and visual texts intentionally designed to support students' literacy development and classroom learning. These include vocabulary posters, educational illustrations, students' work, reading corners, and other learning displays that provide continuous language exposure within school environments.

Analysis of observation, documentation, and interview data revealed that literacy and educational displays were among the most dominant forms of linguistic landscape identified in both SD Muhammadiyah Ponorogo and SDMT Ponorogo.



Figure 1 English Vocabulary Display in SD Muhammadiyah



Figure 2 Bilingual Vocabulary Display on School Stairs

Documentation data further supported this finding. As shown in Figure 1, an English vocabulary poster entitled Let's Learn Vehicles was found inside the classroom of SD Muhammadiyah. The poster provides visual representations of

transportation vocabulary and exposes students to English words through meaningful visual contexts.

The placement of the vocabulary poster inside the classroom indicates that the school intentionally creates a language-rich learning environment where students are continuously exposed to English vocabulary during their daily activities. Rather than functioning solely as classroom decoration, the poster serves as an authentic pedagogical resource that enables students to repeatedly encounter vocabulary in meaningful contexts. This repeated exposure encourages students to associate words with visual representations, supporting vocabulary acquisition, language awareness, and contextual understanding. The continuous interaction with vocabulary displays provides students with opportunities to connect classroom learning to their everyday school environment. Rather than relying solely on memorization, these environmental texts encourage meaningful engagement with language through repeated exposure and authentic contexts, which is consistent with the principles of deep learning. This finding is consistent with Gorter (2023), who argues that literacy and educational displays provide continuous language exposure within school environments and function as educational resources that support literacy development. The finding also reflects Constructivist Theory, which emphasizes that learners construct knowledge through meaningful interaction with their environment.

In addition, Figure 2 presents bilingual vocabulary stickers displayed on the school staircase. The stickers contain numbers, fruits, vegetables, animals, and colors written in both Indonesian and English. The placement of these linguistic

resources in frequently accessed areas enables students to encounter language input beyond formal classroom instruction. The strategic placement of bilingual vocabulary displays on the school staircase further suggests that learning is intentionally extended beyond classroom boundaries. Because students encounter these displays repeatedly while moving around the school, they are provided with continuous opportunities to reinforce previously learned vocabulary in authentic situations. This finding suggests that the linguistic landscape provides opportunities for incidental language learning, as students repeatedly encounter environmental texts during their daily school activities. Therefore, the linguistic landscape functions as an authentic pedagogical resource that continuously supports students' literacy development and language learning throughout the school environment.



Figure 3 various places in Arabic and Indonesian



Figure 4 an informational text about animals

Documentation findings from SDMT revealed a variety of educational displays that support learning processes. Figure 3 illustrates a multilingual poster introducing various places in Arabic and Indonesian, while Figure 4 presents an

informational text about animals accompanied by visual illustrations. Additional documentation showed reading promotion posters, classroom questioning procedures, and student-generated products such as drawings, origami flowers, and animal puzzle projects displayed on classroom walls. Unlike the vocabulary displays found in SD Muhammadiyah, the educational displays in SDMT emphasized multilingual awareness and content-based learning. The multilingual place-name poster introduced students to vocabulary in both Arabic and Indonesian, while the informational animal text combined written explanations with visual illustrations. These displays provided opportunities for students to connect language learning with subject knowledge, thereby supporting contextual and meaningful learning experiences. The diversity of literacy and educational displays found in SDMT indicates that environmental texts are intentionally designed to support different aspects of students' learning. The multilingual place names, informational animal texts, reading promotion posters, and students' creative projects collectively create a literacy-rich environment that encourages students to read, observe, interpret, and connect information with their daily experiences. This finding is consistent with Gorter (2023), who argues that literacy displays in educational settings extend language exposure beyond classroom instruction. It also reflects Constructivist Theory, as learners construct understanding through meaningful interaction with authentic environmental texts within their learning environment.

Interview findings strengthened the observation and documentation results by confirming that teachers intentionally utilized literacy displays to facilitate

students' learning. The participants explained that visual texts help elementary school students understand learning materials more effectively because young learners respond well to pictures, colorful displays, and large printed texts.

I-R1 *"There are literacy trees, dream trees, and picture-based texts in the classroom that **help students' learning activities.**"*

The participant further stated:

I-R1 *"Elementary school students are highly visual learners. **Pictures, large texts, and bigger fonts help them understand learning materials more easily.**"*

The interview findings indicate that teachers intentionally selected visual and text-based displays according to elementary students' developmental characteristics. Since young learners tend to process information more effectively through visual representations, the linguistic landscape functions as a supportive learning medium that complements classroom instruction.

Teachers' perceptions corroborate the observation and documentation findings by confirming that literacy displays are intentionally integrated into the learning environment to facilitate students' understanding. According to the participants, elementary school students respond more positively to visual learning materials because pictures, colorful illustrations, and large printed texts make learning content easier to understand. This suggests that the educational value of literacy displays lies not only in presenting written information but also in creating meaningful learning experiences that accommodate young learners' characteristics.

Overall, the triangulated findings from observations, documentation, and interviews indicate that literacy and educational displays function as authentic pedagogical resources rather than merely decorative classroom materials. Their strategic placement throughout the school environment provides students with continuous opportunities to engage with written language, expand vocabulary, strengthen literacy skills, and experience meaningful learning beyond formal classroom instruction.

4.1.1.2 Motivational and Character-Building Texts



Figure 5 Quote “*Belajar Hari Ini, Sukses Hari Esok*”



Figure 6 “*Ilmu adalah Cahaya, Maka Belajarlh dengan Sungguh-Sungguh.*”

Observation and documentation findings revealed that motivational and character-building texts were widely displayed throughout both schools. These texts consisted of motivational quotations, moral messages, and character-building statements placed in classrooms, corridors, and other strategic locations to encourage positive learning attitudes and responsible behaviour among students. This finding is consistent with Gorter (2023), who explains that educational linguistic landscapes may include motivational texts designed to support students' literacy development, character education, and meaningful learning experiences.

