

ABS 196

by lcels_2 Abs 196

Submission date: 30-Sep-2020 02:11PM (UTC+0700)

Submission ID: 1401118778

File name: full_paper_abs-196_2042935454.docx (61.46K)

Word count: 2745

Character count: 16377

**Project Based Learning Variations for Children with Special Needs
in the Pandemic Era**

Winda Hastuti*, Choiriyah Widyasari, Bambang Sumardjoko

Elementary Education, Postgraduate School, Universitas Muhammadiyah Surakarta, 57162,
Sukoharjo, Indonesia

* Corresponding author

windahastuti0@gmail.com

HP: +6285728316231

**Project Based Learning Variations for Children with Special Needs
in the Pandemic Era**

Winda Hastuti*, Choiriyah Widyasari, Bambang Sumardjoko

Universitas Muhammadiyah Surakarta, Indonesia

q200180019@student.ums.ac.id

HP: +6285728316231

10

Abstract

The aims of this study was to describe the variations in project-based learning for students with special needs in the pandemic era. Research setting at MI Muhammadiyah PK Kartasura. The subjects of this study were teacher classrooms and shadow teachers. The type of research is descriptive qualitative with a case study design. Data collection techniques used observation, interviews, and documentation. The validity of data used triangulation of methods and data sources. The results showed that project based learning has been implemented by classroom teachers, shadow teachers, and inclusion skills programs, and specifically given to individual students. Variations of project based learning provided to students included in each subject, life skills every two weeks, and home projects every day. Each project tailored to the level of a student's special needs.

Keywords: children with special needs, *project based learning*, variations

Introduction

Distance Learning (PJJ) has been implemented since March 2020 due to the Covid-19 pandemic. One of the solutions for the teaching and learning process during the Covid-19

pandemic is online learning. The preparation that needs to be done is to prepare infrastructure that can be used to support learning effectively and efficiently (Shobron, 2020). However, this is a challenge for shadow teachers to carry out the learning process optimally. Likewise, students with special needs have difficulty understanding material without direct and face-to-face explanations with the shadow teacher. Abstract learning material is difficult for students to accept. Therefore, learning during a pandemic needs to be designed optimally so that the learning experience of students is memorable and can achieve learning goals.

Learning for children with special needs to be done with strategies and methods for student learning activities, of course, also considering students' conditions (Mumpuniarti, 2016). The varied conditions of students can actively learn in various ways, so that the learning process needs to be conditioned by the teacher with a variety of strategies or learning models.

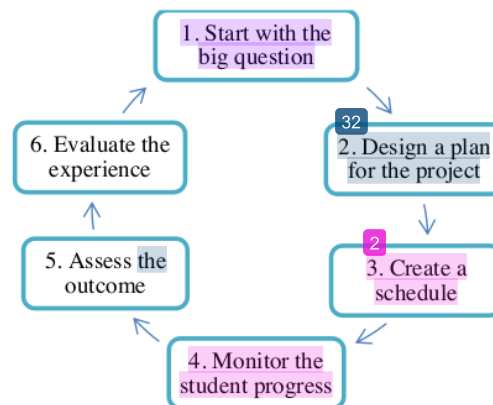
One of the active learning models for students with special needs is ²⁴ project based learning or project-based learning. Project-based learning is a student-centered learning model and provides meaningful learning experiences for students based on products produced ³⁴ in the project-based learning process (Afriana, 2015). The urgency of the project based learning model (Winarni, 2020) describes ²³ "the project based learning focused in the concepts and principles of a discipline of study, involving learners in problem-solving investigations and allowing students to construct their knowledge, and producing tangible products as an innovation. in science." In principle, project based learning focuses on real life issues, individually or in small groups to produce concrete results in the form of projects, products, or artifacts.

