

Using Interactive Media Approach to Enhance the Concentration Span of Slow Learner Students

Nurul Syakira Hazwani Binti Mohd Safie

Abstract—The aim of this research is to help and to maintain the concentration span of the students who are slow learner through the use of interactive media as the main medium of teaching delivery. Data was collected using the instrument of observation, interviews, and document analysis. The responden consisted of six students of Special Education Integration Program from Sekolah Kebangsaan Semerah Saga. All the respondents are experiencing problem in maintaining their focus during the teaching and learning process. The findings showed that the use of interactive media was able to enhance in maintaining concentration span among the slow learner students, thus helping teachers to improve their teaching techniques.

Keywords---Concentration span, interactive media, slow learner students , special education

I. INTRODUCTION

PRACTICAL implementation is one of the exposure to teachers on learning and direct instruction in schools. In fact, it is also regarded as an introductory session and the beginning of training teachers in meeting the challenges of the teaching profession in the real world. It is compulsory for all Bachelor trainees (PISMP) in all of the Institute of Teacher Education (ITE) in Malaysia. It was done in three (3) phases which implemented in different schools. Through this practices, it's an opportunity for student teachers to identify problems or issues that arise in applying the theory so devotedly that they have learned during the interaction or lectures conducted.

Like other teachers, I also learned about the culture of the school through the practicum phase 1, phase 2 and phase 3 which gave me a lot of input and real experience. For example, the field of special education is my major specialization as a teacher, I had to open my eyes to the challenges and appropriate teaching methods to ensure that the learning objectives are achieved. In fact, the obvious needs of each student is unique and requires a different approach to tailored their intellectual and physical abilities. Problems or low achievement students with learning disabilities often influenced by psychological, biological and environmental factors [11].

Each student was born with the needs and capabilities of different levels. For students inert or 'slow learner', they have

some problems in terms of cognitive. For example, during their first phase of the practicum, I was given the opportunity to teach a class that consists of five students, who have inert and active attitude or slow learner. Meanwhile, during the practicum phase two for two months, I was asked to teach three students Down syndrome which has its short focus span when learning time.

A. Focus / Issue Concerns

The issue of concern or main focus of my research is related to how to resolve short concentration span among the slow learner students. A lot of negative behaviors exhibited by the students in the class based on my observation for four weeks whereas undergoing practicum phase three. Some of the behaviors that are often posed by the students were doing other work while the teacher was teaching, look out of the classroom, giving reasons such as 'go to sleep', 'do the exercises given at home', and 'going to the toilet' or body gestures showed that they are lazy by putting their head on the table and sat with their feet up on the chair. Such behaviors were not only annoying the other classmates who want to learn but decreasing their level of involvement in the activities.

The key issues that arise during teaching and learning session was the ratio of concentration span of students which showed a short period of concentration (attention deficit/short attention span). Fig. 1 and Fig. 2 represent based on the observations, it was clear that the students prefer to play with each other and it led to a short focus on the subjects. Therefore, in order to reduce and overcome this problem, I as a teacher must devise a strategy that coincided with their physical and mental capabilities.



Fig. 1 The student body posture during the teaching and learning session

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Fig. 2 Students play with each other and running during teaching and learning session

Reference [8] in her study noted that a variety of approaches in teaching and learning can be used such as teacher-centered, student-centered and materials-centered approach to overcome or reduce the problem. Selection and planning in determining the approach, methods, strategies or techniques could help the teacher to achieve the objectives of the lesson. In fact, during the process of teaching and learning, I tried to apply a variety of methods or teaching strategies such as traditional (teacher-centered), student-centered and materials-centered such as picture cards that could impact the different.

B. The objectives of the study

The objectives to be achieved in implementing this action research are:

1. The use of interactive media to enhance the focus of concentration span on the slow learner students learning during the teaching and learning session.
2. The use of interactive media is to improve the effectiveness of teacher trainee's teaching and learning process.

