

Covid-19 Pandemic: Project-Based Learning as Interprofessional Learning Model to Improve Student With Special Needs' Self Efficacy

Pandemia de Covid-19: Aprendizaje basado en proyectos como modelo de aprendizaje interprofesional para mejorar la autoeficacia de los estudiantes con necesidades especiales

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Abstract: There is a particular emphasis on education for special needs children. They have a right to an education that is appropriate to their needs. This study aimed to improve the self-efficacy of students with special needs who studied in inclusive elementary schools by using project-based learning. The research method used explorative qualitative with the interview, observation, and documentation instruments through triangulation. All instruments were analyzed in-depth, descriptive narrative. This research was carried out in the inclusive elementary schools, among others were five Public Elementary Schools (PES). The findings show that the learning approach of project-based learning at inclusive elementary schools in the covid-19 pandemic effectively improved the students with special need to be active, participatory and feel motivated to solve learning problems experienced by learning products produced

Keywords: Personal Skill, Vocational Skill, Social Skill, Academic Skill, Inclusive Elementary School

Resumen: Hay un énfasis particular en la educación para niños con necesidades especiales. Tienen derecho a una educación adecuada a sus necesidades. Este estudio tuvo como objetivo mejorar la autoeficacia de los estudiantes con necesidades especiales que estudiaron en escuelas primarias inclusivas mediante el uso del aprendizaje basado en proyectos. El método de investigación utilizó el cualitativo exploratorio con los instrumentos de entrevista, observación y documentación a través de la triangulación. Todos los instrumentos fueron analizados en profundidad, descriptivo narrativo. Esta investigación se realizó en las escuelas primarias inclusivas, entre otras cinco Escuelas Primarias Públicas (PES). Los hallazgos muestran que el enfoque de aprendizaje basado en proyectos en las escuelas primarias inclusivas en la pandemia de covid-19 mejoró efectivamente a los estudiantes con necesidad especial de ser activos, participativos y sentirse motivados para resolver los problemas de aprendizaje experimentados por los productos de aprendizaje producidos.

Palabras clave: Destreza personal, Destreza vocacional, Destreza social, Destreza académica, Escuela primaria inclusiva

1. INTRODUCTION

Initiatives for special educational need in the world is a network of special need people, their parents and professionals providing educational services for special need people in developing countries. There is a particular emphasis on education with special needs children (Carpentier, 1991). Special education teaching practices are anchored in IDEA 2004 to provide free appropriate public education (FAPE) in the least restrictive environment (LRE) to ensure students with disabilities receive differentiated instruction (Walker, 2021). Considering the special needs of the children of participating parents in this study, it is possible to conclude that teacher guidance and follow-up is much more necessary in distance education process. Likewise, it may be beneficial to adapt the worksheets for children with special needs as part of the Individualized Education Programs (Yazcayir & Gurgur, 2021). All children, including children with special educational needs, have a right to an education which is appropriate to their needs. The aims of education for pupils with special educational needs are the same as apply to all children (Griffin, 2014). Commensurate with that, Article 1 clause 1 of Law No 20 Year 2003 on National Educational System stated that education is a conscious and planned effort to create a learning atmosphere and learning process. Furthermore, the students can actively develop their potential to have religious, spiritual strength, self-control, personality, intelligence, noble character, and obtain skills needed by themselves, society, nation, and state. Cardullo et al., (2021) Many teachers stated remote teaching and learning could be beneficial for subgroups as additional resources are available, such as translating tools. They also mentioned less peer pressure and fewer distractions. As for the advantages of this transition and being safe and healthy, both teachers' and students' technology competencies improved while teaching and learning online. Several disadvantages indicated, which included teachers' level of self-efficacy in using technology to teach, lack of support and resources to teach online and the struggle to motivate and engage students in remote settings. Self-efficacy is one aspect of self-knowledge that can affect human life. Santrock (2011) states that self-efficacy determines the actions which will be conducted to achieve a goal. In this case, the success of someone in reaching the target is determined by self-efficacy. Amanda, Subagia, & Tika (2014) declare that self-efficacy is the skill to organize and display the actions, even, someone with strong self-efficacy can increase not only his achievement but also his welfare. The student with a strong belief in their ability to complete the tasks will survive easily because these students consider as a challenge. Meanwhile, Zimmerman (2000) states that students who have a low level of effectiveness tend to choose tasks more efficiently, even avoiding and giving up easily.

