



Incorporating Linguistic Landscape into Teaching: A Project-Based Learning for Language Practices at Primary School

Ni Nyoman Padmadewi¹, Putu Suarcaya^{2*}, Luh Putu Artini³, Ahmad Munir⁴, Junita Friska⁵, Rahmad Husein⁶, I. G. A. P. N. S. Paragae⁷ 

^{1, 2, 3, 7} Universitas Pendidikan Ganesha, Singaraja, Indonesia

⁴ Universitas Negeri Surabaya, Singaraja, Indonesia

^{5, 6} Universitas Negeri Medan, Singaraja, Indonesia

ARTICLE INFO

Article history:

Received February 18, 2023

Accepted July 10, 2023

Available online August 25, 2023

Kata Kunci:

Lanskap Linguistik, Pembelajaran Berbasis Proyek, Kompetensi, Praktek Bahasa, Nilai

Keywords:

Linguistic Landscape, Project-Based Learning, Competency, Language Practice, Values



This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

Copyright © 2023 by Author. Published by Universitas Pendidikan Ganesha.

ABSTRAK

Pembelajaran berbasis proyek (PjBL) telah banyak diterapkan dalam pembelajaran bahasa. Namun, belum ada penelitian yang dilakukan mengenai penggunaannya dengan lanskap linguistik (LL) sebagai alat pedagogi di sekolah dasar. Oleh karena itu penelitian ini dilakukan untuk melihat penggunaan PjBL dengan LL untuk praktik dan nilai-nilai bahasa di sekolah dasar. Tujuannya adalah untuk menganalisis jenis-jenis PjBL yang menggabungkan LL yang dilaksanakan, prosedur pengajaran yang diterapkan, kompetensi dan nilai-nilai yang dipromosikan, dan pendapat guru tentang penggunaannya di sekolah dasar. Penelitian ini menggunakan desain metode campuran yang sangat mengandalkan deskripsi kualitatif dan dilengkapi dengan analisis kuantitatif. Penelitian dilakukan pada sebuah sekolah dasar yang dipilih dengan menggunakan teknik purposive sampling. Enam guru, enam ahli dan siswa kelas 4, 5, dan 6 guru dilibatkan. Sebanyak 520 LL dikumpulkan selama tahun 2022 dengan menggunakan observasi langsung, angket, wawancara, dan analisis studi dokumen. Data dianalisis secara kualitatif dan kuantitatif. Hasilnya menunjukkan bahwa berbagai jenis PjBL (proyek PLS, proyek warisan siswa, proyek berbasis acara dan tahunan) telah dimasukkan ke dalam LL untuk pengajaran bahasa. Guru perlu mempersiapkan, memperkenalkan konsep LL, membiarkan siswa mengamati dan menganalisis tugas, berdiskusi, merancang dan berkreasi, presentasi dan tampilan, serta refleksi sebagai prosedur pengajaran. Kompetensi dan nilai-nilai multifaset dipromosikan. Para guru dan ahli mempunyai pendapat positif tentang hal itu. Hasil penelitian menunjukkan bahwa PjBL dengan LL sangat bermanfaat untuk praktik berbahasa

dan nilai-nilai karakter.

ABSTRACT

Project-based learning (PjBL) has been widely implemented in language learning. However, no research has been conducted on its use with linguistic landscape (LL) as a pedagogical tool in primary schools. This study was therefore conducted to look into the use of PjBL with LL for language practices and values in primary school. The purpose is to analyse the kinds of PjBL incorporating LL conducted, the teaching procedures implemented, the competencies and values promoted, and teachers' opinions about its use for primary school. The study used a mixed-methods design that relied heavily on qualitative description and was supplemented with quantitative analysis. The study was conducted at a primary school, which was selected using the purposive sampling technique. Six teachers, six experts and students of grades 4, 5, and 6 teachers were involved. The amount of 520 LL was collected during the year 2022 using direct observation, questionnaire, interviews, and document study analysis. The data were analyzed qualitatively and quantitatively. The results show that PjBL of various kinds (PLS projects, legacy students' projects, event-based and annual projects) has been incorporated into LL for language instruction. The teacher needs to prepare, introduce the concept of LL, allow students to observe and analyze the tasks, have discussions, design and creation, presentation and display, and reflection as the teaching procedure. Multifaceted competence and values are promoted. The teachers and experts have positive opinions about it. The study implied that PjBL with LL is very beneficial for language practices and character values.

1. INTRODUCTION

Linguistic landscape (hereinafter LL) signify the public multilingualism. The use of LL has become increasingly prevalent in today's world, especially in urban areas where multilingualism is common. It is used for a variety of purposes, including advertising, wayfinding, public information, and identity expression (Aladjem & Jou, 2016; Durk Gorter, 2018). In one specific case, for example, companies use

*Corresponding author.

