



## Prospect and Practice of Place-Based Education: Covid 19 and Post-Pandemic

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### ABSTRACT

This study aimed to investigate the impact of Place-Based Education (PBE) and whether PBE has the prospect to meet the need of the teaching-learning process in the current pandemic Covid-19 and beyond. This study is anchored by Vygotsky on Constructivist theory as main theory and supported by Jonh Dewey's theory on constructivism and Carl Roger on Experiential Learning Theory. The design of the research was experimental research. The respondents were the students at Sekolah Tinggi Ilmu Tarbiyah Muhammadiyah Tanjung Redeb, East Kalimantan, Indonesia. The sample taking was cluster sampling, which consists of two groups The experimental group was 40 students, while the control group was 31 students. To get the data, the researcher administered the paper test as Instrument. The researcher considered that the researcher conducted quantitative research and would near use parametric data. So, to analyze was started by giving a score, compute normality distribution by Kolmogorov-Simonov formula, calculate homogeneity using LeveneStatistic, count mean performance, and finding the mean difference of each group's sample by using the T-Test formula. Afterward, based on the statistical data analysis, the research finding shown practice PBE during the Covid-19 pandemic is favorable.

**Keywords:** *Prospect, Practice, Place-Based Education*

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### INTRODUCTION

Since the corona virus's entry into Indonesia in early 2020, the government stopped activities in schools. Therefore, the government and related institutions then took a policy by establishing online learning as an alternative. Since March 2020, campuses and schools have implemented distance learning activities or online lectures. A circular issued by Plt reinforces this. Directorate General of Islamic Education No. 697/3/2020 concerning efforts to prevent Covid-19 in the Islamic Religious College environment, which urges that at Islamic religious colleges for the even semester of 2020 carried out the lecture process remotely.

On the other hand, learning is the absolute obligation of every person. Learning is a lifelong process, even in the 1945 Constitution of the Republic of Indonesia, regulating education. According to Sujatmoko [1], Indonesia has declared that education is the right of every citizen. It can be heard in Article 31 paragraph 1 of the 1945 Constitution, which declares, "Every citizen has the right to education." However, by considering the dangers of the Coronavirus impact and consequences resulting from the government's policy on the learning system, teachers and students are expected to follow and adapt to the pandemic's learning needs. Based on the explanations, the researcher was motivated and emboldened to research by the title "Prospect and Practice Place-Based Education (PBE): Covid-19 and Post-Pandemic".

According to Semken et al. [2], PBE is a trans-disciplinary modality of care and learning situated, context-rich, and distinguished by the emphatic by place, which are areas that people animate with personal meaning and attachment through actual or representative experiences. Whereas Sobel [3] established place-based education as an educational strategy that incorporates all components of the local environment, including local culture and history information, as well as the natural environment and contextual fit. The most important aspect of PBE is the hands-on learning idea, as well as environmental and community involvement. Learning involves physical and social-cultural setting. Therefore, teachers can stimulate the students development in scientific attitudes such as curiosity, critica thinkingl, creative, cooperation, discovery, and so on through PBE.

### *Objective of the Research*

Although the concept of place-based education is not new, the idea of exploring what it would look like could bring a beneficial new perspective. The goal of this study is to look into place-based pedagogical methods and see what factors

might influence educators' experiences with them. This study looks at place-based education and socio-cognitive conceptions, with a focus on learning achievement, to gain a better understanding of the learning process in the present covid-19 epidemic.

### ***Theoretical Framework***

This research would try to prove several learning theories from the expert. Three general theoretical perspectives would guide this research. Firstly, it is anchored by **Vygotsky in Constructivist theory** as cited in Aldoobie [4]. It views learning as a dynamic, ongoing process in which students gather information from their surroundings and create personal interpretations and ideas based on existing knowledge and experience. Learners construct knowledge, according to Piaget, by physically and mentally acting on objects or phenomena in the environment, as well as by social interactions with other members of society. Students' distinctive thoughts and understandings about the world were thus influenced by their learning about the surroundings.

Secondly, **Jonh Dewey's theory on constructivism**. He is the early funder in discovering the constructivism theory, according to Gunawan [5]. To communicate his concepts about constructivism theory, Dewey established his theories. In addition, he argues that learners will not be able to construct and learn new things unless they have previous connected experience. He also felt that learners learn better in groups because humans are social creatures and that when they work together, they build their knowledge. He also urged teachers to provide opportunities for students to cooperate and work through directed activities to expand their knowledge.

