

Sewing Plates can be Used for Optimization of Child-Fine Motorized (the CP Large) of Brain Training

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Abstract

This research aims to help students with cerebral palsy in TKLB SLB D YPAC in southern Jakarta improve their fine motor skills. School learning model design tool effectiveness and reliability, supported by test results, ADDIE (Analysis - design - implementation - assessment) method is used to study the development model used in this study. Researchers present the data results in the form of analysis and facts based on the theories used in this research. The discussion of the presentation is based on research and evidence in the field and has been adjusted according to the theory used in this research to improve fine motor skills. Use media sewing board, South Jakarta TKLB SLB D YPAC cerebral palsy (CP) The student can understand him their illness. After extensive research and development, resulting sewing board has been shown to improve cerebral palsy (CP) fine children's fine motor skills.

Keywords

children with special needs; cerebral palsy; fine motor skills; sewing board



I. Introduction

Physical, psychological and social will love thread obstacles often occurs in children with special needs. They have unique characteristics that influence adaptation in many areas, guaranteeing them the same rights as other children. These modifications are designed to maximize their development, just like any other child. A learning environment that adapts to the needs of all children, regulates the academic ability, ability and knowledge of educators to understand children's conditions, regulates learning activities, learning facilities and infrastructure, adapts to peers and adapts to this social environment.

According to (Effendi, 2009). With special needs children divided into several categories, one of which is unable to children's physical activity (disability). Disabled persons are divided into two categories: orthopedic limb dysfunction (orthopedic disability) and neurological problems (neurological disability). These nerves can be seen in disabled children. Limb dysfunction can be divided into two categories: orthopedic limb dysfunction (orthopedic disability) and neurological deficit, while orthopedic quadriplegia refers to children with certain disabilities, disabilities and movement disorders. Especially bones, muscles and joints. Cerebral palsy (CP) is a big subject to obstruction caused in the process of brain development and growth of the nervous system.

Cerebral palsy (CP) is a Zhong God by disease, attention and the extent of educational institutions is not large (Salim, 2000). To survive, the CP (cerebral palsy) children will continue to live, and will continue to develop as much as possible, so that they can live independently. Salim (2000) believes that cerebral palsy (the CP) children still exists in him their environment, even if they are in a dominant position, still need the help of others, but they still have the potential to maximize the potential according to their ability.

Cerebral Palsy (CP) patient transport movement and posture damage, restricted movement and motor skills, as well as the difficulties affecting their learning outcomes, such as intellectual impairment, seizures, communication, behavior and daily activities limited. The occurrence of this difficulty requires efforts to improve, develop or strengthen fine motor skills, so that cerebral palsy students can directly exercise correctly in the form of motor development, so as to carry out exercises that affect cerebral palsy student.

Old masters always TKLB help course cerebral palsy (the CP) students to optimize the development of their fine motor skills and physical skills to strengthen the joints and muscles through a simple exercise to improve their physical skills. Very good observation. Less rigid and more flexible movements: 1). Strengthen muscles live action, such as physical therapy, occupational therapy, play therapy and music therapy to prevent excessive joint stiffness. 2) through basis through ball, small ball, big ball and other recreational activities, a variety of light equipment, portable sponges, light exercise, improve joint range of activities to help children with cerebral palsy stay healthy, 3). Built proposed child sit, the body should be straight, not bent over, head straight, do not bow.

Researchers' selects material sewn panels because it can provide fine motor skills, classified according to the research themes to attract the interest of students, and to allow coordination of hands, eyes and brain. Purpose of this study are: 1) Learn to optimize cerebral palsy (CP) Science spermatogenic sewing fine motor skills plate medium model, and 2) to understand for the sewing plate media optimization model fine motor skills of the student. CP (cerebral palsy) of students to optimize their fine motor skills. Suffering from cerebral palsy (cerebral palsy) Shen asked people to fine motor skills. 2). In order to improve the fine motor skills of children with cerebral palsy (cerebral palsy), it is necessary to understand the development of cardboard sewing materials. 3). TKLB SLB D YPAC from South Jakarta understands the importance of providing sewing boards for students with special needs, especially children with cerebral palsy.