C. Research questions

1. To what extent is the use of interactive media to enhance the focus of concentration span on the slow learner students learning during the teaching and learning session?
2. To what extent is the use of interactive media helps the teacher trainee to improve teaching and learning process?

II. LITERATURE REVIEW

In conducting my action research, there were several theories that may be related. Some of the theories that can be applied were the constructivism theory (cognitive) and contextual. Based on the perspective of the pioneer's theory of cognitive constructivism, learning is considered an active process that involves acquiring new knowledge and modifying existing knowledge. Reference [14] in their study entitled effectiveness model of the five phases Needham in teaching literature stated that constructivism theory proved that the adjustment is to control all the functions of human development, including learning.

Next, the second theory, which can be associated with this research is the theoretical context. This theory emphasizes on the existing experience and emphasizes student learning in concrete involving 'hands-on' and 'minds-on' which emphasizes experience through their own environment.

Through the implementation of teaching and learning with interactive media in helping to enhance the concentration span of the slow learner students learning, they are given the opportunity to participate in learning directly with the media.

Reference [13] did a study titled teaching method based on children's animation among dyslexic children which may gave some idea of the effectiveness the use of methods for the special education students. In fact, it was to help the teachers to plan their teaching strategies entirely clear even to a weak student special education students. Thus, in a study conducted by [12] stated that the use of computers as teaching support materials can be effective as it has its own niche, which is not owned by other media such as picture cards.

A. Planning and implementation of the action

I used Stephen Kemmis action research model as the main reference in implementation of my action research. Ideas expressed by Kemmis also based on the implementation of the action research model by Lewin and Laidlaw. Through this model, the study was focus on the process of identifying aspects of practice for improvement, an action plan, implementing the intervention, data collection, and subsequent reflection before, during and after the action. However, Kemmis then develop a model to study it in the context of education and the use of the term 'educational action research' in order to encourage teachers to become reflective researchers on their own practice. A flow chart of the model proposed by Kemmis involving two loops as well as the study focused on four major steps that were planning ideas, taking action (intervention), making observations, and also to respond (reflection). If the first loop does not get the desired results, or not achieving the objective of the study, the four key steps will be performed again.

III. METHODOLOGY

A. Research participants

My research involves students in 7th grade class of a Special Education Program Integration (PPKI) at SK Semerah Saga. The participants were made up of six slow learner students of different educational levels of their intellectual ability. Each student has their own personality. All participants of this study are between the age of 10 to 14 years old. In addition, the six students came from middle socio-economic family background that consisting of village parents working, housewives, car promoters and public sector employees. The participants also shared the same categories of special needs student category.

B. Research Ethics

In the world of educational research, a researcher cannot escape from facing and making decisions relating to the ethics of research in education. The issues struck a researcher at all levels in research activities, starting from the beginning of the project up to the stage of sharing research findings. In fact, the issues should be discussed though the research had been completed for many years [4]. As a researcher, I should maintain the ethics of research on aspects of the language, the researchers emphasize research problems, methods of study,

data collection and analysis, and reporting aspects of the study and confidentiality.

C. Data collection techniques

Observation

Data collection methods are focused on observation (checklists, anecdotal records and field notes). In addition, the data collection methods used was the participant observation. Therefore, the observation I have done was recorded using video recording. Apart from using video recording to record data, the checklist and Fig. 3 represents the field notes were also used to help and allowed me to focus and record the desired behavior.