Eskrootchi & Oskrochi (2010) argue that Bandura's theory state that self-efficacy can be obtained, learned and developed from four sources of

information, i.e., an actual attainment and performance accomplishment, victorious experience, verbal persuasion, and physiological state and emotional arousal. A student with special needs who has high self-efficacy will be active in the classroom through many abilities, i.e., a) approaching difficult tasks, committing to the task, c) having a persistent business, d) never giving up dealing with difficulties, and e) not easily stressed. Project-based learning (hereinafter abbreviated as PjBL) has a characteristic in its learning process. Pereira et al., (2021) presented the evidence of the impact of overall levels of burnout and self-efficacy on teachers' self-esteem and also contributes to the body of knowledge under construction about the scenario perceived by teachers in Brazil during the COVID-19 pandemic. One of the characteristics is that students are given the existing problems in accordance with the real world, then they are directed to construct a more meaningful ability, and students with special needs are always accompanied until the completion of the activity. The purpose of this study is to determine the effectiveness of PjBL towards the development of students with special needs of self-efficacy who attend the inclusive elementary school.

Based on the observation result, the students with special needs in the inclusive elementary schools of Public Elementary School (hereinafter abbreviated as PES) of 2 Y, PES 4 Y, PES-T1 Y, PES-S W and PES 2 W are still active in the learning process. Most of the students are running around in the classroom; even some of them often go out of the class to disturb other students. If project-based learning is implemented correctly, students with special needs will directly get involved in learning with various learning activities to produce learning products in accordance with ongoing teaching material. As a consequence, their self-efficacy can be improved. This research question is how the government, principals and educational staff efforts in formulating the Act and translating it to the school? How are the teachers' Roles in Process and Learning Evaluation? And how is the learning product and self-efficacy of students?

1.1. Special Educational Needs

There is no clear definition of special educational needs. The children with special needs in the school mean students who need considerably more care and attention than the other students in the class' and they asked a group of primary school teachers (Veen et al., 2010). The definition of special educational needs education agreed is that "those with special educational needs are defined by the additional public and/or private resources provided to support their education". Over 100 teachers and school specialists from 40 school districts in Indiana participated. Most reported making changes to IEPs in response to the pandemic, including adding ICLPs that described how services were to be provided across learning modalities, adjusting service minutes to provide more flexibility, and

eliminating social goals altogether. Modifications were reported on common EBPs, including how reinforcement was given, what materials could be safely used, and by building collaborations with parents so that they could help deliver interventions and monitor progress across settings. While students with more intense needs struggled, others actually preferred virtual instruction (Hurwitz et al., 2021).

The term “special educational needs” is necessary for historical reasons. Instead, the words disabilities, difficulties and disadvantages are used. These terms broadly describe the students for whom countries make additional resources available so that they can access the curriculum more effectively (Utomo et al., 2019). All countries provide additional resources to help students with disabilities, difficulties and disadvantages access the curriculum and benefit as fully as possible from education (UNESCO, 1997). The term “special educational needs” has replaced definitions in terms of handicap and disability. Generally, the term “pupils with special needs” refers to pupils with various (combinations of) impairments and/or difficulties in participating in education (Pijl et al., 2008). Children with special educational needs are children first and have much in common with other children of the same age. There are many aspects to a child’s development that make up the whole child, including – personality, the ability to communicate (verbal and non-verbal), resilience and strength, the ability to appreciate and enjoy life and the desire to learn. Each child has individual strengths, personality and experiences, so particular disabilities will impact individual children differently. A child’s special educational need should not define the whole child (Griffin, 2014).

1.2. Self-Efficacy and Project-Based Learning (PjBL)

Efficacy is defined as the belief of someone in the capability to reach the desired things, such as mastering a new skill or achieving a goal, such as environmental love skills (Karim et al., 2020). The individuals who has a strong self-efficacy are those who can adapt quickly to the problems they face and not feel anxious in dealing with these problems (Pujaningsih & Ambarwati, 2020). Huang (2013) states that self-efficacy is an individual’s belief that he or she is capable of producing desired results, such as mastering new skills and reaching goals. Self-efficacy also adds to the fundamental theories of self-efficacy, social learning, and social cognitive theory (Lucido, 2021).

