CURRENT REVIEWS OF TEACHING METHODS FOR PRIMARY SCHOOL STUDENT WITH ATTENTION DEFICIT HYPERACTIVE DISORDER: A MALAYSIAN CASE STUDY

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Abstract

Attention Deficit Hyperactive Disorder known as ADHD has been classified as a learning challenging condition which led to special needs specification in education. Children with ADHD often are inattentive, impulsive, and combination of impulsive and inattentive when in the classrooms. Malaysian education system has been focusing on early intervention for addressing the needs of the children with ADHD. The strategy also includes the integration between special education with the national school curriculum where the students with ADHD are grouped together with the other students. However it was found that they just share the same facilities but the teaching methods used are different. Beyond the national schools system there are also private schools which provide special education for students with ADHD. This study identifies the teaching methods applied in the primary schools, both private and public. The paper observes the teaching methods used and highlights the mismatch between teacher experiences, lesson contents and learning environment of each methods. The benefits and challenges will also be discussed. The paper concludes by proposing an alternative teaching strategy designed for students with ADHD.

Keywords: Attention Deficit Hyperactive Disorder (ADHD), Teachers’ Experiences, Teaching Methods.

1 INTRODUCTION

According to the national education in Malaysia, the roadmap of transformation in learning and teaching has been started since the 'Vision 2020' had been announced by the government (MOE, 2010). The transformation started when one of key element of the Multimedia Super Corridor (MSC) called Smart School flagship application had put into practice in year 1997. The Smart School flagship objective as follows:

“The Smart School is a learning institution that had been reinvented in term of teaching and learning methods and school administration system in order to prepare the students for the information-based-society. Creativity and better management of information is facilitated through the use of technology where students, teachers, administrators and parents are better prepared for the challenges of the information age” (MOE, 2010, p. 8)

This has led to the revised of the new policy for the special education when the government had decided to identify four keys component to support the national transformation as follows (MOE, 2010):

- ICT tools and devices such as screen readers and ‘embosses’ will be part of the ICT infrastructure provided to schools for the students with special needs.
- Teachers in schools for students with special needs will be trained and sensitized to issues specially-related to the use of ICT in teaching students with special needs.
- All teachers’ in schools for students with special needs will be provided with ICT-enabled methods during their professional development.
- Web-based digital repositories should be deployed to address the lack of availability of resources for students with special needs.

When the policies had been announcement, the government plan to revise teaching method which might be suite for the special needs learners. Therefore, the intention of the study which focus to identify the alternative teaching method which suitable and support to the special needs learners especially to the ADHD students by reviewing the current teaching methods in the both private and
public schools. The study will give the alternative way to cooperate with the integration between ICT and national curriculum that help to improve learning for the special needs learner. The unique of final outcome of the study, it will customize teaching methods using the ICT as mediated tools to support understanding and motivation of student who have ADHD.

Fundamentally, Attention Deficit Hyperactive Disorder was known as ADHD has been classified as a learning challenging condition which led to special needs specification in education. Children with ADHD often are inattentive, impulsive, and combination of impulsive and inattentive when in the classrooms. Malaysian education system has been focusing on early intervention for addressing the needs of the children with ADHD. The strategy also includes the integration between special education with the national school curriculum where the students with ADHD are grouped together with the other students. However, it was found that they just share the same facilities but the teaching methods used are different. Beyond the national schools system there are also private schools which provide special education for students with ADHD.

According to Kiwanis Disability Information and Support Centre (KDISC), they had classified the type of ADHD symptoms as three types (KDISC, 2010):

- inattentive type: the person cannot focus or stay focused on a task or activity;
- hyperactive-impulsive type: the person is very active and often acts without thinking; and
- Combined type: the person is inattentive, impulsive, and too active.

From these types of ADHD, the content and also the teaching method must have the elements that encourage their engagement to learning by innovate the teaching method. According to the numbers of children who had this symptom, people might think that was not the major issues. However, DISC (2010) had reported that 5 out of 100 newborn infants may have ADHD symptoms. Although, person who had this symptom might become minority population, these people can also contribute for the country in the future. Therefore, the researcher had done some innovation to improve learning environment. Previous researchers have come up with alternative approaches to maintain their attention and engage them in the learning process (Belawati, n.d.; Chan, 2002; Woo & Teoh, 2007). White (2003) had suggested the used of edutainment application that help the student to gain their attention on learning while they having fun. However, there are limited study on special education especially ADHD students (Yusof, Daniel, Abdullah, & Aziz, 2010).

1.1 Purpose of Study

The purpose of study to identify the teaching methods applied in the primary schools, both private and public. The paper observes the teaching methods used and highlights the mismatch between teacher experiences, lesson contents and learning environment of each methods. The benefits and challenges will also be discussed.

1.2 Significance of the Study

The study will discussed the connection between the public school and the private school on teaching environment which related to the special needs students with ADHD. The similarity and differences will showed the pattern in current scenario in the Malaysia learning environment based on selected schools involved in this case study. The alternative teaching strategy will propose to support and improving the ADHD students to learn it. Moreover, the alternative technique strategies will help as a guideline to the students, teachers, school management, and nation by using the ICT and suitable learning approach. Although, the alternative approach just a preliminary and it consider pilot, but they have been tested for the normal student in the school. According to Yusof & Song (2010), overall finding for the study have support a positive result on the blended learning environment classroom and the animation project created by a student will give the benefit impact to improve their motivation and engagement. Therefore, this future alternative teaching method wills incorporation with the technology as the mediate tools to support student learning (Belawati, n.d.; Chan, 2002; Choo, 1994; Hwa & Norhayati, 2009; Kotwal, Burns, & Montgomery, 1996; Ngah & Masood, 2006; Traynor, 2003).
2 METHODOLOGY

2.1 Sampling
The purposive sampling had been conducted by selecting two schools in Malaysia included the private schools and public schools which handle students who have ADHD symptoms. For this case study, there is one public school and one private school had been selected for this study. The study will focus on the techniques that had been applied in their school by interviewing their teachers and special education coordinator. The data collection will focused on the current teaching method that had been used from these two difference organizations. In the end, the conceptual model on this study will map it and visualized it into the diagram.