Based on research by Zakiah, Anwar, and Priyono (2018), the project based learning model has an effect on increasing the ability to structure sentence structures for deaf children in ⁵ grade 5 at SLB B YRTRW Surakarta in the 2017/2018 school year. The second research, Abidin (2020) ¹ project based learning - literacy has been effective in facilitating reasoning

skills because project based learning - literacy can present contextual material with literacy works that are made and are required to carry out a thought process about the use of mathematical contexts in everyday life -day. In addition, students can relate mathematics material to real-life contexts and can make reasons to interpret learning well. The third research, (Sari, 2017) states that project based learning can improve students' social and emotional development. This is indicated by the pretest scale of the acquisition score of 63 with a low percentage of 16.67%, it occurs because students have low motivation during learning. Whereas for the posttest scale the acquisition score was 84.33 with a percentage of 88.88%, students were conditioned and their learning motivation had increased more than previous learning.

Through project based learning, students not only understand learning content, but also cultivate communication and presentation skills, organizational and time management skills, research and inquiry skills, self-assessment and reflection skills, group participation and leadership, and critical thinking. The syntax of the project based learning model includes: 1) start with the big question, 2) design a plan for the project, 3) create a schedule, 4) monitor the students and the progress of the project, 5) assess the outcome, 6. evaluate the experience (Lestari, 2015).

Chart 1. Syntax of the Project Based Learning Model



Based on this syntax, project based learning enables students with special needs to carry out a meaningful learning process physically, psychologically, and socially through interaction with teaching materials or materials. In this case, students are actively involved in interacting and practicing by finding, organizing, storing, being able to solve problems, and to create projects independently. Based on the explanation of this background, ¹⁴ researchers are interested in conducting research with the title "Project Based Learning Variations for Students with Special Needs in the Pandemic Era".

Research Methods

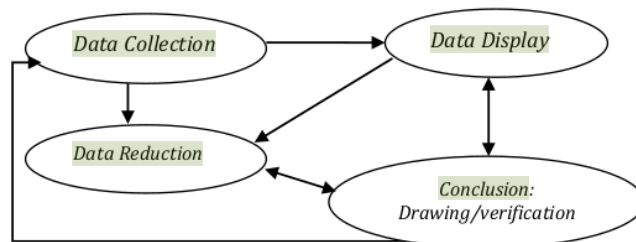
³¹ This type of research is qualitative with a case study design. The research setting at MI Muhammadiyah Program Khusus Kartasura which is located at Jalan Slamet Riyadi No.80 Kartasura, Sukoharjo, Central Java. ¹⁷ The subjects of this study were 5 shadow teachers and parents. In this study, it has focused on students with special needs in grade 4 (5 children). The characteristics of children with special needs are 1 mild deaf student, 1 severely deaf student, 1 emotional barriers student, and 2 dyslexic students.

¹⁴ Data collection techniques in this study were observation, interviews, and documentation. Observations were made when the learning took place, either school visit or home visit. The interview process in this activity was conducted for shadow teachers and classroom teachers. Meanwhile, documentation is carried out to document various activities during learning.

Research begins with case finding, followed by making research instruments. After that, choose informants who will be involved in the research, conduct interviews, observe, and document. Data analysis is carried out if the necessary primary data has been obtained, presents data, and draws conclusions.

33 The data analysis technique used qualitative analysis techniques. 30 Qualitative data analysis techniques use the concept of Miles and Huberman (2007: 91), suggesting that activities in qualitative data analysis were carried out interactively and continue to completion, so that the data is saturated. Activities in data analysis are data reduction, data display, and conclusion drawing / verification.

22 Chart 2. Data Analysis Techniques of Miles and Huberman



Data analysis of this research begins with data collection obtained from observations and interviews. The data obtained from observations and interviews are then reduced to be summarized. The resulting data can be supplemented with documents related to project-based learning variations for students with special needs through qualitative methods that produce descriptive data. After the data is reduced, the data can be displayed arranged in a relationship pattern. Then draw conclusions on the data that has been displayed. So through this technique it can be seen the variations of project based learning for students with special needs at MI Muhammadiyah PK Kartasura.

