

# MY EXECUTIVE SUMMARIES\*

\*(for internal use only)

*(Please include the problem statement, objectives, research methodology, expected output/outcomes/implication and significance of output from the research project).*

**Not more than 300 words**

## **Executive Summary 1: Profiling of High-functioning Children with Learning Disabilities Using the Neuro-Psychological Framework for Differentiated Instruction**

Learning disabilities in children are often diagnosed only when they begin to show signs of difficulty in school. Frequently misunderstood by their teachers as being slow, lazy, or stupid, many of these children develop low self-confidence and poor self-esteem, withdraw from academic and social activity, and become frustrated, which substantially increases the risk of their developing psychological and emotional problems. Studies have also found that a sizeable percentage of delinquents, school dropouts, and those involved in drug abuse and crime have some form of learning disability. Given the fact that about 10% of the population worldwide is estimated to have these conditions, it is important to provide for their early identification to mitigate their negative effects as these children ARE capable of learning. Using the neurophysiological interface, psychological instruments, studies of cases, and a meta-analysis of research on the subject, this research is aimed at: 1) developing a neuropsychological profile of children with learning disabilities such as dyslexia, ADHD, and Asperger's Syndrome; and 2) producing a framework for differentiated instruction; that is, instruction that would help teachers focus on the strengths and needs of these children learning alongside their non-disabled peers. Consonant with our quest to become a developed nation where our children are regarded as our most valuable assets, it is important that we help these high-functioning, i.e., cognitively able children with learning disabilities to succeed so that they will become assets to the nation. It is expected that the results of this research will contribute toward the government's objective of implementing inclusive education for children with special educational needs, which is in accordance with the thrust of the Education National Key Result Area (NKRA), the Malaysia Education Blueprint 2013-2025, and the Special Education Regulations 2013 to provide equal access to education for every Malaysian child.

## **Executive Summary 2: A Framework for Differentiated Instruction for High-Functioning Children With Learning Disabilities in Inclusive Education Settings**

Children with learning disabilities such as dyslexia, ADHD, and Asperger's Syndrome are often misunderstood by their teachers as being slow, lazy, or stupid. Many of these children develop low self-confidence and poor self-esteem, withdraw from academic and social activity, and become frustrated, which substantially increases the risk of their developing psychological and emotional problems. Therefore, it is important to provide for their early identification and intervention as research has shown that a substantial number of these children ARE cognitively able, and ARE capable of learning, and hence, are high-functioning. Given the fact that Malaysia is committed toward inclusive education, where children with learning disabilities are placed in mainstream classes, there is a need to provide for differentiated instruction that focuses on the children's strengths and needs because carefully designed, specialized instruction plays an integral role in their learning success. It is also crucial to determine how mainstream teachers and students with learning disabilities cope with inclusive approaches within the mainstream education system. Using both qualitative and quantitative means of data collection and a meta-analysis of research on the issue, this study is aimed at investigating: 1) mainstream teachers' knowledge and practice of teaching children with learning disabilities and 2) how these children cope in mainstream schools. Additionally, using the neuro-psychological profile of high-functioning students with learning disabilities constructed by the other two research clusters, it is aimed at 3) producing a framework for differentiated instruction to facilitate mainstream teachers to steer their special needs children toward success in learning. It is expected that the results of this research will contribute toward the government's objective of implementing inclusive education for children with special educational needs, which is in accordance with the thrust of the Education National Key Result Area (NKRA), the Malaysia Education Blueprint 2013-2025, and the Special Education Regulations 2013.

### **Problem Statement:**

The implementation of Inclusive Education (IE) in Malaysia can be considered to be a radical educational innovation, as it requires that children with learning disabilities be placed in mainstream classrooms, together with children without. The government has targeted that by 2025, 75% of students with special needs are to be enrolled in Inclusive Education programmes and every teacher equipped with a basic knowledge of special education (UNICEF 2014). An issue that is of central concern is the teachers' readiness to implement inclusive approaches in the mainstream classroom; that is, their knowledge of the strengths and educational needs of children with learning disabilities and how to teach them. For the government to successfully implement the policy, the teachers WILL HAVE to be ready with the necessary knowledge and the skills. Changes will also have to be made to the mode of instruction to accommodate children with learning disabilities. There is a need to provide for differentiated instruction—instruction that is tailored to meet the individual needs of the children in the classroom as well as one that focuses on their strengths—because carefully designed, specialised instruction plays an integral role in their learning success. Given the relative novelty of Inclusive Education in Malaysia, our tacit assumption is that mainstream teachers do not have the necessary knowledge and skills to cater to the special needs of children with learning disabilities and provide differentiated instruction to respond to the variance among the learners in his or her classroom. Hence, we see an urgent need to conduct this study—to investigate how teachers of students with learning disabilities cope in the mainstream classroom, and to develop a framework for differentiated instruction that would help them to do so.

