

CONTENTS

ACKNOWLEDGEMENTS	xi
-------------------------------	----

FOREWARD	xi
-----------------------	----

Angela Fawcett
Research Consultant
Dyslexia Association of Singapore

PART 1: EMBRACE DYSLEXIA

EMBRACE DYSLEXIA	xi
-------------------------------	----

Deborah Hewes
Dyslexia Association of Singapore

WHY SHOULD SINGAPORE EMBRACE DYSLEXIA?	xii
-----------------------------------------------------	-----

Dr Jimmy Daruwalla
President
Dyslexia Association of Singapore

WHAT IS DYSLEXIA	xvi
-------------------------------	-----

A Definition
Dyslexia Association of Singapore

LEFT BEHIND AT THE BEGINNING OF THE RACE: THE PARADOXES OF DYSLEXIA	xix
--------------------------------------------------------------------------------------	-----

Thomas G West
Author of 'Thinking Like Einstein' and 'In the Minds Eye'
Blog: <http://inthemindseyedyslexicrenaissance.blogspot.com>.

PART 2: PERSONAL STORIES OF DYSLEXIA

PERSONAL STORIES OF DYSLEXIA	3
An Introduction	
1 LEE KUAN YEW	5
Singapore's Founding Prime Minister Visionary, Leader, Father and Builder of a Nation	
2 STUART-ANDRÉ KRISTIAN AHCHAK	7
Technical Engineer Student National Serviceman	
3 GRACE AU YONG	10
Social Media and Content Specialist DAS Student Alumni <i>Joyce Au Yong's Sister</i>	
4 JOYCE AU YONG	12
Accountant DAS Student Alumni <i>Grace Au Yong's Sister</i>	
5 DR ROBIN CHAN	14
Senior Associate Director, Human Protections Administrator, Institutional Review Board, National University of Singapore	
6 LUCAS CHIA	20
Local Actor, Host and Aspiring Director Film Studies Undergraduate at LASALLE College of the Arts DAS Young Achiever Awardee 2011 www.lucaschia.com	
7 CHUA RUI DE	26
Engineering Product Development Pillar Undergraduate Singapore University of Technology and Design	
8 CHUA WENG FOO	30
Entrepreneur and Coach Father of YouTube stars "Dr Jiajia and Big Bro" www.youtube.com/user/liangjiasun	

8	FOONG KING YI	34
	Logistics and Supply Chain Management Undergraduate RMIT University	
9	MARCUS GOH	39
	Educational Therapist Dyslexia Association of Singapore	
10	TERESA NYSHA GOMEZ	45
	Info-Communications Technology (Cloud Computing) ITE College East and DAS Student Alumni	
11	HENG YI ZEN	47
	Accounting and Finance Student DAS Young Achiever Awardee 2014	
12	DEBORAH HEWES	51
	BSc (Hons) Psychology Head of Publicity and Publications Dyslexia Association of Singapore	
13	LORRAINE KEONG	60
	Information Engineering and Media Undergraduate Nanyang Technological University	
14	JENNY KHNG	62
	Mother, Wife and Daughter, Entrepreneur Founder of Trust Recycling	
15	ERIN KHOO	71
	Project Manager, Mobile Implementation @ Indeed.com	
16	KWOK FUYU	78
	PhD Candidate (Psychology) Nanyang Technological University <i>Dr Richard Kwok's Daughter</i>	
17	DR RICHARD KWOK	81
	Chief Technology Officer, Singapore Technologies Kinetics Vice President, The Institution of Engineers, Singapore <i>Father of Kwok Fuyu and Kwok Ting Yu</i>	

18 KWOK TING YU	86
National Serviceman, Future Actuarial Science & Econometrics Undergraduate at Monash University <i>Dr Richard Kwok's Son</i>	
19 CORINA LAI	90
DAS Chief Financial Officer (2004 - 2014) Dyslexia Association of Singapore <i>Kenrick Lai's Mother</i>	
20 KENRICK LAI	94
Diplomat Ministry of Foreign Affairs <i>Corina Lai's Son</i>	
21 BRENDAN LEE JUN LOONG	100
Electrical Engineer Undergraduate National University of Singapore	
22 TENDRICK LEE	105
National Serviceman and Baker DAS Student Alumni	
23 LEONG YANYI	107
Architecture Graduate University of Melbourne	
24 AERIN LIM	109
Dentistry Undergraduate at National University of Singapore <i>Ryan Lim's Sister</i>	
25 JEREMY LIM	113
Engineer DAS Student Alumni	
26 RYAN LIM	118
Law Undergraduate at Singapore Management University <i>Aerin Lim's Brother</i>	
27 LIM SER YEE	123
My Daughter Drea Lai Jie Ning, a Dedicated Dancer DAS Parent	
28 LISI LIN	129
Accountant DAS Parent	

