The Influence of Interactive Multimedia on The Loud Reading Skills in English Subjects for The Child with Mental Disability on 7th Grade of SLB Panca Bakti Mulia Surakarta in The Academic Year of 2018/2019

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Abstract This research aims to know the influence of interactive multimedia on the loud reading skills in english subjects for the child with mental disability on 7TH grade of SLB Panca Bakti Mulia Surakarta in the academic year of 2018/2019. This research methods uses an experimental of single subject research with A-B-A design. A-B-A design have three phases, first is baseline 1 (A1), the intervention (B), and the last is baseline 2 (A2). The subject of this research is a child with mental disability on 7TH grade of SLB Panca Bakti Mulia Surakarta in the academic year of 2018/2019. The technique of collecting data used an oral test to find out the loud reading skills of child. The technique of analysing data used descriptive statistical analysis with visual graphics. The result of this study shows the everage value of the subject's loud reading skills in the first baseline phase was 35.5 with a low category to increase in the intervention phase to 84.5 with a high category and in the second baseline phase becoming 90.9 with a high category. The result of the analysis showed an increase in the loud reading skills in each condition with fairly good stability. Based on the result, the conclusion of this research is interactive multimedia has an influence on the loud reading skills in english subjects for the child with mental disability on 7TH grade of SLB Panca Bakti Mulia Surakarta in the academic year of 2018/2019.

Keywords: interactive multimedia, the loud reading skills, the child with mental

1. Introduction

Reading skills have an important role in human life. Reading is one of four language skills (listening, speaking, reading, and writing skills) that must be learned by children in the school (Tarigan, 2008: 1). In this case, reading can be interpreted to understand the written text by reading inwardly or reciting written texts orally.

Reciting written text orally is known as reading aloud. Sukirno (2017: 6) explains that reading aloud means sounding the reading appropriately, which is in accordance with the words and intonation of senteces such as those found in conversations in everyday life. That reading skills are related to the diversity of languages, one of which is English.

English language skills in the era of globalization are needed by all students in daily life, including for the child with mental . The use of English terms in everyday life ca be found in public of places and facitilities, educational sites, tourist attractions, etc. It shows that although only a little material is taught to the child with mental , at least they can recognize and be able to read simple vocabulary. English reading skills will be very useful for the child with mental in everyday life.

The skill of reading aloud on English subjects above is not easy for the child with mental . Based on the education in Indonesia, English is one of the 7th grade subjets at the

extraordinary school. It must be studied by students, including the child with mental in accordance with core competencies and basic competencies in 2013 English Curriculum (Directorate of Special Education Development and Services Special, 2014).

Setyowati, Ambarsari, and Muthoharoh (2017: 2-3) argued that English education has a little difficult of word sounds and pronounciation to teach to children. For example, the "wall" that word means "dinding" (Indonesian language) in English is read /wɔl/. That word in Indonesian language is read /wal/ (*Cambridge Dictionary,* 2019). Based on that, the word in Indonesian language is read according to what is written on the word. Meanwhile, there are many words in English that are pronounced differently from what is written on the word. If there is a pronounciation error in English it can make meaning in a different sentence. Differences in the prononciation way of the language can cause they have a difficulty reading aloud on English subjects. Mahartika and Dewantoro (2017: 123) in their research revealed that the mild mentally retarded children still could not read fluently. In this case, the process of reading a mentally retarded child is very different from the learning process of reading the children in general (Sidiq & Fauziah, 2012: 2).

American Pyschiatric Association (2013: 33) explains that intellectual disability in the DSM-V is a disorder that occurs during a period of development that includes intellectual and adaptive function deficits in the conceptual, social, and practical domains. Meanwhile, Amin (1995: 453) explained that the problem of mentally retarded children in relation to the teaching and learning process included difficulties in capturing lessons, difficulties in learning, limited thinking ability, weak memory, low reading skills, etc. Based on that, shows that the child with mental retardatin have limitations of intellectual development below the average and deficits in adaptive functions which cause in difficulties in completing their tasks and abilities of social functions that take place during the period of development so that they require special education assistance or services.

