

SAVI Learning Model for Students with Reading Difficulties

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Abstract—The purpose of this study was to describe the effectiveness of the SAVI learning model for students with reading difficulties. There were 7-9% of students from populations in grades 4 and 5, who had difficulty reading comprehension. Teachers also do not know of any specific learning models for students with reading difficulties. The research method used is action research. Learning SAVI (Somatic, Audio, Visual, Intellectual) is implemented using John Elliot's model [1]. The research subjects were teachers and grade 4-5 students at SD Negeri II Tomohon. The action is carried out in three cycles. The results showed that out of the 3 cycles carried out, the teacher could be systematically guided from planning, implementing and evaluating learning, able to understand and guide students in overcoming reading difficulties. Likewise students with difficulty reading, with the SAVI learning model, students can be guided in stages by empowering sensory abilities to understand the reading they are learning, and their learning outcomes increase on average 10-15% in each cycle. The classroom climate is more pleasant because students are helped by clear learning stages, and are able to build teacher and student relationships towards educative interpersonal relationships.

Keywords—SAVI learning model; students with reading difficulties

I. INTRODUCTION

Reading skills students must have in school. There are five stages of reading development, namely (1) readiness, (2) reading the beginning, (3) fast reading skills, (4) wide reading, (5) real reading. The readiness reading stage covers the time span from birth to reading lesson given, generally at the time of entering class I elementary school.

Reading skills can develop if done with a lot of practice on a regular basis. To improve reading skills among students there must be a design or learning model that is able to motivate them to review the latest findings, whether they relate to their field of study or other fields of study.

There are several models of learning that can be used to serve the education for children with learning disabilities, one of them is SAVI learning model. SAVI Learning is an acronym of Somatis, Auditory (Voice), Visual (image), and Intellectual (contemplative). According to Meier, if a learning can involve all the elements of SAVI, learning will be effective as well as attractive [2]. For the model of SAVI is most appropriate in

social studies are the basis for mastering various sciences. Reading is one of the academic skills material social problems in the local environment, because it combines four student learning. With so students can attend learning activities well, through a series of learning activities involving gestures, sense of hearing, sense vision and thinking of students in a learning process. Students can practice learning materials and direct experience so that students are easier to remember and understand the essence of the material being taught to be able to train their critical thinking skills [3].

Based on the analysis of existing problems and innovative actions that want to be done as a solutive step of the situation experienced by teachers and students in the classroom, the authors are eager to conduct a study of action on the application of SAVI learning model for children with learning disabilities.

So that emerged some basic principles that characterize action research, namely: 1) The existence of participation from researchers in an activity program; 2) There is a purpose to improve the quality of a program or activity through action; and 3) There is action (treatment) to improve the quality of a program or activity. Action research, therefore, is a reflective form of action by actors, to enhance the rational stability of their actions in carrying out the task, deepening the understanding of the actions taken, and improving where the learning practices are carried out.

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The term children with learning difficulties are quite diverse. The diversity of this term is due to the different viewpoints of experts. Group of medical experts call it with the term brain injured, and minimal brain disorder and in the field of education there is a term called educationally handicapped. But the term often used by educational experts in general is learning disabilities which is defined as "learning difficulties".

In the educational world, educational handicapped is used because these children have difficulty in following the education process so they need special education services in accordance with the type and degree of difficulty. The particular educational service in question also relates to its aid strategy or approach.

Children with learning difficulties are students who have normal or above normal intelligence but have difficulty in one or more of the aspects needed for learning. The difficulty is due to the occurrence of mild dysfunction in the central nervous system or minimal brain disfunction. According to the Federal Register, the term "specific learning disability" means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning disabilities which are primarily the result of visual, hearing, or motor handicaps, or mental retardation or emotional disturbance, or of environmental, cultural, or economic disadvantage [4]. Learning disabilities are most commonly diagnosed on the basis of a notable discrepancy between the student's academic achievement and ability to learn. In other words, the student has reasonable intelligence and adequate opportunity to learn but performs poorly for unknown reasons. Ability to learn is usually measured by intelligence quotient (IQ), and the discrepancy between ability and achievement must be substantial [5].

