

*\*translated from Malay language original article*

## **Culturing a Positive Attitude and Creative Power of Special Education Students Through LEGO Playing**

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### **ABSTRACT**

The play strategy is one of many educational strategies that can be used both directly and indirectly. Student participation in science can foster a positive attitude among students while also improving their abilities, talents, and interests. Pupils with Special Educational Needs are frequently associated with students who have low cognitive achievement and struggle to follow higher skills. A qualitative method, namely observation and notes on the students' positive attitude while playing, was used in this study. This paper includes five special education students from SK Pulaui (Pulai National School) Integration Special Education Program as participants to identify the effectiveness of the Lego game. The arrangement of Lego block in creating any objects during the observation demonstrate the students' creative ability. Playing is an effective approach for students because it provides them with fun and joy. The construction of various structures out of Lego blocks can demonstrate the students' ability and creativity. Students can master the range of physical, emotional, linguistic, and social development gained through play.

**Keywords:** play approach, lego game, positive attitude, creativity

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### **Introduction to Best Practices**

Allowing Special Educational Needs Students (SENS) to play with Lego was initially intended to provide students with comfort and readiness to begin learning and teaching after recess hour. This is because when SENS returns to class after the break, the students appear tired and uneasy. This is because there is a significant distance between the canteen and the Special Education Classes (KPKP). This situation has no effect on students who have high functioning and no physical issues however affecting students who have low functioning skills as they tend to get tired easily after lots of movements.

Fatigue is very noticeable among SENS who have physical issues and are functionally impaired in terms of cognitive, communication, socioemotional, behavioral and psychomotor disabilities. Prior to receiving any learning and teaching activity effectively, students must be ready and stay focus before the process starts. According to Siti Nurliyana (2015) in Tuan Rahayu Tuan Lasan, Mohd Aderi Che Noh, and Mohd Isa Hamzah (2017), readiness is a process in which a student's physical, mental, and emotional aspects are integrated when performing an action. Students who are ready to learn, for example, can understand and appreciate a lesson more easily than students who are not yet ready, resulting in confusion at the end of the learning process. Clearly readiness can be understood when someone is able to follow up the teaching and learning activity. Cognitive, affective, and psychomotor readiness are all aspects of readiness (Mok Soon Sang, 2004).

Positive attitudes can be formed through socialisation and relationships between friends while playing. As a result, the writer considers making observations and taking notes in terms of recording good student behaviours. This as well can be recorded and written in the Success Form of the school's Key Performance Indicator (KPI). Teachers SK Pulai are required to achieve 1000 records of good students' behaviours, given that Lego games can foster good and positive attitudes in themselves, which can be recorded as well.

Because the majority of SENS students have cognitive weaknesses, they are frequently regarded as students who are not creative. They are said to be resistant to any kind of environment or activity changes within themselves. Lego games are appropriate because SENS can demonstrate creativity while playing by arranging lego blocks in various shapes, as well as providing physical and mental rest after recess hour. According to Evin Diswiko (2020), the various shapes and colours of lego make this game very effective in stimulating children's creativity and concentration.

The writer chose five students from different classes at the Special Education Program for Integration (PPKI), Sekolah Kebangsaan Pulai, two from the high, one from the medium, and one from the low functioning category. Lego games are permitted to be played in the first hour after recess on Mondays, Wednesdays, and Fridays. The students were chosen because the writer wants to see if there is a difference in the arrangement of Lego created by the five students while playing.

### **Justification on the Implementation of Best Practices**

One of the factors influencing SENS's acceptance in receiving the learning context is the students' readiness before the teacher starts the learning activity. Furthermore, MBPK is frequently associated with difficulties in receiving teaching and learning due to a variety of factors. Lack of interest in learning, emotional disturbances, lack of concentration, forgetfulness, and other symptoms are among them. Playing with Lego a moment before the learning process starts can help them to be in a relaxed state

and relief their tiredness. The teacher only acts as an observer and reprimands students for impolite behaviour and speech.

The selection of good behaviours in fostering positive attitude are one of the efforts to record good students' practices in the *Sistem Sahsiah Diri Murid* (SSDM) in order to meet the KPI that all teachers must achieve. Recording students' good practices throughout the playing time not only can help teachers to fill up the SSDM but also could benefit the SENS from the activity. Positive attitudes can be seen throughout the game from the students' behaviour, which is to comply with the duty schedule of taking, packing, and returning the Lego piece into containers. SENS also willingly help their friends who are in need while playing the Lego.