Based on the results of interviews with a seventh grade English teacher at SLB Panca Bakti Mulia Surakarta conducted on Monday, January 14, 2019, the mentally retarded children of seventh grade in general have been able to read simple words related to objects around the class on English subjects. However, when the child is asked to read words and sentences on English subjects, the child looks still stammered and the sound intonation that is issued is still not right. The pronounciation of reading aloud for mentally retarded children in English subjects is also difficult to understand. In addition, the child is still guided by each word when asked to read aloud a number of English sentences written on the child's English notebook.

Based on these problems, it is necessary to have an effort to solve the problem of mentally retarded children on loud reading skills in English subjects. One method that can be used to improve the loud reading skills in English subjects with mental is to use interactive multimedia. Interactive multimedia learning is defined as a combination of various media and packaged in an integrated and interactive way to present learning messages (Warsita, 2008: 154). Meanwhile, Sidiq and Fauziah (2012: 8) in their research, suggested that the use of "Cerdas Belajar Baca" interactive multitedia had an effect on improving the ability to read the beginning of mild mentally retarded children. Based on this, Nurtantio and Syarif (2003: 3) explained that interactive multimedia can be used as a media to explain a learning material in which there are components of text, images, animation, and video.

Based on the problem of reading skills of mentally retarded children above, the researcher proposed a problem statement as follows: "The Effect of Interactive Multimedia on The Loud Reading Skills in English Subjects for The Child with Mental on 7TH Grade of SLB Panca Bakti Mulia Surakarta in The Academic Year of 2018/2019" . The purpose of this study was to determine the effect of interactive multimedia on the loud reading skills in English subjects for the child with mental on 7th grade of SLB Panca Bakti Mulia Surakarta in the academic year of 2018/2019.

2. Research Methodology

The research was conducted at the SLB Panca Bakti Mulia Surakarta which is located at Sumbing 6 No. 65, Mojosongo, Jebres,

Surakarta, Central Java for 5 months, starting in December 2018 until May 2019. This research uses a type of experimental approach with the design of a single subject experiment (Single Subject Research). Sukmadinata (2015: 59) explains that a single subject research is conducted on a single subject and the experimental results can be analyzed and presented based on individual subjects.

This Single Subject Research (SSR) uses the A-B-A design. The research began with baseline 1 (A1) measurements for 4 sessions until the data was stable, then intervention (B) with interactive multimedia for 6 sessions, and the final step was measurement of baseline 2 (A2) for 4 sessions. According to Darmadi (2014: 247), the implementation of this A-B-A design included measurement of data in baseline conditions that were repeated until stability was considered sufficient, administration of treatment and a number of measurements carried out during treatment, as well as re-measuring an untreated condition at the second baseline phase .

The subjects in this research were a child with mental of seventh grade at SLB Panca Bakti Mulia Surakarta. That child have a "D" initials and 13 years old. The subject shows loud reading problems in English subjects. When asked to read simple words and sentences, the subject looks halting and needs teacher guidance. Intonation issued by the subject is still not right and not smooth when reading loud material objects around the class.

The data collection techniques were carried out by tests to measure the extent to which children's reading skills were loud. The form of the test is an oral test consisting of 10 items. The oral test in question is a loud reading test of 10 items available and carried out during all three phases.

The data analysis techniques in this research used descriptive statistical analysis with visual graphics. The results of measurement data for both baseline (A1), intervention, and baseline (A2) will be described, compared and visualized in graphical form. Visual analysis of this graph includes analysis in conditions and analysis between conditions.