E-mail addresses: p.suarcaya@undiksha.ac.id (Putu Suarcaya)

multilingual signs to reach a wider audience and convey a message of inclusiveness and cultural sensitivity. In another case, it is common for governments to use LL to provide information to diverse populations and to promote their official languages and policies. Additionally, minority groups use LL as a tool for asserting their linguistic and cultural identity in a predominantly monolingual environment.

The use of linguistic landscape has important implications for language policy and planning, as well as for the preservation of linguistic diversity. It is also required in educational settings. By studying the ways in which language is used in the public space, researchers can gain a deeper understanding of the language practices of different groups and the challenges they face in maintaining their linguistic heritage. This information can be used to inform language policy and planning decisions and to promote linguistic diversity and multilingualism. Its use is also considered appropriate for language schools, not only for the purpose of providing public information but also promoting multicultural awareness and even real language use in authentic context (D Gorter & Cenoz, 2017; Huebner, 2016). Various studies on LL have been undertaken in different landscapes. Language awareness and attitude, language policy and minority language maintenance relationship of language and power, contestation of rights and ownership, multilingual and identity construction are the most frequent themes to be studied (Huebner, 2016; Lozano et al., 2020). The theme further develops into bringing LL into schools.

An application of LL as a pedagogical tool can be of great relevance to educators and students (D Gorter & Cenoz, 2017; Yanmei & Xiaodan, 2019). LL can be useful in English language teaching (ELT) for two basic reasons. First, it can provide a link between the language instruction in the classroom and the outside world (Aladjem & Jou, 2016; Dumanig & David, 2019). Learning through the use of LL is easy and useful because it is accessible. The application of LL as a tool reveals the wealth of materials available for language learning outside the confines of the classroom. It, further, can provide meaningful and cognitively engaging learning and the learners may find it more genuine, practical, and pleasant to utilize as their language learning tools. Due to its authenticity, utility, and familiarity, LL has been shown in numerous studies to be an efficient tool for learning a foreign language (Aladjem & Jou, 2016; Bernardo-Hinesley, 2020; Paramarta, 2022). Second, through studying language use and its sociolinguistic context, students can strengthen their analytical and creative thinking skills (Dumanig & David, 2019; Lozano et al., 2020; Sayer, 2009). It encourages students and teachers to become aware of their surroundings and the prints they come into contact with on a daily basis. LL, therefore, is a helpful tool for language teaching and learning because it exposes pupils to the language's actual use.

Studies at schoolsapes in general based on the sources of data are grouped into three, namely: signages found inside physical educational settings, use of signages for S/EFL teaching, and LL-based learning project. A study, focusing on signages in textbooks and their relevance to teaching French in Canada, finds that use of LL images in the textbooks represent public spaces to aid student understanding (Chapelle, 2020). The study further concludes that the textbooks analysed do not use LL images to support pedagogical activities. Another study observes that schoolscape is surprisingly characterised by dominant use of national language (Andriyanti, 2019; Pakarinen & Björklund, 2018). Additionally, the respondent awareness of the linguistic diversity in the communities should become a consideration in developing learning materials at school as linguistic diversity signified by LL can be source of authentic materials and authentic activities.

Previous study try to fill the gap between LL and pedagogy by placing streetsigns as a kind of genre (text) from which students can make meaning critically (Lozano et al., 2020). The tasks the students assigned were identifying the purpose of the signs, interpreting the intention of the creator, and situating the signs in the sociocultural context where the signs are located in the city. The study shows that through the making meaning project of streetsigns, the students are able to identify use of particular grammatical features in the signs by way of analysing data and internalising the concepts being learned prior to the project and connecting the concept with the data analysed. In another study about use of LL as a source of learning in an EFL classroom. Previous study design learning by incorporating LL in a collaborative project. The street signs are used as object of analysis in the student project (Wangdi & Savski, 2022). The study reveals that students can develop their language awareness about the position of English as a foreign language and the national language.

In Indonesian context, research incorporating LL in pedagogy is almost absent. The only identified study incorporating LL in language teaching is use of street signs for teaching English morphology (Andy Hancock, 2022; Kweldju, 2021). In this study assigns an inventive English word formation in public space (IEWF) task to an English morphology class. The study affirms that only a few projects students submit fulfil the requirements set prior to the project assignment dealing with word formation. The author argues that this happens because the students are lack of practices of critical thinking.