Lastly, this research also supports by **Carl Roger on Experiential Learning Theory** [6]. The active process in which children absorb information through discovery and exploration is explained by this idea. It's a student-centered strategy that caters to each student's requirements and desires. Learning occurs as a result of both successes and failures, and it aids pupils in the development of new abilities, attitudes, and problem-solving approaches. In this theory, Rogers [7] proposed the concepts of cognitive and experiential learning. Memorizing facts, such as vocabulary, are part of cognitive learning. With a focus on hands-on experience and real-world scenarios, experiential knowledge caters to the learning goals and interests of students.

Refers to those theories, the researcher assumed that place-based education might help teachers and students have a more intense experience of the environment and are more skeptical of the societal norms and power structures that surround them. Place-based education encourages students to critically examine power systems and seek more meaningful learning experiences by providing more in-depth student and teacher experiences.

### ***Review of Related Literature and Studies***

An educational concept that connects learning with the community's context and the local environment is called place-based Education (PBE). In the current pandemic, the term "place-based education" maybe very popular. The philosophical foundation of PBE, according to Deringer, is not, and it comes from thinkers like John Dewey, Paulo Freire, Gregory Smith, David Sobel, and David Gruenewald [8,9]. Many of the educational concepts on which PBE is founded are advocated by Dewey. Dewey [10], for example, thought that education and life experience are inextricably linked, and that "education, therefore, is a living process and not a preparation for future life" (p. 1), an idea he expanded in his 1938 book, *Experience, and Education*. Problem-forms were stressed by Freire [11]. Posing for educational purposes, as well as the development of PBE. According to Freire, when students' learning is assisted by teachers' challenges, they learn best and have the most human experiences.

According to Power [12], Place-based education (PBE) is a learning technique that focuses on integrating learning using local communities as a context and is based on local community resources, problems, and values. Place-based education is defined by the study of local communities and the natural environment, direct experience of environmental discovery and problem solving, interdisciplinary curriculum, team teaching, and learning, according to Chawla and Escalante in Sulaiman [13]. Based on the description above, shows that PBE is firmly anchored in the local environment. With more sensitivity to context, one's experience of a location is likely to be enhanced. As a result, both notions must be examined to find areas of overlap or similarity.

In actuality, some specialists have principles based on the ecology-culture premise. The reciprocal interaction between persons and their environment, they claim, takes the shape of relational architecture and pedagogy. The relationships that are formed inside space give it shape and identity. [14]. Learners can get knowledge through everyday living contexts such as everyday landscape experiences, interpersonal interactions, and traditional culture through place-based learning. It is the empowerment of citizens as well as the opening of knowledge. So that kids gain a better understanding of their neighborhood and develop more interpersonal interactions. It also fosters community participation and self-actualization for both students and the community.

The idea that society should not end at the schoolhouse door and that pedagogy should be based on local problem-solving experiences is widely held around the world. It is in keeping with Gruenewald's [15] statement that "place-conscious education attempts to struggle against the isolation of school discourse and practice from the increasingly dislocated world of living beyond school institutions" (p. 620). Literature on PBE [15,16]. Apart from its emphasis on integrating communities, PBE can be difficult to establish due to its adaptability to a variety of settings [8]. Smith [8] suggests five thematic PBE patterns that can be used in a variety of settings: (a) cultural studies, (b) nature studies, (c) real-world problem solving, (d) apprenticeship and entrepreneurial opportunities, and (e) induction. Involved in the community (pp. 587-590). Even as PBE evolves to meet the requirements of varied groups, these themes give a framework for understanding it.

Place-based education, according to David Sobel in Widyanti [16], is an educational strategy that incorporates all parts of the local environment, including local culture and historical information, as well as natural and artificial surroundings, into learning situations. The main thing in PBE is the concept of hands-on learning as well as environment and community involvement. By doing hands-on learning (doing process skills), students are indirectly required to involve a scientific attitude to understand the expected concepts. The concept of hands-on learning, environment and community involvement are the three main elements in PBE. PBE connects learning with a community context allowing students to interact directly with the environment and society as owners of the ecological environment. Interaction with learning resources can be packaged quickly with a scientific approach.

Place-based education takes the local community and environment as a starting point for teaching topics in a variety of disciplines across the curriculum, including language arts, mathematics, social sciences, science, and other subjects. (Page 4) Because of the many different ways PBE might be used, both Sobel and Smith leave their definitions of PBE broad. The PBE definition must be adaptive to any community while yet being explicit enough to be meaningful.

## METHODOLOGY

This research was to find whether the implementation of Practices of Place-Based Education is significantly useful in the teaching-learning process remotely. The design of the research was experimental research. The respondents were the students at Sekolah Tinggi Ilmu Tarbiyah Muhammadiyah Tanjung Redeb, East Kalimantan, Indonesia. The sample taking was cluster sampling, which consists of two groups. The experimental group was 40 students who were given the treatment using PBE, while the control group was 31 students who were given treatment through a virtual learning modality.