3. Results and Discussion

The results of this study were obtained through oral tests for three phases, namely baseline 1 (A1), intervention (B), and baseline 2 (A2). Based on the data obtained, it can be seen that the loud reading skills of a child with mental of seventh grade at SLB Panca Bakti Mulia Surakarta in the academic year 2018/2019. Below is the data recapitulation during the baseline phase 1 (A1), intervention (B), and baseline 2 (A2) presented in the following figure 1.
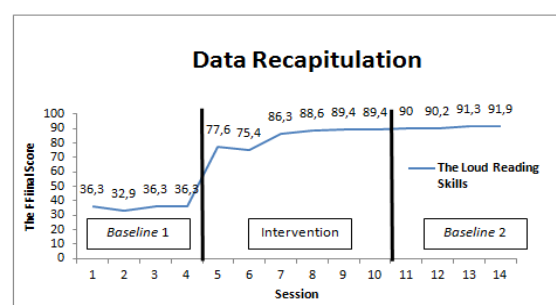

Fig 1. Data Recapitulation

Based on figure 1, the data recapitulation shows that the subject D's loud reading skills at baseline 1 (A1) looks low, starting at session 1 with a final score of 36.3, then dropping to 32.9 in session 2 until stabilizing in session 3 and 4 which is 36.3.

The loud reading skills of subject "D" on the intervention (B) session 1 to 6 shown in figure 1 looks high. The loud reading skills in session 1 intervention obtained the final value of 77.6 then decreased with the final score of 75.4 in session 2, then increased again with the final score of 86.3 in session 3, the final score of 88.6 in session 4, until it was stable in sessions 5 and 6 with a final score of 89.4. From these trends, it can be concluded that the use of interactive multimedia has an influence on loud reading skills in English subjects.

The loud reading skills of subject D at the baseline 2 (A2) sessions 1 to 4 in figure 1 also shows an increase and remains in the high category. The loud reading skills at baseline 2 (A2) session 1 obtained the final score of 90, then the final score of 90.2 in session 2, the final score of 91.3 in session 3, and the final score of 91.9 in session 4. From this tendency, it can be concluded that the use of interactive

multimedia has a positive influence and an increase in loud reading skills on English subjects between the intervention phases and after intervention.

The data obtained above is analyzed using visual graph analysis. That analysis includes analysis in conditions and analysis between condition. Below is the results of that analysis can be seen in tables 1 and 2.

Table 1. The Results of Analysis in Condition

Kondisi	A1	B	A2
Panjang Kondisi	4	6	4
Estimasi Kecenderungan Arah	— (=)	/ (+)	— (=)
Kecenderungan Stabilitas	100% (Stabil)	67% (Tidak Stabil)	100% (Stabil)
Kecenderungan Jejak Data	— (=)	/ (+)	— (=)
Level Stabilitas dan Rentang	32,9 – 36,3 (Stabil)	75 – 89,4 (Tidak Stabil)	90 – 91,9 (Stabil)
Perubahan Level	36,3 – 36,3 (=0)	76,6 – 89,4 (+12,8)	90 – 91,9 (+1,9)

Table 2. The Results of Analysis between Condition

Perbandingan Kondisi	A1/B		B/A2	
Variabel yang Diubah	1		1	
Perubahan Kecenderungan Arah dan Efeknya	— (=)	/ (+)	/ (+)	— (=)
Perubahan Kecenderungan Stabilitas	Stabil ke Tidak Stabil		Tidak Stabil ke Stabil	
Perubahan Level	36,3 – 76,6 (=40,3)		89,4 – 90 (+0,6)	
Perubahan *Overlap*	$\frac{0}{6}$ x 100% = 0%		$\frac{2}{4}$ x 100% = 50%	

The results of the analysis showed an increase in loud reading skills in each condition with fairly good stability. The results showed that the average value of the loud reading skills of the subjects in the baseline phase 1, namely 35.5 with the low category experienced an increase in the intervention phase to 84.5 in the high category and in the baseline phase 2 to 90.9 in the high category.

Based on that data analysis, it can be concluded that the use of interactive multimedia has an affects on the loud reading skills in english subjects for the child with mental on 7TH grade of SLB Panca Bakti Mulia Surakarta in the academic year of 2018/2019.