As illustrated in Figure 5, a motivational quote stating, “*Belajar Hari Ini, Sukses Hari Esok.*” was displayed in SD Muhammadiyah. The message encourages students to view learning as an investment for their future success. Similarly, Figure

6 presents another motivational text stating "*Ilmu adalah Cahaya, Maka Belajarlal dengan Sungguh-Sungguh.*" This quote promotes positive attitudes toward learning and emphasizes the importance of knowledge in students' lives.

Unlike literacy displays that primarily support language learning, these motivational texts emphasize students' affective development by encouraging perseverance, responsibility, and positive attitudes toward learning. Their placement in frequently accessed areas allows students to encounter these messages repeatedly as part of their daily school experience.

The presence of motivational and character-building texts in prominent areas of the school indicates that the school intentionally integrates moral values and positive learning attitudes into the everyday learning environment. Rather than functioning merely as decorative slogans, these texts continuously remind students of the importance of perseverance, responsibility, and lifelong learning. Their repeated visibility enables students to internalize these values through daily interaction with the school environment, supporting both character development and meaningful learning experiences.

This finding is consistent with Gorter (2023), who argues that motivational texts displayed within educational settings contribute to creating supportive learning environments beyond their informational function. It also reflects Constructivist Theory, as continuous interaction with meaningful environmental texts encourages students to internalize values through authentic learning experiences.



Figure 7 “*Lelah Belajar Itu Pasti, Namun Menyerah Bukan Solusi*”

Similarly, SDMT displayed various motivational and moral messages, As shown in Figure 7 a poster stating “*Lelah Belajar Itu Pasti, Namun Menyerah Bukan Solusi*” was displayed inside the classroom environment. The poster serves not only as a visual decoration but also as a character-building resource that encourages perseverance, resilience, and positive learning attitudes among students. By repeatedly encountering these motivational messages, students are encouraged to develop positive learning attitudes and self-regulation, which support meaningful participation in learning activities. This finding suggests that motivational texts extend the function of the linguistic landscape beyond providing information. Through repeated exposure, these texts provide opportunities for students to develop positive learning attitudes, perseverance, and self-regulation within their daily school environment.

Teachers’ interview responses supported these observation findings.

I-R2 *"In elementary schools, motivational words are often displayed on posters and placed in strategic locations because **they encourage students to stay motivated in learning.**"*

The interview findings indicate that teachers deliberately place motivational texts in visible locations because they believe continuous exposure reinforces students' attitudes and encourages positive learning behaviours.

Teachers' perceptions corroborate the observation findings by confirming that motivational texts are intentionally displayed in strategic locations to encourage students' enthusiasm for learning. According to the participant, the continuous presence of these motivational messages helps students maintain positive attitudes, develop self-discipline, and strengthen their commitment to learning. This suggests that motivational and character-building texts function not only as written messages but also as authentic pedagogical resources that reinforce students' character formation within everyday school activities.

The continuous exposure to motivational texts also supports the principles of deep learning by creating learning environments that encourage students to connect positive values with their everyday learning experiences rather than merely receiving information.

Overall, the triangulated findings from observations, documentation, and interviews indicate that motivational and character-building texts function as authentic pedagogical resources that promote positive learning attitudes, perseverance, discipline, and responsibility. Their continuous presence within the school environment provides students with repeated opportunities to internalize positive values and supports meaningful learning experiences through everyday interaction with environmental texts.

4.1.1.3 Informational and Instructional Texts

Observation and documentation findings revealed that informational and instructional texts were widely displayed throughout both schools. These texts included room signs, classroom agreements, environmental awareness posters, procedural notices, direction signs, hygiene instructions, and other informational displays that guided students' daily activities within the school environment. This finding is consistent with Cenoz and Gorter (2024), who explain that informational and instructional texts facilitate communication while supporting contextual learning in educational settings.



Figure 8 Room Sign

Documentation data from SD Muhammadiyah showed labels such as “*Ruang Komite*” and “*Meeting Room*,” as well as environmental awareness posters encouraging energy conservation.

Unlike the literacy and motivational displays discussed previously, the informational texts primarily functioned to guide students' daily activities while simultaneously exposing them to authentic written language in meaningful contexts.

The strategic placement of these informational texts indicates that the school intentionally integrates written language into students' daily routines. Because

students encounter room signs, environmental reminders, and instructional notices during their everyday activities, they continuously interact with authentic written language beyond formal classroom instruction. This finding suggests that informational texts function not only as practical guidance but also as authentic pedagogical resources that promote contextual learning by connecting language with real-life situations within the school environment.

This finding is consistent with Cenoz and Gorter (2024), who argue that informational texts in school environments extend learning opportunities by integrating written language into students' everyday activities. It also reflects Constructivist Theory, as students construct understanding by interacting with authentic environmental texts while performing real-life tasks within the school environment.



Figure 9 Handwashing Procedure



Figure 10 Classroom Agreement



Figure 11 Waste Disposal Reminder

Similarly, SDMT displayed handwashing instructions, direction signs, classroom agreements, class structures, maps of Ponorogo Regency, eating etiquette procedures, questioning procedures, and waste-disposal reminders. These texts

provided students with practical information and behavioral guidance within the school environment.

Compared with SD Muhammadiyah, SDMT presented a broader range of instructional texts related to classroom management, personal hygiene, environmental awareness, and daily routines. These displays illustrate how written language is integrated into students' everyday school experiences to support both learning and responsible behaviour.

The diversity of informational and instructional texts found in SDMT indicates that environmental texts are intentionally organized to support students' daily learning and behavioural routines. Rather than merely providing instructions, these texts encourage students to develop independence, responsibility, and awareness of appropriate behaviour through continuous interaction with written language. Their integration into different areas of the school creates authentic learning opportunities in which students naturally connect written information with real-life actions.

