

# USE PICO CARD MEDIA TO IMPROVE EXPRESSIVE LANGUAGE SKILLS IN DEAF CHILDREN IN SKH BINA CITRA ANAK

*(Penggunaan Media Pico Card Untuk Meningkatkan Kemampuan Bahasa Ekspresif Pada Anak Tunarungu Di Skh Bina Citra Anak)*

<sup>1</sup>Desty Ariesandy

Departement of Special Education  
Sultan Ageng Tirtayasa University, UNTIRTA  
Banten, Indonesia  
destyariesandy0@gmail.com

<sup>2</sup>Siti Hidayati Nur

Departement of Special Education  
Sultan Ageng Tirtayasa University, UNTIRTA  
Banten, Indonesia  
hidaayatinur@gmail.com

<sup>3</sup>Nurbaeti

Departement of Special Education  
Sultan Ageng Tirtayasa University, UNTIRTA  
Banten, Indonesia  
Nurbaeti155@gmail.com

<sup>4</sup>Dedi Mulia, M. Pd

Departement of Special Education  
Sultan Ageng Tirtayasa University, UNTIRTA  
Banten, Indonesia  
dedi\_mulia@yahoo.com

*Abstract—This research is based on the problem of lack of deaf children's ability in an expressive language. Research aims to develop the expressive language skills of deaf children and target child behavior in expressing desire. The subject of this research is the deaf student at SKh Bina Citra Anak. The method used is Single Subject Research with A-B-A research design. The developments can be seen in phase A1, phase B and phase A2. The processed Data is presented in a simple descriptive statistical form through graphs and percentage values. The results showed a significant development on the expressive language of the research subject using Pico Card media with the evidence of the acquisition of the mean phase A1 level of 57% to 79% at the mean phase level A2. Then the use of Pico Card Media is effective in enhancing the expressive language ability of deaf children*

*Keywords—Deaf Child, Pico Card, SSR*

## 1. Introduction

Language is a major communication tool for social beings or other individual beings to express their wishes or needs, to conduct social interactions, and to self-maintain. Speaking of a person can communicate well with his or her opponents, get what he wants and carry out his survival. Languages have two traits namely receptive language and expressive language. Expressive language is a conversing ability that reveals a desire, need, thought and precludes in Word form orally. It is necessary to have good hearing to get a language so that one can communicate well in daily life. By connecting the daily experience with the symbol of hearing (the Batini language) understood in the form of receptive, then reexpressed in an expressive form. Children with hearing impairment are often referred to as deaf or impairment hearing. A person is said to be deaf when having difficulty hearing mild to severe and classified into including deafness and lack of hearing (Antonius Aris Sudana, 2013:4). Deaf children suffer from a loss of hearing that results in inability to capture stimuli in their hearing to experience total or partial hearing impairment and is difficult to understand the language when communicating Because of lack of your words. This can result in the feeling of being unfamiliar to the deaf child. Problems in the development of the language and communication of deaf children such as poverty in language, limited information, not yet able to understand other people's talks or receptive language and misinterpret can affect cognitive development, emotional development, social

development, and the personality development of deaf children. Therefore, early intervention services for the deaf child from an early age so that the child obtain a language that is not obtained naturally due to the functioning of his hearing and can understand the receptive language then the child can reveal Simple word or an expressive language continually.

Based on the results of observations that have been done there is a problem about the development of expressive language experienced by the deaf students of the 5-year-old young children in SKh Bina Citra Anak that is still less expressive, lack of understanding Deaf child in using simple syllable sentences, and lack of child motivation in understanding expressive language independently so as not to achieve the disclosure of their own wishes and needs clearly. Therefore, effective learning by using the learning media that is interesting by the teachers in the school so that it can facilitate the intervention services provided well carried out and achieve the target. SKh Bina Citra Anak is a privately-owned school that caters to various types of children with special needs in Kragilan, Serang-Banten, such as deaf children, children with intellectual impairment, children who are blind, Down syndrome, autistic, and hearing impaired. The children get an education and good service according to their abilities and needs. SKh Bina Citra Anak provides education level from childhood to elementary school. The educational service for the deaf child of the school has provided learning to understand the speech and cues performed by the teacher in order to promote the understanding of receptive

language and expressive language. However, there are still shortcomings in the learning strategy that has not been able to facilitate the understanding of deaf children.