Self-efficacy is also a perception that one of the abilities needed to achieve an individual's goals. It is right in the sense of knowing what to do and being emotionally able to do it. The teaching strategies that encourage student participation and reflections on learning increase students’ self-efficacy, regardless of the teaching format (i.e., face-to-face vs. online teaching). Moreover, the gains in self-efficacy are invariable to demographic co-variables

(Roldan & Reina, 2021). People who consider themselves capable of facing greater challenges; then, they will make a more significant effort and have the possibility to be more successful in achieving the expected goals. Amanda et al. (2014) explained that self-efficacy is the perception that an individual is capable of doing what is necessary to reach their goals both in the sense of knowing what to do and being emotionally able to do it. A study of Multon et al. (1991) explain that student efficacy is actively motivated by participatory learning through encouragement to find learning problems that students experience themselves. Schunk (1985) explains that self-efficacy could influence students' perceptions, motivations, and actions in various activities.

Shin (2018) supported the idea that project-based learning has a positive influence in students' motivation and is able to enhance their cooperation skills as well. In addition, Dewi (2015) argued that PjBL is the basis of the problems revealed in collaborative learning activities, and it makes students more active. Eskrootchi & Oskrochi (2010) say that the learning experiences of students can be driven by PjBL because students are actively involved and participatory in learning. Amanda et al. (2014) state about PjBL, self-efficacy of students, is influenced by direct experience as a result of experience working on a past assignment and indirect experience as a result of observing the experiences of others. Furthermore, Mills (2009), with this learning method, explains that students are directly involved in project work facilitated by the teacher. Kurdie & Purnomo (2015) reveals that learning will be far more effective because it is centered on the problem and focuses on the field of study so that students will be involved in full.

2. METHODOLOGY

The purpose of this study was to analyze the self-efficacy of students with special need improvements by using project-based learning (PjBL) under teachers' roles in the process and learning evaluation by the roles of the government, principals and educational staff efforts in formulating the act and translating it to the school. In line with this purpose, this field research used narrative, qualitative exploratory methods (Tacq, 2011). This study was carried out in the inclusive elementary school of PES 2 Y, PES 4 Y, PES-T1 Y, PES-S W and PES 2 W. The research subject in this study was the students with special need who learned in the inclusive elementary school. These research subjects consisted of 28 students with special need in PES 2 Y, 6 students with special need in PES 4 Y, 35 students with special need in PES-T1 Y, 7 students with special need in PES-S W, and 20 students with special need in PES 2 W.

The exploratory research procedures were to map the characteristics of PjBL through the study of research instruments, including administration, the curriculum, result of psychologists assessing related to categorization of special

need students as a reference basis for handling the process and learning evaluation, and the efficacy of students with special needs at the beginning of learning process and identifying learning products produced. In-person interviews were aimed at teachers, principals, and educational staff as primary sources. Interview results from primary sources were supported by confirmation to all secondary source subjects such as district education officials and parents through interviews, as done by Karim et al. (2020). The interview with the secondary source subject was completed when the interview did not produce new information, and documentation (triangulation) was obtained (Myers, 2009). Furthermore, the interview with relevant principals of the elementary school curriculum section for data of policy and curriculum, homeroom teachers/tutors and teachers for data of process and learning evaluation, principals for data of administration and curriculum's break down, and ten representatives of parents of students with special need for responses and confirmation of self-efficacy of their children.

In addition, all these instruments will be analyzed in-depth, descriptive narrative (editing, classifying, confirming, and interpreting) starting from the learning process to the assessment based on the learning products produced. These analysis results in the form of research reports after they were combined with the research data of observation and documentation (Sugiyono, 2011). This was a differentiator in evaluating the process between special needs students and other normal students. Assessment analysis of students with special needs is based solely on self-efficacy after the PjBL process. The last was to compile a research report in a descriptive narrative strengthened by several data such as a natural image (pictures) of special need student learning products as well as a form of their self-efficacy. In this assessment, a description of the student's classification consisting of vocational skill, social skill, personal skill and academic skill was also narrated.

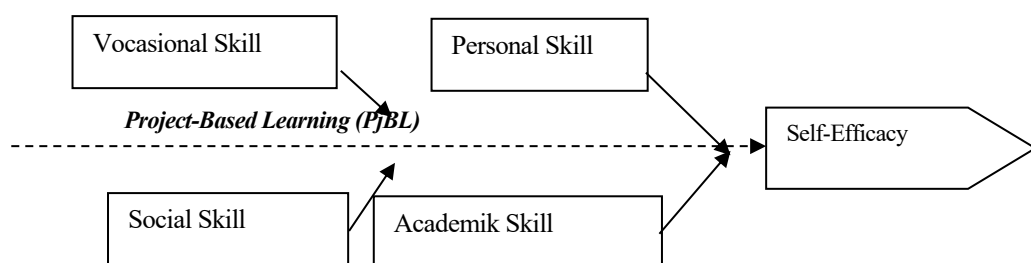


FIGURE 1. Fishbone diagram: The development of student's self-Efficacy through PjBL

Grouping categorizations of students with special needs in each primary school are detailed in the following table 1.