The empirical findings above show that studies dealing with LL at schools are limited to the use of street signs as sources of learning to develop students' critical thinking and language awareness. Furthermore, in Indonesian context study dealing with LL-based pedagogy is still rare. Therefore, investigating LL-based pedagogy in Indonesian context needs to be conducted to enrich the repertoire of teaching, especially in the area of English as a foreign language teaching (EFLT). For that reason, the current study is conducted to analyse the process of teaching on how LL was utilized to teach primary school students. This study is to analyse the kinds of PjBL incorporating LL conducted, the teaching procedures implemented, the competencies and values promoted, and teachers' opinions about its use for primary school.

2. METHOD

The study was carried out in the form of a mixed-methods design with more emphasis on qualitative study and supported by quantitative analysis at one of bilingual elementary schools in North Bali (Dawadi et al., 2021). Purposive sampling was used to select the school because of two reasons, namely: 1) the school employs English as a medium of instruction rather than only offering English as a subject matter, and 2) the school uses LL as pedagogical tools in their process of teaching and learning. The study was conducted on students in grades 4, 5 and 6, because these students created a large number of LL posters as parts of their learning process. Participants in the study were students and teachers. The student participants included two classes of 50 grade 4 students, two classes of 45 grade 5 students, and two classes of 42 grade 6 students and six teachers. These experts were required to respond to questions about their thoughts on the adoption of LL in primary schools. Four methods of data collection were employed in this study. The first method was observing directly the processes of teaching and learning interactions in the classroom and the LL signs produced by students. The observations were conducted during the year 2022 by visiting the school once a week. Besides, the data were also collected by observing and analysing the LL posters submitted by the school in its learning management system (LMS). The second method employed was interviewing the teachers dealing with projects assigned to students to promote certain values and master targeted competences. The instrument grid for assessing the students' competencies and character values is shown in Table 1.

Table 1. The Instrument Grid for Assessing the Students' Competencies and Character Values

Component of Product Assessment	Score (1-10)
1. Awareness	
Spatial	
Read-ability/Visibility	
Purpose	
2. Artistic Component	
Color Choice	
Font	
3. Language Use	
Diction	
Accuracy	
4. Creativity	
5. Character Values	
6. Collaboration	
7. Communication	

Additionally, evaluation of the products of the student project was conducted. By using a rubric of assessment, the products were scored. Components of assessment are presented in Table 1. Data collected at this stage was cross-checked with data from interview and observation to answer research question no. 3. The last was use of questionnaire to collect the teachers' opinions dealing with incorporation of LL in teaching. Use of this instrument was to answer research question no. 4. Table 2 presents items of the questionnaire using Likert scale.

Table 2. Questionnaire on the Significance of LL in Language Teaching

Item
Enriching the meaningful learning experience by providing real-life context learning
Developing more complex knowledge of the social context of the language

Practicing intercultural communication and language exchange
 Providing a resource for learning new vocabulary and structures in context
 Providing various sources for authentic materials for language teaching and learning
 Developing an appreciation for linguistic and cultural diversity
 Enhancing the development of language proficiency and pragmatic competence
 Developing linguistic and cultural competence for global citizens
 Promoting a more holistic approach to language education
 Providing insight into language attitudes and ideologies, fostering critical language awareness

All data was analysed qualitatively as well as quantitatively. Dominant qualitative analyses were conducted based on the nature of the data collected and supported with quantitative analyses for calculating the number of LL posters the students produced and also the scores the students received.

3. RESULT AND DISCUSSION

Result

Projects Application

Based on the data analysis about the kinds of projects incorporating LL, the findings show that there are four different kinds of projects the teachers assigned to the class. Those projects are personal life skill (PLS) project, students' legacy project, event-based project, and annual project. PLS project was used to promote the school Character Education Program which is based on 6 themed posters which have been used since the inception of the school. Every class has the 6 posters on the wall at the front such as respect, responsibility, caring, fairness, trustworthiness, and citizenship. The Indonesian national character education program, consisting of the themes of Religion, Nationalism, Individualism, Cooperation, and Ethics are also melded into the school Character Education Program.

Every week, 1 class / teacher from grades 4-6 has some responsibility for the program. Every Monday, the school has a short (10-15min) assembly on the playground, to introduce the theme of the week. The responsible class prepares (in advance of Monday) a POSTER with the theme. The poster is tri-lingually written (Bahasa Indonesian, English, and Balinese). The poster is used to introduce the theme and then posted on the gate / at the front of the school, reminding parents or visitors what the theme is for the week. The class responsible, explains the theme and gives positive examples to the rest of the school. [Figure 1](#) shows posters are on the wall during PLS project.