II. Review of Literature

2.1 Young Children Fine Motor Skills during the Capable

a. Young Children Transport Movement Skills Can

In young children education, physical development is sometimes taken for granted (Diane Trister Dodge, 1999). It is expected that children will progress in a predictable manner at all stages and acquire predictable skills. However, in some cases, different conditions can stimulate or hinder physical development. Good health, proper nutrition and a safe environment are essential to the normal development of the body. Proper nutrition is essential for the physical and mental development of early pregnancy. During these years, babies need balanced meals and snacks that are low in fat, salt and sugar. As the child's body grows, the muscles become stronger and stronger, which is largely due to proper nutrition.

Yun moving development is defined as physical activity is closely related to brain maturation and development of the central adjustment (Ungerleider, Doyon and the Karni, 2002). In daily life, I who will use a variety of motor skills, eventually to learn these skills through practice and interaction with the environment. According to (Formiga & Linhares, 2015), op movement can be defined as all the processes occurring in the human body, including the control process is affected by physical and physiological factors affecting the (coordination) and adaptation (physical condition) factor. Psychological factors. Good exercise factor. Movement in the human body plays a support for use. Sports and transport movement is not exactly the same, but interrelated. This is because fine motor skills are movements of certain parts of the body, which only affect a small part of the body's muscles

This action does not consume energy, but requires hand-eye coordination. Fine motor skills are the result of training and learning, with an emphasis on motor maturity.

b. Cerebral Palsy (CP) Early Childhood op Movement Skills

According to (Bandi Delphie, 2010) , the body transported hyperactivity disorder is due to nerve disorders, muscle and bone problems, abnormalities caused by congenital malformations, accidents and other circumstances not caused by exercise. Body mentally disabled children learn to face obstacles and learning sports. Movement disorders, sensory problems, and poor posture can worsen your physical condition, especially in children with cerebral palsy (CP). In general, these obstacles are: 1) or find a place, 2) because the body is transported move which led to poor skills impaired movement coordination, 3) social interaction ambient pressure moving process is too large (psychological factors), usually unable to adapt, 4) can not fit should be adapt. Perform simple tasks.

In (Sense & Development, 2017) are well described in children with cerebral palsy (Cerebral Palsy) transport moving defects lead from the problem. 1). When he was when they refuse or evade fine motor skills, it is called avoidance behavior. 2). Frustrated with maintaining adequate hand-eye coordination, 3) Avoid these tasks and delegate the responsibility of fine motor to others, 4). Showcase learn spells: You can become a good public speaker, but you may find it difficult to show your skills (such as writing, painting and pasting) on paper 5). School performance and sleepy difficulties faced by children with their school work.

Every kind of types of learning activities require the use of motor skills; therefore, impaired motor skills of children with cerebral palsy or damaged ship moving development of skills, the formation or strengthening of a lot of work. The personal demand for exercise is related to motor skills, and any action performed by a child is related to exercise. Encourage cerebral palsy (CP) Teen transport moving development to be able to accurately and meaningfully exercise, it is very important.

2.2 Children - Cerebral Palsy Children (Cerebral Palsy)

According to (Klingels et Al., 2011) , cerebral palsy (CP) children will not increase self- made sports activities, exercise capacity and quality throughout the year to perform the task with both hands, it will not age-related increase in personal responsibility, so on. D. good at. Patients have unilateral cerebral palsy (cerebral palsy) of the children, especially the table now outstanding children and children with congenital anomalies, seem to be able to learn more adaptive movement patterns to improve fine motor skills.

The (Singer, Mink, Jankovic & Gilbert, 2016), cerebral palsy (CP) a Species big brain stiff. There are many causes of cerebral palsy (CP), from prenatal and perinatal events to postpartum trauma. Hypoxic-ischemic encephalopathy (HIE) is the newborn child a minor subtype encephalopathy, not even cerebral palsy (CP) Development of a factor. Brain hypoplasia, intrauterine infection, intrauterine growth retardation, premature delivery, coagulation dysfunction, prenatal hemorrhage, multiple pregnancy, pathological manifestations, neurometabolic diseases, chromosomal abnormalities, certain polymorphisms, congenital abnormalities, and many others that affect the mother the elements of. ... newborn child common cause of cerebral palsy is stroke (ischemic cardiomyopathy or synovial perinatal thrombosis) (SR).

According to (Jamaris, 2010) of the statement, cerebral palsy (CP) is the most common physical ailments. This disease is caused by static defects in the brain, and it causes paralysis and inconvenience, not a disease.

Teman (2005) believes that cerebral palsy (CP) mainly refers to cerebral palsy. It is a set of non-progressive conditions related to muscle control, posture, and mobility. CP (cerebral palsy) students face temporary problems regardless of their muscles.