29	LOUIS LIOW ZI QUAN	133
	National Sailor and Information Systems Undergraduate National University of Singapore	
30	MAY LUI	138
	DAS Parent	
31	ROBIN MOSELEY O.B.E.	141
	Chief Executive Officer (2002 to 2014) Dyslexia Association of Singapore	
32	JOSIAH NG	146
	Filmmaker and Aspiring Novelist <i>joshiahcreations.com</i>	
33	SHUN NG	150
	Fingerstyle Guitarist, Vocalist and International Performer	
34	KIMBERLY ONG HUI LI	155
	Animator, Designer and Artist DAS Student Alumni	
35	MATTHEW QUEK	159
	International Singer Composer and Teacher <i>www.matthewquekonline.com</i>	
36	ADAM REYNOLDS	165
	Psychology Undergraduate Singapore Management University	
37	MUHAMMAD RIDZNAIN BIN SAMSURI	167
	Engineering Student and Hip Hop Rapper Republic Polytechnic	
38	GARY SEOW	170
	Entrepreneur, Inventor and Creator Founder, KYDZ International <i>Husband of Carrie Chan Chai Yen</i>	
39	CARRIE CHAN CHAI YEN	175
	Daughter, Wife, Mother, Entrepreneur Co-founder, KYDZ International <i>Wife of Gary Seow</i>	

40	PATRICK SIAH	179
	Interior Designer and Entrepreneur <i>www.patricksiah.com</i>	
41	ELVIN SIEW	182
	Digital and Precision Engineering Student Nanyang Polytechnic DAS Young Achiever Awardee 2013	
42	AMY RUTH TAN	185
	Registered Nurse DAS Student Alumni	
43	HEMAN TAN	191
	Iron Man “Chef Heman” Group Executive Chef, JP Pepperdine Group	
44	RINI TAN	198
	International Business Undergraduate University of London DAS Young Achiever Awardee 2011	
45	SAM TAN CHIN SIONG	202
	Minister of State, Prime Minister’s Office, Ministry of Culture, Community and Youth	
46	SHAUN TAN XIN HAO	205
	Mechatronic and Robotic Engineering Student Singapore Polytechnic	
47	JULIAN TAY	208
	Videographer and YouTuber <i>youtube.com/JulianTayTM</i>	
48	TEO HENG HAO	212
	Economics, Finance and Banking Undergraduate at Monash University and DAS Young Achiever Awardee 2011 <i>Teo Heng Soon’s Brother</i>	
49	TEO HENG SOON	219
	Banking and Financial Services Student at Ngee Ann Polytechnic DAS young Achiever Awardee <i>Teo Heng Hao’s Brother</i>	

50	ALVIN THAM	222
	Assistant Director, Marketing & Corporate Communications Football Association of Singapore / S.League	
51	AUGUSTINE & KELLY THONG	230
	"The Odyssey—Parenting a Dyslexic Child" DAS Parents	
52	WAYNE TOH	234
	Photographer and Teacher DAS Parent <i>www.dpictureroom.com</i>	
53	GLENN WEE	241
	Network and Mobile Technology Student Temasek Polytechnic	
54	LESTER WONG	244
	National Serviceman and Business Undergraduate Singapore Management University	
55	EDWARD YEE	246
	Entrepreneur, Accountancy and Business Undergraduate Nanyang Technological University	
56	ZALINA ZAKARIAH-ISMAEL	250
	My Daughter—"Deanna in Wonderland" DAS Parent	

PART 3: ABOUT DAS **255**

DYSLEXIA ASSOCIATION OF SINGAPORE	256
Who we are and what we do	



A child is like a butterfly in the wind.

Some can fly higher than others.

But each one flies the best it can.

Why compare one against the other?

Each one is different,

Each one is special,

Each one is beautiful!



ACKNOWLEDGEMENTS

This book would not have been possible without the support and commitment of the individuals who have generously shared their personal dyslexia stories, for which we give our heartfelt thanks. Some needed a lot of convincing that their story would be important enough to share and others were delighted at being able to raise awareness through the Dyslexia Association of Singapore about the strengths and challenges of dyslexia. Their stories help weave the tapestry of success that demonstrates the difference that individuals with dyslexia can make in Singapore.

I would like to thank my wonderful team at the Dyslexia Association of Singapore. Kristy Wong, Cheryl Cheong and Shannon Ong are my pillars of support. All three have been present during the interviews at some time over the last year. Cheryl has written the majority of the stories and I appreciate her dedication and the hours she has put into this project. Her help in editing and proofreading the stories has ensured that the positive force of the dyslexia story shines through. I don't know what I would have done without my team's support and encouragement in putting this book together.