The observation and documentation findings were further supported by interview data, which provided teachers' perspectives on the educational function of informational and instructional texts within the school environment. One participant explained:

I-R2 *"Classroom rules, room labels, and instructional posters are placed in visible locations so that students can easily follow school routines and understand what they should do without always waiting for the teacher's instructions."*

The interview findings corroborate the observation and documentation data by confirming that informational and instructional texts are intentionally integrated into the school environment to support students' independence, responsibility, and understanding of daily school routines. Rather than functioning solely as informational notices, these displays also serve as educational resources that encourage students to interact with authentic written language in meaningful contexts.

This finding is consistent with Cenoz and Gorter (2024), who argue that informational texts in educational settings extend learning opportunities by integrating written language into students' everyday activities. It also reflects Constructivist Theory, as students construct understanding through meaningful interaction with authentic environmental texts while participating in real-life school routines.

Overall, the triangulated findings from observations, documentation, and interviews indicate that informational and instructional texts function as authentic pedagogical resources that guide students' daily activities while promoting contextual learning. Through continuous interaction with room signs, classroom agreements, hygiene procedures, and environmental reminders, students are provided with opportunities to connect written language with real-life situations, thereby supporting independent learning behaviours within the school environment.

4.1.1.4 Multilingual Linguistic Resources



Figure 12 Classroom Labels



Figure 13 Language sign

Observation and documentation findings revealed that multilingual linguistic resources were displayed in both SD Muhammadiyah Ponorogo and SDMT. These multilingual displays consisted of classroom labels, bilingual vocabulary displays, language awareness posters, Arabic quotations, and multilingual educational texts that exposed students to more than one language within the school environment. This finding is consistent with Cenoz and Gorter (2024), who argue that multilingual displays provide authentic opportunities for students to develop language awareness while reflecting the linguistic diversity of educational environments. As shown in Figure 12, SDMT displayed classroom labels and room signs written in Arabic and Indonesian. Figure 13 further shows a language awareness poster containing the messages “*English Language*,” “*Bahasa Indonesia*,” and “*Jawa Halus*.” These multilingual displays provide students with opportunities to interact with multiple languages within authentic educational contexts.

The multilingual displays reflect the schools' deliberate efforts to create a linguistically diverse learning environment that exposes students to multiple

languages during their everyday school activities. Rather than functioning solely as classroom labels or visual decorations, these environmental texts provide authentic opportunities for students to recognize the different functions of Indonesian, English, Arabic, and Javanese within educational contexts. Continuous exposure to multiple languages also supports language awareness by encouraging students to observe similarities, differences, and the communicative purposes of each language in meaningful situations.

This finding is also consistent with Constructivist Theory, which emphasizes that learners construct knowledge through meaningful interaction with authentic learning environments. Furthermore, the integration of multilingual texts into everyday school activities supports the principles of deep learning by encouraging students to connect language use with authentic communicative contexts rather than learning languages through isolated memorization.

In SD Muhammadiyah, multilingual texts appeared through English vocabulary posters and bilingual stair displays containing Indonesian and English vocabulary. In SDMT, multilingual resources were more extensive, including Arabic classroom labels, Arabic quotations accompanied by Indonesian translations, prayers written in Arabic and Latin script, English motivational quotations, and posters promoting the use of Indonesian, English, and Javanese.

Although the forms and quantity of multilingual displays differed between SD Muhammadiyah and SDMT, both schools intentionally integrated multiple languages into their educational environments. These multilingual resources

provided authentic language exposure and encouraged students to become familiar with the functions of Indonesian, English, Arabic, and Javanese in meaningful educational contexts.

Teachers' interview responses supported these observation findings.

I-R1 *"The dominant language is Indonesian, but English and Arabic are also displayed. **Students are exposed to Indonesian, English, and Arabic through posters and classroom displays.**"*

Teachers' perceptions corroborate the observation and documentation findings by confirming that multilingual displays are intentionally implemented to familiarize students with different languages encountered in their daily school environment. According to the participant, continuous exposure to Indonesian, English, Arabic, and Javanese enables students to become more aware of multilingual language use while naturally expanding their language knowledge through authentic interaction with environmental texts.

Overall, the triangulated findings indicate that multilingual linguistic resources function as authentic pedagogical resources that promote language awareness, vocabulary development, and meaningful language learning. Through continuous interaction with multilingual environmental texts, students are provided with authentic opportunities to experience linguistic diversity within their everyday educational environment.

Summary of Research Question 1

Overall, the findings indicate that the linguistic landscape in both elementary schools consists of four major categories: literacy and educational displays, motivational and character-building texts, informational and instructional texts, and multilingual linguistic resources. Collectively, these environmental texts function as authentic pedagogical resources that provide continuous language exposure, support contextual learning, and create meaningful learning opportunities beyond formal classroom instruction. Their presence reflects the educational functions of linguistic landscape by encouraging students to observe, interpret, and interact with authentic written language in their daily school environment, thereby supporting the implementation of deep learning-based teaching and learning processes.

4.1.2 Teachers' Perceptions of the Role of Linguistic Landscape in Supporting the Deep Learning-Based Teaching and Learning Process

The second research question explores teachers' perceptions of the role of the linguistic landscape in supporting the deep learning-based teaching and learning process. The findings were primarily obtained through interviews and were supported by observation and documentation data to strengthen the triangulation of the results. The analysis identified three major themes: (1) linguistic landscape as a learning medium, (2) linguistic landscape as a literacy development tool, and (3) linguistic landscape as a motivational and contextual learning resource.

4.1.2.1 Linguistic Landscape as a Learning Medium

Analysis of observation, documentation, and teachers' interview data revealed that the participants perceived linguistic landscape as an important learning medium that supports classroom instruction. Observation findings showed that educational posters, vocabulary displays, informational texts, students' work, and classroom visual resources were integrated into learning environments in both schools. The observation checklist further indicated that environmental texts were frequently utilized as learning resources during teaching and learning activities.

The observation findings indicate that environmental texts are intentionally integrated into classroom settings to support teaching and learning activities rather than serving merely as visual decorations. Their continuous presence within the learning environment enables students to access learning materials repeatedly, thereby creating opportunities for independent learning, reinforcing previously learned concepts, and promoting meaningful interaction with authentic written language.