21 The validity of the data in this study used triangulation of data sources and triangulation of methods. Triangulation of data sources by comparing and checking data information obtained from informants. Technical triangulation is carried out on the same data source through different techniques (Satori and Komariah, 2014: 171). Through technical triangulation, researchers can make observations and interviews with data sources / sources and this can be proven through documentation.

Result and Discussion

4 Based on the results of observations and interviews with shadow teachers, the number of students with special needs in grade 4 was five children with special needs. Every student with special needs is accompanied by a shadow teacher.

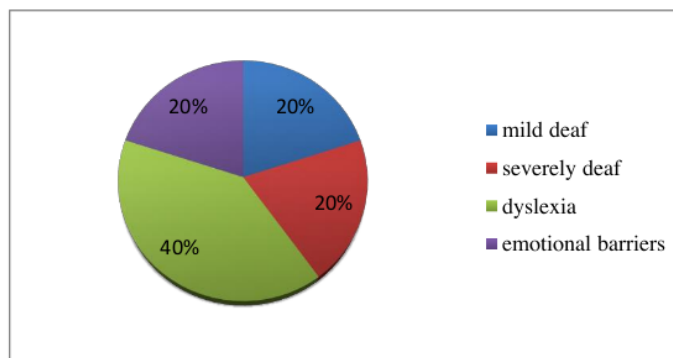
Table 1. Classification of Students with Special Needs in Grade 4

MI Muhammadiyah PK Kartasura

Class	Special needs	Children
4A	mild deaf	1
	emotional barriers	1
4B	severely deaf	1
	dyslexia	2
Cumulative		5

Chart 3. Classification of Students with Special Needs in Grade 4

MI Muhammadiyah PK Kartasura



7 Based on the results of interviews with shadow teachers and classroom teachers regarding variations in project based learning for students with special needs that were designed during the pandemic, the following data can be presented.

Table 2. Interview and observation data with shadow teachers and classroom teachers

Aspect	Mild deaf (H)	Emotional barriers (K)	Severely deaf (F)	Dyslexia (I)	Dyslexia (N)
Participation at class	Regular class	Regular class	Pull out	Regular class and pull out	Regular class and pull out
Curriculum	Regular class	Modification by shadow teacher	Modification by shadow teacher	Modification by shadow teacher	Modification by shadow teacher
PJBL variations (class/shadow teacher)	Planting flowers (IPA), make a collages/mosaic and music skill (SBdP), make a sculptures from soap (IPA), practice motoric skill (PJOK), story telling (Indonesian)				
PJBL variations (inclusion skills program)	Cooking class (make a infused water, a sand witch, a fruit salad), make a strawberry from origami paper, make piggy banks, dolls, and pencil case from secondhand. (Life skill – every two weeks)				
PJBL variations for individual (home project – every day)	Read and recite the letters in the quran	Make a script book to release emotions	Fill out and report the daily activity table orally	Read picture story books and retell to the shadow teacher	Read and write lectures under the guidance of shadow teachers or parents

Based on the data, ⁴ the participation of students with special needs in the class consists of regular classes and pull out classes. The involvement of children with special needs is 2 students (mild deaf and emotional barriers) learning in regular classes, 2 students (dyslexia) learning in regular and pull out classes, and 1 student (severely deaf) using the pull out system. When viewed from the curriculum, only 1 student (mild deaf) follows the regular class learning curriculum and 4 students (emotional barriers, severely deaf, dyslexia) with a modified curriculum from the shadow teacher.

Pull out is an independent teaching and learning activity or withdrawing students to a special room that has been provided by the school or a place that students enjoy (Marsudi and Hastuti, 2016). 3 of 5 students with special needs, learn using the pull out system, where they learn separately from their peers. However, during a pandemic, learning for children with special needs is based on pull out. This is appropriate with research (Mardini, 2016) that the pull out class can increase student interest in learning.