Thus, this research refers to the context that has been established, then the focus of this research to be observed is the development of expressive language skills of deaf children using the simple picture card media that is Pico Card that can be Make it easy to acquire a language, pronounce syllables and target behaviors that can independently reveal the desire of deaf students in SKh Bina Citra Anak.

## 2. Theory Studies

### A. Expressive language skills

Expressive language included in the ability to speak according to Bromley in Dhieni (2006:1.19) stating the ability to speak is a phrase in the form of words. Some are receptive (understandable and acceptable) and expressive (expressed). Sugono in Dhieni (2006:4.4) stating that the spoken language or expressive language is the language produced using the Organ Of Speech with the phoneme as its base element. Spoken languages include pronunciation, grammar (word form and sentence order), and vocabulary. Gordon and Browne in Dhieni (2006:7.5) added that expressive language mastery is increasingly often expressing the child's desire, need, thoughts and feelings to others orally. Tarigan in Suhartono (2005:20) suggests that speaking or expressive language is the ability to pronounce the articulation sounds or words to express, declare and convey thoughts, ideas and feelings. Human beings as a social creature tend to live in groups and interact with each other. According to Zulmiyetri (2017:63) Humans are required to be able to master the language used to convey information to other human beings. Before mastering human language hear first the language spoken by others. In addition, humans mimic what he hears and pronounce back by moving the speech organs necessary to reveal the language he mastered. Besides mastering the language, children must also understand the concept of the language itself, so that the delivery of information can be done well and run smoothly.

### B. Media learning (pico card)

Media Learning in general is a tool to teach learning process. Everything that can be used to stimulate the mind, feelings, attention and skills or skill of learning so that it can be encouraged to happen learning (Yani Meimulyani & Caryoto, 2013:34). According to the Dictionary Indonesia of the second edition, 1994 quoted by Yani Meimulyani and Caryoto (2013:35) The word media comes from Latin and is the plural form of medium that literally means intermediary or message introduction from sender to message recipients. So learning media is a media that is created and used in accordance with the condition of ability and needs of children with special needs in the process of learning to achieve the purpose of teaching.

Pico Card is the media name of the picture, Word, Card that belongs to the type of visual media that relies on the senses of vision. The Pico Card Media only displays interesting images such as flash cards for deaf children and there are syllables like family pictures, dad, mother, sister, teacher the names of the objects he saw around him and the name of the body members who have two syllables. According to Aisha in Arsyad (2013:115) suggests that flashcards are small cards that contain

images, text, or symbols that remind or lead students to something related to an image, text, or symbol The. Card Media (flashcards) can be developed into card media letters, word cards, picture cards, sentence cards in which there are words. The word is the smallest element of a spoken or written language. This media is also a simple medium is easy to obtain, it is cheap, and can be easily made. According to Yani Meimulyani & Caryoto (2013:41) A visual-based learning medium (image or parable) plays a very important role in the learning process. Visual Media can facilitate understanding (e.g. elaboration of structures and organizations) and strengthening memory. Visual can also foster student interest and can provide a connection between the content of the subject matter with the real world.

### C. Deaf child

Deaf is a term that refers to the condition of a person's organ or ear. This condition causes the person to experience obstacles or limitations in responding to the surrounding sounds. (Ardhi Wijaya, 2015:1). The deaf is an individual who has obstacles in hearing both permanent and permanently. Because it has a barrier in hearing deaf individuals have a barrier in speech so they are commonly called Tunawicara (Yani Meimulyani & Caryoto, 2013:12).

The cause of hearing loss in children is usually differentiated into three based on the occurrence of hearing loss, i.e. prenatal or during pregnancy related to heredity (genetic), infection in pregnancy and influence of medicines That is consumed during pregnancy, perinatal or at the time of birth caused by the birth process using vacuum, postnatal or after birth caused by bacterial or viral infections such as rubella, morbili, otitis media, meningitis and head trauma experienced during growth. The deaf consist of several levels of hearing ability, namely specific and general.