Table 1. *Classification of students with special need*

Name of Schools	The Classification of Special Need Students											Total
	Blind	Deaf	Physical ly disabled	Men- tally disabl- ed	Unsoci- able	Auti- stic	Slow Learner	Sindrom Down	Dysl- exia	Low Visi- on	Mental Retardati- on	
PES 2 Y	-	-	1	1	3	3	7	2	3	-	8	28
PES 4 Y	-	2	-	-	1	1	-	-	1	-	1	6
PES-T1 Y	-	5	1	8	-	1	19	-	-	-	1	35
PES-S W	-	1	-	2	-	1	3	-	-	-	-	7
PES 2 W	-	2	1	-	3	-	9	3	1	1	-	20

3. RESULTS

3.1. The Roles of Government, Principal and Educational Staff

The role of the government in succeeding of learning activities in inclusive schools is to establish educational policies. Based on Article 1 Number 70 Year 2009 regarding inclusive education for students with special need with Potential Intelligence or Special Talents, it is stated that inclusive education is a system of implementing an education that provides opportunities for all students who have abnormalities and have the potential for intelligence and special talents to take part in education or learning in an educational environment together with students in general. Meanwhile, Article 2 mentions that inclusive education aims to (1) provide an opportunity to all students who have physical, emotional, mental and social disorders and students who have the intellectual potential and special talents to obtain a quality education in accordance with their needs and abilities. (2) Realize education organization that respects diversity, and it is not discriminatory for all students. Learning activities that were initially implemented conventionally must be carried out gradually and sustainably as for the tools to achieve the idealism of the policy is the existence of a national curriculum.

The role of district education officials is to socialize and break down policy and curriculum to make it more practical so that it can be applied in schools. Principally, the curriculum in the inclusive elementary school was the standard curriculum as practiced in other public schools. This was explained by Sarno in 2018 as the head of the curriculum section of the elementary school of W province. Meanwhile, the minimum completeness criteria for normal students were 75 (seventy-five), as explained by all principals of inclusive elementary schools.

The role of principal and educational staff is as an administrative authority. All the principals at the research site revealed that the mandate received to manage and develop the students with special need self-efficacy is no longer a

cause, but rather a spirit of service. All school staff also conveyed similar things that each school's educational staff served them full of hospitality. Thus, special needs students were kept at ease. This standard had been discussed by the principal and all teachers in the interview session. Furthermore, in the process of evaluation, the special need students were free to imagine and reflect it on specific media (drawing book, canvas and the others) based on teaching materials according to their abilities as structured assignments and accompanied by the teacher on duty.

3.2. The Teachers' Roles in Process and Learning Evaluation

The teachers always involved them both in the learning process and interactions outside of learning. Therefore, according to the teachers, project-based learning (PjBL) was considered appropriate because students are encouraged to create their own learning products more participative and actively. However, in the implementation of the learning evaluation process, special needs students were given assignments according to the level of categorization experienced and psychological condition. Furthermore, minimum completeness criteria (KKM) learning was not equated with other normal students. For special needs students, minimum completeness criteria were not applied because the target to be achieved was only learning products produced. It is because the self-efficacy targets and assessment learning outcomes to be achieved only on the learning products produced and the interaction process both during learning and outside learning.

Table 2. *The change of students' improvement with special need classification in inclusive elementary school of W province*

No	School	Student Category (Psychological Examination Results)		Before Project-Based Learning (PjBL)	After PjBL
1	PES-S W	Down Syndrome	Uncontrollable Behave	Cheerful, active, more confident, accepting the teacher's instructions.	
		Deaf	Daydreaming in class	Happy writing, actively asking.	
		Dyslexia	Passive learning	enthusiasm increases	
		ADHD + harmonious	Difficulty focuses on the subject matter	Learning enthusiasm increases.	
		Low Vision	Passive learning	Learning enthusiasm increases.	