Documentation data supported this finding. In SD Muhammadiyah, learning media such as English vocabulary posters, multiplication charts, currency displays, and bilingual vocabulary stickers were displayed in strategic locations. Similarly, SDMT provided various educational displays including animal information posters, reading promotion posters, Arabic-Indonesian vocabulary displays, and visual classroom procedures. These materials provided continuous learning opportunities beyond direct classroom instruction.

The diversity of educational displays observed in both schools suggests that teachers deliberately utilize various forms of linguistic landscape to accommodate students' learning needs. The combination of vocabulary posters, bilingual displays, informational texts, and visual procedures provides contextual learning resources that help students connect abstract concepts with real-life experiences. This finding indicate that linguistic landscape functions as an authentic pedagogical resource capable of extending learning beyond direct teacher explanations.

These findings are consistent with Gorter (2023), who argues that the linguistic landscape in educational settings functions as an authentic pedagogical resource by extending learning opportunities beyond formal classroom instruction. They also reflect Constructivist Theory, which emphasizes that learners construct understanding through meaningful interaction with authentic learning environments. Furthermore, the integration of visual environmental texts supports the principles of deep learning by enabling students to connect classroom concepts with authentic real-life contexts.

Interview findings confirmed these observations.

I-R1 *"It is very helpful, especially for lower-grade students. **The visual displays support students in understanding learning materials.**"*

Similarly, Participant 2 stated:

I-R2 *"Visual materials such as posters and displays **help students learn more effectively.**"*

The interview findings indicate that teachers intentionally utilize environmental texts as supporting learning media because elementary school

students respond more effectively to visual representations combined with written language. According to the participants, these displays make abstract concepts easier to understand and provide continuous learning opportunities throughout the school environment.

Teachers' perceptions corroborate the observation and documentation findings by confirming that environmental texts are deliberately integrated into classroom instruction to facilitate students' understanding. According to both participants, visual learning materials enable elementary school students to comprehend concepts more easily because they combine written language with meaningful visual representations. These findings suggest that teachers perceive linguistic landscape not merely as classroom decoration but as an authentic pedagogical resource that actively supports teaching and learning processes.

Overall, the triangulated findings from interviews, observations, and documentation indicate that teachers perceive the linguistic landscape as an essential learning medium that enriches classroom instruction. By providing authentic, contextual, and visually meaningful learning resources, environmental texts support students' understanding, encourage active learning, and facilitate the implementation of deep learning-based teaching and learning processes.

4.1.2.2 Linguistic Landscape as a Literacy Development Tool

Observation findings revealed that both schools provided literacy-oriented displays that encouraged reading activities. Educational posters, informational texts, vocabulary displays, dream trees, literacy trees, and students' written work

were visible in classrooms and school corridors. The observation checklist also indicated that students frequently interacted with these texts during school activities.

The observation findings indicate that literacy-oriented displays are intentionally integrated into the school environment to encourage students' continuous interaction with written language. Rather than limiting literacy activities to formal classroom instruction, the presence of literacy trees, educational posters, vocabulary displays, and students' written work creates a literacy-rich environment where reading becomes part of students' everyday experiences. This suggests that the linguistic landscape supports literacy development by creating continuous opportunities for students to engage with authentic written texts as part of their everyday learning experiences.

Documentation data further demonstrated literacy-supporting practices. In SD Muhammadiyah, literacy trees and bilingual vocabulary displays encouraged reading and vocabulary exposure. Meanwhile, SDMT presented reading promotion posters, informational texts about animals, classroom procedures, and various student-created projects that required reading and interpretation.

The documentation findings further indicate that both schools intentionally utilize diverse literacy displays to promote students' reading habits and language development. The combination of informational texts, vocabulary displays, and student-generated learning products encourages students not only to read written information but also to interpret and apply it in meaningful learning contexts. This

finding reflects the role of linguistic landscape as an authentic pedagogical resource that extends literacy learning beyond scheduled reading activities.

These findings are consistent with Gorter (2023), who argues that literacy-oriented linguistic landscapes provide authentic opportunities for students to engage with written language beyond formal classroom instruction. They also reflect Constructivist Theory, which emphasizes that learners develop understanding through meaningful interaction with authentic learning environments. Furthermore, the continuous availability of literacy displays supports the principles of deep learning by encouraging students to connect reading activities with meaningful experiences encountered throughout the school environment.

Teachers' interview responses supported these observation findings.

I-R1 *"Posters are one of the learning media used by students because **they support reading and literacy development.**"*

Similarly, Participant 2 stated:

I-R2 *"Visual media like posters are frequently used because **they help students improve their literacy skills.**"*

The interview findings indicate that teachers intentionally maintain literacy displays because they believe continuous exposure to written texts encourages students to read more frequently and strengthens their literacy development.

Teachers' perceptions corroborate the observation and documentation findings by confirming that literacy displays are intentionally maintained as part of the school learning environment. According to the participants, the continuous

availability of posters and other literacy-oriented displays encourages students to engage with written language beyond formal reading sessions. These findings indicate that teachers perceive linguistic landscape as an authentic pedagogical resource that promotes reading habits, vocabulary development, and meaningful literacy experiences through everyday interaction with environmental texts.

Overall, the triangulated findings from interviews, observations, and documentation indicate that teachers perceive the linguistic landscape as an effective literacy development tool that enriches students' literacy experiences. By providing continuous exposure to authentic written language through posters, vocabulary displays, informational texts, and students' learning products, the school environment creates meaningful opportunities for reading, vocabulary acquisition, and literacy development beyond formal classroom instruction.

4.1.2.3 Linguistic Landscape as a Motivational and Contextual Learning Resource

Analysis of observation and documentation data revealed that both schools utilized motivational texts, character-building messages, and contextual information as part of their linguistic landscape. Various motivational slogans, anti-bullying campaigns, environmental awareness posters, classroom agreements, and behavioral reminders were positioned throughout the school environment.