General classification include the Deaf (deafness), which is a heavy deaf and very heavy with the rate of deafness above 90 dB. Hard of hearing (less hearing), i.e. with mild or moderate deaf persons with a rate of 20-90 dB. The special classification is a mild deaf that has a level of 25-45 dB of literacy, a moderate deaf who has a rate of 46-70 dB, a heavy deaf with a 71-90 dB of literacy, and very heavy tunarpurple that has a level of The 90 dB (Ardhi Wijaya, 2015:10-16). Deaf children need an education to optimally develop their potential. To meet these needs, education services are required tailored to their characteristics, abilities, and inability. Educational services to deaf children, including public service is a service that can be given to children to hear, while a special service is a service provided to reduce the impact of its and build sound perception and rhythm. The Learning strategy for deaf children is essentially the same as the learning strategy used in learning for the child to hear, but in doing so should be visual, meaning more utilizing the sense of vision Deaf Student (Yani Meimulyani & Caryoto, 2013:13-14).

## 3. Method

This type of research is a method of experimental research in the form of single subject research (SSR). According to Sugiyono (2016:72) Experimental research methods can be interpreted as a research method used to find the influence of certain treatments on others in controlled conditions. Single Subject Research is a study that uses single subject data. The

study uses the A-B-A design, where A1 is the baseline-1 phase or the initial ability before treatment, B as the interventional phase or initial ability given intervention and A2 as the baseline-2 phase or the initial capability that has been given intervention. A-B-A design indicates a causal relationship between binding variables and free variables. The basic procedure is not much different from the A-B design, there is only a repetition of the baseline phase. At first the target behavior is measured continuously at baseline conditions (A1) with a specific time period then in the intervention condition (B). On A-B-A design after measurements of the intervention conditions (B) The measurements at baseline conditions (A2) are given. The addition of baseline conditions (A2) is intended as a control for the intervention phase so as to make it possible to draw conclusions the existence of functional relationships between free variables and bound variables (Sunanto, Takeuchi, and Nakata, 2005:61). Thus, the variables tied in this research are the expressive language skills of the deaf child in SKh Bina Citra Anak. While the free variables in this research are Pico Card media.

This research was conducted in SKh Bina Citra Anak located at Jalan Simpang Toll Ciujung Kragilan No. 8, Kp. Kebon Kelapa Rt/Rw. 004/004, Kragilan, Kragilan District, Serang Regency, Banten province. The subject in this study was a 5-year-old young deaf child, male sex and sitting in the TKLB-level class in SKh Bina Citra Anak. The subject characteristic is an active and difficult deaf child. The subject can understand the receptive language but has not yet been able to reveal expressive words or languages. To reveal his desire the subject always uses the sign language of mother because it does not know the Indonesian signal system. Because the subject is still 5 years of emotionality still can not be controlled by himself. The subject is always running around if it is bored to follow the learning, the subject always annoys the people who are nearby, often screaming at the time of wanting something but when the subject has been given interesting objects such as Android and toys. Then the subject was still silent, the subject also could not say the word mother or father and could not understand the meaning of the word but the subject can show the same thing as the picture or given object. For that matter the subject requires intervention in the development of expressive language so that the research is felt can help the subject in expressing verbal wishes and needs independently. In order to handle the intervention goes well then it needs interesting media such as visual media or images that is Pico Card to make the subject interested in language learning.

The data collection techniques used in this study are by using research instruments that are carried out with tests and observations. The data collection activity through the test is to assess the aspect observed by the researcher through the prescribed observation sheet and the test given is subjective. According to the observation activities conducted in the field is observing or researching the behavior of the subject in its activity and the learning process takes place. The observation is non-structured observation. According to Sugiyono (2016:146) structured observation is an observation that has been systematically designed, about what will be observed, when and where the place is. So structured observation is done when researchers know exactly what variables will be observed. In conducting researchers' observations using research instruments that have proven validity and reliability.