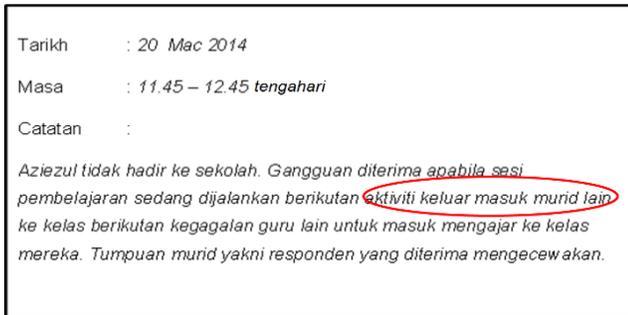


Fig. 3 The field notes were taken

Interviews

In carrying out this action research, I also use interview techniques on the study participants. I had interviewed the class teacher and subject teacher who teach the class. Interviews can be divided into three nature of structured interviews, semi-structured interview and the interview without structure [3]. In order to get the data, I have been doing interviews with six participants of my study, Adham, Shamira, Syahmi, Aziezul, Afif and Arief. Fig. 4 represents the semi-structured interviews were conducted with several teachers who have taught Grade 7 class in which six participants of were learning.

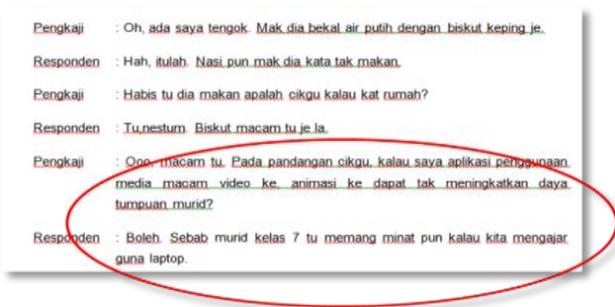


Fig. 4 A portion of the interview transcript was conducted

Document analysis

Some important documents such as diagnostic test sheets and work sheets also help my students get to know their definitely abilities stage of their initial understanding of a topic as a data support prior to the intervention is executed. The data were analyzed through the work sheet by comparing between the diagnostic test and the work sheet done. Through analyzing this test, it help me to provide myself to deal with in

addition to helping my students in planning teaching and learning activities corresponding to their stage.

D. Data analysis techniques

I used triangulation of data to confirm the findings and at the same time ensuring that there is no error in the results of this qualitative study. In fact, the triangulation is very important to be implemented to improve the validity and reliability of the findings that have been obtained. In action research, I use two (2) types of data triangulation. to validate the findings of the triangulation method to verify the various sources of data (data collection methods and triangulation performed by comparing various aspects of the data obtained from various sources and to compare the results of the study participants (Compare the difference between the six participants).

Triangulation of methods implemented by varying the method of collecting the data necessary to strengthen the study of the actions performed. Through the method of data collection was carried out through observation (questionnaires, field notes, video records), interviews and document analysis (diagnostic tests and worksheets). The data obtained is focused and answer the questions posed at the beginning of the study. The diversity of data collection methods allows the information and any findings are valid and reliable by the researcher who conducted the study.

IV. FINDINGS

A. Results of action research findings

To what extent is the use of interactive media to assist in improving student learning focus inert during learning sessions and learning to walk? The findings show that the use of interactive media can help in maintaining the concentration of students inert. Fig. 5 represents the evidenced by the findings of the data analysis obtained from various data collection instrument such as observation (anecdotal records).

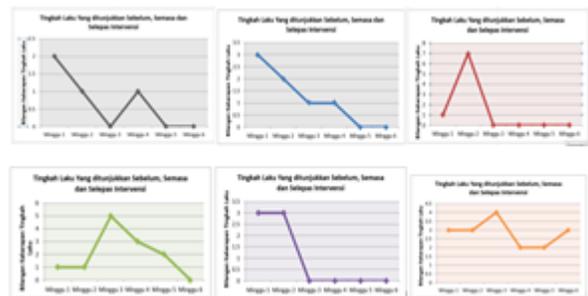


Fig. 5 The results of the data obtained from study participants through the observation (anecdotal records)