Figure 1. An LL Poster for PLS on the Wall

Base on [Figure 1](#) the posters represent the six themes of the character education. As the whiteboard is mounted at the centre of the class eyesight, the posters are posted around the whiteboard for the students to pay attention to. With the posters dealing with the six themes, the students can build their literacy and sense of meaning dealing with character education. The posters also show that English is the salience language as the posters are monolingual. One word is written at the centre, for example: Caring, exposed in oversized capital letters in one of the posters. Another poster is posted at the front gate of the school is show in [Figure 2](#).



Figure 2. An LL Poster on the Gate

Base on Figure 2, the poster puts the identity of the school at the top followed by the theme of the week in English, Bahasa Indonesia, and then Balinese. English is still the salient language as it is placed at the top most among the other two languages. Irrespective of the school name, Bilingual School, the poster is actually multilingual as it contains three words from three different languages. This might suggest that the school also complies to the local government policy which prescribes that public institution should encourage the use of Balinese.

Additionally, the poster at the gate is to inform parents that the theme of the week is about fairness, *keadilan*, and *sadulur*. With this as a reminder, parents can facilitate their child in learning at home to focus on the theme and make sure all assignments are accomplished. A legacy Project at the school is defined as a project that is “left behind” by Grade 6 students upon graduation. The aim is to benefit younger students, have younger students remember and be inspired by their graduated seniors and to instill pride and kindness in the graduates as a last gesture upon graduation as they head to junior high school. This project leans heavily on character education and life skills, which are core to the school. As with all projects at the school, students were central to the process and responsible for the product at the end of the Library Legacy Project. The student-centered activity is characterized by the student active involvement in the project. In order to engage them in the project actively project is preceded by introduction to the concept of legacy. Then, all students are taken to the library which has been unused for two years. In the library, the students in their group are assigned to explore things which can be improved through discussion in the group. Results of discussion are presented and the final stage is to execute the decision. The success of the project is partly measured in the creative and beautiful decorations as shown in Figure 3.



Figure 3. An LL Poster at the Library as Students' Legacy Project

Base on Figure 3, one of the products of the project is the direction of sections in the library. The sign is monolingual, written in English. Again, irrespective of the name of the school, the use of a single language in the sign is to signify that English is the ubiquitous language in the school. Library is a place where students have to communicate in English. Furthermore, this sign will be in the library to assist new students when entering the library for the first time. This means that the sign will be there as the new school year starts again. With the project and the sign produced, the project has enabled the students to build their sense of pride and confidence for the work will be there for the new students to appreciate.

Another type of projects incorporating LL into teaching is a kind of projects designed based on certain events. Products of the project produced by students are in accordance with the events, as it is shown in Figure 4.

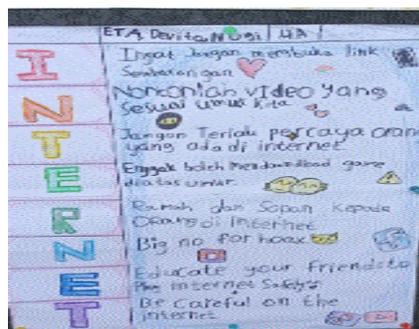


Figure 4. Examples of Event-Based Project on LL

The poster in Figure 4 represents the LL made for the events as a part of socializing information. The poster has a unique way to promote safety on the Internet. The poster uses the word internet as an acronym by defining the meaning of each letter. The poster is bilingual by first defining the letter I using Bahasa Indonesia, *Ingat jangan membuka link sembarangan*, which means 'Never open any unclear link'. English definition is then used in the letter E, 'Big no for hoax'. The poster shows that the salient language used is Bahasa Indonesia. This case is different from the previous case in which the the salient language is English. The use of Bahasa Indonesia at the top has the purpose to facilitate reader understanding, thus, to promote literacy, especially, for students whose English is not well developed. This project is implemented at the school as an application of LL utilized for celebrating annual events. The projects were collaboratively made by the students as a part of their academic assignment and also as a part of media for sharing the events to the school members. Figure 5 indicates the monolingual poster in English.



Figure 5. Annual Book Week Event

Base on Figure 5, the poster informs the Book Week event at the school. The top most of the poster written in capital letters is the name of the school followed by the name of the event. In smaller size letter, the schedule of the event is provided. The last is theme of the event, Stories We Love. The use of English in the poster is visibly salient. The poster seems to suggest that the book week event provides books written in English only. This event is held likely to encourage reading activities at school and to improve student literacy in English. The poster is also posted at the front gate of the school. The poster is visible not only for parents who are dropping their children, but it is also visible for passersby. For parents, the poster implicitly informs them to take their role as facilitators at home by accompanying their children while reading. On the other hand, the poster also signifies that the school has a particular program conducted in English. This program the poster informs is a good rapport built by the school for community around the school. The summary profiles of LL produced by the students in 2022 can be seen in Table 3.