To get the data, the researcher used the test as an instrument. It was considering that the researcher conducted quantitative research and has near used parametric data. To analyze the data was started by giving a score, compute normality distribution by Kolmogorov-Simonov formula, and calculate homogeneity using Levene Statistic. Count the mean, and find each group's mean difference sample using T-Test.

### Findings

This research was experimental; considering that this research is a type of parametric research, a series of data analysis procedures must be carried out as described in this section.

#### 1. Distribution of Normality

To see if the tests were normally distributed, the normal distribution test was utilized. The Kolmogorov-Smirnov formula for windows was utilized in the investigation. It utilized 0.05 as a significant criterion. If a significant point was greater than 5% or 0.05 (i.e.  $> 0.05$ ), the data was expressed as a normal distribution. The experimental group's normalcy distribution produced Table 1.

**Table 1.** Test of Normality Distribution on Experimental Group

		TEST
N		40
Normal Parameters <sup>b</sup>	Mean	.0000000
	Std. Deviation	5.54476951
Most Extreme Differences	Absolute	.146
	Positive	.118
	Negative	-.146
Test Statistic		.146
Asymp. Sig. (2-tailed)		.082

a. Test distribution is Normal.

b. Calculated from data.

The Asymp is shown in table 1 output. The data has a Sig. (2-tailed) pretest of 0.082. Because the significance of 0.082 is greater than 0.05, the test has a normal distribution. Following the output, the computation result is displayed as data that is redistributed normally.

Table 2 provides the normalcy test result for the control group, with the value indicating the Asymp. The sig. (2-tailed) data pretest is 0.010. Because the significance of 0.010 is greater than 0.05, the test has a normal distribution. Following the output, the computation result is displayed as data that is dispersed normally.

**Table 2.** Test of Normality Distribution on Control Group

		TEST
N		31
Normal Parameters <sup>b</sup>	Mean	.0000000
	Std. Deviation	1.68915677
Most Extreme Differences	Absolute	.224
	Positive	.195
	Negative	-.224
Test Statistic		.224
Asymp. Sig. (2-tailed)		.010

- a. Test distribution is Normal.
- b. Calculated from data.

### 2. Variance Homogeneity

After performing a normal distribution test, the homogeneity of variance test was completed. This test was performed to determine sample homogeneity. The data was analyzed and the homogeneity of variance was determined using the Levene Statistic test on SPSS 16 for Windows. Table 3 presents the homogeneity variances in the experimental group. It shows the final result of Levene Statistics is 4.822, df is 35 and sig is 0.004, while the control group is 13.204, df is 16 and sig is 0.000.

**Table 3.**The Result of Homogeneity Variances

Groups	Levene Statistic	Df	Sig.
Experimental	4.822	35	.004
Control	13.204	16	.000

As a result of the statistics, it can be stated that the experimental group students were more homogeneous than the control group. Or, to put it another way, the member control group was varied.

Refer to the current finding; it can be deduced that the pupils in both groups were diverse. They have nearly identical variants. This situation exists because the researcher administered treatment to the sample. Throughout the study, each sample received the same proportion of the learning process. Students who struggled to learn were given special attention, such as providing an intention guide and motivation, making it easier for them to study. Smarter kids, on the other hand, were praised for their cooperation and participation.

### 3. The mean performance of pretest and posttest

Based on the computing SPSS program in table 4, the experimental group that the number of group members was 40 students got mean in pretest is 39.31. The standard deviation is 6.606, and verbal interpretation is fair. Then mean performance in posttest is 42.47, the standard deviation is 7.513, verbal interpretation is good. The students got improvement after they were involved in PBE practice.

While the control group, which the number of group members is 31 students, got mean in pretest was 26.55, the standard deviation is 3.449, verbal interpretation is fair. Then mean performance in the post-test is 27.55, the standard deviation is 3.501, and verbal interpretation is fair. Finding the mean in the control group shows the point has no significant gain. In other words, the implementation of virtual modality in teaching practice to the control group not effectively improved the students' achievement.

**Table 4.** Mean performance Pretest and Posttest Between Control and Experimental Group

		N	Mean	Std. Deviation	Verbal	Interpretation
Experimental group	Pretest	40	39.31	6.606		Fair
	Post Test	40	42.47	7.513		Good
Control group	Pretest	31	26.55	3.449		Fair
	Post Test	31	27.55	3.501		Fair

*Legend: 0-19 Poor*  
*20-39 Fair*  
*40-59 Good*  
*60-79 Very good*  
*80-100 Excellent[17]*

#### 4. Hypothesis testing

The data were statistically computed to find t obtain and then compared with t-table after collecting the students' mean scores on pretest and posttest achievement. The results of the paired sample test computation to identify the significant difference between the pretest and posttest between the control and experimental groups are presented in Table 5.