I would like to thank Angela Fawcett and Thomas West for their unwavering guidance and support for the Embrace Dyslexia movement in Singapore. Their experience and knowledge in the area of positive dyslexia has been invaluable.

DAS is an inspiring organisation to work for. It is full of enthusiastic, creative and caring individuals who make a difference in the lives of people with dyslexia. I feel very privileged to work amongst these wonderful people.

I hope you enjoy this book as much as it has inspired me to put it together.



Writing means sharing.
It's part of the human condition
to want to share things
thoughts, ideas, opinions.

~ Paulo Coelho

FOREWARD

Angela Fawcett

I feel very privileged to have been asked to contribute a foreword and endorsement for 'Embrace a Different Kind of Mind: Personal Stories of Dyslexia'. Being able to share the success stories of dyslexic people across the world has always been a great passion for me. Naturally as the wife and parent of successful dyslexics, and an academic and advocate highlighting the positive aspects of dyslexia, this message is very close to my heart.

In this book, more than 50 Singaporeans have contributed their insights and disclosed their unique tally of strengths and weaknesses. This includes a transplanted Australian, Deborah Hewes, who has lived in Singapore for over 14 years. She is also the editor and driving force behind this publication.

This new endeavor builds on the success of the Embrace Dyslexia event led by Thomas West, the famous dyslexic author, presented by DAS in 2014, and provides a showcase for success for dyslexia in Singapore. The launch coincides with the 50th anniversary of Singapore in choosing more than 50 contributors to share their personal stories.

All of these people have dyslexia or are touched by dyslexia and while many have been happy to write their own contributions, others have needed support and much encouragement from Deborah and her team. Of the many interesting interviews that took place one of the more rewarding interviews happened with a chef, who prepared a meal in his restaurant for Deborah and her team, while the interview occurred. Others were interviewed over the phone and Deborah and her team have worked long and hard to bring otherwise lost stories to life.

Interestingly, these successful adults were still consciously aware of their grammar and spelling and asked that these be checked carefully. So as to allow their positive contribution to shine through, unmarred by errors and with a view to avoiding the negative connotations that are too often associated with dyslexia.

I would like to thank the Dyslexia Association of Singapore for their vision in supporting Thomas West's Positive Dyslexia movement and to congratulate Deborah on tirelessly seeing her project through to fruition. Deborah you are a force of nature and long may you continue to advocate and change the world for dyslexia, working within DAS. It is one of the most, if not the most, successful Dyslexia Association in the world, supported as it is by the Singapore Ministry of Education.

I am sure that you will all agree that 'Embrace a Different Kind of Mind: Personal Stories of Dyslexia' is a triumph and should be required reading for all educators and dyslexics everywhere, as well as their parents and their teachers, to increase public awareness of the potential for success in dyslexia.

Many, many congratulations to everyone involved!

Angela Fawcett
Research Consultant
Dyslexia Association of Singapore
Emeritus Professor, Swansea University
Editor, Asia Pacific Journal of Developmental Differences

PART 1

EMBRACE DYSLEXIA



Embrace a different kind of mind



DRAMATIC
DYNAMIC
RESILIENT
INTELLIGENT
ENTREPRENEURIAL
EXCEPTIONAL
INVENTIVE
CREATIVE

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WWW.DAS.ORG.SG/EMBRACE-DYSLEXIA

EMBRACE DYSLEXIA

Deborah Hewes
Dyslexia Association of Singapore

EMBRACE DYSLEXIA, an initiative of the Dyslexia Association of Singapore (DAS), endeavours to foster greater public awareness about dyslexia with the aim of helping everyone to understand both the strengths and the challenges in the lives of individuals who have dyslexia.

One of the more engaging initiatives of EMBRACE DYSLEXIA was to encourage individuals with dyslexia to step forward and share their personal challenges with dyslexia so that they might become aspirational role models for DAS students, DAS ambassadors of achievement, as it were.

We sought out those people with dyslexia who have followed their passion and are succeeding despite any educational struggles they have encountered along the way. Our call to action has been met with great success and we are grateful to those individuals who have responded.

Many interesting and motivated people are willing to share their personal stories and we are pleased to have collected more than fifty for inclusion in this book. These are all individuals who have worked to make a difference in the fabric of Singapore and wish to instill in young students the desire to strive for equal if not greater success in their future careers.

This effort has been truly enlightening and inspirational for those of us at DAS. We have been humbled by the generosity of these individuals in sharing their personal experiences and we hope that you feel the same as we do when you read them.

Let's EMBRACE DYSLEXIA, despite the challenges we may have in learning, through determination, passion and willpower all of us can make a significant and meaningful contribution to Singapore.