Table 3. Profile of the LL Produced

Grade	Number of LL produced	Language use (In Percent)		
		English	Bilingual	Three Languages
4	158	80	18	2
5	176	90	9	1

6

186

95

3

2

Table 3 shows that students produced a lot of LL, and the LL were used to socialize the activities while also demonstrating the students' competences in using the language in real contexts. Teachers have meaningful teaching procedures in place that allow students to collaborate, communicate, and self-direct themselves.

Procedure of Teaching

With reference to the second research questions, the procedure of implementing LL into the process of teaching and learning were therefore analyzed. The procedure consists of several steps. The first step is preparation consisting of two activities, namely: orientation about the purpose of the project and LL in the form of posters for the school use, and meeting between students and teachers involved about the technical implementations. The second step is introduction. This step covers activities such as: introducing the concept of LL and its importance in promoting linguistic and cultural diversity, and browsing ideas about the LL/posters to be made, and gather materials, such as photos of signs and advertisement. The next step is observation which focuses on encouraging students to analyse LL in their environment. The other step is discussion to facilitate the results of their observations, encourage students to reflect on the cultural and linguistic diversity they see. Step number five is presentation and display to provide opportunities for students to present their creations and discuss their thoughts and experiences with the class. Finally, the class is concluded with reflection to encourage students to reflect on their experiences with LL and what they have learned about language, culture, and society.

By incorporating LL into teaching, students can develop critical thinking skills, cultural awareness, and language proficiency, while also gaining a deeper understanding of the role language plays in shaping our environments. The competencies gained by the students reflected their understanding about the content of the message displayed and also the ability of using the language in authentic situations.

Competencies and Values Promotion

To answer the third research question about the competencies and character values promoted by the PjBL incorporating LL, it can be stated that the PjBL with LL has been able to establish multifaceted competences and promote character values. Multifaceted competencies and character values promoted is show in Table 4.

Table 4. Multifaceted Competencies and Character Values Promoted

Component of Product Assessment	Average Scores			Character values Promoted	
	Grade 4	Grade 5	Grade 6		
Awareness					
Spatial	7.5	8.0	8.0	Responsibility, respect, trustworthiness, caring, fairness, citizenship	
Read ableness/Visibility	8.0	8.5	8.5		
Purpose	9.0	9.0	9.0		
Artistic Component					
Color Choice	8.0	8.5	8.5		
Font	7.5	8.5	9.0		
Language Use					
Diction	8.0	9.0	9.0		
Accuracy	9.0	9.0	9.0		
Creativity	8.0	8.5	9.0		
Character Values	8.0	8.5	8.5		
Collaboration	9.0	9.0	9.0		
Communication	9.0	9.0	9.0		

The scores shown in Table 4 are the mean scores that the teachers averaged each month. At the end of the semester, the mean scores of the LL were compiled and converted to grade points. Even though less scores were obtained by the students on the components of spatial awareness, the LL collected and holistically examined revealed that the students have good scores in language use, creativity, character values, collaboration, and communications.

Teacher Opinion

The significance of LL conducted through PjBL has been able to reflect the students' competencies in learning language. This is in line with the teachers' opinions as collected using a Likert-type questionnaire. The teacher opinions about incorporating LL in the learning process are very positive. Table 5 depicts the results of the questionnaire.

Table 5. Teachers' Opinions Regarding the Significance of LL in Language Teaching

Item	Distribution
Enriching the meaningful learning experience by providing real-life context learning	Agree 100%
Developing more complex knowledge of the social context of the language	Agree 100%
Practicing intercultural communication and language exchange	Agree 100%
Providing a resource for learning new vocabulary and structures in context	Agree 100%
Providing various sources for authentic materials for language teaching and learning	Agree 100%
Developing an appreciation for linguistic and cultural diversity	Agree 100%
Enhancing the development of language proficiency and pragmatic competence	Agree 100%
Developing linguistic and cultural competence for global citizens	Agree 100%
Promoting a more holistic approach to language education	Agree 100%
Providing insight into language attitudes and ideologies, fostering critical language awareness	Agree 100%

Base on Table 5, the impacts of LL have been obviously shown through the LL produced by the students and also by observing the presentations and displays made by the students. The teachers stated that the LL incorporated in PjBL has given positive and beneficial impacts and bring significant influences on the students' competencies as well as character values promotion. This is in line with the experts' opinions who provide all positive responses about the significance of LL to the students' competencies.