**Table 5.** Paired Samples Test

Respondent	Mean differences	std. deviation	t-obtain	Df	t-table
Experimental Group	3,156	5,754	3.109	35	2.03
Control Group	1.000	1.732	3.103	30	2.04

The result shown in Table 5 that the t-obtained of experimental group is 3.109, it is slightly higher than t-table 2.03. At the same time, computed data in control is 3.103 higher than t-table 2.04.

Vygotsky's theory in Gunawan and Nurbianta[5] justified this condition as a ground of this research theory. The theory is that the potential for intellectual development is determined by the proximal development zone (ZPD): a developmental stage reached when students participate in social interaction. As in actual PBE, the full development of the ZPD is dependent on full social contact. Practicing PBE during the Covid-19 pandemic, in other words, is a promising possibility for the teaching-learning process.

## DISCUSSION

It has been discovered that several components influence the learning process's success. By engaging student interest and making them more involved in the learning process, the method of delivering the material used in this study must be modified. During the Covid-19 pandemic, the researcher used PBE to instruct students at STIT Muhammadiyah Tanjung Redeb in Berau, East Kalimantan, Indonesia. Because human nature is social, the outcomes of this study indicate that learners learn better when they interact directly with the surrounding community. When students work together, they build their knowledge. Furthermore, PBE encourages teachers to create opportunities for students to cooperate and work on specific activities to expand their learning knowledge [18]. It is the theory of constructivism, as described by John Dewey.

In terms of education, spatial encounters can stimulate the enthusiasm for learning in students who are motivated by technical and practical learning. Interacting truthfully also encourages pupils to be more creative and use what they've learned. Another justification for employing this strategy, according to Pilot & Bulte[19], is for a multi context-based syllabus rather than a single context-based syllabus to illuminate profound information and expand understanding of a gist rather than the incomprehensible departing materials. Vygotsky's theory, especially constructivist theory, which frames learning as an active and ongoing process in which students acquire information from the environment and construct personal interpretations and meanings based on prior knowledge and experience, reinforces this condition. This finding is also supported by Carl Roger's Experiential Learning Theory. This is an active process in which children learn information through discovery and investigation, according to the notion.

PBE Implementation means that the teacher builds a comfortable environment for students because class members are not always in a monotonous learning situation. That is the positive Social Learning Theory by Lev Vygotsky. Social

learning theory guides how we, as instructors, develop active learning communities by assisting us in understanding how individuals learn in a social setting (by learning from one another). Both teachers and students learn via this cultural lens through engaging with others and according to the rules, skills, and abilities that our culture molds as they practice PBE. As a result, the teacher's involvement in supplying huge stimuli in classroom activities is important. The major message of Vygotsky's theoretical framework for social development is that social interactions play a crucial role in cognition development.

So, referring to the findings during social observation, the researcher believes that PBE activates community space and brings students to the knowledge platform into the community, and facilitates their participation. Regardless of the student's academic results, the application of PBE brings learning as closely as possible to life so that the effect is that their self-confidence also increases. In this case, self-confidence is when students can courageously express their opinions both in writing and orally. It increases their self-confidence, maybe because the topic being discussed is close to them so that they do not hesitate if they make mistakes later. Eventually, using Place-based learning is the possibilities to further education in the teaching and learning process during covid-19 and beyond and/or in post-pandemic time, because applying the teaching and learning is not limited to face to face or online among teachers and students, but teaching and learning nowadays can be carried out in the own place and space.

## CONCLUSION

In the light of the finding, the researcher can conclude that students who learn in situations of limited space who must prioritize strict health protocols during this pandemic, PBE provides a perspective for the continuity of the teaching and learning process for each individual (i.e., students). Students will be highly motivated because they can share and negotiate to build thinking, insight, and competence.

## RECOMMENDATION

In light of the finding and conclusion, the following recommendations were formulated:

- a. Learning is a lifelong process that must not stop. The right to education is protected by the 1945 constitution of the Republic of Indonesia. In the Covid-19 pandemic era, keeping the body healthy is a priority, so there must be a way to access education safely. In this study, PBE has been proven to sustain the teaching and learning process at STIT Muhammadiyah Tanjung Redeb during the pandemic period.
- b. PBE must be carried out regularly during the pandemic that is still hitting the earth so that students' insights can be honed and improved because PBE can meet the needs of this pandemic and students' needs.

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