The observation findings indicate that these environmental texts are intentionally incorporated into the school environment to reinforce positive attitudes and connect learning with students' everyday experiences. Their

continuous presence encourages students to encounter meaningful messages beyond classroom instruction, allowing them to internalize educational values, social responsibility, and positive learning behaviours through authentic interaction with written language.

Documentation data showed examples such as “Belajar Hari Ini, Sukses Hari Esok,” “Lelah Belajar Itu Pasti, Namun Menyerah Bukan Solusi,” “Stop Bullying Now,” and “Save Our Earth.” These texts were positioned in visible locations where students could encounter them during daily activities.

The strategic placement of these motivational and contextual texts suggests that the schools intentionally create learning environments in which educational messages remain visible throughout students' daily routines. Rather than functioning merely as visual displays, these texts provide authentic contextual learning opportunities by linking written messages with students' real-life experiences and everyday behaviour. This finding indicates that linguistic landscape contributes to meaningful learning by continuously reinforcing educational values within the school environment.

These findings are consistent with Gorter (2023), who argues that motivational and contextual texts displayed within educational settings function as authentic pedagogical resources that extend learning beyond formal classroom instruction. They also reflect Constructivist Theory, which emphasizes that learners construct understanding through meaningful interaction with authentic learning environments. Furthermore, the integration of motivational messages into students'

daily school experiences supports the principles of deep learning by encouraging learners to connect educational values with authentic situations encountered in their everyday lives.

Interview findings further supported this interpretation. Participant 1 explained:

I-R1 *“The displays **stimulate students’ interest in reading.**”*

Participant 2 added:

I-R2 *“Students are usually very enthusiastic when interacting with visual displays because **they attract students’ attention and increase learning motivation.**”*

The interview findings indicate that teachers intentionally use motivational and contextual displays to create learning environments that are engaging and closely connected to students' daily experiences. According to the participants, visually attractive environmental texts encourage students to read, participate actively in classroom activities, and relate educational messages to real-life situations.

Teachers' perceptions corroborate the observation and documentation findings by confirming that motivational and contextual texts stimulate students' interest in learning and encourage active participation during classroom activities. According to the participants, visually attractive environmental texts capture students' attention, increase their motivation to read, and make learning experiences more meaningful because the messages are closely related to students' everyday lives. These findings indicate that teachers perceive linguistic landscape as an

authentic pedagogical resource that supports both students' motivation and contextual learning.

Overall, the triangulated findings from interviews, observations, and documentation indicate that teachers perceive the linguistic landscape not only as instructional support but also as an authentic contextual learning resource that enhances students' motivation, promotes positive behaviour, and facilitates meaningful learning experiences. By integrating motivational messages into everyday school environments, the linguistic landscape helps create learning experiences that are closely connected to students' real-life contexts and support the implementation of deep learning-based teaching and learning processes.

Summary of Research Question 2

Overall, the findings indicate that teachers hold positive perceptions regarding the role of the linguistic landscape in supporting deep learning-based teaching and learning processes. Teachers perceive environmental texts as authentic pedagogical resources that enrich classroom instruction, strengthen literacy development, foster students' motivation, and create meaningful and contextual learning experiences. These perceptions indicate that the linguistic landscape is intentionally integrated into the school environment to provide continuous language exposure and support students' engagement and understanding throughout the learning process.

4.1.3 Contribution of Linguistic Landscape to Students' Engagement and Understanding During the Deep Learning-Based Teaching and Learning Process

The third research question aims to examine how linguistic landscape contributes to students' engagement and understanding during the deep learning-based teaching and learning process. The findings presented in this section are primarily derived from classroom observations and documentation and are further strengthened by teachers' perceptions obtained through semi-structured interviews. Therefore, students' engagement and understanding were interpreted through the triangulation of classroom observations, documentation, and teachers' professional perspectives obtained from semi-structured interviews rather than direct interviews with students. The analysis identified four major contributions of linguistic landscape: (1) enhancing student engagement, (2) promoting inquiry and classroom interaction, (3) supporting contextual learning and vocabulary development, and (4) facilitating understanding and meaningful learning.

4.1.3.1 Enhancing Student Engagement

Analysis of classroom observations, documentation, and teachers' interview data revealed that linguistic landscape contributes significantly to students' engagement during the deep learning-based teaching and learning process. The contribution was primarily identified through students' observable learning behaviours during classroom activities and was further strengthened by teachers' professional perceptions. Observation findings showed that students frequently

paid attention to educational posters, vocabulary displays, and classroom visual resources. The observation checklist also indicated that students actively interacted with environmental texts during learning activities.

The observation findings indicate that the presence of environmental texts naturally attracts students' attention and encourages them to interact with written language during classroom activities. Rather than remaining passive observers, students were frequently seen reading, discussing, and responding to the displayed materials. This suggests that the linguistic landscape creates an engaging learning environment where students become active participants through continuous interaction with authentic educational texts.

Documentation data further demonstrated that both schools provided colorful, visually attractive displays designed to capture students' attention. Literacy trees, dream trees, student artwork, motivational posters, vocabulary displays, and classroom visual aids created an engaging learning environment.

The diversity of colorful and visually attractive displays further indicate that the school environment is intentionally designed to stimulate students' curiosity and sustain their attention throughout the learning process. The integration of literacy displays, motivational posters, vocabulary resources, and students' creative work provides authentic learning stimuli that encourage students to participate more actively in classroom activities. These findings suggest that linguistic landscape contributes to student engagement by creating a learning environment that is

visually appealing, meaningful, and closely connected to students' everyday experiences.

These findings are consistent with Gorter (2023), who argues that educational linguistic landscapes create authentic learning environments that encourage students to interact continuously with written language beyond formal classroom instruction. They also reflect Constructivist Theory, which emphasizes that learners actively construct knowledge through meaningful interaction with authentic learning resources. Furthermore, the visually engaging environmental texts support the principles of deep learning by encouraging students to participate actively, connect learning with authentic contexts, and engage in meaningful learning experiences.