	Slow Learner	Very slow to follow the teacher's instructions	The enthusiasm for learning is growing, actively asking.
	Mentally disabled	Daydreaming, pessimism, lack of confidence, shy	The enthusiasm of expression, more focused, humanist.
	Autism	Running in class	Sociable, humanist, able to work together.
	Deaf	Daydreaming in class	like to write, actively asking.
	Physically disabled	Daydreaming, pessimist, lack of confidence, shy	The enthusiasm of expression, more focused, humanist.
2	PES 2 W	Mentally disabled	Passive learning, more silent.
	Unsociable	Emotional, unruly. Study at will.	Communicative, humanist.
	Autism	Running in class	Sociable, humanist, able to work together.
	Slow Learner	Very slow to follow the teacher's instructions	The enthusiasm for learning is growing, actively asking.
	Dyslexia	Passive learning	Learningenthusiasm increases
	Low Vision	Passive learning	Learningenthusiasm increases.
	Mental Retardation	Quiet, passive	Sociable, cooperative. Eager to learn.

In the first and second meetings, the teacher had not fully engaged students to be active and participatory in learning activities. Due to the teacher still explained the subject matter through the lecture method. The activity of students in the class was not developed comprehensively. Further, after being evaluated periodically, students with special needs were fully involved with the class teacher's instructions by preparing two picture books and drawing equipment. Hereafter, they were motivated to keep busy by filling in the picture book according to their wishes with assistance from the class teacher. In the implementation, the students with special needs were directed by the teacher verbally and signaled to follow the instructions. Then, the teacher accompanies the students started from the process up to collecting the tasks.

Table 3. *The change of students' improvement with special need classification in inclusive elementary school of Y province*

No	School	Student Category (Psychological Examination Results)	Before Project-Based Learning (PjBL)	After PjBL
1	PES 2 Y	Autism	Running in class	Sociable, humanist, able to work together.
		Dyslexia	Language difficulties, reading, writing, speaking	Easy to express feelings
		Down syndrome Dislogia	Uncontrolled Behavior	Cheerful, active, more confident, accepting the teacher's instructions.
		Physical Barriers	Daydreaming, pessimist, lack of confidence, shy	expressive, more focused, humanist.
		Demotivation	Low learning focus	Asking Many questions
		ADHD	Passive learning	Learning spirit increases.
		Speech Delay	More silent	Actively ask
		Slow Learner	Slow understanding of subject matter	Learning actively
		Social and behavioral barriers	Most difficult social interaction	Controlled behavior
		High emotion	Emotional	controlled behavior
2	PES 4 Y	Asperger	Lowest social interaction, slow to speak and speak	able to collaborate with colleagues and teachers
		Speech delay	More silent	Actively ask
		Deaf	Daydreaming in class	Happy writing, actively asking.
		Autism	Running in class	Sociable, humanist, able to work together.
		ADHD (Attention deficit hyperactivity disorder)	Passive learning	Learning spirit increases.
		Mentally disabled	Passive in learning, more silent.	Communicative, active, growing motivation.
3	PES-T1 Y	Physical disability	Daydreaming, pessimist, lack of confidence, shy	more expressive, more focused, humanist.
		Deaf	Daydreaming in class	like writing, actively asking.
		Physically disabled	Daydreaming, pessimism, lack of confidence, shy	more expressive, more focused, humanist.

Mentally disabled	Passive in learning, more silent.	Communicative, active, growing motivation.
Autism	Running in class	Sociable, humanist, able to work together.
Slow Learner	Very slow to follow the teacher's instructions	do not give up on learning, such as growing, actively asking.
Mental Retardation	Quiet, passive	Sociable, cooperative. Eager to learn.

The guidelines and steps for implementing a PjBL include planning, creating, implementing, and processing. Some steps that had been prepared by some inclusive schools PES-T1 Y (see table 2), PES-S W and PES 2 W (see table 3), are first, planning, i.e., arranging the entire projects in detail, organizing (choosing a topic, information, organizing the cooperation, and designing investigation). Second, creating, i.e., the special need students are supported to improve their project ideas. The ideas emerged even they were given the opportunity by the teacher to document their learning activities using the teacher's mobile phone. Third is implementing and processing; the students with special need were given the opportunities to present the result of a project in front of their friends. Johnson & Crawford (2015) showed the Alberta Education Pyramid which could be the reference for building student competency.