2.2 Instrument
The study has started by identify the selected schools by getting the permission from them. After that, the observation can be made spontaneously during a teacher conducting their teaching in class. The interview had been conducted in selected school by using the purposive sampling based on the selected type of private and public school in Malaysia. The interview questions will focus on the teacher experiences, the teaching method had been used, content and other resources. Continuously, the observation will conducted spontaneously on teacher in class. As a result, the process of learning environment and teaching approaches can be identifying in class.

3 FINDINGS AND DISCUSSION
The study had defined the relationships between the private and public school based on the teacher experience handle the special needs students, the process of teaching learning experiences, content and other resources which support the learning. According to the finding on the interview with the teacher on their perception, the main conceptual model had been developed and it had been mapped into it to define the relationship of these elements.

3.1 Conceptual Model
According the finding based on the observation and interviewing the teachers in two difference types of school, the conceptual model was defined to identify the connection of these elements. Moreover, the relationship can be visualized the flow of process teaching method that implement to the two difference types of school management. In the national public school, the special needs learner will have the diagnosis within a week before they will separate it into the academic class which based on their performance. The performance had been measured from observation by teachers, sitting for the standard test by improvement’s class (Permulihan). According to special education’s coordinator, the main objective for academic class is to ensure the special needs students will overcome the 3M-concept (Writing, Reading, and Counting). Within the learning session, the other observation had been take place by teachers until the student can achieve the minimum requirement before they will inclusion into the national curriculum. For private school, they started by assist the new special needs learner into several types of skills therapy classes within two weeks. Then, the student’s interest and capability will observed by the teacher. After that, the coordinator will assist them to join any selected therapy skills class which suitable to the student. The skills therapy class are consist such as drawing class, ICT class, and other therapy classes. According to the fig.1 below, the purpose of study is to identify the teacher’s experience and content factors that influence the difference in these two organizations in learning environment in the school.
3.2 Issues

Based on the conceptual model on teaching method in the both private and public, there are some issues whether their approach give the benefit to the ADHD student. In the public school, there is focus more on 3M concept that need to achieve it. Another hand, in the private school, they assist a student to identify their interest on skill therapy. According to the observation, the involvement of ICT in their teaching method is still in the preliminary stage. Moreover, their also told the challenges that they face to implement ICT in education. Both organizations faced the similar in challenges, when they have limited resources to make use the ICT in their teaching environment. These are the limitation which had pointed below:

- The lack of teacher's experience to conduct the ICT as their teaching tools in the class.
- Lack of software that related to the special education and hard to operate it for the special need learner.
- The software was not related to special education because it cannot customize it.
- Lack of hardware facilities and connection to special education. Most of them still used the manual approach in their teaching.
- Limited time to teach them how to use ICT and lesson plan that they need to cover in the class.

This had led to the proposing the new strategy that make utilized the ICT as the mediated tools in the learning and teaching. According to UNESCO (2009) special education guidelines that, a person with ADHD will “…involve learner-centred teaching methods and developing appropriate learning materials. ICTs and the use of new technology constitute a vital part of modern societies and should be used whenever possible” (UNESCO, 2009, p. 20). It also support by Xu, Reid, & Steckelberg (2002), when the “…technology had become the expansion to the new opportunity when creating the strategies” (Yusof, et al., 2010, p. 2305)
3.3 Alternative Teaching Strategy

After the issues had been discussed, the study also defines the solution might help to integrate the objective of these two differences school teaching approach by introducing the blended learning environment in the special education. The combination education and entertainment will encourage the ADHD student to gain their attention, engagement in their learning (Reich & Daccord, 2009; White, 2003; Yusof, et al., 2010; Yusof & Song, 2010). The information might need to change into more interactive information to gain the student attention and the conventional approach might not give the advantages for the students (Armstrong, 1999). Therefore, new creation in the computer interactivity such as using animations might help the ADHD students gain the motivation to learn (Höffler & Leutner, 2007; Mayer & Moreno, 2002). Moreover, by adapting the constructivist learning approach such as project-based learning, this approach can help the student to gain other related skill such as computer literacy, reading, drawing and animation development. However, the alternative is still in the way to test it out to the school with special education.

4 CONCLUSION

The public school and the private school provide the similar facilities and learning environment. However, there are some differences on the content and teaching method that used. It clearly define that the public school practised the writing, reading and counting concept known as *Menulis, Membaca, Mengira* (3M). The main objective to ensure the student have to majoring these 3M concept in the end of their lesson before they will inclusion into the normal class. However, the private school involve learning practise based on their skill. Therefore, the student will be joining the class which related on their interest and capabilities. The ADHD students also inclusive in the normal school and learn the academic content.

In conclusion, the teaching methods between two difference institutions have the similar and difference approach and method based on their own goals and objectives. However, by adapting the alternative teaching strategy, it can be combine the academic and skill approach by using technology as mediated tools and project-based learning (Yusof, et al., 2010; Yusof & Song, 2010). Moreover, it gives the benefit for ADHD to gain their attention and to build up their certain skills. Although, this teaching strategy is still in preliminary stage, the improvement, revision and testing can be made to improve the teaching method for both institutions in the private and public school in the future.

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