Curriculum for students with special needs, namely a modified curriculum tailored to the special needs of children. Curriculum modification aims to determine the minimum learning target reduction in each semester. Shadow teacher designs learning activities for Individual Learning Programs (PPI). This is done in the aspect of the allocation of learning time, and the material and learning achievement targets (Amalia and Hutami, 2016). Therefore, students with special needs are not burdened by too many learning activities.

Project Based Learning Variations

Project based learning from classroom teachers or shadow teachers with the following stages: 1) giving appropriate questions about the topic of learning, 2) making learning designs, 3) arranging activity schedules, 4) monitoring by assisting students, 5) presenting results, 6) giving appreciation and evaluation. In line with (Lestari, 2015) opinion ⁶ that the syntax of the

project based learning model includes: 1) start with the big question, 2) design a plan for the project, 3) create a schedule, 4) monitor the students and the progress of the project, 5) assess the outcome, 6. evaluate the experience. The syntax of project based learning has been implemented by classroom teachers and shadow teachers.

Learning using a project based learning model has been implemented in MIM PK Kartasura, both from classroom teachers, shadow teachers, and inclusion skills programs. Learning activities are very diverse. Project based learning variations from classroom teachers or shadow teachers include: Planting flowers (IPA), make a collages/mosaic and music skill (SBdP), make a sculptures from soap (IPA), practice motoric skills (PJOK), story telling (Indonesian). Project based learning variations of the inclusion skills program include: Cooking class (make infused water, sand witch, fruit salad), make a strawberry from origami paper, make piggy banks, dolls, and pencil cases. so it can be seen that learning is more varied, because there are meaningful learning activities for students. This activity is to provide provisions for students with special daily needs (Amalia and Hutami, 2016). Learning that is emphasized helps students with special needs to adapt their environment and be able to survive after school (Ishartiwi, 2010).

The last, project based learning variations for individual. Mild deaf (H) Read and recite the letters in the quran, Emotional barriers (K) Make a script book to release emotions, Severely deaf (F) Fill out and report the daily activity table orally, Dyslexia (I) Read picture story books and retell to the shadow teacher, Dyslexia (N) Read and write lectures under the guidance of shadow teachers or parents. This project based learning is tailored to the level of special needs of children which are designed in the Individual Learning Program (PPI).

Conclusion

²⁵ Based on the data, it can be concluded that project based learning is an alternative learning model for students with special needs during the pandemic era. Variations in assigning project based learning assignments to grade 4 by shadow teachers and classroom teachers through: 1) integrated in each subject (planting flowers (IPA), make a collages (SBdP), make a sculptures from soap (IPA), practice motoric skills (PJOK), story telling (Indonesian), 2) life skill every two weeks (cooking classes such as making sand witch, infused water, fruit salad), making dolls, making pencil cases from used materials, and 3) home project every day (focused at "ibadah and murojaah")

Acknowledgement

Thanks to Prof. Bambang Sumardjoko and Dr. Choiriyah Widyasari, M.Psi for their guidance so that complete this article. Thank you to the Elementary Education Study Program, Postgraduate School, Universitas Muhammadiyah Surakarta for funding our participation in this international seminar.

References

- Abidin, Z., Utomo, A, C., Pratiwi, V., Farokhah, L. (2020). ¹ Pembelajaran Project Based Learning – Literasi dalam Meningkatkan Kemampuan Penalaran Matematis Siswa di Sekolah Dasar. *EDUKARYA: Educational Journal of Bhayangkara. 1(1): 35-42.* ²⁶
Retrieved from <http://ejurnal.ubharajaya.ac.id/index.php/EDUKARYA>
- ¹² Afriana. (2015). Project Based Learning (PjBL). Makalah untuk Tugas Mata Kuliah Pembelajaran IPA Terpadu”. *Tesis. Program Studi Pendidikan IPA Sekolah Pascasarjana. Universitas Pendidikan Indonesia. Bandung.*

