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A Glimpse of Malaysian Teachers' Reading Intervention Strategies for Children with Dyslexia

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Abstract

This paper explores contemporary issues surrounding the teaching of reading towards dyslexic children in Malaysia. The objectives of the literature review and preliminary investigation were to ascertain the complexity of the issues, and to make informed decisions that warrant the development of educational app targeted for educators. It was discovered that children with dyslexia would normally experience distinctive learning difficulties than other children of learning disabilities. Nevertheless, the study revealed that most of them did not receive suitable classroom intervention. When teaching reading to these children, teachers should be aware of the major causes of their reading difficulties, and then employs strategies that could accommodate their personal strengths and weaknesses. Dyslexic children are often stigmatised and isolated by teachers and friends; therefore, it is vital to provide equal opportunity to learn for them. The result of this study calls for serious deliberation to train teachers about effective literacy intervention techniques that are precisely tailored for children with dyslexia.

Keywords: *dyslexia, reading intervention, pre-service teachers, educational app*

Introduction

Dyslexia is a specific language disorder that causes problem in reading, writing and speaking (Richardson, 1992). It has been described as a specific learning disability that is neurobiological in origin and is characterized by poor word recognition, spelling and decoding abilities despite having higher cognitive abilities and receiving effective classroom experience (Reid, Shaywitz & Shaywitz, 2003). Dyslexia is defined by the World Federation of Neurologist as "a disorder in children who, despite conventional classroom experience, fail to attain the language skills of reading, writing, and spelling commensurate with their intellectual abilities" (Gomez, 2004). In conjunction with this definition, the Malaysian Ministry of Education constitutes dyslexia as a condition in which a student experiences significant difficulties in reading, writing and/or spelling despite having a mental ability which is comparable to, or above those of average students (Zahrah, 2007; Kang, 2010). Children with dyslexia are described by Sheila and Samsilah (2006) as those who often have difficulties in retrieving the sound of alphabets, thus causing problems in spelling. In reading and writing, they often show transposition (eg: roli for lori; mali for lima), addition (eg: diyam for diam), omission (eg: buna for bunga) and letter reversals (eg: b for d).

Dyslexia within Malaysian Education System

In Malaysia, every child will normally start to learn recognizing alphabets, spelling and reading in the kindergarten as early as four years old. This will continue in primary school and by the age of seven or eight, they should be able to read and write at grade level. Unfortunately, there are many children who face difficulty in learning because it is estimated that in Malaysia, 50% of over 90000 pupils with learning difficulties are caused by dyslexia (Mohd. Fahmi, 2012). Rajesvari (2008) also discovered that there exist dyslexia-related difficulties among pupils in remedial classes. Strong evidence shows that children with dyslexia continue to experience reading problems into adolescence and adulthood (Shaywitz et al. 1999; Shaywitz, et al., 2003). Therefore, it is paramount to help dyslexic children to master the reading skills because if left untreated, they will develop low self-esteem and poor confidence (Zahrah, 2007). Furthermore, without effective intervention, a person could develop emotional problem because of inferiority and frustration (Wong, 2009).

Within Malaysian education system, dyslexia is positioned under special education, and categorized as a specific learning difficulty. In practice, after six months of schooling, Standard One pupils who are at risk of learning difficulties may be screened by their teachers using an instrument called *Instrumen Senarai Semak Disleksia* (Dyslexia Checklist Instrument) to check against dyslexia-related symptoms (Instrumen Senarai Semak Disleksia, 2011). The teachers will then recommend parents to have their children diagnosed by specialists at government hospitals. Upon diagnosis, these children must be registered with the Department of Welfare to acquire the *Orang Kurang Upaya, OKU* (People with Disabilities) card. This card would entitle them to enroll in the *Program Pendidikan Khas Integrasi Disleksia, PPKI Disleksia* (Dyslexia Special Education Integration Program, Dyslexia SEIP) and receive monthly financial allowance (Bahagian Pendidikan Khas, Kementerian Pelajaran Malaysia).