Interactive multimedia in this study contains material chapter objects around the class using concrete images media, text, interesting sounds, and added educational games in it. That is in line with the opinion of Nurtantio and Syarif (2003: 3) which explains that interactive multimedia can be used as a media to explain a learning material in which there are components of text, images, animation, and video.

The use of text, audio, and image components in interactive multimedia learning to mentally retarded children can attract attention, interest, and make it easier for children to understand the material related to loud reading skills in English subjects. This is in line with the opinion of Musfiqon (2012: 186) which suggests that students generally have more learning abilities with visual, audio, and rest kinesthetic tendencies.

Based on the research that has been done, it is known that the results of the use of interactive multimedia on mentally retarded children are also in line with Sidiq and Fauziah's research (2012: 8) which shows that the use of "Cerdas Belajar Baca" interactive multimedia learning in his study has an effect on improving the beginning read ability for the mild mentally retarded children. In this study, the use of interactive multimedia can influence loud reading skills on English subjects for mentally retarded children.

The use of interactive multimedia shows a positive influence on mentally retarded children. This is indicated by the activity of the subject during the implementation of the intervention phase, where the subject can run interactive multimedia commands independently and can carry out the activity of reading loudly material objects around the class according to the instructions they are carried out. This is in line with the statements of Novana, Sukaesih, and Prasetyo (2012: 44) in their research which suggested that physical activity in the form of operating multimedia when learning shows the interactivity of children.

According to Tapillouw and Setiawan (2008: 24), learning to use interactive multimedia technology classically does not play a role in stimulating the independence of students learning in the classroom, but can help if the program is studied independently outside the lesson hours because it can affect students' thinking in processing lessons into more

understood. In contrast to the opinions of experts above, mentally retarded children in this study can be independent in carrying out loud reading activities in a classical manner and carry out repeated instructions in interactive multimedia if they feel the reading skills are not right.

Children with mental in the implementation of this study showed that they did not feel burdened, children were very enthusiastic to do loud reading activities according to the instructions they were carrying out, children were not afraid, and always wanted to try if they had a loud reading error.

That is because the implementation of interactive multimedia learning involves children's organs, such as ears (audio), eyes (visual), and hands (kinetic). Children involve the eye and ear organs to see and hear and the hand organs to operate interactive multimedia. This is in line with Ruhaena's opinion (2015: 49) that the involvement of multisensory organs namely visual sensory (vision), auditory sensory audiotori), and kinesthetic-textile sensory (movement-touch) can improve memory and learning processes of children.

Based of discussion and results of study on the interactive multimedia, it can be said thath the use of the interactive multimedia is proven has an influence on the loud reading skills in english subjects for the child with mental on 7TH grade of SLB Panca Bakti Mulia Surakarta in the academic year of 2018/2019. It shows that the presence of several media components (text, sound, and images) involved in it can attract attention and make it easier for mentally retarded children to understand the material delivered, increase interactivity and independence of children's learning, making children feel burdened and enthusiastic read aloud activities, and can improve children's multisensory abilities. So, it can be concluded that the use of the interactive multimedia has an influence on the loud reading skills in english subjects for the child with mental on 7TH grade of SLB Panca Bakti Mulia Surakarta in the academic year of 2018/2019.

4. Conclusion

Based on the results of the study, the conclusion is interactive multimedia has an influence on the loud reading skills in english subjects for the child with mental on 7TH grade of SLB Panca Bakti Mulia Surakarta in the academic year of 2018/2019.

5. Suggestion

Based on the conclusion of the study results, the researcher gave suggestions for consideration as follows: 1) the school principals, 2) the educators, and 3) the future researchers. First, the school principals should pay attention to facilities and infrastructure in educational technology to support the smoothness and progress of learning in schools. Second, the educators are expected to be able to use interactive multimedia as a learning media for mentally retarded children in improving loud reading skills in English subjects. And the last, the future researchers can conduct research in other places and enrich new knowledge about the influence of interactive multimedia on loud reading skills in English subjects for mentally retarded children and different subjects.