Therefore, some experts explain the notion of dyslexia with the same concept. Mercer defines dyslexia as a difficulty syndrome in studying the components and sentences integrating the components of words and sentences, and in learning everything about time, direction, and time [6]. Meanwhile, according to Critchley, dyslexia is defined as [7]: (a) a disorder in children although conventional learning experiences fail to attain language skills such as reading writing and spelling commensurate with intellectual ability, and or (b) a disorder manifested through difficulty in learning to read even though conventional teaching, adequate intelligence, and socio-cultural opportunities. According to Myklebust and Johnson, there are some characteristics of children with learning difficulties, which are as follows [8]: (1) experiencing shortcomings in the visual and auditory memory, shortfalls in short and long term memory; (2) have problems remembering data such as remembering the days of the week; (3) have problems in knowing the left and right direction; (4) have shortcomings in understanding time; (5) if asked to draw people are often incomplete; (6) poor in spelling; (7) difficult in interpreting globe, map, or graph; (8) lack of coordination and balance; (9) difficulty in counting; (10) difficulty in learning a foreign language.

Winkel argues that learning is a set of actions designed to support the learning process of students, taking into account external events that contribute to a series of internal events taking place within the student [9]. The setting and creation of external conditions is done in such a way that it supports the learning process of the students and does not impede it. Gagne

et al. Suggests that learning is a careful organization of events with a view to learning and making it work, learning must be sensitive to how the goals to be attributed to one another, and what learning activities are well-liked for facilitate achievement. According to Miarso learning or instructional is an effort to manage the environment deliberately so that someone to establish themselves positively certain under certain conditions [10]. This understanding implies that learning is a conscious and deliberate effort, which makes students learn, goals set before the process is executed, its implementation is controlled, its content, time, process and result. Reigeluth believes that learning should be based on learning theory which according to him is prescriptive which means that the theory of learning provides a "recipe" to overcome the problem of learning, therefore in the implementation must consider three variables namely [11]; conditions, methods, and results. In the variable of learning condition is related to the characteristics of the lesson covering the objectives, obstacles and characteristics of the students, while in the variable of learning method related to the organizing of lesson materials, delivery strategy, and management of activities, while in the learning result variable related to effectiveness, efficiency.

Learning doesn't automatically improve by having people stand up and move around. But combining physical movement with intellectual activity and the use of all the senses can have a profound effect on learning. I call this SAVI learning. The components are easy to remember. (1) Somatic: Learning by moving and doing; (2) Auditory: Learning by talking and hearing; 3. Visual: Learning by observing and picturing; and 4. Intellectual: Learning by problem solving and reflecting [2]. SAVI is a learning process that combine both physical and intellectual activities involving all senses. In SAVI approach physical movements develop mental process. This approach was pioneered by Dave Meier. It consists of: (1) Somatics, learning by moving and doing activities, (2) Auditory, learning by speaking and listening, (3) Visual, learning by observing and describing/imagining, and (4) Intellectuals, learning to solve problems and making reflection [2]. This approach combines physical movements, senses of hearing and sight, as well as intellectual activities in one learning situation. SAVI trains students to interact with their friends, informants, and environment in order to obtain a variety of information. The information collected will later be utilized as the materials used in discussions. In this case, students are placed as the center of attention in instructional process as what the constructivist paradigm explains. The students construct their knowledge based on their own experience to formulate the best solution [12].

II. METHODS

This research was carried out with action research, with the following steps:

A. *Compile Planning*

The action research plan is the plan of the researcher in explaining what, why, when, where, by whom and how the action is carried out.

B. Acting

The implementation of the action is the implementation which is the implementation or implementation of the design contents.

C. Observation (observing)

Observations are carried out by observers whose function is to document the effects of actions.

D. Reflection (reflecting)

Reflection is an activity to reiterate what has been done. This reflection activity is carried out when the implementing teacher has finished taking action. The action research site was conducted at Tomohon II State Elementary School, located in Matani II Tomohon Village, North Sulawesi Province. This action research is carried out in the second semester of the 2016-2017 school year. Research time is from February 2016 to June 2017.

The research subjects were teachers and children with learning difficulties in grade 4 and grade 5 of State Elementary School II Tomohon, the 2016-2017 school year.

III. RESEARCH RESULTS AND DISCUSSION

A. Results of quantitative 1, 2 and 3 cycle data analysis in class 4

Based on the results of the post-test, the average value of cycle 1 was 53.43 with a standard deviation of 8.64, the highest score of 63 and the lowest of 40. This value was obtained after the students followed the action with a differentiated learning model for 5 meetings. While the post test results in cycle 2 obtained an average value of 61 with a standard deviation of 5.00 the highest value was 70 and the lowest value was 56. While the results of post-test cycle 3 obtained an average value of 77.86 with standard deviation amounting to 8.15 and the highest value is 94.