Teachers' interview responses supported these observation findings. Participant 1 stated:

I-R1 *"Students enjoy interacting with the displays because **they become more interested in reading and participating in learning activities.**"*

Similarly, Participant 2 reported:

I-R2 *"Students are very enthusiastic about the visual displays because **they attract students' attention during learning.**"*

The interview findings indicate that teachers perceive visually attractive environmental texts as effective tools for maintaining students' attention and encouraging active participation throughout the learning process.

Teachers' perceptions corroborate the observation and documentation findings by confirming that visually attractive environmental texts increase students' interest and participation during learning activities. According to the participants, Teachers perceived that students were more enthusiastic about interacting with learning materials when educational displays capture their attention and encourage them to read, observe, and participate actively in classroom discussions. These findings strengthen the teachers' perceptions that the linguistic landscape contributes to students' engagement by fostering meaningful interaction with authentic learning resources.

Overall, the triangulated findings from observations, documentation, and interviews indicate that the linguistic landscape enhances students' engagement by attracting their attention, stimulating curiosity, encouraging active participation, and fostering meaningful interaction with authentic learning resources. Through continuous exposure to visually engaging environmental texts, students are provided with opportunities to become more actively involved in the learning process, reflecting an important characteristic of deep learning-based teaching and learning.

4.1.3.2 Promoting Inquiry and Classroom Interaction

Observation findings indicated that students often interacted with environmental texts through questioning, discussion, and collaborative activities. The observation checklist showed that students responded to visual displays and used environmental texts as references during classroom learning.

The observation findings indicate that environmental texts encourage students to become active participants in the learning process rather than passive recipients of information. Students' observable behaviours, such as reading, asking questions, discussing ideas, and referring to visual displays during classroom activities, suggest that the linguistic landscape stimulates inquiry and supports collaborative learning. These behaviours reflect meaningful engagement with authentic learning resources, allowing students to construct understanding through interaction with their learning environment.

Documentation data further revealed the presence of informational posters, classroom procedures, and educational displays that provided opportunities for inquiry and discussion. Posters containing factual information, vocabulary, and educational content encouraged students to explore and discuss ideas.

The documentation findings further indicate that the environmental texts were intentionally designed to stimulate students' curiosity by presenting meaningful and accessible information. Rather than functioning solely as informational materials, these displays provide authentic learning stimuli that encourage students to observe, interpret, and discuss ideas with their peers. This finding suggests that linguistic landscape creates opportunities for inquiry-based learning by promoting active interaction with written language in everyday school contexts.

These findings are consistent with Gorter (2023), who argues that the linguistic landscape in educational settings extends learning opportunities by

encouraging students to interact with authentic written language beyond formal classroom instruction. They also reflect Constructivist Theory, which emphasizes that learners construct knowledge through meaningful interaction, discussion, and collaboration within authentic learning environments. Furthermore, the observed inquiry and classroom interaction support the principles of deep learning by encouraging students to question, explore ideas, and actively participate in the learning process rather than passively receiving information.

Teachers' interview responses supported these observation findings. Participant 1 explained:

I-R1 *"After reading the posters, students often ask questions because **the information encourages their curiosity.**"*

Participant 2 added:

I-R2 *"Students frequently discuss the information displayed on posters and sometimes present it in front of the class because **the displays stimulate classroom interaction.**"*

The interview findings indicate that teachers perceive environmental texts as effective learning resources that stimulate students' curiosity and encourage collaborative classroom interaction. According to the participants, the information presented through posters and educational displays motivates students to ask questions, exchange ideas, and participate more actively in classroom discussions.

Teachers' perceptions corroborate the observation and documentation findings by confirming that environmental texts stimulate students' curiosity and encourage classroom interaction. According to the participants, students frequently

ask questions, exchange ideas, and participate in discussions after interacting with educational displays. These findings strengthen the interpretation that linguistic landscape supports inquiry-based learning by creating meaningful opportunities for students to construct knowledge through questioning and collaborative discussion.

Overall, the triangulated findings from observations, documentation, and interviews indicate that linguistic landscape promotes inquiry and classroom interaction by encouraging students to ask questions, exchange ideas, collaborate with peers, and actively participate in classroom discussions. Through continuous interaction with authentic environmental texts, students are provided with opportunities to develop inquiry skills and construct understanding collaboratively, reflecting important characteristics of deep learning-based teaching and learning.

4.1.3.3 Supporting Contextual Learning and Vocabulary Development

Observation findings revealed that vocabulary displays were widely present in both schools. English vocabulary posters, bilingual displays, Arabic-Indonesian labels, and informational texts provided students with opportunities to encounter new words in meaningful contexts.

The observation findings indicate that vocabulary displays are intentionally integrated into the school environment to provide continuous language exposure beyond formal classroom instruction. By repeatedly encountering vocabulary through posters, bilingual displays, and multilingual labels, students naturally associate written words with real objects, images, and everyday situations. This

repeated interaction creates authentic opportunities for contextual vocabulary learning rather than isolated memorization.

Documentation data supported this finding. Examples included “*Let’s Learn Vehicles,*” bilingual vocabulary displayed on staircases, Arabic classroom labels, Arabic prayers with transliteration, and multilingual language-use posters. These resources exposed students to multiple languages and enriched their vocabulary knowledge.

The documentation findings further indicate that the schools intentionally utilize multilingual environmental texts to strengthen students' vocabulary development through authentic language exposure. The combination of visual illustrations, bilingual vocabulary, and multilingual labels enables students to connect language forms with meaningful contexts, making vocabulary acquisition more relevant to their daily learning experiences. This finding suggests that linguistic landscape supports contextual learning by embedding language naturally within the school environment.

These findings are consistent with Gorter (2023), who argues that multilingual linguistic landscapes provide authentic opportunities for students to encounter language in meaningful educational contexts beyond formal classroom instruction. They also reflect Constructivist Theory, which emphasizes that learners construct understanding by connecting new knowledge with authentic experiences. Furthermore, the continuous exposure to multilingual environmental texts supports

the principles of deep learning by encouraging students to relate newly acquired vocabulary to real-life contexts and meaningful learning experiences.