WHY SHOULD SINGAPORE EMBRACE DYSLEXIA?

Dr Jimmy Daruwalla
President, Dyslexia Association of Singapore

DAS President, Dr Jimmy Daruwalla shared his EMBRACE DYSLEXIA vision during his presentation speech at the Embrace Dyslexia Dinner held on 19 November 2014 at Hotel Jen, Singapore.

As we all know, the only natural resource available to us in Singapore is human capital. We cannot afford to let even a single child fall by the wayside. This is not only because of an inability to read or write, but because dyslexia also has several positive aspects as well and we need to mine these qualities.

The incidence of dyslexia in the general population varies from 4-10% with at least 4% requiring remediation. Because of their extraordinary abilities people with dyslexia can contribute meaningfully to society. It has been known for some time that dyslexic business people are more likely to succeed as entrepreneurs and studies have confirmed why this is the case.

Professor Julie Logan of Cass Business School in London found the incidence of dyslexia to be 20% in British entrepreneurs in 2001 and a “staggering” 35% of the 139 American entrepreneurs she studied in 2007. Perhaps such a study should be conducted in Singapore, and soon.

Dyslexics are more likely to become self-made millionaires when compared to their non-dyslexic counterparts and more likely to own multiple business. It is also worth noting that successful SMEs are a great source of new job growth.

They have the ability to see the big picture, without being bogged down in the details. They have the drive and determination to succeed where others would give up having faced failure frequently in their earlier days

and have developed creative solutions to deal with it.

While reading may slow them down, they do learn to read people and are good at choosing people who they can delegate these responsibilities to, be it a parent, sibling co-worker, etc. Whereas a non-dyslexic often believes in doing everything himself. They have mastered the art of verbal communication, which is so important in doing business - and in employee relations it was found that the turnover rate is lower in businesses run by dyslexics.

It is well known that a business succeeds or fails not because of the money that is put into it, but the ideas behind it. Professor Logan showed that those who have dyslexia are more creative than those who do not have dyslexia. They are creative thinkers, a skill they have mastered in order to cope with their personal struggles. They can come up quickly with the best solution to a problem, or the right words to say to customers and investors.

It is very obvious that if 35% of all successful entrepreneurs never began their businesses, we would have missed out on many good technologies and ideas.

Is dyslexia an Asset or Handicap? Dr Sally Shaywitz, Pediatric Neurologist at Yale University, feels it should be evaluated as an asset, not just a handicap.

She says, "I want people to wish they were dyslexic". Dyslexics are not able to achieve their true potential because they have to negotiate the education system. She is trying to change the way dyslexia is viewed in the educational system and the business world too.

Another person who has taken a keen interest in the education system is Sir Jackie Stewart, the famous three time Formula 1 champion. He was diagnosed as being dyslexic at age of 41! He dropped out of school because he was so humiliated when he was asked to read in front of the entire class and when he failed he thought he

Is dyslexia an Asset or Handicap?

Dr Sally Shaywitz,
Paediatric Neurologist
at Yale University feels
it should be evaluated
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was dumb and stupid. But then he found something he was good at – race car driving. He became an activist for ‘Dyslexia Scotland’. Thanks to this group, Scotland is now the first country in the world to demand training in learning disabilities as part of all new teacher training.

When Jackie visited us he mentioned that change in Scotland had taken a long time, and admitted to knocking some heads together to get the changes in Scotland. To quote his own words – “Some people still don’t see the potential in learning disabled students and would just as soon write them off.” Would you believe it if I told you that besides being knighted he was the recipient of eight honorary doctorates and a professorship!

I am also of the opinion that dyslexia is a “hidden” asset and not a handicap. The difference between a child that goes undiagnosed, and another that is diagnosed and has specific remediation can be dramatic. We have witnessed this at the DAS annual graduation ceremony for our students.

Professor Logan’s study also showed the importance of a mentor and how important it had been for someone to “believe in you in school”. A few words of encouragement can sometimes tip the scales between failure and success.

An excellent example is Dr Carol Greider. Out of 13 schools she applied to only two accepted her – Caltec and UC Berkeley. She selected Berkeley and in 2009 was one of three winners of the Nobel Prize in Physiology and Medicine.

Parents of dyslexic children still find this to be quite a burden to bear and this is compounded by the negative perception in Singapore. We are not asking our children to do their own best but to be THE best. The doctrine of education appears to compete. The majority of our children are being led to believe that they are doomed to failure in a world, which has room only for those at the top academically, in terms of marks.

Our children are subjected to tuitions at a very young age, which has led to a multi-million dollar industry in Singapore. Parents do not want their child to fail and want them to be perfect because of the “kiasuism” which is so prevalent in Singapore. I wonder why adults expect perfection from

children. Few grownups themselves can get through a whole day without making a mistake.