Then to see how much improvement is done also by calculating the percentage and by comparing the value of the KKM. Quantitative data analysis of action research in grade 4 based on minimum graduation criteria (KKM) = 60, in cycle 1 after being given differentiated learning actions during 5 meetings, showed that out of 24 students, 22 students who received Indonesian learning outcomes met the KKM target, while the other 2 students are still below the KKM score. Then after calculating the percentage of cycle 1 obtained an increase of 42.8%. For this reason, further action is needed in the second cycle. From the intervention given in cycle 2 shows that there was an increase in the results of 24 students whose grades met the KKM increased to 23 students, after a percentage calculation, the increase reached 71.442% of this data indicating that further action is needed, then cycle 3, after being given SAVI learning for 5 meetings (all 15 meetings) showed that all students (24 students) in grade 4 got learning scores on Indonesian subjects above the KKM, the percentage increase reached 100%.

Based on the comparison of the value of learning outcomes in cycle 1, cycle 2, and cycle 3 with the KKM, it can be said

that there is a significant increase in both results and processes. Thus learning in the Indonesian Language subject with the application of the SAVI learning model is very well used, and needs to be continued.

B. Results of quantitative cycle 1, 2 and 3 data analysis in class 5

Based on the results of the post-test obtained the average value of cycle 1 is 54.8 with a standard deviation of 5.718 the highest value of 64 and the lowest value of 50. This value is obtained after students follow the action with a differentiated learning model for 5 meetings. While the post test results in cycle 2 obtained an average value of 61.4 with a standard deviation of 10.09 the highest value was 76 and the lowest value was 50. While the results of the post-test cycle 3 obtained an average value of 86.6 with standard deviation of 12.99 and the highest value is 96.

Based on the calculation of the average value on the results of Indonesian language learning in grade 5 in cycle 1, cycle 2, and cycle 3. Then it appears to increase the average value both in cycle 1, cycle 2, and cycle 3. This shows that there is improvement of Indonesian language learning outcomes for students with reading learning difficulties in grade 5 after differentiated learning is carried out.

Then to see how much improvement is done also by calculating the percentage by comparing the KKM value. Quantitative data analysis of action research in grade 3 based on minimum graduation criteria (KKM) = 60, in cycle 1 after being given differentiated learning actions for 5 meetings, showed that out of 30 students, there were 26 students who received Indonesian language learning outcomes meeting the KKM target, while the other 4 students are still below the KKM score. Then after calculating the percentage of cycle 1 obtained an increase of 20%. In cycle 2 shows an increase in the results obtained from 30 students whose grades meet the KKM increased to 28 students, after the percentage calculation, the increase reached 60%. In cycle 3, after being given SAVI learning for 5 meetings (all 15 meetings) showed that all students (30 students) in grade 5 got learning scores on Indonesian subjects above the KKM, the percentage increase reached 100%.

C. Discussion

To find out the improvement of the learning process by applying the SAVI learning model is done by comparing the learning atmosphere, learning motivation, level of learning activities, active participation and students' reading comprehension skills in each cycle, namely cycle 1, cycle 2, and cycle 3 in each class. Whereas to find out whether there is an increase in Indonesian language learning outcomes with the application of the SAVI learning model, it is done by comparing the results of test post 1, post-test 2, and post-test 3 in each cycle in each class.

From the results of data analysis in class 4, the involvement of students in the learning process by applying the SAVI learning model gives a positive contribution to improving the learning outcomes of Indonesian students in grade 4 Tomohon

Elementary School II. Student activity increases, students learn in a fun and enthusiastic atmosphere, motivation gradually increases, student interaction and participation seem to develop, and comprehension reading skills seem to increase. The group seemed to respect each other (although there were still three people who tended to be alone), seen cooperation, giving advice and opinions, with a significant increase both in terms of process and results in class 4, thus SAVI's learning model was very good to be used in language learning Indonesia in particular.

From the results of data analysis in class 5, the involvement of students in the classroom, in groups, and individually in the SAVI learning model process provides a positive contribution to improving the results of learning Indonesian Language at Tomohon Elementary School II students. A pleasant learning atmosphere is assisted with the use of teaching aids can increase student activity and motivation of students in learning Indonesian. Conductive teacher support in the SAVI learning model is also able to improve interaction, student participation, and understanding reading skills to develop well. There was also enthusiasm of students and mutual respect, respect, giving advice and input among them, especially in group activities, with a significant increase in both process aspects and results aspects, thus the application of the SAVI learning model was very good to be used in Indonesian language learning specifically and the eyes other lessons in general.

