



Book Interactive For Mentally Disabled Children Short For Increase Ability Psychomotor and Needs Sensory and Cognitive Mentally Retarded Children

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Abstract

Every human being has the same right to education, including children with intellectual disabilities. The abilities of these children can be explored and optimized through simple academic learning, such as reading, writing, and arithmetic. Therefore, children with intellectual disabilities should be provided with stimulation that can aid in their development and productivity, such as interactive books. Previous research has shown that interactive books are effective for typically developing children, and it is hoped that this learning medium can also be applied to children with intellectual disabilities. The research method used in this study is the design thinking method, with a particular focus on the empathize stage. Through a combination of observation, in-depth interviews, and questionnaires, this research aims to provide comprehensive insights into the learning needs of children with intellectual disabilities at SLB C Terate Bandung. The results of this study are expected to make a significant contribution to the development of more effective and suitable teaching methods and media for students with special needs. The findings indicate that interactive books are highly effective for the education of children with intellectual disabilities, with some adjustments needed in design and approach to meet their sensory and cognitive needs

Keywords :Increase,psychomotor abilities,sensory needs

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INTRODUCTION

In education inclusive every man own equal rights in education , including child mentally retarded . Mentally retarded children entitled get education appropriate , both formal and informal, and state facilities without discrimination . Views family that child with disability No will feel benefit education as big as child without disability .

Endang Rochyadi and Zainal Alimin (2005: 11) stated that that " mentally retarded" related close with problem development ability low intelligence and is A condition ". This is supported with statement According to Kirk (Muhammad Effendi, 2006: 88) , namely "Mental Retardation is not a disease but a condition". So based on the statement above can concluded that mentally disabled is a condition a

child whose intelligence or ability his intelligence below average and not own skills in communication social so that difficult For follow education in school normal .

According to Data Center Social Welfare of the Indonesian Ministry of Social Affairs (2007), number sufferer disabled people in Indonesia are 2,364,000 people , including sufferer mentally handicapped . Assumption SoIna (Special Olympics Indonesia) stated that amount sufferer mentally disabled is 3% of amount Indonesian residents or around 6 million soul . Condition This estimated will Keep going increase along growth population and factors others that affect amount sufferer mental disability .

Currently , the provision of protection special for children sufferer disability in institutions education Still face various challenges . Some of them is lack of adequate facilities and infrastructure , lack of training for teachers, data that has not been complete about children sufferer disabilities , especially those who do not go to school , and view family who think that child with disability No will get benefit education as big as child without disability (KemenPPPA , 2022).

Ability child mentally retarded who still can excavated and optimized namely with learning academic simple , like reading , writing and arithmetic . One of the learning media For child mentally disabled is book interactive . Book not even interactive only can applied to normal children , but child mentally retarded people also need book interactive , for example book interactive learning about the animal world , children mentally disabled can Study Miscellaneous animal start from shape , sound , color even texture from hair every animals . Therefore That should child mentally retarded are also given stimulation that can help grow supporting flower productivity . Interactive books can with easy absorbed by the child . In the book interactive child mentally disabled invited Study as well as interact practice sensory and motor children (Edwin, Hendy and Agus, 2020)

In the delivery process message , communication play a role important in give Power pull . Visual communication design has second element said , but in the context more visual elements (images) regarding target target than verbal (textual). This is due to Because through visuals, messages can delivered more faster and more make it easier the target for understand message (Ira Wirasari , 2018)

Based on study previously , book interactive proven effective For children without disability , so that expected learning media this can also applied to children mentally disabled with adjustment in accordance ability they . Learning methods child mentally disabled involving read image , repeat teacher's speech , learning while singing , and coloring and sticking origami paper or mosaic with A little teacher guidance .

Work The same between teachers and parents help child mentally disabled accept learning in accordance ability and development them . This allows potential child mentally disabled optimized through learning base like reading , writing and arithmetic , using book media interactive .

RESEARCH METHODS

Research methods used in studies This is design thinking method , with focus specifically at the empathize stage . Analyzing data is connect between formulation problem as well as framework theory with result data research (Soewardikoen , 2019). In the analysis to summarize all data that has been obtained

from results observation and interview deep . At the stage this , is done observation and interview deep as technique main For collect and analyze data.