Discussion

The implementation of PjBL incorporating LL indicate that there have been meaningful PjBL practiced in the process of teaching and learning. Projects are implemented in each class of grade 4, 5, and 6. Project-based learning connects the theory students learn in class to the practice they conduct outside of class. When students understand that what they learn in the classroom may be practical and applicable in their daily lives, they will be more motivated and willing to learn, resulting in an improvement in their abilities (Bytyqi, 2021; Pereira et al., 2022; Ting et al., 2021). As the previous studies report, findings in this study show that learners are obviously active participants in the learning process, involved in the activities from which they construct their own understanding and meaning through hands-on explorations, collaborations and reflections (A Hancock, 2012; Li & Marshall, 2020; Wangdi & Savski, 2022). Using PjBL to incorporate LL in the process of teaching and learning is very beneficial because it involves students in solving real-world problem and addressing current issues and questions through extended projects that integrate multiple subjects and skills. In designing and producing LL through PjBL, students work in groups to plan, discuss, and produce a project from which they can also exercise character values, and other skills reflected on their learning throughout the process (Mulyawan et al., 2022; Paramarta, 2022; Yanmei & Xiaodan, 2019). This type of learning environment supports the constructivist view of knowledge as something that is constructed through active engagement and exploration, rather than simply being transmitted from teacher to student. The use of constructivism manifested in PjBL in designing and producing LL, has been able to create a dynamic and engaging learning environment that supports student-centred, hands-on learning experiences, where students are able to construct their own understanding of complex concepts and develop critical thinking and problem-solving skills. In project-based learning, the projects are not seen as the result of learning, but as the process through which the learning process happens (Condliffe et al., 2017; Durk Gorter, 2018; Li & Marshall, 2020).

The power of PjBL to incorporate LL is obvious and the results of the LL posters analysis show that students are able to display their LL with various kinds of shape. The significance of LL use in the process of teaching and learning can be described from their quality of the LL produced and the competencies of the students. Students are able to communicate the purpose of the theme and clearly presented using clear dictions with clear meaning, promote their character values, and enhance their creativity. Given that it is a teachable and trainable skill, creativity can be enhanced through education, including in the study of English (Ritter & Mostert, 2016; Sun et al., 2020).

Further advantages of incorporating LL in a learning project is that it can provide authentic learning materials and can help teachers relate the language lesson in the classroom to the real world beyond the classroom (Aladjem & Jou, 2016; Dumanig & David, 2019; Sayer, 2009). The success of LL can

also be seen in legacy student projects, which are projects created by students who designed LL for their younger classmates. The process of designing was an exercise in self-directed learning, where the students decided for themselves what to make and how to display it. The process-oriented method utilized in the process of designing the LL allows the students to exercise a lot of character values such as responsibility, respect, caring, trustworthiness, fairness, and citizenship. For example, the LL used for library use is highly needed, and the LL displayed there is highly beneficial for the other students as library users (Andriyanti, 2019; Yanmei & Xiaodan, 2019).

The use of linguistic landscape as a tool highlighted the availability of multiple resources for language learning outside of the classroom. It may be more real, useful, and comfortable for learners to use as a language learning resource and it can deliver meaningful and cognitively engaged learning (Chapelle, 2020; Lozano et al., 2020). The produced LL reveals that the competency in communication skills and collaboration has been well practiced, as evidenced by their ability to present their presentation orally in English to audiences when asked to provide descriptions on the LL. Students can demonstrate their understanding and communicate the lesson topic to the audience. Creativity among students is also encouraged. The obligation for the students to produce whatever shape as provided by their teachers clearly represented their ingenuity. They were discussing with their classmates and group members how the LL could be developed and what icons and photos should be included. This corresponds to what experts say about creativity in terms of novelty, originality, and uniqueness (Corazza, 2016; Rydell, 2018).

Despite the fact that the LL produced was successfully constructed and that the LL made by the students indicates competent language use in English, numerous parts require improvement and refinement. The first is the spatial component. Many LL admit to ignoring the concept of word division and spacing. For showing holistic meaning, students disregard the correct use of space and word division. It is comparable to being attentive of the text size. They must acquire the skills necessary to determine the appropriate size and its significance in the LL. However, as primary school children, the LL created by the students for using their language practice in the actual world, enhancing their awareness and competency in authentic language usage, and promoting character values have been reflecting competencies above their levels.

Teachers engaged in the research also support the importance of introducing LL into language teaching and learning. They are all enthused about LL and believe it has a potential impact on language learning. The meaningful benefits of the LL employed for language learning practices demonstrate the efficacy of PjBL and that the mechanism of student-centred learning has been properly applied. It is also needed for global competence, which can be adapted based on the topics displayed in LL. The topics addressing global competence are very flexible and can be adjusted to the subjects and activities and this requires teachers' skills to adapt the topics based on the themes of the curriculum (Kang et al., 2018; Keengwe & Byamukama, 2018; Kerckhoff & Cloud, 2020). In spite of positive responses and beneficial impacts produced, the present research has the limitation that the use of PjBL with LL was not conducted using an experimental research design, which may influence the robustness of the data analysis. The assessments of the LL were also generally conducted in order to grasp the general quality of the LL. For that reason, further research is recommended to be conducted in the future with more sophisticated assessments and analyses.