Interview findings further confirmed this contribution. Participant 1 explained:

I-R1 *"When students see a picture, they immediately connect it with vocabulary. For example, they recognize a strawberry and learn its English name. **This helps students connect visual information with language learning.**"*

Participant 2 added:

I-R2 *"Vocabulary posters are useful because **they help students expand their vocabulary knowledge.**"*

The interview findings indicate that teachers perceive visual and multilingual vocabulary displays as effective learning resources that help students associate new words with familiar objects and everyday situations. According to the participants, combining written language with pictures and multilingual representations makes vocabulary learning more meaningful and easier for elementary school students to understand.

Teachers' perceptions corroborate the observation and documentation findings by confirming that vocabulary learning becomes more effective when written words are accompanied by meaningful visual representations. According to the participants, students are able to connect new vocabulary with familiar objects and everyday experiences, making language learning more contextual and easier to understand. These findings strengthen the interpretation that linguistic landscape

functions as an authentic pedagogical resource supporting contextual vocabulary development through continuous interaction with environmental texts.

Overall, the triangulated findings from observations, documentation, and interviews indicate that the linguistic landscape supports contextual learning and vocabulary development by providing authentic language exposure, enriching students' vocabulary knowledge, and encouraging continuous interaction with written language in meaningful educational contexts. Through repeated encounters with multilingual environmental texts, students are provided with opportunities to connect language with real-life experiences, reflecting one of the key principles of contextual and deep learning.

4.1.3.4 Facilitating Understanding and Meaningful Learning

Observation findings showed that environmental texts were closely related to students' daily experiences and learning contexts. Educational posters, environmental awareness campaigns, classroom agreements, etiquette guides, anti-bullying messages, and cultural values provided meaningful learning opportunities beyond academic content.

The observation findings indicate that the environmental texts were intentionally designed to connect classroom learning with students' everyday experiences. Rather than presenting academic information in isolation, these texts encourage students to relate educational content to real-life situations, social interactions, and daily behaviours. This suggests that linguistic landscape creates

meaningful learning opportunities by enabling students to construct understanding through authentic experiences within the school environment.

Documentation data further supported this finding. Posters such as “Save Our Earth,” “Stop Bullying Now,” handwashing instructions, eating etiquette procedures, and the 5S culture poster connected learning materials with students’ everyday behaviors and social experiences.

The documentation findings further indicate that the environmental texts extend learning beyond subject knowledge by integrating moral values, health awareness, environmental responsibility, and positive social behaviour into students' daily routines. The strategic placement of these displays throughout the school enables students to encounter meaningful messages repeatedly, encouraging them to connect written information with authentic experiences. This finding suggests that linguistic landscape supports meaningful learning by making educational concepts relevant to students' everyday lives.

These findings are consistent with Gorter (2023), who argues that educational linguistic landscapes create authentic learning opportunities by integrating written language into students' everyday experiences. They also reflect Constructivist Theory, which emphasizes that learners construct understanding through meaningful interaction with authentic learning environments. Furthermore, the integration of environmental texts into students' daily school activities supports the principles of deep learning by encouraging learners to connect classroom knowledge with real-life situations and meaningful experiences.

Interview findings reinforced these observations. Participant 1 stated:

I-R1 *"Posters help students understand learning materials because attractive visual designs make students more interested in learning."*

Participant 2 stated:

I-R2 *"Students tend to focus more on visual elements because the displays direct their attention to important learning content."*

The interview findings indicate that teachers perceive visually meaningful environmental texts as effective learning resources that help students relate classroom concepts to their everyday experiences. According to the participants, attractive visual displays simplify learning materials and encourage students to understand educational content through familiar real-life situations.

Teachers' perceptions corroborate the observation and documentation findings by confirming that visually meaningful environmental texts help students understand learning materials more effectively. According to the participants, visual displays simplify abstract concepts and enable students to relate new knowledge to familiar situations and everyday experiences. These findings strengthen the interpretation that linguistic landscape facilitates meaningful learning by helping students construct understanding through authentic interaction with environmental texts.

Overall, the triangulated findings from observations, documentation, and interviews indicate that the linguistic landscape facilitates students' understanding by connecting learning materials with authentic experiences, encouraging

reflection, and providing opportunities for students to construct meaningful knowledge through continuous interaction with environmental texts encountered in their daily school environment. These findings illustrate how environmental texts support the principles of deep learning by helping students relate classroom knowledge to meaningful real-life contexts.

Summary of Research Question 3

Overall, the findings indicate that the linguistic landscape makes substantial contributions to students' engagement and understanding during the deep learning-based teaching and learning process. Based on the triangulation of observations, documentation, and teachers' perceptions, environmental texts provide opportunities for students to participate actively in learning, develop curiosity, engage in classroom interaction, expand their vocabulary, and construct meaningful understanding by connecting new knowledge with their everyday experiences. Collectively, these findings indicate that the linguistic landscape functions as an authentic pedagogical resource that supports contextual, meaningful, and student-centred learning in elementary school settings.

4.2 Discussion

The findings of this study indicate that the linguistic landscape plays an important educational role in supporting the implementation of deep learning-based teaching and learning in elementary schools. Rather than functioning merely as environmental decoration, the linguistic landscape serves as an authentic pedagogical resource that facilitates continuous language exposure, literacy

development, contextual learning, and meaningful learning experiences. The integration of written and visual texts throughout the school environment enables learning to extend beyond formal classroom instruction, allowing students to interact with authentic environmental texts as part of their daily school activities. These findings suggest that the school environment itself functions as an extended learning space where students continuously construct knowledge through meaningful interaction with authentic educational resources.