Dyslexia Learning Difficulties and Reading Intervention

Teaching individuals with dyslexia requires substantial understanding of their learning difficulties since the level of severity is different from one person to another (Rogers, 1991). Intervention needs to concentrate on individual's strengths and weaknesses, and have flexibility to adapt with the needs of the individual (An International Perspective on Dyslexia, 2007).

i. Multisensory technique

In order to help individuals with dyslexia in learning to read, they should be taught using multisensory technique that utilizes hearing, vision and touch (Wong, 2009). Training in phonological awareness is also essential to overcome their letter-shape-to-sound confusion (Spector, 1995; Thomson, 2010). The use of multisensory technique was found effective in helping at-risk children to memorize the shape of letters and to write them correctly (Nur Sharmimi, 2012). Rohaty, Mohd Anuar and Zahara (2012) also discovered that by using multisensory method for three months on dyslexic children who were attending remedial education classes, they had shown a significant increase in the ability to identify alphabets and words as well as in alphabet mastery. Therefore, it was recommended that multisensory technique be incorporated into literacy teaching toward dyslexic children to enhance their learning.

ii. Related Studies

The role of teachers is very important in helping these children to beat their literacy problem (Afendi, 2012), because they are often being laughed at in the classroom for making very simple mistake such as writing own name incorrectly, and consequently making them feeling socially isolated and having low self-esteem (Alfian, 2011). Rohaty and Shafie (2005) revealed that dyslexic children did not receive specific attention in general education as well as in special education; for example, these children were usually placed in remedial class along with other children who did not possess any dyslexia characteristics. Rohaty and Shafie (2005) also reported that some children with dyslexia, though having specific learning difficulty, were placed in general learning difficulties classes, which are a mix of various other learning difficulties such as autism, Down syndrome and slow learner. For that reason, they emphasized the urgent need to expose teachers to good teaching technique for dyslexics to improve the quality of education for this often neglected group of special needs children.

In another study, Liyana, Nurul and Khuzaiton (2013) discovered that most special education teachers in their case study did not possess sufficient knowledge about dyslexia symptoms, its associated difficulties and effective intervention technique; thus they did not know how to best help the dyslexic students in the special education class. Concerned with the situation, Liyana et al. (2013) advocated that children with dyslexia should be taught by teachers who are trained in the area. Likewise, Rohaty et al. (2012) insisted that teachers should receive specific training on dyslexia so that they could teach the children successfully.

In a nutshell, these previous studies upheld the need to improve the quality of education for dyslexic children and this could be achieved by enriching the pre-service university program of the special education teachers in dyslexia intervention.

iii. Courses in university for pre-service special education teachers

Pre-service teachers are the prospective teachers for special education schools, remedial classes and special education integration program at mainstream schools. Apparently, they are the ones who need to be exposed to examples of effective reading intervention technique for children with dyslexia. Nevertheless, based on the researchers' review of the syllabus in special education diploma and degree program of two public universities and one teacher training institute, the courses offered are mainly theory-intensive: (i) the introduction to learning difficulties and (ii) teaching strategy for individuals with learning difficulties. The introductory-level course exposes the pre-service teachers to all types of learning difficulties such as Down syndrome, autism, slow learner, cerebral palsy, dyslexia and attention deficit hyperactivity disorder (ADHD); just to name a few. Meanwhile, the latter discusses general topics in teaching individuals with any types of learning difficulties. Unfortunately, topic on the strategy of literacy intervention for individuals with dyslexia were noticeably missing, albeit their distinguished difficulties from other special need individuals. They require specific intervention that addresses the underlying cause of their reading problems, for example in matching letter-to-sound confusion. Ideally, the teaching technique employed by the teachers should be tailored to specifically address the pupils' difficulties in learning, as well as to accommodate to their current progress in reading (Zahrah, 2007).

Preliminary Investigations (PI)

The PI was conducted to investigate the current issues in the context of awareness of dyslexia and its intervention strategy. Semi-structured interview was chosen as the interview technique to create a semi-formal situation that is flexible and comfortable for the respondents whereby questions can be added or dropped freely and the researcher was able to adapt the level of language according to the language proficiency of the respondents (Chua, 2012). The semi-structured interviews were conducted with five special education teachers, two special education pre-service teachers, a headmaster of a school with Dyslexia SEIP classes and four parents of dyslexic children to gain information about their experience with the major topic of interest. The investigation also involved review of some researches and software for dyslexia intervention. The following sub sections will describe the results of the investigation.

i. Interview with special education teachers

Three primary school special education teachers were initially interviewed at their respective Dyslexia SEIP classes in three separate schools. The objectives of the interview were to gain information about the trainings related to dyslexia that the teachers receive during teacher preparation program and in-service, the teaching aids they use in classrooms and the teaching technique that they employ to help dyslexic children learn to read. It was discovered that all teachers did not receive formal training in dyslexia reading intervention during their pre-service training in university. There was no topic that focused on reading intervention for children with dyslexia. Therefore, they began learning about teaching strategy for pupils with dyslexia merely when they became teachers at the Dyslexia SEIP classes.