- Amalia, N., Hutami, R, E. (2017).²⁸ Studi Pengelolaan Kurikulum Program Inklusi di MIM PK Kartasura. *Proceedings of The Progressive and Fun Education Seminar*. 478-485.¹⁹ Retrieved from <https://publikasiilmiah.ums.ac.id/handle/11617/9124>
- ⁸ Gunawan, Sahidu, H., Hajono, A., dan Suranti., N. M. Y. 2017. “The Effect of Project Based Learning with Virtual Media Assistance on Student’s Creativity in Physics”. *Jurnal Cakrawala Pendidikan*. 167-178. DOI: 10.21831/cp.v36i2.13514.
- ² Lestari, T. (2015). Peningkatan Hasil Belajar Kompetensi Dasar Menyajikan Contoh-Contoh Ilustrasi dengan Model Pembelajaran *Project Based Learning* dan Metode Pembelajaran Demonstrasi Bagi Siswa Kelas XI Multimedia SMK Muhammadiyah Wonosari. Skripsi. Program Studi Pendidikan Teknik Informatika Fakultas Teknik Universitas Negeri Yogyakarta. Yogyakarta.
- Mardini. (2016). Increasing Interest in Learning Children With Special Needs Model Through Regular Class Pull Out State Elementary School of ¹³ Giwangan Yogyakarta. *JPSD : Jurnal Pendidikan Sekolah Dasar* 2 (1).23-35. Retrieved from <http://www.jurnal.uad.ac.id>
- Marsudi, S., Hastuti, W. (2017)¹³ Implementasi Pembelajaran Inklusi Bagi Peserta Didik ABK di MI Muhammadiyah PK Kartasura. *Proceedings of The Progressive and Fun Education Seminar*. 478-485.¹⁹ Retrieved from <https://publikasiilmiah.ums.ac.id/handle/11617/7842>
- ¹¹ Miles, M, B., Huberman, A. (2007). *Analisis Data Kualitatif Buku Sumber tentang Metode-Metode Baru*. Terjemahan Tjetjep Rohendi Rohisi. Jakarta: Universitas Indonesia.
- Putra, I. D.,⁹ (2016). Transformasi Pendidikan Karakter Melalui Pembelajaran Berbasis Proyek (Project Based Learning) di Sekolah Dasar. *Proceeding Seminar Nasional Transformasi Pendidikan Karakter Dalam Pembelajaran Holistik Anak Sekolah Dasar*

Dalam Rangka Menyongsong Generasi Emas Indonesia. Retrieved from <http://jayapanguspress.penerbit.org/index.php/PN/article/view/216/211>

²⁷ Satori, D., Komariah, A. (2009). *Metodologi Penelitian Kualitatif*. Bandung: Alfa Beta.

¹⁶ Shobron A.N. (2019). Pengaruh Daring Learning terhadap Hasil Belajar IPA Siswa Sekolah Dasar. *Prosiding Seminar Nasional Sains dan Entrepreneurship VI Tahun 2018*
¹⁵ “Transformasi Sains dalam Pembelajaran untuk Menyiapkan SDM Pengelola Sumber Daya Hayati Berkelanjutan Era Revolusi Industri 4.0 Bervisi Entrepreneurship”. ISBN: 978-602-99975-3-8

²⁰ UNESCO. 2009. *Toward Inclusive Education for Children with Disabilities: A Guideline*. Bangkok: UNESCO Bangkok.

¹⁸ Winarni, E.W., dan Purwandari, E. P. 2020. “Project-Based Learning to Improve Scientific Literacy for Primary Education Postgraduate Students in Science Subject”. *Jurnal Prima Edukasia*. 8(1): 66-67.