References

American Pyschiatric Association. (2013), Diagnostic and Statictical Manual of Mental Disorders: DSM-5 (5th ed.), American Pyschiatric Association, Arlington, VA.

Amin, H. M. (1995), Ortopedagogik Anak Tunagrahita, Departemen Pendidikan dan Kebudayaan, Bandung.

Cambridge Dictionary. (2019), "Cambridge Dictionary", https://www.dictionary.cambridge.org, accessed at Monday, January, 21th 2019, 08.00 WIB.

Darmadi, H. (2014), Metode Penelitian Pendidikan dan Sosial, Alfabeta, Bandung.

Direktorat Pembinaan Pendidikan khusus dan Layanan Khusus. (2014), Kompetensi Inti dan Kompetensi Dasar Pendidikan Khusus Tunagrahita, Kementerian Pendidikan dan Kebudayaan, Jakarta.

Mahartika, S.A. dan Dewantoro, A.D. (2017), "Meningkatkan Kemampuan Membaca Pemahaman Anak Tunagrahita dengan

Menggunakan Metode *Reading Aloud", Jurnal Ortopedagogia*, Vol. 2, Page 123-126, Malang.

Musfiqon. (2012), Pengembangan Media dan Sumber Pembelajaran, PT Prestasi Pustakaraya, Jakarta.

Novana, T., Sukaesih, S., & Prasetyo, A. P. B. (2012), "Pengembangan Multimedia Interaktif Berbahasa Inggris Materi Vertebrata sebagai Suplemen Pembelajaran di SMA", *Jurnal Pendidikan Biologi*, Vol.1, Page 40-46, Semarang.

Nurtantio, P. & Syarif, A. M. (2003), Kreasikan Animasimu dengan Adobe Flash dalam Membuat Sistem Multimedia Interaktif, C.V ANDI OFFSET, Yogyakarta.

Ruhaena. L. (2015), "Model Multisensori: Solusi Stimulasi Literasi Anak Prasekolah", *Jurnal Psikologi,* Vol. 1, Page 47-60, Yogyakarta.

Setyowati, L., Ambarsari, Y., dan Muthoharoh, N.H. (2017), "Pelatihan Pelafalan Kata-kata Bahasa Inggris dalam Rangka Meningkatkan Kualitas Pengajaran Guru-guru Sakinah *English Course", Jurnal Pengabdian kepada Masyarakat,* Vol.1, Page 2-3, Semarang.

Sidiq, Z. dan Fauziah, P. (2012), "Penggunaan Multimedia Interaktif Cerdas Belajar Baca dalam Meningkatkan Kemampuan Membaca Permulaan pada Anak Tunagrahita Ringan", *Jurnal Asesmen dan Intervensi Anak Berkebutuhan Khusus*, Vol. 1, Page 1-9, Bandung.

Sukirno. (2017), Terampil Membaca Nyaring untuk yang Ingin Terampil Membaca Teknik Dan Membaca Indah, Pustaka Pelajar, Yogyakarta.

Sukmadinata, N. S. (2013), Metode Penelitian Pendidikan, PT Remaja Rosdakarya, Bandung.

Tapillouw, F. & Setiawan, W. (2008). "Meningkatkan Pemahaman dan Retensi Siswa Melalui Pembelajaran Berbasis Teknologi Multimedia Interaktif (Studi Empirik pada Konsep Sistem Saraf)", *Jurnal Pendidikan Teknologi Informasi dan Komunikasi,* Vol. 2, Page 19-26, Bandung.

Tarigan, H.G. (2008), Membaca Sebagai Suatu Keterampilan Berbahasa, Angkasa, Bandung.

Warsita, B. (2008), Teknologi Pembelajaran, Landasan dan Aplikasinya, Rineka Cipta, Jakarta.