Data analysis is the last stage before drawing conclusions. In general experimentation studies when analyzing data using descriptive statistical techniques. Therefore on research with a single case of statistical use of the complex is not done but more using simple descriptive statistics (Sunanto, Takeuchi, and Nakata, 2005:96). In this research analysis of the data used i.e. visual data analysis consists of analysis in conditions (length of condition, estimation of trend direction, level of stability, data trace, level of stability and range, level of change) and analysis of data between conditions (the number of variables changed, the trend of direction and effect, changes in the trend of stability, level change, and percentage overlap).

#### 4. Results and Discussion

##### A. Research results

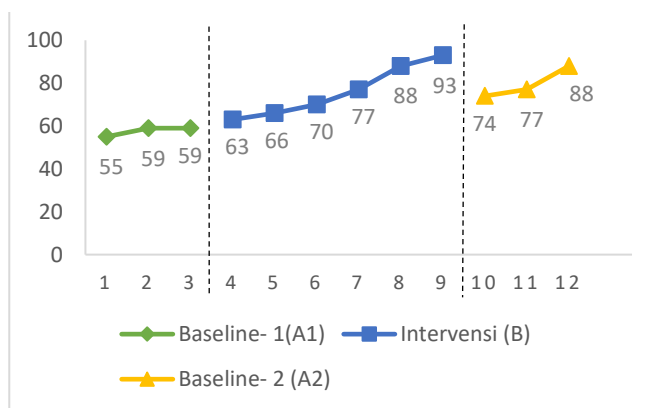
Data obtained from the research results of expressive language development using Pico Card Media in deaf children in SKh Bina Citra Anak, with data collection for 12 sessions in 3 weeks consisting of 3 baseline sessions-1 (A1), 6 session intervention (B) and 3 Baseline Session-2 (A2) is described in the table below as follows:

Table 4.1: Results of Research Data Recapitulation

Phase Baseline-1 (A1)	
Session	Score
1	55%
2	59%
3	59%
Phase Intervention (B)	
Session	Score
1	63%
2	66%
3	70%
4	77%
5	88%
6	93%
Phase Baseline- 2 (A2)	
Session	Score
1	74%
2	77%
3	88%

According to table 4.1 result of data acquisition results of expressive language development using Pico Card Media in the deaf child in SKh Bina Citra Anak can be seen in the chart as follows:

Graph 4.1 Research Result Data



The 4.1 graph describes the acquisition data of baseline-1 (A1) phase data research, the intervention phase (B), and the baseline-2 phase (A2). The Green Line in the graph explains the acquisition of baseline-1 phase data, the Blue line in the graph explains the acquisition phase of the interventional (B), and a yellow line explaining the acquisition of baseline phase-2 (A2) data.

Table 4.2 Result Data Mean Level

Mean Level Phase Baseline- 1 (A1)	Mean Level Phase Intervention (B)	Mean Level Phase Baseline- 2 (A2)
57%	76%	79%

Based on the table 4.2 above the results of the acquisition data of each phase can be explained the acquisition of the mean level percentage value in the baseline phase-1 (A1) is 57%, in the intervention phase (B) is 76% and in the baseline phase-2 (A2) is 79%.

a) Analysis in condition

The results of the analysis in the conditions can be seen in the table below:

Table 4.3: of Visual Data analysis in conditions

No.	Conditions	Baseline- 1 (A1)	Interventio n (B)	Baseline- 2 (A2)
1	Length of condition	3	6	3
2	Estimation of directional tendencies	(+)	(+)	(+)
3	Trend of stability	Stabil (100%)	Variable (50%)	Stabil (100%)
4	Estimated trace data	(+)	(+)	(+)
5	Level of stability in range	$59 \times 0,15 = 8,85$	$93 \times 0,15 = 14$	$88 \times 0,15 = 13,2$
6	Level of Change	55-59 (+4)	63-93 (+30)	74-88 (+14)

According to table 4.3 above, describe the data analysis result in the baseline phase-1 (A1) condition, interventional phase condition (B), and baseline-2 phase condition (A2).

The length of the condition performed during the observation is that in the baseline phase-1 (A1) is performed 3 sessions, in the intervention phase (B) performed 6 sessions, and in the baseline phase-2 (A) performed 3 sessions.