The first finding indicates that the linguistic landscape supporting the deep learning-based teaching and learning process consists of four major categories: literacy and educational displays, motivational and character-building texts, informational and instructional texts, and multilingual linguistic resources. These findings are consistent with the educational perspective of Linguistic Landscape proposed by Gorter (2023) and Cenoz and Gorter (2024), who argue that environmental texts in educational settings function as authentic pedagogical resources that extend learning opportunities beyond formal classroom instruction. Rather than serving merely as visual decorations, the linguistic landscape continuously exposes students to written language and provides meaningful opportunities for literacy development, contextual learning, and authentic language use. The findings also support the informational and symbolic functions of Linguistic Landscape introduced by Landry and Bourhis (1997). Informationally, environmental texts provide practical guidance through classroom labels, instructional posters, multilingual signs, and school regulations. Symbolically, they communicate educational values, promote positive learning attitudes, reinforce

school culture, and strengthen students' multilingual awareness. The presence of Indonesian, English, Arabic, and Javanese across both schools further demonstrates how linguistic landscape reflects the linguistic diversity of the school environment while supporting students' exposure to multiple languages. These findings are also consistent with previous studies conducted by Padmadewi et al. (2023) and Wen (2023), which reported that school linguistic landscapes function as authentic learning resources supporting literacy development and contextual language learning. However, the present study extends these findings by demonstrating that linguistic landscape not only supports literacy and multilingual awareness but also contributes to the implementation of deep learning through authentic, continuous, and contextual interaction with environmental texts. This extension is evident in the way environmental texts were intentionally integrated into classrooms, corridors, and other frequently accessed areas, enabling students to encounter meaningful written language as part of their everyday learning experiences rather than only during formal classroom instruction.

The second finding indicates that teachers perceive the linguistic landscape as an authentic pedagogical resource that supports classroom instruction, literacy development, and meaningful learning experiences. Rather than viewing environmental texts merely as supplementary classroom decorations, the participating teachers considered them an integral part of the learning environment that continuously supports students' learning both inside and outside the classroom. This perception suggests that the educational value of the linguistic landscape lies in its ability to provide continuous access to authentic learning resources that

complement formal classroom instruction. These findings are consistent with Constructivist Theory, which emphasizes that learners actively construct knowledge through meaningful interaction with their learning environment. The integration of environmental texts into classrooms and other school spaces provides students with opportunities to connect classroom concepts with authentic situations encountered during their daily school activities. Instead of relying solely on teacher explanations, students are exposed to written language, visual information, and contextual learning resources that encourage them to interpret information independently and develop meaningful understanding. Furthermore, these findings also reflect the principles of Deep Learning Theory, which emphasize meaningful learning through active engagement, contextual understanding, and authentic learning experiences. The teachers' positive perceptions indicate that linguistic landscape supports deep learning by creating learning environments where students can repeatedly interact with meaningful educational resources, strengthen their understanding through authentic experiences, and relate classroom knowledge to everyday contexts. The findings are also in line with previous studies reporting that school linguistic landscapes support literacy development, authentic language learning, and students' engagement with environmental texts. However, the present study extends previous research by demonstrating that teachers perceive the linguistic landscape not only as a literacy resource but also as an important pedagogical tool that facilitates the implementation of deep learning within elementary school settings.

The third finding indicates that the linguistic landscape contributes to students' engagement and understanding by providing authentic opportunities to interact with written language throughout their daily school activities. Based on the triangulation of classroom observations, documentation, and teachers' perceptions, environmental texts encourage students to pay attention to visual information, ask questions, participate in classroom discussions, expand their vocabulary, and relate learning materials to authentic situations. These findings suggest that the educational value of the linguistic landscape lies not only in presenting information but also in creating meaningful learning experiences that support students' active participation throughout the learning process. These findings are consistent with Constructivist Theory, which emphasizes that learners construct understanding through meaningful interaction with authentic learning environments. The presence of educational posters, multilingual displays, informational texts, and contextual learning resources enables students to connect classroom concepts with their everyday experiences rather than learning through memorization alone. Such interaction provides opportunities for students to interpret information, relate new knowledge to prior experiences, and gradually construct deeper understanding within authentic educational contexts. Furthermore, the findings strongly reflect the principles of Deep Learning Theory, which emphasize meaningful learning through active engagement, inquiry, contextual understanding, and authentic learning experiences. The continuous exposure to environmental texts throughout the school environment allows learning to occur beyond formal classroom instruction, enabling students to revisit information repeatedly, strengthen conceptual

understanding, and connect learning with real-life situations. Rather than functioning solely as visual classroom decorations, the linguistic landscape becomes an integral part of the learning environment that supports meaningful and student-centred learning. These findings are also consistent with previous studies reporting that school linguistic landscapes promote literacy development, language awareness, and authentic learning experiences. However, the present study extends previous research by demonstrating that the educational contribution of the linguistic landscape is not limited to language learning alone. Instead, environmental texts also support students' engagement, contextual understanding, and meaningful learning, thereby contributing to the implementation of deep learning within elementary school settings.

Overall, the discussion demonstrates that the linguistic landscape functions as more than a collection of written signs or visual displays within the school environment. Instead, it serves as an authentic pedagogical resource that supports literacy development, contextual learning, student engagement, and meaningful learning experiences. The integration of environmental texts into everyday school spaces enables learning to extend beyond formal classroom instruction, providing students with continuous opportunities to interact with authentic written language in meaningful contexts.

The findings also demonstrate the interconnectedness of Linguistic Landscape Theory, Constructivist Theory, and Deep Learning Theory. While Linguistic Landscape Theory explains the educational functions of environmental texts, Constructivist Theory provides a theoretical foundation for understanding

how students construct knowledge through authentic interaction with their surroundings. At the same time, Deep Learning Theory explains how continuous exposure to meaningful environmental texts encourages students to connect classroom knowledge with real-life experiences, resulting in deeper and more contextual understanding.

Compared with previous studies that primarily examined linguistic landscape from the perspectives of language exposure, multilingualism, and literacy development, this study provides additional evidence that linguistic landscape also supports the implementation of deep learning in elementary school settings. The findings suggest that environmental texts can function as authentic pedagogical resources that encourage meaningful learning, strengthen students' engagement, and support contextual understanding through continuous interaction with the school environment. Therefore, this study contributes to the growing body of research on educational linguistic landscape by highlighting its role in supporting deep learning-based teaching and learning processes in Indonesian elementary schools.