Observation done with careful For understand context and behavior subject study in environment they . This is aiming For get more insight deep about needs , problems , and behavior user . Observation This done in a way systematic and recorded in a way Details For ensure accuracy and reliability of the data obtained .

In addition , interviews in-depth also done with the respondents . Interviews This designed For dig more in understanding , feelings , and perspectives from users . Questions in interview arranged in a way open and flexible , allowing Respondent For share view they in a way free and comprehensive .

Data collection was carried out with carefully and systematically , using various technique For ensure quality and validity of data. The data collected from observation and interview Then analyzed in a way deep . With approach this , research expected can produce rich and deep insight about needs and problems users , who then can used as base For to design innovative and relevant solutions .

Objects study This is Special School (SLB) C Terate in Bandung. Observation done at school the with observe activity daily children mentally retarded . Observation This aiming For understand behavior , needs , and challenges faced by students in context learning they .

Interview deep done with educators and parents from student mentally retarded . Interview This designed For get better understanding in about perspective and experience they in accompany the learning process children . Questions in interview arranged For dig outlook about method effective learning , challenges faced , and hopes and needs Good from educator and parents .

In addition , questionnaires were also distributed to educators and parents . The purpose of questionnaire This is For collect any additional data you can give description more comprehensive about alternative learning media that can used For support the learning process children mentally retarded . Questionnaire This designed with relevant and structured questions For get specific and useful information for study .

Through combination observation , interview in-depth , and questionnaire , research This expected can produce comprehensive insight about need learning children mentally retarded at SLB C Terate Bandung. Research results This expected can give significant contribution in development more learning methods and media effective and appropriate with need especially for students .

Additions feature interactive such as pop-up, peek-a-boo, flap, or elements that can moved need added For make learning more interesting and dynamic , with design element interactive that is not scary . The lift-a-flap type is effective develop verbal skills . Words and illustrations in books illustrated interactive help develop identity (Mohamad Dzikri Alhamdi , 2020).

RESULTS AND DISCUSSION

data collection process begins with observation participatory to activities and behavior children intellectual disabilities at elementary, middle, and high school levels at SLB C Terate Bandung. Observation done since children enter class until start learning with the teacher. Learning media used very simple , but need repetition material Because limitations thinking children . So that students

understand material , level the difficulty need customized or reduced . Children mentally disabled easy bored so that the teacher does not may force they to sit still. Learning must flexible in accordance desire them , with the teacher providing advice for them to still Want to Study .

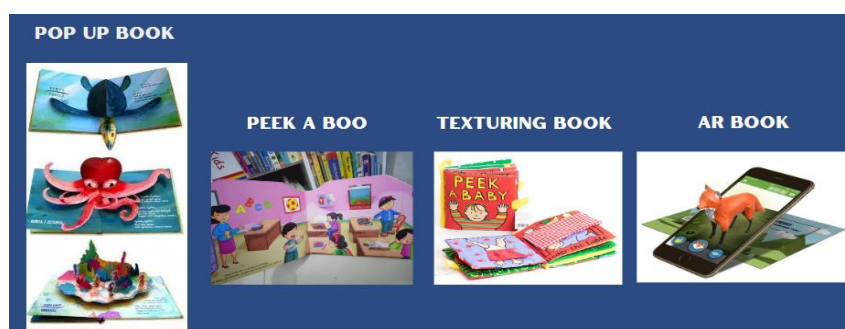
Obstacle main found is the difficulty communication between teachers and students, which slows down the learning process . Low and varying IQ levels among children become inhibitor main . Children often feel bored and playing whatever you want , so that service individual and social very required . Teachers are also facing it challenge in withhold emotion , looking for creativity new , and requires power extra in accompany children .

In the interview process structured done with teachers at SLB C Terate Bandung. Esmi Sulasmiati state that absence book special For child mentally disabled force the teacher to creative in convey material use book interactive which is usually used For normal children . According to Heni Dede Rohaeni , book interactive more effective For child disability junior high school level because they more Can understand material compared to elementary school level which is still confused , and high school level that has too understand material so that not enough interested .

Teachers take notes that child mentally disabled capable learn something with more Good through visuals, sound , and touch , so book interactive very effective . For example , children can write Name fruit when see the picture , but No Can when only hear name . Teachers also use material as is For make learning more interactive .