DAS hopes to change the way Singaporeans look at dyslexia and highlight the potential hidden and extraordinary assets of someone with a learning difference.

In my humble opinion, the aim of education should be to teach us how to think rather than what to think. Dr Sally Shaywitz emphasised that, "We need to train executives to recognise 'Outside-the-Box' thinkers who don't perform well on standardised tests."

There is a long list of successful dyslexics in every field. To name a few successful dyslexic entrepreneurs; Richard Branson, Henry Ford, Ingvar Kamprad (IKEA), Charles Schwab, Kerry Packer, William Hewlett (HP), Steve Jobs, Steven Spielberg, Craig McCaw (Cellular), Nelson Rockefeller, Paul Orfalea (FedexKinko), are proof of the hidden assets they possessed which made them millionaires. As Paul Orfalea mentions in his book, "I think everyone should have dyslexia and ADHD."

You may ask, "Why am I highlighting these entrepreneurs?"

Singapore has been given the highest rating in the world for its business friendly environment.

Singapore has its share of local entrepreneurs but if we could only focus more on the strengths rather than the weaknesses of people with dyslexia, can you imagine how many more successful millionaire entrepreneurs we could have in this country, and perhaps someday even a recipient of the Nobel Prize, and let us not forget that the Father of this Nation, Mr Lee Kuan Yew was also mildly dyslexic.

"DAS hopes to change the way Singaporeans look at dyslexia and highlight the potential hidden and extraordinary assets of someone with a learning difference.."

WHAT IS DYSLEXIA?

A Definition by the Dyslexia Association of Singapore

DAS is guided in its definition of Dyslexia by the Ministry of Education, Singapore in their November 2011 publication "Professional Practice Guidelines for the Psycho-educational Assessment and Placement of Students with Special Educational Needs".

Dyslexia is a type of specific learning difficulty identifiable as a developmental difficulty of language learning and cognition¹.

It is a learning difficulty that primarily affects the skills involved in accurate and fluent word reading and spelling. Characteristic features of dyslexia are difficulties in phonological awareness, verbal memory and processing speed. Co-occurring difficulties may be seen in aspects of language, motor co-ordination, mental calculation, concentration and personal organisation, but these are not, by themselves, markers of dyslexia².

An appropriate literacy programme should include the following components: phonemic awareness, phonics, fluency, vocabulary and comprehension³. The literacy programme provided by DAS meets these guidelines.

The exact cause of dyslexia is uncertain. However, research findings suggest that it might be associated to neurological differences which may tend to run in the family. In fact, many people with dyslexia are smart and motivated to learn. But not being able to read well can make many areas of learning a problem. Dyslexia describes a different kind of mind, sometimes gifted and productive, that learns differently.

These differences in the brain are likely to influence the way dyslexics think, learn and process information, and people with dyslexia often show weaknesses in:

- ♦ Phonological processing
- ♦ Ability to learn the relationships between letters and sounds (phonics)
- ♦ Ability to hold information in their short-term memory and then manipulating that information, such as working on mental arithmetic or remembering a long list of instructions
- ♦ Word retrieval



1. U.S. Department of Education. (2006). *Assistance to States for the education of children with disabilities and preschool grants for children with disabilities; Final rule*. Retrieved on May 26, 2011 from <http://idea.ed.gov/download/finalregulations.pdf>
2. Rose, J. (2009). *Identifying and Teaching Children and Young People with Dyslexia and Literacy Difficulties*. Nottingham: DCSF Publications.
3. National Institute of Child Health and Human Development. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction* (NIH Publication No. 00-4769). Washington, DC: U.S. Government Printing Office.



“So be sure when you step,
Step with care and great tact.
And remember that life's
A Great Balancing Act.
And will you succeed?
Yes! You will, indeed!
(98 and $\frac{3}{4}$ percent guaranteed)
Kid, you'll move mountains.”

~ Dr. Seuss, ‘Oh, The Places You’ll Go!’

LEFT BEHIND AT THE BEGINNING OF THE RACE: THE PARADOXES OF DYSLEXIA

By Thomas G West

Author of 'Thinking Like Einstein' and 'In the Mind's Eye'

Blog: <http://inthemindseyedyslexicrenaissance.blogspot.com>.

I am sometimes asked to write about the positive aspects of dyslexia and the way these positive traits have been reflected in my own life story.

In my own story, the beginning is familiar. The story of a little boy who could hardly read at all for the first three or four years of primary school – and then struggled for many years to keep up with his classmates. For a long time, his greatest ambition was to not be at the bottom of the class.