⁵ Zakiah, W, G., Anwar, M., Priyono (2018). Impact Of Project Based Learning Learning Model On The Ability Of Deaf Children To Build The Structure Of Sentence. *Indonesian Journal of Disability Studies (IJDS)*.2018: Vol. 5(1): PP 59 - 64. Retrieved from <http://IJDS.ub.ac.id/2018-1>

ORIGINALITY REPORT

25%

SIMILARITY INDEX

24%

INTERNET SOURCES

15%

PUBLICATIONS

12%

STUDENT PAPERS

PRIMARY SOURCES

1	www.scilit.net Internet Source	2%
2	repository.upi.edu Internet Source	2%
3	tip.ppj.unp.ac.id Internet Source	2%
4	eudl.eu Internet Source	1%
5	ijds.ub.ac.id Internet Source	1%
6	R Yusri, N Nurmi, H Delyana. "Development of ICT integrated project based learning student worksheet", Journal of Physics: Conference Series, 2019 Publication	1%
7	Aji Heru Muslim, Sri Harmianto. "A DESCRIPTIVE STUDY ON LEADERSHIP STYLE OF HEADMASTERS AT MI MUHAMMADIYAH WANGON, SD	1%

MUHAMMADIYAH CIPETE, AND MI
MUHAMMADIYAH PASIRMUNCANG AS
RECOMMENDATION OF LEADERSHIP STYLE
AT SD/MI MUHAMMADIYAH BANYUMAS",
Dinamika Jurnal Ilmiah Pendidikan Dasar, 2020

Publication

-
- | | | |
|---|---|----|
| 8 | Submitted to Universitas Jambi
Student Paper | 1% |
|---|---|----|
-
- | | | |
|---|---|----|
| 9 | journal.unnes.ac.id
Internet Source | 1% |
|---|---|----|
-
- | | | |
|----|---|----|
| 10 | garuda.ristekbrin.go.id
Internet Source | 1% |
|----|---|----|
-
- | | | |
|----|--|----|
| 11 | Tri Endaryati, Aman Aman, Johan Setiawan.
"The Implementation of National Values Insights
in the Learning Process of Indonesian History to
Form Student's Solidarity Attitudes",
International Journal of Learning and
Development, 2020
Publication | 1% |
|----|--|----|
-
- | | | |
|----|---|----|
| 12 | psbsekolah.kemdikbud.go.id
Internet Source | 1% |
|----|---|----|
-
- | | | |
|----|---|----|
| 13 | publikasiilmiah.ums.ac.id:8080
Internet Source | 1% |
|----|---|----|
-
- | | | |
|----|---|----|
| 14 | etheses.uin-malang.ac.id
Internet Source | 1% |
|----|---|----|
-

15	lldikti6.ristekdikti.go.id Internet Source	1%
16	Submitted to UPN Veteran Jawa Timur Student Paper	1%
17	eprints.uny.ac.id Internet Source	1%
18	journal.uny.ac.id Internet Source	1%
19	lib.um.ac.id Internet Source	1%
20	www.emeraldinsight.com Internet Source	<1%
21	icoen.org Internet Source	<1%
22	download.atlantis-press.com Internet Source	<1%
23	eprints.umm.ac.id Internet Source	<1%
24	tiie.w3.uvm.edu Internet Source	<1%
25	mafiadoc.com Internet Source	<1%
26	Muhammad Adil, Henny Leidiyana. "Sistem	

Pakar Juru Pemantau Jiwa (Jumanji) Berbasis Web Dengan Metode Forward Chaining", Journal of Students' Research in Computer Science, 2020

Publication

<1%

27

journal.umpalangkaraya.ac.id

Internet Source

<1%

28

publikasiilmiah.ums.ac.id

Internet Source

<1%

29

journal.um.ac.id

Internet Source

<1%

30

ijtmer.com

Internet Source

<1%

31

eprints.walisongo.ac.id

Internet Source

<1%

32

Submitted to CSU, San Jose State University

Student Paper

<1%

33

W Kusumaningsih, H A Saputra, A N Aini. "Cognitive style and gender differences in a conceptual understanding of mathematics students", Journal of Physics: Conference Series, 2019

Publication

<1%

34

Changjuan Zheng, Lijuan Wu, Xingang Wang. "Notice of Retraction: Project-based learning

<1%

and its application in marketing research
teaching", 2011 International Conference on E-
Business and E-Government (ICEE), 2011

Publication

Exclude quotes Off

Exclude matches Off

Exclude bibliography Off