Literature review done For understand needs and methods effective learning for children mentally retarded . Books interactive such as Pop Up Book, touch and flap texture, and books montessori tested try on children . The material observed covers illustrations , pop ups, peek-a-boo, sound , and touch and feel. The use of book interactive help child mentally disabled understand material with more Good through visuals ad sound .



At the stage furthermore done observation participatory to children mentally retarded in all level with test book interactive For child 3 years old up . However because of ability child mentally disabled Far more slow , then tried For applied to every level to be able to know response every children . Books tested is book with various topics , such as Pop Up Book with title My Home Sea , Book interactive used with title go to school , Books interactive with title I Can alone , book montessori such as touch and flap texture. From the book that has been there is , then the material to be observed For child mentally disabled is illustrations , pop up, peek a boo, sound , touch and feel with see response , arrest material as well as child requested For repeat What only that has been delivered .

From the stage observation participants said , it was found that student with elementary school level provides response child to book interactive Enough Good with increasing interest . However , the power remember and completeness Study Still low Because many have not Can reading and emotional that is not controlled . While student with junior high school level respond very positive with enthusiasm high . Focus and capture material good , and cooperation between child increased . Some child Still shy , but capable answer and convey material with true . However matter different found in students with high school level where focus and response not enough Because material considered easy . However , the power remember and repeat material Enough good . Some child feel Afraid with pop-up characteristics in book , so that design character need changed become more pleasant .

Besides that obtained that child mentally disabled often experiencing a sensory meltdown because too Lots stimulation sensory . This causes confusion and behavior aggressive . Meltdown triggers are diverse and difficult guessed , like voice noise , unfamiliar food tastes , and bright lights . In the design book interactive also found that use color bright and warm give energy and excitement , while color soft and calm create calming atmosphere . Fonts used must simple and easy read For help learning child mentally disabled .

With Thus , the book interactive very effective For learning child mentally retarded , with a number of adjustment required in design and approach For fulfil need sensory and cognitive they .

In designing book interactive For child mentally retarded , steps First is determine concept and purpose learning that you want achieved , which must be customized with needs and capabilities children mentally retarded at elementary, middle and high school levels , based on results observation .

Selected theme must interesting and relevant for children , such as environment around , activities everyday , or familiar story , as well as easy content understood and appropriate with level cognitive they . Illustration in book must interesting , colorful bright , and clear , avoiding too much picture complicated or confusing , and must relevant with the material taught .

On audio elements such as voice animal , sound tool music , or voice narrative need added For help understanding , but must set so as not to too hard For avoid sensory overload. Use element tactile such as touch and feel or touch and flap texture are also important For give experience interactive learning .

In use the colors used must soft and calm For create a calming atmosphere , while the font chosen must simple , big and easy read , avoid fonts that are too decorative .

Additions feature interactive such as pop-up, peek-a-boo, flap, or elements that can moved need added For make learning more interesting and dynamic , with design element interactive that is not scary . Activity physique simple like sliding , opening the flap, or press buttons can also be entered For increase interaction .

Trials book interactive must performed on children mentally retarded in various level education For see response them and observe How they interact with book , catch material , and repeat information .

Based on results testing , adjustment design must done For overcome problems found , such as change design pop-up characters to make it more pleasant If There is a scared child . After all adjustment done , production book interactive in sufficient amount must done For used in schools , with ensure materials used safe , durable and easy cleaned .

Implementation book interactive This in the learning process at SLB C Terate Bandung it is necessary monitored Keep going its effectiveness . With follow steps this , book interactive designed can become tool effective and enjoyable learning for children mentally retarded , help they understand material with more Good through visuals, sound and touch .

CONCLUSION

Study about level effectiveness book interactive as a learning medium For child mentally disabled produce conclusion that although in its implementation own Lots obstacle like the difficulty communication between teachers and students also low and varying IQ levels , books interactive very effective for learning media mentally retarded . Although so , book interactive provided to child mentally disabled still must given in accordance with age and level they . Design suggestions book interactive that has exposed like use color bright and warm , also simple and easy font read can implemented in the design book interactive that will created by researchers furthermore

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