The results of the data obtained using other instruments also prove that the use of interactive media to assist in maintaining the concentration span of the slow learner students. In fact, involvement of the slow learner students during teaching and learning sessions were very active. It is proved by the analysis of implementation of data triangulation. To what extent is the use of interactive media in teaching and learning can help to improve the process of my teaching? Effective use of interactive media in helping to maintain the concentration

span of the slow learner students can be evidenced by the findings of the data. The students failed to understand the subject matter if the techniques or teaching strategies used by the teachers is not effective. The proof can be seen by the comparison between the diagnostic tests and worksheets provided by the teacher. In addition, Fig. 6 represents the effective use of interactive media is also supported by the findings of the data collected through the instrument interviews with the teachers who taught the class. Mrs. Rosnani dan Mrs. Siti Jawyah explained that the use of interactive media is interesting, and is regarded as a facilitator in the process teaching delivery.

- Saya : Pada pandangan cikgu berkaitan dengan penggunaan media interaktif dalam meningkatkan daya tumpuan belajar murid?
- Cikgu : Kaedah penggunaan media interaktif menggunakan video, muzik, animasi tu ke2. Pada saya, kaedah tu bagus dan sesuai digunakan. Lagi pun, murid-murid minat, rasa seronok kalau kita guna laptop.
- Saya : Pada pendapat cikgu, apa kekuatan penggunaan media interaktif?
- Cikgu : Pada saya, yang paling utama, minat murid la. Kita dapat kawal murid dengan baik. Penlibatan murid pun baik kerana mereka akan sama-sama tumpu kepada media yang kita perlihatkan. Jadi, gangguan atau halangan dapat diatasi. Dan aspek pemahaman pelajaran, semua murid terdengar dan pada jenis bekeperluan khas masalah, lambat. Jadi, penggunaan media interaktif sedikit sebanyak memberi pemahaman kepada murid mengenai isi pelajaran. Penulangan pun dapat dilakukan menggunakan media interaktif yang digunakan guru.
- Saya : Oo, macam tu, hüm, kalau dari aspek kelemahan penggunaan media interaktif untuk bantu, tingkatan daya tumpuan murid pada pandangan cikgu pula macam mana?
- Cikgu : Biasanya pada pandangan saya tiada kelemahan. Sebab pengajaran dilakukan dimana murid dikelompokkan di hadapan laptop. Jadi, guru dapat kawal tingkah laku yang tidak diingini dengan segera. Pemhatian guru juga adalah menyeluruh.
- Saya : Akhir sekali, pada pandangan cikgu, apakah penggunaan media interaktif dapat membantu meningkatkan daya tumpuan murid sewaktu mengikuti sesi pembelajaran dan pengajaran?
- Cikgu : Saya rasa kaedah ini berkesan. Apa yang dapat saya perhatikan, lebaran kerja yang dibekalkan guru sebelum dan selepas media interaktif digunakan. Terdapat perubahan. Murid yang sebelumnya melakukan kesalahan dalam menjawab soalan yang ditanyakan dapat melaksanakannya dengan lebih baik selepas mengikuti sesi pembelajaran dan pengajaran menggunakan media interaktif.

Fig. 6 Transcript of interview with Mrs. Rosnani, 7th grade teacher

V. DISCUSSION

To what extent is the use of interactive media to assist in improving concentration span among the slow learner students learning during learning sessions and learning? Using interactive media as the medium of instruction help the slow learner students to improve their concentration span during learning. The slow learner students can concentrate on the lessons delivered by teachers. The concentration span of the slow learner students during teaching and learning session were increasing could be seen from the observation (anecdotal records, checklists and field notes), interviews and analysis of diagnostic test and worksheets. In fact, the behavior that cause the lack of focus concentration span among the slow learner students also reduced during teaching and learning. The slow learner students also could do their worksheets accurately and correctly which support the increasing the concentration span without assistance from the teacher.

To what extent is the use of interactive media help to improve the process of my teaching and learning? Generally, interactive media was used to help the teacher to increase the concentration span among the slow learner students when implementing the teaching and learning process. With the use of interactive media, it helps to increase the student interest in learning, thus allowing them to concentrate on what the

teacher trying to say during the process of learning and teaching. The use of interactive media has also helped to improve my teaching skills especially in dealing with behavioral problems that exist among the students.