Gradually, however, as the curriculum changed from rote memorisation to larger concepts and logical thinking, the little boy began to see that he could easily do things that his classmates had trouble with – and that he could quickly see things that they did not easily see.

Over time, amazingly, this little boy became an author of books about dyslexia, visual talents and emerging computer graphic technologies. His writing led to invitations to give many talks, including presentations in 18 foreign countries.

His first book has been translated into three languages – Japanese, Chinese and, most recently, Korean. To his surprise (and to the delight of his publisher), over time, his first book became a classic – an “evergreen,” as they say in the trade, a book that never stops selling.

“As one highly successful dyslexic pointed out, it is not hard for a dyslexic to think “out of the box” because, as he says, “they have never been in the box.”

"I was happy as a child... I have been happier every year since I became a man. But this interlude of school [made] a somber grey patch upon the chart of my journey... All my contemporaries and even younger boys seemed in every way better adapted to the conditions of our little world. They were far better both at the games and the lessons. It is not pleasant to feel oneself so completely outclassed and left behind at the beginning of the race."

These are not my words. However, these words perfectly reflect my own feelings through most of my own early education. They are the words of Sir Winston Churchill writing in 1930 of his own early life. When he wrote these words, Churchill was a well known public figure – indeed, one who many thought was well past his prime – although his greatest test and his chief accomplishments were not to unfold until nine years later with the beginning of World War II. (Churchill, *My Early Life*, 1930, pp. 38-39.)

PARADOXES OF DYSLLEXIA

The field of dyslexia is full of puzzles and paradoxes. One of the greatest of these is that sometimes – perhaps one can say many times – the student who appears most dumb in the early years of schooling can be among the most capable and successful later on in the world of work – especially when the work is creative and innovative – involving the ability to ponder, think deeply, envision possibilities and to see patterns that others do not see.

As one highly successful dyslexic pointed out, it is not hard for a dyslexic to think "out of the box" because, as he says, "they have never been in the box." In contrast, those who always could do quickly exactly what the teacher wanted (getting top grades) can sometimes find it very hard – if not impossible – to have a really new thought or to deal successfully with a really new problem or novel situation. They find it easy to retain old knowledge, but they may find it nearly impossible to create new knowledge.

PERSONAL DISCOVERIES

In my early school years, mostly in a rural state school system, I had learned to read very poorly and very late and had great difficulties with most primary school subjects. This was a puzzle to my teachers and a worry to my otherwise supportive parents.

Even in this comparatively undemanding rural school system, I could barely keep up. I could learn almost nothing by rote. I could not memorise. I could not retain exact texts or numbers. I had to have time to ponder and think. I had to understand. I needed to see the connections between things. I needed to know the story. I had to find a way to visualise the information. Then, I would never forget.

I knew nothing of my own dyslexia at the time. I was not diagnosed until decades later – at the age of 41. But I did know that there were many things that I could not do – that were quite easy for my classmates. Gradually, in the last years before college, at another school, the increasingly high-level content began to change what was wanted – and what I could produce. Gradually, everything was transformed. The higher-level curriculum began to play to my strengths and my weaknesses became less important.

Before, I had trouble with arithmetic and “math facts,” but in time I came to love geometry, log tables, and even the slide rule. I eventually got good grades in a course on the philosophy, basic concepts and history of mathematics and logic that I was required to take in college. I had trouble with foreign languages, but loved linguistics and the history of language. I still had lots of trouble with spelling and my slow, faltering reading – but I began to see that I seemed to have a special knack for following logical arguments, complex story lines and higher level conceptual thinking in science, engineering and technology.

Gradually, strangely, by my final school year before college, I felt that I was getting more out of the readings than many of my classmates. I can still recall, in some detail, almost all of the readings we did during that year.

I went to a small liberal arts college that proved to be the right place, on the whole, for the further growth of these new-found strengths and abilities. Remarkably, my major studies were English Literature and Philosophy (so many books to be read and understood) and later earned a Masters degree. I found that I was well suited to do high level work – but I had to be careful because I

“I had begun to see that, for some people, the easy things in primary school could be quite hard -- but the hard things in college, graduate school and work could be quite easy.”

could easily be overwhelmed by large volumes of work.

I had begun to see that, for some people, the easy things in primary school could be quite hard – but the hard things in college, graduate school and work could be quite easy.

SCHOOL WEAKNESSES, WORK STRENGTHS

After graduate school and military service, I was employed by several consulting and engineering companies where I worked in early computer information systems, studies of the effectiveness of certain new medical services, developing national energy policy and international trade (participating in one trade mission to four Asian countries and then leading a second Asian trade mission).

Eventually, I was the number two manager for a five-year renewable energy development and training program for engineers in Egypt, funded by the US Agency for International Development.