4. CONCLUSION

There are four kinds of projects incorporating LL implemented at the school. The projects are classified into several types, such as PLS projects, student-legacy projects, event-based projects, and annual projects. The teachers implemented several steps of activities in the process of teaching and learning, which include preparation, introduction, allowing students to observe and do analysis, discussion, designing and creation, presentation and display, and ending with reflection. The LL produced reflects students' language learning competencies as well as the promotion of character values. This is in line with the opinions of the teachers involved in the research, which stated that the implementation of PjBL with LL had positive impacts on the process of teaching and learning.

5. REFERENCES

- Aladjem, R., & Jou, B. (2016). The Linguistic Landscape as a Learning Space for Contextual Language Learning. *Journal of Learning Spaces*, 5(2), 66–70. <https://doi.org/https://doi.org/10.46303/jcve.2020.10>.
- Andriyanti, E. (2019). Linguistic Landscape at Yogyakarta's Senior High Schools in Multilingual Context: Patterns and Representation. *Indonesian Journal of Applied Linguistics*, 9(1), 85–97.

- <https://doi.org/10.17509/ijal.v9i1.13841>.
- Bernardo-Hinesley, S. (2020). Linguistic Landscape in educational spaces. *Journal of Culture and Values in Education*, 3(2), 13–23. <https://doi.org/10.46303/jcve.2020.10>.
- Bytyqi, B. (2021). Project-Based Learning: a Teaching Approach Where Learning Comes Alive. *Journal of Teaching English for Specific and Academic Purposes*, 9(4), 775–777. <https://doi.org/10.22190/JTESAP2104775B>.
- Chapelle, C. A. (2020). Linguistic Landscape images and Québec's cultural narrative in French textbooks. In D. Malinowski, H. H. Maxim, & S. Dubreil (Eds.), *Language teaching in the Linguistic Landscape: Mobilizing pedagogy in public space* (pp. 43–68). Springer. https://link.springer.com/chapter/10.1007/978-3-030-55761-4_3.
- Condliffe, B., Quint, J., Visher, M. G., Bangser, M. R., Drohojowska, S., Saco, L., & Nelson, E. (2017). Project-based learning: A literature review. In *Mdrc* (Issue October). mdrc.
- Corazza, G. E. (2016). Potential Originality and Effectiveness: The Dynamic Definition of Creativity. *Creativity Research Journal*, 28(3), 258–267. <https://doi.org/10.1080/10400419.2016.1195627>.
- Dawadi, S., Shrestha, S., & Giri, R. A. (2021). Mixed-methods research: A discussion on its types, challenges, and criticisms. *Journal of Practical Studies in Education*, 2(2), 25–36. <https://doi.org/10.46809/jpse.v2i2.20>.
- Dumanig, F. P., & David, M. K. (2019). Linguistic Landscape as a Pedagogical Tool in Teaching and Learning English in Oman. *Modern Journal of Studies in English Language Teaching and Literature*, 1, 1–13. <https://doi.org/10.56498/11201988>.
- Gorter, D., & Cenoz, J. (2017). Linguistic landscape and multilingualism. *Language Awareness and ...*, 44, 80–85. <https://doi.org/https://doi.org/10.1016/j.linged.2017.10.001>.
- Gorter, Durk. (2018). Linguistic landscapes and trends in the study of schoolsapes. *Linguistics and Education*, 44, 80–85. <https://doi.org/https://doi.org/10.1016/j.linged.2017.10.001>.
- Hancock, A. (2012). Capturing the linguistic landscape of Edinburgh: A pedagogical tool to investigate student teachers' understandings of cultural and linguistic diversity. *Linguistic Landscapes, Multilingualism and Social Change*, 25, 249–266. <https://doi.org/10.1080/13670050.2022.2066970>.
- Hancock, Andy. (2022). Chinese students' engagement with linguistic landscapes during a summer school in Scotland. *International Journal of Bilingual Education and Bilingualism*, 25(10), 3568–3579. <https://doi.org/10.1080/13670050.2022.2066970>.
- Huebner, T. (2016). Linguistic Landscape: History, Trajectory and Pedagogy. *Manusya: Journal of Humanities*, 19(3), 1–11. <https://doi.org/https://doi.org/10.1163/26659077-01903001>.
- Kang, J. H., Kim, S. Y., Jang, S., & Koh, A.-R. (2018). Can College Students' Global Competence Be Enhanced in the Classroom? The Impact of Cross- and Inter-Cultural Online Projects. *Innovations in Education and Teaching International*, 55(6), 683–693. <https://doi.org/10.31274/itaa.11914>.
- Keengwe, J., & Byamukama, R. (2018). *Handbook of Research on Promoting Higher-Order Skills and Global Competencies in Life and Work (Advances in Higher Education and Professional Development)*. IGI Global.
- Kerkhoff, S. N., & Cloud, M. E. (2020). Equipping teachers with globally competent practices: A mixed methods study on integrating global competence and teacher education. *International Journal of Educational Research*, 103, 101629. <https://doi.org/https://doi.org/10.1016/j.ijer.2020.101629>.
- Kweldju, S. (2021). Incorporating linguistic landscape into English word-formation task in an English Morphology class. *TEFLIN Journal*, 32(1), 29–49. <https://doi.org/10.15639/teflinjournal.v32i1/29-49>.
- Li, J., & Marshall, S. (2020). Engaging with linguistic landscaping in Vancouver's Chinatown: a pedagogical tool for teaching and learning about multilingualism. *International Journal of Bilingual Education and Bilingualism*, 23(8), 925–941. <https://doi.org/10.1080/13670050.2017.1422479>.
- Lozano, M. E., Jiménez-Caicedo, J. P., & Abraham, L. (2020). Linguistic landscape projects in language teaching: Opportunities for critical language learning beyond the classroom. In D. Malinowski, H. H. Maxim, & S. Dubreil (Eds.), *Language Teaching in the Linguistic Landscape* (pp. 17–42). Springer. https://doi.org/10.1007/978-3-030-55761-4_2.
- Mulyawan, I., Paramarta, I. S., & Suparwa, I. (2022). Language contestation at Batukau Temple, Bali (a linguistic landscape study). *Cogent Arts & Humanities*, 9(1). <https://doi.org/10.1080/23311983.2022.2090651>.
- Pakarinen, S., & Björklund, S. (2018). Multiple language signage in linguistic landscapes and students' language practices: A case study from a language immersion setting. *Linguistics and Education*, 44, 4–11. <https://doi.org/10.1016/j.linged.2017.10.005>.
- Paramarta, I. S. (2022). Balinese language on the street in Singaraja town, Bali: A Linguistic landscape