An estimate of the direction trend explains the change of each record from session to session. The baseline phase-1 (A1) direction line is increased because the percentage value gained increases from the first session to the third session. In the intervention phase (B) The direction line was increased because the percentage value gained increased from the first session to the last session. In the baseline phase-2 (A2) The direction line is increased because the percentage value gained increases from the first session to the last session.

Based on the outcome of the stability tendency calculation in the baseline-1 (A1) phase is 100%, the intervention phase B is 50% and the baseline-2 phase (A2) is 100%. So that in the three phases the tendency of stability data is stable.

Based on data trace lines, it can be noted that the baseline-1 (A1) phase of the data trace increases. In the intervention phase (B) The data trace increases and the baseline phase-2 (A2) of the data trace increases.

The baseline-1 (A1) phase data increases stably with a range of 8.85, in the intervention phase data (B) increases stably with a range of 13.95, and the Baseline-2 (A2) phase increases stably with a range of 13.2.

The Level of change in the baseline-1 (A1) phase shows the (+ 4) mark which means to increase, in the intervention phase (B) indicates a (+ 30) mark which means to increase, and the baseline-2 (A2) phase indicates a (+ 14) mark which means to increase.

b) Analysis of Data Between Conditions

The results of data analysis between conditions can be seen in the table below as follows:

Table 4.4: Data Analysis

No.	Comparison of Conditions	B/A1	A2/B
1	Number of variables changed	1	1
2	Directional tendencies and effects	(+) (=)	(+) (+)
3	Trend changes in stability	Variable to stable	Stable to variable
4	Level change	93-59 (+34)	88-93 (-5)
5	Overlap Percentage	$0 : 6 \times 100\% = 0\%$	$2 : 3 \times 100\% = 66,67\%$

Based on the table 4.4 above is a summary of the data analysis results between conditions can be known that in this study the number of variables that want to be changed there is 1 that increases the expressive language ability of deaf children. The directional tendency and effect between the baseline-1 (A1) phase to the intervention (B) is from stable to elevated which means the subject condition increases after intervention. Meanwhile, between the baseline-2 (A2) phase of the intervention increases to an increase which means that the intervention can significantly improve the subject's ability. The

trend change in stability between baseline-1 (A1) to Intervention (B) is variable to stable, and between baseline-2 (A2) into the intervention (B) is stable to variable.

The level changes from baseline-1 (A1) to Intervention (B) to + 34 which means that the expressive language-speaking ability of the subject is increased by a greater 34. Whereas from baseline-2 (A2) to Intervention (B) of-5, in the baseline phase-2 (A2) The data obtained is lower than the intervention phase data (B). But the baseline-2 (A2) phase data remains higher than the baseline-1 (A1) phase. It can be concluded that the effectiveness of Pico Card media usage in improving the expressive language proficiency of research subjects. The overlapping Data at baseline-1 (A1) into intervention (B) is 0% which means that intervention can improve expressive language skills significantly towards the target behavior. In other words the use of Pico Card Media is effective in enhancing the expressive language proficiency of research subjects.

## B. Discussion

### a) Subject capability before intervention is given

The baseline condition is the initial condition to determine the ability of the subject prior to intervention. Conditions before the intervention given the ability of expressive language subjects have not been able to express their wishes verbally. At the first observation stage in the aspect of the pre-speech exercises, breathing exercises and sensing the vibration of the subject are able to follow according to the given order. The first session can be obtained a percentage value of 3 aspect assessment criteria where the first session was obtained a percentage value of 55%, the second session was obtained a percentage value of 59% and the third session obtained a percentage value of 59%.

### b) Ability subject after intervention

At this stage the development of expressive language of subjects using Pico Card Media occurred a significant increase. According to Riani Rachmawati, Tati Hernawati, and Juhanaini, (2016) flash cards are very suitable for the development period of early childhood, in addition to supporting a game-based learning pattern. The use of this media also supports the development of child's self-confidence as well as forming a pleasant learning motivation. The way the intervention given by researchers for the development of expressive language is to provide Pico card media to facilitate the subject in understanding expressive language. Researchers intervene by showing the card with a blue image, then the subject gives a response by showing the exact color of the image that the researcher showed. It can make the subject understand the color and reveal the word "bi-ru" on two syllables. In giving the intervention the utility not only shows the image but also pronounces the two syllables present on the Pico Card. The subject was ordered to read the lip movement when the researcher spoke the word blue, then the subject was instructed to Follow the speech. With the use of media Pico Card the subject is not having difficulty in following the speech that is modeled by researchers.