IV. CONCLUSION

Based on the action research that has been carried out, it can be concluded as follows:

- The application of the SAVI learning model can improve the learning process. The improvement of the learning process can be observed from the aspect of the learning atmosphere, motivation, learning activities, student participation and students' reading comprehension skills. These aspects have increased after the actions in cycle 1, cycle 2, and cycle 3 in each class.
- The application of the SAVI learning model can improve the Indonesian language learning outcomes of students with learning difficulties in reading in grade 4 and grade 5 of Tomohon Elementary School II. Increasing the results of Indonesian language learning can be seen from the increase in the average value of the post-test results in each cycle in each class and the improvement of Indonesian language learning outcomes by referring to the Minimum Completeness Criteria in each class. Judging from the KKM scores in each class (grade 4 values KKM = 60 and grade 5 values KKM = 60), indicates that there is an increase in each cycle. In grade 4 there was an increase in the contribution of SAVI learning to the results of Indonesian language learning in cycle 1 was 42.85%, cycle 2 became 71, 428, and in cycle 3 it reached 100%. In grade 5 the increase in SAVI learning contribution to the results of Indonesian language learning in cycle 1 was 20%, cycle 2 increased to 60%, and in cycle 3 it reached 100%.

- The SAVI Learning Model can be done in regular and special classes, namely by giving different treatments according to the conditions and characteristics of students, and looking at the child's initial abilities.
- The procedures for applying SAVI learning models in grades 4 and 5 to students with learning difficulties in reading at Tomohon Elementary School II have been successfully carried out through action research in three cycles, each of which includes; planning, action, observation and reflection. The implementation of the SAVI learning model can be carried out by not disturbing the implementation of the usual learning. Of the three classes that were given action, showed that the application of the SAVI learning model can be carried out well and smoothly.
- From the action research carried out in grades 4 and 5 of Tomohon Elementary School II shows that in the implementation of the SAVI learning model, the teacher's expertise in understanding, mastering, and skill requires the use of approaches, strategies, methods, and techniques in facilitating classroom learning.

REFERENCES

- [1] J. Elliot, *Action Research for Educational Change*, Open University Press: Milton Keynes, 1991.
- [2] D. Meier, *The Accelerated Learning Handbook: A Creative Guide to Designing and Delivering Faster, More Effective Training Programs*. New York : Mc Graw Hill Professional, 2000.
- [3] D. Iskandar, "Implementation of Model SAVI (Somatic, Auditory, Visualization, Intellectual) to Increase Critical Thinking Ability in Class IV of Social Science Learning on Social Issues in The Local Environment", *Journal of Education, Teaching and Learning*, vol. 1, March 2016, pp. 45-50.
- [4] K. A. Kavale, L. S. Spaulding, and A. P. Beam, "A time to define: Making the specific learning disability definition prescribe specific learning disability", *Learning Disability Quarterly*, vol. 32, 2009, pp. 39-48.
- [5] Termann, Donna L. (1996). *Special Education for Students with Dissabilities : Analysis and Recommendation. The Future of Children Special Education For Students With Disabilities Vol. 6 • No. 1 – Spring 1996*
- [6] D. Mercer-Cecil and R. Mercer-Ann, *Teaching Students With Learning Problems* (third ed.). Ohio USA: Merrill Publishing Company A Bell & Howell Company, 1989.
- [7] M. Critchley and E. A. Critchley, *Dyslexia Defined*. London: William Heinemann Medical Books, 1978.
- [8] M. Myklebust and J. Johnson, *Learning Dissabilities, Educational Principles and Practices*. New York: Grune and Stratton, 1967.
- [9] W. S. Winkel, *Psikologi Pengajaran*. Yogyakarta: Media Abadi, 2004.
- [10] Y. Miarso, *Menyemai Benih Teknologi Pendidikan*. Jakarta: Kencana, 2007.
- [11] C. M. Reigeluth, *Instructional – Design Theories and Models An overview of Their Current Status*. New Jersey: by Lawrence Erlbaum Associate, Inc, 1983.
- [12] E. D. Kurniawati, H. J. Waluyo, and S. Y. Slamet, "Developing a Model of Thematic Speaking Learning Materials Using SAVI Approach (Somatic, Auditory, Visual, Intellectual) in Senior High School in Sambas Regency, West Kalimantan Province, Indonesia". *Online International Interdisciplinary Research Journal, {Bi-Monthly}*, vol. 3, Sept-Oct 2013.