Lego is a popular plastic block game among children that can be arranged into any model such as cars, trains, buildings, cities, statues, airplanes, robots, and other forms of creation, according to Emmy Suciati (2020). Lego is highly recommended for SENS because it is a manipulative game that trains students' physical and mental strength to improve. Students are given the opportunity to imagine freely with Lego blocks. They are free to build whatever they want until they form something meaningful and can express it in their own language. This indirectly teaches them to create and arrange Lego blocks based on their own imagination. This SENS's construction of various shapes and things produced is very creative. This demonstrates how Lego games can help their minds develop, think, or imagine using their creativity.

### **Implementation Objectives**

The following are the goals of implementing this best practice:

1. Prepare and comfort students before returning to study after a break.
2. Encourage positive attitudes or behaviours in SENS.
3. Instill students in a positive attitude and behaviour to study after a break.

### **Implementation of Best Practices**

A qualitative approach was used to examine SENS's development of positive attitudes and creativity in creating with Lego blocks. The author used observation and notes to see the positive attitudes displayed when students were allowed to play Lego for the first time after the break, so that SENS felt comfortable, not tired, and ready to begin teaching and learning.

Table 1  
*Is A Plan for Implementing This Best Practice*

No.	Actions to Implement Good Practice	Activities
1	Before	All teachers and student management assistants were consulted.
		Set the time for execution.
		Determine which good behaviour practices must be addressed.
		Prepare, choose, and arrange Lego blocks in a suitable, safe, and portable container.
		Setting guidelines.
2	During	Observations on the implementation of good practices that can be recorded in the SSDM.
		Determine the attitude and pure values displayed.
		Students' good practices should be documented online in SSDM.
		Gather and take pictures of the Lego construction build by students as results to demonstrate the students' creativity.
3	After	Reflection

Taking photos of MBPK while playing and his creations demonstrates that MBPK with learning disabilities has creativity that can be highlighted and improved through Lego games.



SENS are playing a lego game with his friends.



Low functioning skills SENS are playing with Legos.

Several constraints were encountered during the implementation of this study. Among them are the following:

- i. the absence of the student in question
- ii. high and medium functioning students participate in co-curricular training activities.
- iii. a relatively limited access of Lego blocks for all of students.
- iv. There are school-wide activities that involve all SENS students.

## **Effectiveness from the Implementation of Best Practices**

Findings from observations:

### **i. Learning Readiness of the Student**

It is critical to be ready to learn before the teacher begins teaching. Typically, the teacher will ask the students if they are ready to learn and students are already in a relaxed physical state during this. Learning readiness is critical to ensuring that students learn from what the teacher delivers. A student who is ready to learn, for example, is more likely to appreciate and comprehend a lesson than a student who is not yet ready.

There are times when stopping the game can motivate students to participate in formal PdPC in the classroom as they acknowledge by themselves, they can continue building the Lego in the next playing session. The unfinished block construction will be saved and placed in a separate location. This situation will indirectly teach SENS to respect time and instructions, as well as how to take care of the built Lego they created.

Their emotions are soothed when they play and construct with Lego as they play happily on their own and freely construct objects using piece of Lego. Teachers and their assistants will observe the SENS playing with the Lego and they might interrupt the playing session if only the SENS tends to display negative behaviors or words. This gives the students full authority to build their own Lego structure without limitation from the teacher.

### **ii. Keeping Track of Students' Best Practice**

The writer can identify SENS' good practice during the observation of playing Lego activity. Before SENS are allowed to play the Lego, teachers will gather and indicate clear instructions to be followed by the students during the playing. The students must follow the instructions and be responsible for their words and actions during the playing session. Good behaviour displayed by the students will be recorded by the teacher in the SSDM.

Initially, the author assigns high and medium functioning skills students to retrieve the containers from the library room and they will take turns picking it up each session.

This demonstrates that the instructions were followed. When they ask permission to take the toy container in advance from the teacher or student management assistant, they demonstrate the development of a positive attitude. One of the most important aspects of Lego games is SENS working together in small groups to build or create any objects. They assist their friends by picking up, building, and stacking piece of Legos. This process at the same time will educate children to play together, encourage realistic focus, and share their own stories, all of which will indirectly promote positive behaviour and social contact among the students.

Students communicate using appropriate language when they required something from their friends throughout the game. During the Lego play, students are frequently reminded to use appropriate language. When receiving tools and ideas, students are taught to use polite language such as "Please take it," "I can help," and "Thank you." It cannot be denied that there happen to be negative behaviour and inappropriate language when communicating, however, students are immediately reprimanded so that they remember such behaviour or words are improper to be practiced.