During the study of the development of expressive language using Pico Card media for deaf children in SKh Bina Citra Anak ie the subject experienced a significant increase of baseline phase-1 (A1), Phase intervention (B) and Baseline phase-2 (A2). Learning using the learning Media is Pico Card about the development of the compressed language with the materials provided such as pre-lingual exercises, say two

different syllables, identify the names of objects around, and pronounce the word mother, The father can be understood by the subject because it is through the visual medium and utilizes a functioning sense of vision and the focus on the subject's image is able to understand and pronounce the learned word. The subject is a mild deaf child who uses hearing aids so that it can help the learning process. It is also noticeable in the value obtained by the subject during the intervention phase i.e. 63%, 66%, 70%, 77%, 88% and 93% and baseline-2 phases are 74%, 77% and 88%. Evidenced also the analysis in the baseline phase data condition-1 (A1) increases stably with a range of 8,85, in the intervention phase data (B) increases stably with a range of 13,95, and the baseline phase-2 (A2) increases stably with a range of 13,2. In an inter-state analysis the visible overlapping data at baseline-1 (A1) into the intervention (B) is 0% which means that intervention can improve expressive language skills significantly towards the target behavior. In other words the use of Pico Card Media is effective in enhancing the expressive language proficiency of research subjects.

## 5. Conclusion

Based on the results of the research and analysis of data conducted over 12 sessions, it can be concluded as follows: 1) expressive language learning for the deaf child of TKLB who has not been able to control expressive language becomes effective for students with Using the Pico card learning media; 2) Expressive language learning is done with learning media related to the daily life of the child such as introducing the names of objects that are around the ball, pencils, books, rocks and introduce various colors such as blue, red and black and introduce the names of family members such as father, mother and sister this aims to increase children's understanding of the names of objects, colors, and names of family members through expressive language.; 3) Expressive language learning for deaf children by using Pico card media affects the ability of the child to achieve the child's behavior target can reveal the word already taught so that the subject can understand how to convey His wishes through verbal. The influence of expressive language learning of deaf children has undergone a steady increase. This can be seen from the percentage value obtained in the baseline Phase 1 that is at the first session obtained a percentage value of 55%, the second session is 59% and the third session obtained a percentage value of 59%. In the phase of the intervention of learning expressive language for the deaf children experienced an increase of 63%, 66%, 70%, 77%, 88% and 93% and in the Basline Phase 2 also experienced a steady increase of 74%, 77%, 88%. The length of the condition performed during the observation is that in the baseline phase-1 (A1) was performed 3 sessions, in the intervention phase (B) performed 6 sessions, and in the baseline phase (A2) performed 3 sessions. The trend in stability in the baseline-1 (A1) phase is 100%, the intervention phase B is 50% and the baseline phase-2 (A2) is 100%. So that in the three phases the tendency of stability data is stable. The Level of change in the baseline-1 (A1) phase indicates a (+) sign that means to increase, in the intervention phase (B) indicates the (+) sign increases, and the baseline-2 (A2) phase indicates a (+) sign that means increased. The level changes from baseline-1 (A1) to Intervention (B) to + 34 which means that the expressive language-speaking ability of the subject is increased by a greater 34. Whereas from baseline-2 (A2) to Intervention (B) of-5, in the baseline phase-2 (A2) The data obtained is lower than the intervention phase data (B). But the baseline-2 (A2) phase data remains higher than the baseline-1 (A1) phase. The

overlapping Data at baseline-1 (A1) into intervention (B) is 0% which means that intervention can improve expressive language skills significantly towards the target behavior. In other words the use of Pico Card Media is effective in enhancing the expressive language proficiency of research subjects.

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