Improving Lateral Series Addition Ability for Deaf Children Through Class VI Counting Funnel Media at SLB Kemala Bhayangkari

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Abstrak

Penelitian Ini bermaksud untuk meningkatkan kemampuan penjumlahan deret kesamping untuk anak tunarungu di SLB Kemala Bhayangkari, Lintau Buo dengan memakai media Pendidikan Corong berhitung. Media Corong berhitung berperan selaku perlengkapan peraga pendidikan yang dapat digunakan serta memudahkan siswa dalam penjumlahan. Penelitian ini memakai pendekatannya yaitu kuantitatif dengan metode yang digunakan ialah Single Subject Research(SSR) serta desain A1-B-A2,Serta informasi diteliti menggunakan grafik dengan menggunakan datadalam grafik yang setelah itu didapati terkait kondisi A1-B-A2. Hasil Penelitian terkait penggunaan media corong berhitung dapat tingkatkan kemampuan penjumlahan deret kesamping pada siswa gangguan pendengaran kelas VI di SLB Kemala Bhayangkari, Lintau Buo.

Kata Kunci: *penjumlahan deret kesamping, corong berhitung, Siswa tunarungu*

Abstract

This research aim to improved the abillity to add lateral series for deaf children at SLB Kemala Bhayangkari, Lintau Buo by using the educational media Funnel Counting. The counting funnel media acts as educational demonstration equipment that can be sen and make it easie for student to add up. The research use a quntitative approaach with ekperimental method, namelly Singel Subject Research(SSR) and Design A1-B-A2, and information is analysed using visuall graph by enter data in graphs wich are then anallyzed basd on condition A1-B-A2. The result of reseach using counted funnel mediacan improve the abillity to add lateral series for deaf children in class VI at SLB Kemala Bhayangkari, Lintau Buo.

Keywords: lateral series addition, counting funnel, deaf students

Introduction

Children with special needs require special services, for their education these services are tailored to the needs and skills of individual children according to the characteristics of the child during the education process. Children with special needs are divided into several types, including deaf children. Deaf children are defined as children who have a complete or partial hearing impairment or

impairment. According to (Sulfanita & Zulmiyetri, 2018) a situation where a child/old person cannot use their hearing function when speaking, this is due to problems with hearing in mild, moderate, severe and very severe conditions. This deafness problem is caused by the lack or non-functioning of some or all of the sense of hearing so that the child is unable to use his sense of hearing optimally. Basically, deaf children have the same intelligence as normal normal children (Iswari & Zulmiyetri, 2013).

Learning mathematics is a learning that is no less important than other subjects, learning mathematics is very much needed in everyday life in solving problems, especially addition. (Apriliana et al., 2023). The abililty of deaf chilldren to understand numbers is the ability or ability of deaf children to understand numbers by using something that has various limitations. (Safaruddin et al., 2019).

Based on the resullts of a preliminari study conduct at SLB Kemala Bhayangkari in September 2023, researchers observed students in the learning process in class VI with a total of 3 female students. Researchers made observations from the first hour until the break. During class learning, the researcher saw that there was 1 student with the initials A who was not yet able to operate sideways addition of more than 10 fingers on his hand. For example, 5+3 = 8 and 4+2 = 6 in adding units the child answered correctly, then given the next question 12+6 = in adding tens the child answered incorrectly. For adding tens, children have problems because so far in learning mathematics to count children have only relied on their fingers, beyond these fingers children are unable to think.

From this problem, researchers provide a solution to improve the addition ability of deaf children, namely by using creative learning media that attracts children's interest in learning. Literally, media means intermediary or introduction. So it can be concluded that learning media are tools or media that can be used to assit the teacing and lerning process and function to clarifiy the meaning of the message conved, so that learning objectives can be achievd. Therefore, researcher want to use counting funnel media to overcome the problem of addition in children which is used as a learning medium for deaf children.

Method

The reseach approach use in this research is a quantitativ approch with ekperimental procedures. Researh using ekperimental method aims to determine whethe theres an increas in skill by provide the intervention that are tried. The ekperimental procedure in research a Single Subject Research (SSR). It is ekperimental researh which aims to observe and evaluate the treament given or interventon that have been implement. The invention providing is measur based on how much influen it has in the form of a percentage (Indra 2021).In this research, intevention was measuring using calculating funnel media to help aspect of mathematic education, namelly the addicion of side series. The research desing use is a reversall design tipe A-B-A.