Throughout these work experiences, I found ways around my weaknesses and ways to exploit my talents. I could easily see the big picture of our projects and how to deal with co-workers and clients. However, I learned to never mention a number unless I had it printed in front of me. My memory for certain details was too unreliable. I had little technical training, but – coming from a family of engineers and usually working with engineers, economists or computer programmers – I found I could easily understand the technical concepts and technical projects at an appropriate level. Others could be relied on for the data and details. I could write reports about the projects, explain them, plan them and, eventually, manage them.

FAMILY PATTERNS

However, I didn't really begin to understand the common difficulties and the common patterns of talent among dyslexics until our own two sons started having problems in their early years of primary school.

The idea that they were going to go through what I had gone through – this was a great emotional shock for me. Suddenly, I realised that I had to understand this thing that had been running my life – and, in part, the life of my dyslexic artist father as well as other family members, more or less.

So I had myself tested for dyslexia. I attended dyslexia conferences and started the library research that eventually became the book, *In The Mind's Eye*. I had learned that almost all the professionals in the field wanted mainly to fix reading problems. But that they mostly ignored the special talents that many dyslexics have. Coming from a family of visual-thinking artists and engineers – many with dyslexia or related problems and talents – I realised that there was more to the story than just reading problems.

My research and book focused on these talents as no other book had done before – the neurological foundations, the case studies and the profiles of famous people and the growing role of new computer graphic information visualisation technologies. I found that several important earlier neurologists had emphasised the talent side – but they had been largely ignored. Also, as I did my research, I could see the world of technology was changing in fundamental ways – almost all in favor of the dyslexics and their distinctive talents – while, of course, most conventional educators and institutions were then – and still are – blind to these changes.

I was shocked to suddenly realise that, in most cases, the major technological changes unfolding today required skills and talents that seem to come easily to most dyslexics (information visualisation, for example) – while the things dyslexics had most difficulty with (rapid reading, fact memorisation and spelling) were becoming less and less important in life and in the workplace. Few experts understand the inevitable consequences of this major trend.

I suspect that the strong focus on the talents of dyslexics is the reason that the book is still very much alive today – and still, amazingly, regarded as radical new thinking – over twenty years since it was first published in 1991. (However, I have often pointed out that most of the basic ideas were not really new. They were set forth earlier by neurologists like Samuel Torrey Orton and Norman Geschwind, But, as noted, these ideas were largely ignored by later researchers and practitioners who mostly focused on pathology alone.) Even the university research librarians liked the book. It was selected out of some 6,000 books as one of the “best of the best” for the year by the American

“I suspect that the strong focus on the talents of dyslexics is the reason that the book is still very much alive today -- and still, amazingly, regarded as radical new thinking -- over twenty years since it was first published in 1991.”

Library Association (one of only 13 books in their broad psychology, psychiatry and neuroscience category).

Over time, the book has come to be highly regarded in many quarters. To my great delight, Dr Oliver Sacks (the famous author of *Awakenings* and *The Man Who Mistook His Wife for a Hat*) came to write in the foreword to the second edition: "In the Mind's Eye brings out the special problems of people with dyslexia, but also their strengths, which are so often overlooked... It stands alongside Howard Gardner's *Frames of Mind* as a testament to the range of human talent and possibility."

VISUAL THINKERS, VISUAL TECHNOLOGIES

Over the years, I have been invited to give talks and workshops for scientific, medical, art, design, computer and business groups in the U.S. and overseas, including groups in Australia, New Zealand, Canada, Hong Kong, Taiwan, Dubai and twelve European countries.

In addition, I came to be asked to write a regular series of articles and columns on the broad effects of visualisation technologies for a quarterly publication of the international professional association for computer graphics artists and technologists (ACM-SIGGRAPH) – a truly international organisation with many creative dyslexics (with conferences as large as 60,000 attendees, often in Los Angeles, California).

These columns have been collected into a second book with the title: *Thinking Like Einstein – Returning to Our Visual Roots with the Emerging Revolution in Computer Information Visualisation*.

Attitudes toward the special talents of dyslexics have been changing, but very, very slowly. Gradually, non-dyslexics are beginning to see why it is important to have dyslexics involved in their start up businesses – or their scientific research.

However, no one could be more surprised that I am with the wide and continuing interest in my books and articles and the ideas they contain. As I started my book research long ago, it was more than a small comfort to me to know that Winston Churchill, for all his major achievements as a leader in time of great crisis, had also once been at the bottom of the class – feeling "completely outclassed and left behind at the beginning of the race."

PART 2

PERSONAL STORIES OF DYSLEXIA



We can change the world
and make it a better place.

It is in your hands
to make a difference.