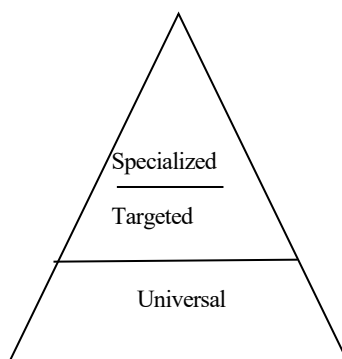


FIGURE 2. *Specialized: School psychology supporting individual students*

Furthermore, in the learning process, there were some visible behavior changes from the students with special needs besides, as described in the table above, which shows their self-efficacy. These changes based on their respective categories indicated that their nature, habits, and behavior could change if their world could be understood by teaching partners, i.e., teachers both inside and outside the classroom through their involvement in PjBL activities. This case was

in line with the explanation mentioned by Welsh (2006) that PjBL could invite the students to be more active in the learning process.



FIGURE 3. In Elementary School Negeri Sidamulya Cirebon City, West Java, the students in the slow learner student category actively participate in sports, communicative and can work together with their friends both inside and outside the classroom.



FIGURE 4. In Elementary School Negeri 2 Weru Kidul Cirebon Regency, West Java. These autistic students experience an increase in significant changes that are proven to be easy to follow the teacher's instructions and easy to socialize with their classmates.

Figures 3 and 4 showed that students with special needs could be controlled if their world can be understood by their partners, among others, the teacher, all school members, and peer group. Sekar et al. (2017) stated that the creativity of fourth-grade students of the private elementary school of Muhammadiyah Kudus could be encouraged through PjBL. Hugerat (2016) explained that self-esteem could be improved by the acceptance of people to the students with special needs because exceptional children who were accepted by people around them have a favorable view of them and feel respected.



FIGURE 5. Slow learner students in Elementary School Negeri 1 Trirenggo Bantul Yogyakarta can finish the drawing task.



FIGURE 6. Unsociable students in Elementary School Negeri 1 Trirenggo Bantul Yogyakarta are very focused in making drawings on drawing art teaching materials

Pictures 5 and 6 are evidence that students with special needs can be creative based on their guided imagination. The evidence of learning concentration ability and the results of the images and writings on the worksheet that they did was one achievement that had to be recognized that they had the feeling to become students completely. They wanted to be like other normal friends. Ulfa Nurhidayah as homeroom in class 4 PES-T1 Y and all teachers in other schools revealed that one of the benefits of PjBL was being able to support the enthusiasm for learning for students with special needs and some of them even wanted to do other normal learning tasks. Holttum (2015) stated that social competence was developed by interacting the exceptional students with normal students. Besides, Sokal & Sharma (2017) explained that real-life situations in the classroom could help. It was social interaction that teaches them to imitate strategies, solve problems, acquire life skills and reduce explosive behavior.



FIGURE 7. The inclusion room in Elementary School Negeri 1 Trirenggo Bantul Yogyakarta is the place to provide the counseling process, especially for the special needs students in a certain period.



FIGURE 8. The special needs students in Elementary School Negeri Sidamulya Cirebon City, West Java, can express themselves by joining the soccer in the schoolyard.

Figure 7 shows the specialized equipment provided by the principal of PES-T1 Y for students with special needs counseling in order to get privacy and comfort. Picture 8 showed the socialization and teamwork demonstrated by students during soccer and other sports. The equipment and facilities were very needed by the management of the inclusive school. Through PjBL and other supporting facilities, it could be stimulated the development of the efficacy of special need students, both personal and social, as student confidence. Habók & Nagy (2016) stated that confidence that grew among students with special needs made them able to interact and collaborate with their peers, and this confidence needs to be kept alive through activities they did together. Furthermore, the elements involved in improving the self-efficacy of students with special needs could be described as follows:

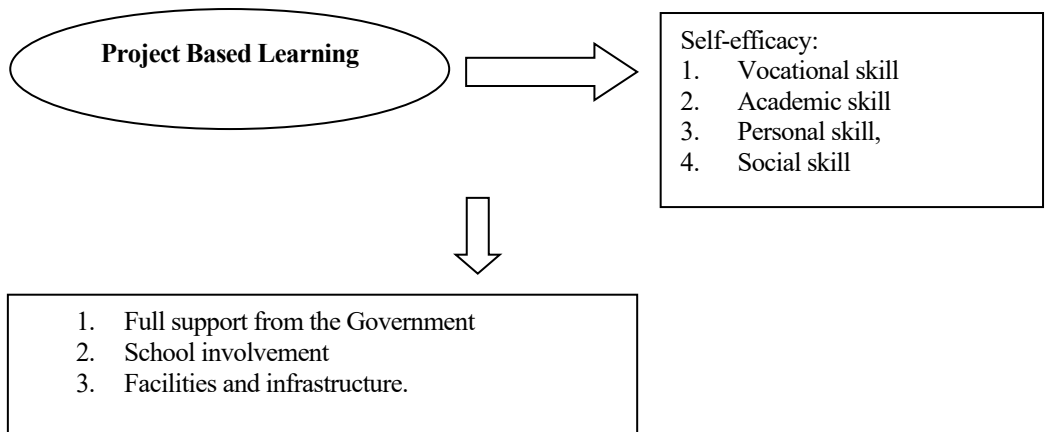


FIGURE 9. *The elements included in increasing the efficacy of students with special needs*

3.3. The Learning Product and Students' elf-Efficacy

The COVID- 19 pandemic has presented multiple challenges for teaching students with disabilities in an online instructional environment, but there are also opportunities for collaboration, training, and communication for special educators to meet the needs of their students (Smith, 2021). Keywords: About vocational skills, personal skills, social skills, and academic skills of special needs students, they only expressed in different ways. This was also acknowledged by their parents (Iswinarti & Suminar, 2019). For example, some of them become accustomed to collaborating while playing football with their friends. The interactions with friends also remained intertwined only often out of control due to various limitations. Parents expected that through studying at school, the skills of their children could be accommodated and directed. These were the educator's duties to develop it according to their respective abilities by directing the encouragement of their creative development. This is similar to research of Sokal & Sharma (2017) which explained that vocational skill could be demonstrated by arranging balls from the largest to the smallest. Personal skills were shown with confidence in the community, such as asking questions, practicing writing, daring to speak in front of friends in their class. Social skills were characterized by the ability to work with their group teams in carrying out their task learning. Besides, academic skills were shown by the ability to follow the direction and instructions of the teacher in learning activities both in the classroom and outside the classroom.

Principally, based on the picture above, it can be understood that all types of students' efficacy, such as self-confidence, can be developed through group

learning activities in a group. This is revealed by Dong, Chen, & Hernandez (2015) and Smith (2021) said that the influence of collaboration in PjBL could improve student's personal skills and may scientific skills be (Rinto et al., 2020). PjBL is implemented in the inclusive elementary school by involving the students with special needs directly in certain learning products produced based on the subjects delivered according to their abilities. The teachers only gave the instruction and accompaniment from the beginning of the learning process to the tasks collection. Due to the categorization of students with special need is different, the implementation techniques also vary. For example, were the commands with cues and showing examples of certain learning products for deaf students? Furthermore, for physically disabled students, the motivation in certain learning products produced was according to their abilities. Furthermore, for mentally disabled students, the teachers would instruct for many times because the comprehension of understanding was more feeble.

Moreover, the unsociable students had an opportunity to make learning products to suit their desires. This category – autistic students, was very aggressive, emotional and they often defied suddenly. Thus, the teachers would explain the form of the command repeatedly. This implementation was caused by autistic students experience barriers to brain development. For the slow learner students category, they were very easily bored with learning and slow to understand the lesson. Besides, the form of the order was by assisting directly to provoke the imagination of students. For students in the Down syndrome category, only the task of coloring pictures had been provided by the teacher. It aimed to encourage hand movements and verbal communication because this type of student category has a mental disability and shows a stupid face.

There were the students with mental retardation who had a below-average intellectual function, lack of adaptive social behaviors (communication, self-care), and lack of interpersonal skills and the use of community resources. For this student category, the type of command used by the teacher was making things according to their wishes but directed at ongoing learning material (Sukendar et al., 2019). Furthermore, for low vision students, the tasks were oral tasks. Based on the result of the learning evaluation in the third, fourth meeting and so on, the students with special needs had some significant changes. The students enjoyed the learning process in the class and also could create many learning products with the assistance of the teacher. Their enthusiasm for learning grew and developed rapidly. Thus, it was encouraging changes in their efficacy.

Some parents explained that their children had better changes ranging from how to interact, communicate to the psychological (Shaari et al., 2019). Lutfiah Nurahmi as homeroom teacher 5 (lima)/tutor di PES-T1 Y and several teachers in all said that the PjBL approach was considered effective because the students with special needs who had different psychological condition could be actively involved and participatory during the learning process. Habók & Nagy (2016) say

that the PjBL is very suitable for all character of student levels. The following are significant changes experienced by special needs students in each inclusive elementary school.