- analysis. *Ranah: Jurnal Kajian Bahasa*, 11(1), 120–129. <https://doi.org/10.26499/rnh.v11i1.4197>.
- Pereira, M. A. C., Ignácio, L. M. N. da C., & Rodrigues Reis, C. E. (2022). Virtualizing project-based learning: An abrupt adaptation of active learning in the first days of the covid-19 pandemic, with promising outcomes. *Sustainability (Switzerland)*, 14(1). <https://doi.org/10.3390/su14010363>.
- Ritter, S. M., & Mostert, N. (2016). Enhancement of Creative Thinking Skills Using a Cognitive-Based Creativity Training. *Journal of Cognitive Enhancement*. <https://doi.org/10.1007/s41465-016-0002-3>.
- Rydell, M. (2018). *Constructions of Language Competence: Sociolinguistic Perspectives on Assessing Second Language Interactions in Basic Adult Education*. Universitetservice US-AB.
- Sayer, P. (2009). Using the linguistic landscape as a pedagogical resource. *ELT Journal*, 64(2), 143–154. <https://doi.org/10.1093/elt/ccp051>.
- Sun, M., Wang, M., & Wegerif, R. (2020). Effects of divergent thinking training on students' scientific creativity: The impact of individual creative potential and domain knowledge. *Thinking Skills and Creativity*, 37(July). <https://doi.org/10.1016/j.tsc.2020.100682>.
- Ting, K., Cheng, C., & Ting, H. (2021). Introducing the problem / project based learning as a learning strategy in University Social Responsibility Program - A study of local revitalization of Coastal Area , Yong-An District of Kaohsiung City. *Marine Policy*, 131(700), 104546. <https://doi.org/10.1016/j.marpol.2021.104546>.
- Wangdi, J., & Savski, K. (2022). Linguistic landscape, critical language awareness and critical thinking: Promoting learner agency in discourses about language. *Language Awareness*. <https://doi.org/10.1080/09658416.2022.2115052>.
- Yanmei, H., & Xiaodan, W. (2019). Language policy, linguistic landscape and residents' perception in Guangzhou, China: dissents and conflicts. *Current Issues in Language Planning*. <https://doi.org/10.1080/14664208.2019.1582943>.