### **Executive Summary 3: A New Framework for Developing Critical Thinking through Critical Reading in the Secondary School Literature Classroom**

The emphasis on a knowledge-based and innovation-driven economy has forced nations worldwide, including Malaysia, to review their education systems in order that we may maintain a competitive edge. Among the findings is that our graduates are not able to think analytically and critically. This point has been raised by employers, and is also apparent in International assessment programmes such as PISA, where, in 2012, Malaysia ranked 39th out of 65 countries, obtaining a score of 398 on reading, below the OECD average of 496. In addition, Malaysia also did not do well in problem solving, where we obtained a score of 422, significantly lower than the OECD average of 500. This is a cause for concern, because the ability to **think and read critically** is *essential* to effective learning, sound decision making, creative or innovative thinking, and to producing university graduates and members of society who will be able to contribute effectively to the development of the country. Indeed, the need to teach our students **critical thinking**, which involves **higher order thinking skills**, is strongly emphasised in the Malaysia Education Blueprint 2013-2025 and Malaysia Education Blueprint 2015-2025. Because teaching **higher order thinking skills** requires comprehension, inference, and decision-making, the reading classroom is the logical place to begin. Using both **qualitative and quantitative** methodology, this study seeks to address this issue by: 1) investigating the factors that influence our students' ability to **think and read critically**; 2) mapping the strategies they use when responding to written texts, and 3) proposing a framework to enable them to **think and read critically**. It is expected that the results of this research will lead to a framework to help Malaysian teachers develop **critical thinking** and **reading** ability among their students, and for Malaysian students to be able to **think and read critically**.

### **Executive Summary 4: Narrowing the gender gap: Investigating the factors that influence Malaysian boys' literacy development and profiling their literacy needs**

Over the past decades, it has been observed that the academic performance of Malaysian boys has been on a downward trend. Boys are not achieving very well in many subjects in national examinations; far more boys than girls drop out of school; and the educational gap between boys and girls is increasing. This trend continues to the university, where statistics show that female students far outnumber male students in undergraduate programmes. There is an urgent need to address this worrying trend. Low achievement in schools is closely linked with behavioural problems, high dropout rates, low levels of income, unemployment, and social problems. The underachievement of our boys will ultimately jeopardise Malaysia's competitiveness in the world economy and her desire to become a developed nation, which requires support from *both* the male and female population. While many notable efforts have been made to bridge the rural-urban and socio-economic divide through education, little, thus far, has been done to address this apparent gender inequity. Indeed, this issue has been emphasised by the National Education Blueprint as requiring our attention "to ensure that the country does not have a cohort of "lost boys" who either leave school early or with low attainment levels". Using both **qualitative and quantitative** methodology, this study seeks to address this issue by: 1) investigating the factors that influence literacy development among Malaysian boys, *where we define literacy development as: development in reading and writing, using the definition from language education* 2) profiling their literacy needs and 3) proposing a framework to help parents and teachers foster literacy development among them, as research strongly suggests that literacy is *significantly associated* with academic achievement. It is expected that the results of this research will lead to a literacy framework to help parents and teachers increase boys' engagement in literacy activities.

## **A Psychological-Educational Framework for Fostering a Healthy and Active Lifestyle in the Prevention of Type 2-Diabetes.**

Malaysia is the most obese country in Asia, with about 50% of the population being either overweight or obese. In just two decades, the number of those overweight has increased by 80.7%, and those obese, by 302%. Malaysia also has the highest occurrence of Type 2 diabetes in Asia and one of the highest in the world. About 3.6 million Malaysians—close to 1 out of 5—suffer from diabetes. By 2025, it is projected that 7 million Malaysian adults will have diabetes. The rapid rise in the incidence of obesity and diabetes is alarming because obesity is highly associated with the risk of developing Type 2 diabetes; and diabetes is one of the leading causes of death worldwide, killing more than 1.6 million people in 2016. It also reduces the health-related quality of life of sufferers and puts them at an increased risk of stroke, kidney disease, and blindness. Hence, it is crucial that we address this problem by educating Malaysians on the importance of maintaining a healthy weight and adopting a healthy and active lifestyle as Type 2 diabetes CAN be prevented. Given the scarcity of studies on the effectiveness of diabetes education programmes and on HOW to motivate Malaysians to adopt a healthy and active lifestyle, this research seeks to address the issue, using both qualitative and quantitative methodology, by focusing on the following objectives: 1) identifying the eating habits and lifestyle practices of Malaysian secondary school students; 2) discerning their awareness of the contributing factors towards the development of diabetes; 3) proposing a psychological-educational framework for reducing the incidence of diabetes by fostering lifestyle changes through education. The results of this research will contribute toward the national priority area of promoting Good Health and Well-being among Malaysians and a framework for effective diabetes education programmes.

**\*Something that I would like to share about writing the executive summary:** It has to include those aspects that the form has asked for. However, I use the bulk of the “space” in the 300-word executive summary to establish the importance of the problem TO THE NATION and WHY it needs to be funded. I see this as being the most important part of the executive summary. It is meant to *persuade*, and to *convince*. So let’s go and DO IT!

May Allah reward our efforts with success!

Prof Dr. Ratnawati Mohd Asraf  
Kulliyah of Education,  
and  
Director, Research Management Centre  
International Islamic University Malaysia  
[ratnawati@iium.edu.my](mailto:ratnawati@iium.edu.my)