~ Nelson Mandela



A lot of what is most beautiful
about the world arises
from struggle.

~ Malcolm Gladwell

PERSONAL STORIES OF DYSLEXIA

An Introduction

The Dyslexia Association of Singapore (DAS) is pleased to be able to bring this book for personal stories of dyslexia to you. So many individuals from “all walks of life” have shared their experiences with dyslexia in an effort to raise greater awareness and also to bring hope to the children and their families who are facing their journey with dyslexia.

The dyslexia stories commence with Lee Kuan Yew. Mr Lee revealed he had mild dyslexia in 1996 and his announcement helped remove the stigma of having a learning difference and paved the way to better public awareness and acceptance of dyslexia. Mr Lee is mentioned in so many of the personal stories that follow as an inspiration to overcoming dyslexia.

The rest of the personal stories have been placed in the book in alphabetical order as neither story is more important than the other. The only story that is not in alphabetical order is that of Carrie Chan, her story follows her husbands, Gary Seow. I felt that they should be kept together, when you read their stories you will understand. Most wrote their own story with the proviso that we would edit it for them for publication, others felt that being interviewed would be a better option and as a result their stories were written for them. Most of the interviews were completed in face-to-face meetings while others were conducted by phone or on skype.

We were lucky to have a number of families participate and we have parents, their children as well as siblings contributing to this book. We also have stories from DAS parents and their point of view of parenting a child with dyslexia.

The Dyslexia Association of Singapore is privileged to be able to share their stories with you and hope in doing so provides greater public awareness of dyslexia.

I have no regrets.
I have spent my life, so much of it,
building up this country.
There's nothing more that I need to do.
At the end of the day, what have I got?
A successful Singapore.
What have I given up?
My life.

~ Lee Kuan Yew (1923 - 2015)

LEE KUAN YEW

Singapore's Founding Prime Minister
Visionary, Leader, Father and Builder of a Nation
1923 - 2015

It can sometimes take a great man to dispel prejudice. Lee Kuan Yew was a great man, and his example is a great step in the battle to fight bias against dyslexia. For Mr Lee was dyslexic too, only learning of this when he was an adult in his mid-fifties.

His daughter, Dr Lee Wei Ling, was at the time training to be a paediatric neurologist in Boston. She was sitting in on a test of a college student being tested for dyslexia when she realised she had difficulty with the words the student was being tested on.

Returning to Singapore, she noticed that her father was making the same mistakes, and suspected that he may have dyslexia as well. So she brought in a doctor to evaluate him.

"I had complained that I could not read fast without missing important items," said Mr Lee at the time. He was given a few words and asked to spell them out. He was eventually diagnosed with mild dyslexia.

Mr Lee revealed his condition to the world during a press conference at the Dyslexia Association of Singapore in 1996, when the then-Senior Minister announced his generous decision to donate to DAS royalties from the sale of the CD-ROM version of his book, 'Lee Kuan Yew: The Man and his Ideas'.

He explained that dyslexic people are as normal intellectually as non-dyslexics, but simply have trouble reading the letters of the alphabet and reproducing them correctly in a phonetic way.

Like Mr Lee, many people with dyslexia do not get diagnosed because they do not see that they are behind their peers in reading or spelling. They assume that the extra amount of effort they put into reading is the same as

everyone else. So many dyslexics work harder than others without knowing it. That was the case with Mr. Lee

"I should have come to that conclusion that something was wrong when I did a course in speed reading and I did not succeed. And it was not because I was stupid, but because I have to run my eyes back to make sure that I got the right word, so I slow down," he had said of his condition. "But because I read it slowly, I read it only once and it sticks. So there are compensations."

The important thing, said Mr Lee, "is not to be discouraged and think that 'I am disabled'."

Citing the example of Leonardo da Vinci, who is also believed to be dyslexic, Mr Lee asked, "So what? He was a great artist, sculptor, thinker. I am not comparing myself to him, but if he can overcome dyslexia, [so can others]. Fortunately, I overcame it without my knowing it." He said that it proved that it is not impossible to overcome dyslexia through hard work.

Mr Lee's announcement helped remove the stigma of having a learning difference and paved the way to better public awareness and acceptance of dyslexia.

The Dyslexia Association of Singapore is grateful for Mr Lee's unwavering support since 1996. The proceeds from the sale of his book was a great help to DAS, and he continued to contribute regularly until his passing in 2015.

Many of the stories in this book mention Mr Lee as an inspiration to those trying to overcome dyslexia. His success gave them the impetus and determination to pursue their dreams and their passion. The Dyslexia Association of Singapore applauds the late Mr Lee, as well as our contributing authors, for their courage in proclaiming their dyslexia so that others can see that it does not hinder success in life.