Control operation moving function brain regions leads to impaired cerebral palsy (the CP), which is a state of movement and posture. This disease is caused by static defects in the brain, and it causes paralysis and inconvenience, not a disease. Due to an accident or injury, this may happen before, during, or after delivery. As a result, a person is difficult to move part or the entire body, speech and non-verbal communication of the body (facial expressions do not always convey the true feelings), involuntary muscle movements (convulsions), and vice versa. However, when food and drink, a drink and all. Drinking alcohol can inhibit excessive muscle stiffness and flexibility, muscle weakness, especially muscles involved in breathing, which can lead to more frequent shortness of breath, lack of balance and coordination, and inattention.

2.3 In the Study Using the Media Learning Process

The (Jalinus Nizwardi, 2016) of the argument, Media is medium a plural form of the word, it comes from the Latin *medius*, meaning in between, intermediate or introduction. Therefore, the media can be seen as a tool for disseminating or researching news, as well as an intermediary for transmitting messages from sender to receiver.

According to (Azwandi, 2009), "Educational Media" a regular with the word "media" or "media" a confusing term. If a tool called mass communication is used, the communication interaction will proceed smoothly and achieve the greatest effect.

According to (Chotimah, Chusnul, Fathurrohman, 2018), the media is the place where information is sent, and the source or disseminator of the information passes the information to the receiver or recipient of the information.

Media was set defined as people used to spread the message, or all forms and sources of information from the sender to the receiver, and the media is defined as the dissemination of information to the people or all forms and sources of information. Media can be used as teaching aids, teaching materials will be communicated from textbooks to students, increase Xing interest, attention, thought and feeling, so learn learning more effective, improve learning outcomes.

III. Research Methods

Open made ADDIE model design teaching methods, to build analysis used in this study - Design - Open development - implementation - evaluation of the learning model. ADDIE can develop systematic methods based on the theoretical basis of design teaching. The model is developed in a programmatic manner and contains a series of systematic actions, aiming to solve educational problems related to educational resources according to the needs and characteristics of students. ADDIE model allows promise you evaluate each stage of development activities.

The evaluation method used is not a test method. In the research and development, the researchers used the survey method and the questionnaire observation method. Use peer review to evaluate closed and open questionnaire methods and observe these methods during field trials of cerebral palsy (CP) students using sewing boards. Personal evaluations are used for peer review and field trials.

IV. Discussion

Comparison and Effectiveness of Fine Motor Skills before and after the Test for Cerebral Palsy (CP) Students

On using the four (4) a variable, i.e., the flexibility of the hand, the hand-eye coordination, accuracy and speed, and to compare the performance test before and after the splice plate to maximize the CP (the CP fine) of student's fine motor skills.

Table 1. The Average Scores are Summarized Used before and after the test Board, and a Circuit Board to Improve the Sewing CP (the CP) Student Fine Motor Skills Can

Do not	It refers to the number of	Preliminary test		Re- trial		efficient	
		method	%	method	%	method	%
A kinds of	Hand flexible movement of						
1	The boy with five stretch fingers sewing plate.	2.25	56.25	3.58	89.58	3.83	95.75
2	Children can use five fingers sewn sewing board system	2.25	56.25	3.25	81.25	3.50	87.50
	Average the number of	2.25	56.25	3.42	85.42	3.67	91.63
B.	Hand-eye coordination						
3	According to instruct the sewing work can force	2.50	62.50	3.50	87.50	3.88	96.88
fourth place	Children should be able to adjust their hand movements when sewing.	2.50	62.50	3.55	88.75	3.78	94.50
5	Can concentrate on sewing	2.75	68.75	3.63	90.75	3.50	87.50
	Average the number of	2.58	64.58	3.56	89.00	3.72	92.96
with.	accuracy						
6	May the cable be inserted into according to the description in NÄfÄhbrettloch ?	2.50	62.50	3.48	87.00	4.00	100.00
Date 7	You can use your thumb and index finger to pull the power cord out of the hole on the sewing board .	2.75	68.75	3.55	88.75	4.00	100.00
The first 8 Ti an	You can sew with your fingers until all the holes on the sewing board are covered by lace .	3.00	75.00	3.50	87.50	3.80	95.00
Nine	You can sew along the groove of the hole on the sewing board .	2.00	50.00	3.40	85.00	3.25	81.25
	Average the number of	2.56	64.06	3.48	87.06	3.76	94.06
D.	speed						
ten	Correctly insert the hole on the sewing board by hand	2.50	62.50	3.48	87.00	3.83	95.75
eleven	Can be quickly pulled out of the thread in the hole enough for hand sewing plate .	2.25	56.25	3.55	88.75	4.00	100.00
12 Ri	You can sew by hand according to the instructions .	3.00	75.00	3.55	88.75	4.00	100.00
13 Ri	We know how to generate interest in sewing work, so that it can be fully completed to	3.00	75.00	3.63	90.75	4.00	100.00