For(Marlina 2021) the A-B-A design is Single Subject Reseach(SSR)research is broken down into 3 condition, namely:initial, in the initial Baseline session(A1), is the inityal condytion without any tretment or intervention at all the second namely (B)is providing treatmented or provided calculating funnel media the educational proces, and the thyd is Baseline(A2) is the condition of student without beiing give treatmend or without

provided intevention with calculated funnel media.In this research, a fimale student named pseudonym A class VI who attended SLB Kemala Bhayangkari faced difficulties in adding side series.

Result and Discussion

The research was conducted or carryed out in 17 meeting.In the baseline condition (A1) 4 meeting were held,(B)the interventyon was caried out 9 time, and (A2)baseline(A2)was caried out 4 times. Initial data (A1) was obtayned from observation of deaf student who experienced obstacles in their ability to add sideways series.In the Baseline condytion, this was done 4 time with percentages of 10%, 10%, 10%, 10% with 2 assessment aspects, namely adding and writing. Meanwhile, intervencion(B)was caried out 9 time with percentages of 20%, 30%, 40%, 60%, 70%, 80%, 90%, 90% and 90%. In the Baseline condition (A2), 4 meetings were held with percentages of 80%, 90%, 90% and 90%.

Here is a summary of the percentage in 3 Condition A1-B-A2

Graph 1 Ability to add lateral series in the deaf
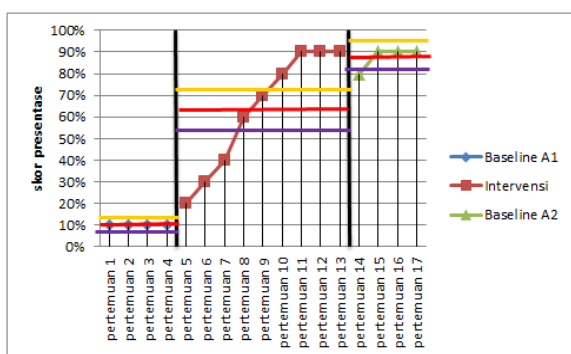
Data *Baseline* (A1) : ——
Data Intervensi (B) : ——
Data *Baseline* (A2) : ——
Mean level : ——
Upper limit : ——
Lower limit : ——

Table.1 Summary of inconditionsanalysis

No.	Condition	A1	B	A2
1.	Length of conditions	4	9	4
2.	Estimated Directional Tendency	(=)	(+)	(+)
3.	Stability Tendency	100% (stable)	22,22% (unstable)	75% (unstable)
4.	Data Footprint Trends	(=)	(+)	(+)
5.	Stability level and range	Variabel 10% - 10%	Variabel 20% - 90%	Variabel 80% - 90%
6.	Level of change	10 – 10 = 0 (=)	90 – 20= 70 (+)	90 – 80 = 10 (+)

Table 2.Summary of intercondition analysis

No.	Condition	A1/B/A2
1.	Number of changed variables	1
2.	Changes in direction trends and their effects	(=) (+) (+)
3.	Changes in stability trends	stable-unstable-stable
4.	Level of change a. Level changes to condition B/A1 b. Level changes to condition B/A2	20%-10% = 10% 90%-20% = 70%
5.	Overlape percentage a. Percentage overlape on AI with B b. Percentage overlap on A2 with B	0% 33,3%

The similarity between research results and the aim this research is to see an increased in the abiliti to add from 11 to 30 as evidenced by the researchers who tested it during 17 meetings held at school A. Throughout the research, the researchers divided it into 3, the initial phase was Baseline (A1) taking 4 meetings , the second phase is intervention 9 times and the last is the baseline phase (A2).

Reviewing this data tries to find out as Baseline (A1) in the ability to identify the numbers are good or stable at level 13. And when implementing the intervention using counting funnel media the results of the data obtained were stable between the 11th and 13th meetings with an average level of average 63.33. And after that, an analysis was carried ou in the lower condition (A2) where the data and ability to understand the sum of the side series obtained without using the counting funnel media was stable at level 87.5.

From the results of the data analysis above, it can be seen that there is an improvement in students' ability to add lateral series after using modified counting funnel media for students learning about addition. The counting funnel media contains two materials on the addition of 11-30, the first material is calculating the addition of 11-30, the second material is that students are invited to write down the addition of 11-30, the counting funnel media has an attractive appearance and various grain colors so that students are enthusiastic and find it easier to learn. learn to count additions.

Based on results of data analisis,it is believed that the counted funnel media can be used well to improve the lateral series addition ability of deaf students. This can be seen from the results of A1/B data compensation of 0% and A2/B information compensation with results of 33.3%. The consistency score of the results in this study is low, so the impact of the intervention is positive.

Conclusion

Based on the explanation,the use of counted funnel media can improve the ablity to add lateral series in deaf children at SLB Kemala Bhayangkari. To optimize learning, consistency is needed for both student and teacher during the learning process.

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