The interview was later conducted with another two secondary school special education teachers. They taught in special education classes at mainstream schools. The classes were attended by combination of students with various learning difficulties, including dyslexia. The teachers informed that they did not have adequate exposure towards dyslexia and its reading intervention technique. They confirmed that they had not undertaken any specific courses about dyslexia while studying in university. As such, they admitted that they had limited knowledge to help the present dyslexic students in their class and had used the same intervention technique for all students in the special education class.

They agreed that supplemental materials about reading intervention strategy would be beneficial to pre-service and in-service special education teachers, especially if it is accessible via computer software or the web. The interview revealed that there is a gap in the teacher preparatory program with regards to teaching dyslexic children.

ii. Interview with special education pre-service teachers

Pre-service teachers were selected as respondents in the PI because they are the future teachers for special education schools, remedial classes and special education integration program at mainstream schools. The interview was conducted with two special education pre-service teachers at a local university. The purpose was to find out the courses that they have undertaken with regards to dyslexia and their opinion about teaching children with dyslexia. Both of them informed that they have learned an introductory course about learning difficulties and will learn in the coming

semester about general teaching strategies towards children with learning difficulties; however, they were uncertain about effective strategy in teaching children with dyslexia to read.

iii. Interview with headmaster

The headmaster of a school with Dyslexia SEIP class revealed that there was no specific strategy being employed by the teachers in order to overcome reading difficulties among pupils with dyslexia, since the problems vary from one child to another. Therefore, the idea of developing a multimedia learning application to persuade teachers in learning about intervention strategies for dyslexic individuals were highly welcomed. The headmaster added that the learning application should not only be used for training of pre-service teachers, but also for in-service teachers.

iv. Interview with parents of dyslexic children

Four mothers were interviewed. Their children were learning either under the Dyslexia SEIP class or remedial class. They themselves wanted to know how to best support their children socially and emotionally since they realized that these children have very low self-esteem and confidence, due to the maltreatment they receive from some teachers and friends. They had high hope that teachers could be well trained with knowledge and skills in teaching pupils with difficulties to read.

v. Review on research and software for dyslexia intervention

Past literature focused on using computer based materials, especially educational multimedia to remedy reading difficulties among dyslexic children. These products were developed as reading aid using Malay language and the target users were the dyslexic children themselves. For instance, a courseware named MyLexics (Muhammad Haziq, Syariffanor & Shahril, 2009) were developed to be used as reading and writing aid by dyslexic children. Other examples of courseware are the X-Leksia (Anusuria, Umawathy, Zeratul & Mohd Hafiz, 2007) which is a reading aid in Malay language for pre-schoolers, E-Z-Disleksia (Siti Salwa, Rozita, Eze Manzura, Karimah & Mohd Zaliman, 2010) which is a reading aid in Malay language for dyslexics who are in early stage of reading and FonicsTutor (Noor Eszereen, 2011).

On the other hand, there is a web-based system created and owned by the School of Educational Studies in Universiti Sains Malaysia (USM), called the e-PKhas. It is a portal where anyone could register and log-in to view and download the resources for teaching and learning in special education. The information caters for dyslexia, remedial class, learning difficulties, and hearing and visual impairment. Nevertheless, there is no specific topic that concentrates on the step-by-step strategies to help improve reading skill for children with dyslexia. As of the completion of the PI, there was no reported literature on training software for teachers about dyslexia reading intervention.

Conclusion

In summary, the PI has shown that there exists a gap in the context of teaching children with dyslexia. There is lack of concentration on intervention strategies that is adaptive to the causative factors of reading difficulties among dyslexic children. Therefore, it is crucial to provide the right help and intervention for children with dyslexia as early as possible so that they could lead a normal life and safeguard their well-being. Most previous research developed educational products to be used by the dyslexic children; however, none of those has utilized the educational multimedia

technology to enhance knowledge of teachers in teaching these children. Hence, there is an opportunity to fill the gap in the enhancement of special education teachers' skills, especially in producing supplemental materials that could be used as a reference tool beyond lectures and training courses.

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