fourteen	This may indicate a desire to change the pattern of the image .	3.00	75.00	3.83	95.75	4.00	100.00
	Average the number of	2.75	68.75	3.61	90.20	3.97	99.15
	Means everything	2.54		3.52		3.78	
	Points hundreds of points ratio	63.41		87.92		94.45	

The following is a *test material before and after* the validity of the results , and optimize cerebral palsy (the CP) students fine fine motor skills -*based foundation material* :

Using splice plates after designs, each with cerebral palsy (CP) students of fine fine motor skills in the arm flexibility are improved. This shows that the flexibility of each student's hand movement is not increased when using the sewing board, but after using the sewing board design. Therefore, the design of the sewing machine board is very advantageous in terms of the flexibility of hand movement.

According to Table 1, cerebral palsy students' fine motor skills in the initial slab test average score of 2.54 (63.38%), suggesting that cerebral palsy (the CP) fine for children of relatively low fine motor skills. What kind. Make the most of the media. Sewing board. In the subsequent sewing board design test, the average growth rate parameter is 3.52 (87.94%), suggesting that cerebral palsy (CP) fine children's fine motor skills best suited to the measurement of the growth rate after sewing. From the media committee. Sewing board design by the 94.50% effective test, demonstrating its cerebral palsy (the CP) fine children's fine movement of development is very beneficial.

The following is a comparison between the pre-test using the sewing board and the final test using the sewing board design:

Table 2. Before and After the Test than

Do not	Regulation die	Preliminary test	Re- trial	efficient
1	Hand flexible movement of	After using the sewing board, children with cerebral palsy (CP) did not develop fine motor skills at all, accounting for 56.25%.	This ratio rose to 85.42% , that the use of the sewing plate CP (the CP) fine children fine motor skills improved significantly .	This number increased to 95.72% , that the use of the sewing plate CP (the CP) fine children fine motor skills improved significantly .
2	Hand-eye synchronization	64.58% refers to the standard indicates that cerebral palsy (cerebral palsy) children in the use of the sewing plate can best develop fine motor skills.	Score increased to 89.00%, described after use sewing plate CP (the CP) fine children fine motor skills improved significantly.	This number increased to 92.96% that the use of the sewing plate CP (the CP) fine children fine motor skills improved significantly.
3	accuracy	Among children	This number	Fraction number

		with cerebral palsy (CP), fine motor skills developed well after using the sewing board, accounting for 64.06%.	increased to 87.06%, described CP (sewing plate after use the CP) fine children fine motor skills significantly improved.	increased to 87.50%, that the use of the sewing plate CP (the CP) fine children fine motor skills were significantly improved.
fourth place	speed	According to media committee members would call for 68.75 percent ratio, very bright display, cerebral palsy (CP) fine children's fine motor skills has been to maximize development.	This figure rose to 89.53%, which indicates that the use sewing plate with cerebral palsy (the CP) fine children's fine motor skills have significantly improved.	Score increased to 94.06% that the use of the sewing plate CP (the CP) fine children fine motor skills improved significantly.

The following will discuss the theory used in this study can be activated from the South Jakarta TKLB SLB D YPAC students of fine motor skills, from southern Jakarta TKLB SLB D YPAC students in the media application sewing panels on-site analysis of data and facts.

V. Conclusion

The research and development of sewing paperboard materials can draw the following ideas:

1. It has been found to be helpful for the splice plate material developed can be used to improve cerebral palsy (CP) students of fine motor skills.
2. Cerebral Palsy (CP) The student may find use-sewing plate to obtain a quick guide helpful.
3. Initial test, the sum of the results of subsequent testing and performance testing results show that, for the optimization of the sewing plate cerebral palsy (CP) Student fine motor skills usefulness.
4. In Jakarta the South part of TKLB SLB D YPAC, provide cardboard sewing material to optimize cerebral palsy (CP) students of fine motor skills to be successful and the best.

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