SENS is asked to arrange and pack the Lego game when playing time for Lego is up. They assist each other in assembling and disassembling the Lego blocks that were built, and they ensure that none of Lego blocks are left behind or scattered on the floor. Then SENS assists each other in keeping the game container on the shelf from which it was taken.

Table 2  
*Shows the Number of Good Practises Identified Through Observation During the Implementation Period (May-July)*

No.	Good Student Practices Exhibited	Murid				
		1	2	3	4	5
1	Communicate politely.	12	10	22	16	7
2	Assist a friend	10	8	14	11	5
3	Requesting permission from the teacher to use the restroom	3	2	-	-	4
4	Tools and game containers should be packed.	18	14	20	18	11
	<b>Total Amount of Good Practice</b>	<b>43</b>	<b>34</b>	<b>45</b>	<b>45</b>	<b>27</b>

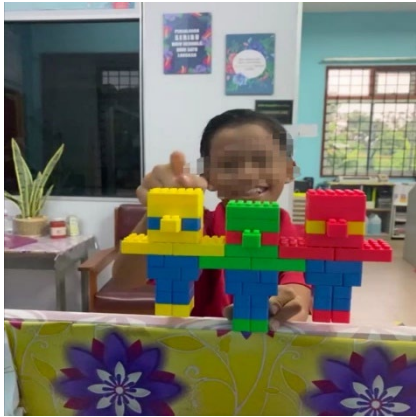

### iii. Student Ingenuity




Playing Lego activities is not only about SENS having fun; they are also part of the learning process where they can receive various stimuli while playing by observing, listening, holding, touching, and feeling, which can stimulate the brain development. Despite their many deficiencies, SENS is capable of great things as they have their own advantages and strengths. The priority of student creativity in this study refers to their ability to arrange and create Lego blocks into something meaningful. According to the author, the high functionality SENS thrived in creating more complicated design.



While medium functionality student succeeds building simpler design of Lego block and they are able to imitate the examples of design from the Lego creation book. While the low functionality SENS able to create the simplest form of Lego construction, whilst sometimes they are able to create an unexpected form, such as a camera.

Based on the image below, the Lego game demonstrates MBPK's unexpected creativity: -

No.	Picture	Creativity Statement
1		<p><b>Student No. 1</b></p> <p>Adi is a high-functioning SENS who participates in a variety of activities. He is in the highest performance class compared to other SENS. Adi is story telling with a PPKI teacher about his invention. Adi built three people out of Lego blocks: himself and his two best friends, Aniq and Afif. They're good friends all three of them. Even if they are in different classes, they must participate in any activity together.</p>
2		<p><b>Student No. 2</b></p> <p>Afif is a high functioning skill SENS. He has difficulty in mastering skills such as writing, reading and calculating. Afif is in the second-best class. Afif builds a robot because it is one of his favourite things. The decision to build a robot was made because the robot is extremely powerful and can demolish the evil.</p>

3		<p><b>Student No. 3</b></p> <p>Sara is an intellectual SENS with a medium level of functioning. Her Lego blocks were used to create the spinning wheel game. Despite the design originally from the Lego creation book, Sara was able to follow along and successfully create her spinning wheel game without any assistance.</p>
4		<p><b>Student No. 4</b></p> <p>Lina is a normal-functioning student with physical issues. Her Lego creations are tools that can be functioning well by pushing its handle as it has two wheels at the bottom.</p>
5		<p><b>Student No. 5</b></p> <p>Hanif is a low-functioning SENS with Down Syndrome. Hanif is very persevered in finishing his Lego creation. Hanif is able to demonstrate his ability to create a camera with his own. Hanif tried to be a cameraman when his Lego camera was completed.</p>

According to the author, SENS boys are more likely to turn Lego blocks into weapons. While playing with Legos, they frequently construct weapons such as rifles, pistols, machine guns, and swords. They also designed automobiles and trucks. SENS, on the other hand, prefers to make simpler and lighter objects such as telephones, hammers, boxes, and houses. From the writer's perspective, the pictures



selected to demonstrate the students' creativity is the best among all other Lego creation construct by them.

## Conclusion and Recommendations

The findings indicate that Lego games provide numerous benefits to SENS, including increased socialisation and creativity, as well as the ability to instill a more positive attitude.

Here are some suggestions for improvement:

- i. add more piece of Lego block into the collection to see SENS's creativity in creating even more creative Lego arrangements.
- ii. hold a Lego game competition to improve SENS's ability based on their level and ability.
- iii. apply Lego blocks in learning and teaching process to increase students' interest and acceptance of learning, which can imply the teachers' effort to diversify their teaching methods in more enjoyable way.

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