Next, using interactive media approach gave me the opportunity to expand and improve in my teaching practice as a professional, punctuality, and also concerned about the needs of a diverse student. The study by Wang Ying Bong entitled 'Towards teacher professionalism reflective practice for self improvement' noted that as teachers we must believe in change, we must know it is possible, or we would not be teaching because education is a constant process of change. Every single time you "teach" something to someone, it is ingested, something is done with it, and new human being emerges in.

Through this action research, the question that arises is related to the concentration span of the slow learner students. These problems were identified through data analysis of the findings obtained through the observation using checklist that clearly showed the negative behaviors did by the students bring to the situation does not focus in learning. In fact, the analysis of anecdotal records before the intervention also showed the main problems faced by students were related to the concentration span of students. Therefore, as a way to address or mitigate this problem, the use of interactive media approach has been selected as an intervention for a predetermined period of time.

In addition, further reading on related studies by local and foreign researchers encouraged me to choose a focus of study in accordance with the situation faced by the participants which problem in maintaining concentration span during the process of teaching and learning in the classroom. Short attention span makes the students difficult to achieve the objectives of the lesson [10]. Reference [6] found that the influence of their peers is a cause that lead to the concentration of short span among the students.

The findings of the data collected through checklist instrument also showed some behaviors driven by his peers do lead to problems such as hyperactivity attention, and going out of the classroom without permission. Students also will usually choose their peers with similar behavior, attitude and identity with them [1]. Implementation of these interventions gave an impact how students can maintain the focus of their learning and understand the content of their lessons. Fig. 7 represents the impact of the overall result of this intervention is only effective against 4 students only, while it does not impact directly on 2 other students.

This action research also produce a very positive impact on the professional practice of teachers. This is because through action research, I had the opportunity to know and learn new method that I can apply in carrying out my teaching in schools. Teachers was defined by Imam Al-Ghazali as someone who delivers a good, positive, creative or constructive things to someone who can afford it, regardless of age but had to go through a variety of means and methods without expecting any reward [5].

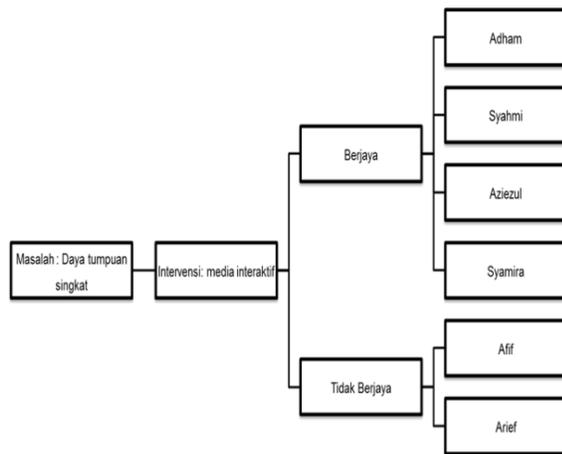


Fig. 7 Summary findings of an intervention

Implementation of action research in school helped to enhance interpersonal skills. It also allows teacher trainees to share the experience, knowledge and exchange of ideas among the teachers. In addition, the interaction that exists between the teachers and teacher trainees allowed to understand and explore more the world of special education, which is a real challenge as stated by [9], a collaboration of this kind is a proactive measure to improve the professionalism of the teachers. Such collaborations bring real benefit to the teacher trainees.

The results were significantly impacted either positively or negatively on the students who participated during the execution of this action research titled using interactive media approach to enhance the concentration span of the slow learner students. Therefore, some of the proposed actions can be performed for the second and subsequent cycles to continue the interventions conducted on other categories of students with special needs. Another proposal for the students who gave negative result of the intervention are to use a multisensory approach for the next cycle.

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