The results section told us that the role of the government in succeeding of learning activities in inclusive schools is to establish educational policies. The role of district education officials is to socialize and break down policy and curriculum to make it more practical so that it can be applied in schools. The role of the principal and educational staff is as an administration authority (Karim, 2016). Department of Education officials in the elementary school curriculum explained the implementation of inclusive schools because of demand from the community, especially parents who have children with special needs, wanted the public elementary schools to continue to accept their children for several reasons. In line with Williams (2017) study, as follow: a) the students with special need had equal rights with the other normal students. b) the location of SLB was too far from the domicile of the special need student, and not all villages had special schools. Moreover, the curriculum that had been implemented was the National standard curriculum for public elementary schools. However, the evaluation and assessment model for students with special need were not equalized to the normal students. In addition, in order to facilitate policy-making, the data gathered on these students are presented separately for the following three cross-national categories: students with disabilities, difficulties and disadvantages (UNESCO, 1997).

The role of the teacher in the results section showed that the teachers always involved them both in the learning process and in interactions outside of learning. The guidelines and steps for implementing a PjBL include planning, creating, implementing, and processing. Eskrootchi & Oskrochi (2010) argue that incorporating computer-simulation modelling into project-based learning may be effective but requires careful planning and implementation. Teachers, especially, need pedagogical content knowledge, which refers to knowledge about how students learn from materials infused with technology. Sokal & Sharma (2017) explained that the teacher's experiences in teaching should be implemented before, during the learning process. In addition, the evaluation of the learning process to obtain the positive behavior of the students with special needs. The teachers with a positive attitude towards the inclusion of students with special educational needs referred fewer children to special education than teachers with less positive attitudes towards inclusion (Veen et al., 2010). Pijl et al. (2008) assume that teachers have a more positive view on the relationships in the group and the number of friendships pupils with special needs have. Furthermore, about the Islamic teacher, it is explained that all students with special needs capable of following all religious activities in the school. Lee (2009) explained that the PjBL had a significant effect on student learning outcomes on the competency standards of digital engineering basics at Surabaya Vocational High School 2 because they were directly involved and able to solve their learning problems by making teaching methods. Bandura (1993) described that self-

efficacy could motivate students to get achievements. Amri & Alasmari (2021) Teachers must identify the various strategies and techniques used in online environments to achieve this goal. Though it has been proven to contribute to students' academic performance and success, self-efficacy in the digital learning context requires further investigations and deeper scrutiny, especially under the unprecedented conditions of school closures during COVID-19. Instructing learners to employ a mode of learning they do not prefer proved to be a failure. Stakeholders in the education sector should attempt to predict unprecedented circumstances and prepare learners to make adjustments.

About vocational skills, personal skills, social skills, and academic skills of special needs students, only expressed in different ways (Irmansyah et al., 2020). Dong et al. (2012) state that the complete course redesign process using the participatory approach as well as the resulted pedagogical changes in the revised CPBL model, the focus is to share the research findings on the impact of course redesign on student learning. During the implementation of the revised CPBL in the pilot course, significant improvements in student participation and project performance were observed. Veen et al. (2010) argue that depending on factors in the learning context, the special educational needs of a child may or may not be recognized. Consequently, children's special educational needs may not always be sufficiently catered for. Pijl et al. (2008) conclude that physical inclusion only is a fundamental condition, that becoming part of the group is not an automatism, and that especially pupils with special needs may need extra support in participating in the group. Eskrootchi & Oskrochi (2010) argue that students who participated in the manipulation of the experimental model of the watershed experiment and the STELLA simulation performed best on understanding the watershed concept. In turn, heightened learning self-efficacy enhances motivated learning or motivation to acquire knowledge and skills. It is presented showing how different educational practices affect self-efficacy (Schunk, 1985).

4. CONCLUSION

This study concludes that the students with special needs in the inclusive elementary school in W and Y provinces can improve the self-efficacy of special needs. It covered vocational skills, personal skills, social skills, and academic skills. It can be received through project-based learning (PjBL) supported by the government, creativities of institution manager, facilities and infrastructures and other supporters. This case can be proved by some positive changes of the students. The primary effective factor for the implementation of PjBL is the direct involvement of the students with special needs in understanding the learning problems by facilitating the outpouring of expressions and academic imagination through the creation of certain teaching products in accordance with the fantasy built and very comprehensive teacher assistance.

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