



TEACH TO INSPIRE INSPIRE TO TEACH

PRESIDENT'S AWARD FOR TEACHERS 2021







TEACH TO INSPIRE INSPIRE TO TEACH



A teacher's job is often associated with hard work and sacrifice, as well as joy and fulfilment. As we celebrate the noble work of our teachers, we would like to cast the spotlight on distinct individuals who have tapped their diverse strengths and talents to collectively develop the potential of those under their care. Together, they are united by a common mission – nurturing the lives of our future generations.



FOREWORD

Teachers are the mainstay of education, the heart of a school and the inspiration of our students. Since time immemorial, teachers have played a critical role in igniting our students' passion for learning, in caring for their well-being, and in shaping their character. Anchored in their strong beliefs and commitment to their calling, they undertake the mission of moulding the future of our nation with tenacity.

As the education landscape evolves, so has the role of our teachers. Today, our teachers not only collaborate with one another, but also partner parents and the community to provide for the holistic development of our students. In the last one year, they have also braved the COVID-19 pandemic to keep lessons going for the students. By developing new modes of learning and pedagogies, while continuing to extend care for the students, our teachers conducted home-based learning seamlessly and made sure that no child was left behind. In such challenging times, the teacher is crucial in providing security, direction and care to our young charges.

The 18th issue of *Teach to Inspire, Inspire to Teach* presents stories which relate the grit, innovation, warmth and care that 17 teachers bring to the profession. Their stories are told with a generous sprinkle of light-hearted and heartwarming anecdotes that exemplify their unique experiences. Although they come from diverse backgrounds and disciplines, the common thread that binds their stories is their labour of love and sacrifice, especially during this extraordinary time. Their impact spans across students and colleagues, inspiring a love for lifelong learning through their words and deeds.

I commend these 17 teachers for their invaluable contributions to the fraternity, and for being champions of professional excellence, collaboration and innovation in their respective domains of practice.

Congratulations to the recipients and finalists of the President's Award for Teachers 2021. May these stories resonate in the hearts of fellow educators and bring a greater appreciation of the profound impact that you have on many young lives.

Lead. Care. Inspire.

Mr. Chan Chun Sing *Minister for Education*

PRESIDENT'S AWARD FOR TEACHERS

The President's Award for Teachers was introduced in 1998 to recognise excellent teachers for their role in moulding the future of our nation. The Award is conferred by the President of the Republic of Singapore during the Teachers' Day Reception at the Istana.

These teachers inspire their students and peers, through their words and deeds. Since its inception, 102 outstanding teachers, including this year's recipients, have been recognised. They are caring and nurturing, dedicated to the holistic development of their students. Committed to developing their students to the fullest potential, they are passionate in adopting innovative approaches in their lessons. These teachers are also life-long learners and mentors to their peers.

These teachers are role models that exemplify the Ethos of the Teaching Profession.



Mr Leung Yulun Yuan Ching Secondary School



Mrs Ng-Siah Siew Ling

Corporation Primary School

Ms Khairiah Bte Hairoman Peirce Secondary School



Mdm Edwina Cheng Wei Na

Ms Tang Iman Temasek Polytechnic







PRESIDENT'S AWARD FOR TEACHERS

RECIPIENTS 2021

PRESIDENT'S AWARD FOR TEACHERS **RECIPIENTS AND FINALISTS 2021**

Mr James Han Choon Boon Blangah Rise Primary School



Mrs Ng-Siah Siew Ling Corporation Primary School



Mr Koh Weining Temasek Junior College



Ms Teo Yong Chin Queensway Secondary School



Yuan Ching Secondary School



Mdm Edwina Cheng Wei Na Compassvale Secondary School



Mdm Jayasutha d/o Vijaya Kumaran Sengkang Primary School



Ms Chua Siew Kheng Sengkang Green Primary School



Mdm Penny Chong Chew Luan Ahmad Ibrahim Secondary School



Ms Khairiah Bte Hairoman Peirce Secondary School



Mdm Radin Rafeah Bte Ali Evergreen Primary School







PRESIDENT'S AWARD FOR TEACHERS

RECIPIENTS AND FINALISTS 2021

POST-SECONDARY EDUCATION INSTITUTION

Ms Tang Iman Temasek Polytechnic



Mr Dennis Lim Chee Wei ITE College West

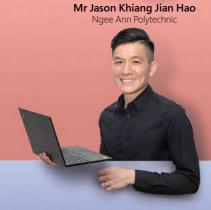


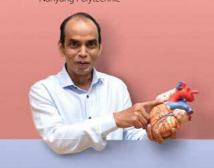
Mrs Sathish Sowmya

Mr Jeff Koh Hock Tong ITE College Central









SINGAPORE EDUCATORS' PHILOSOPHY OF EDUCATION

ETHOS OF THE

TEACHING PROFESSION



The Ethos is expressed in Our Singapore Educators' Philosophy of Education, the Teachers' Vision, the Teachers' Pledge, the Teachers' Creed and the Desired Outcomes of Education. Each of the above is an important facet of an integrated Ethos of the Teaching Profession.

The compass has been chosen to depict the facets of the Ethos of the Teaching Profession. Pointing to the true north, it symbolises the constancy of values in the lives of educators. New entrants to the profession are presented with a compass at the Teachers' Compass Ceremony.



Our Singapore Educators' Philosophy of Education captures the core beliefs and tenets of the teaching profession and serves as the foundation of teachers' professional practice.



The Desired Outcomes of Education establishes a common purpose for the teaching fraternity, guiding educational and school policies, programmes and practices.



The Teachers' Vision articulates the aspirations and roles of the teaching profession, helping teachers to focus on what to do in pursuit of professional excellence



The Teachers' Pledge constitutes an act of public undertaking that each teacher takes to uphold the highest standards in professional practice.



The Teachers' Creed codifies the practices of retired and present educators and makes explicit their tacit beliefs. It provides a guide for teachers to fulfil our responsibilities and obligations, and to honour the promise of attaining professional excellence



TEACHERS' VISION

SINGAPORE TEACHERS: LEAD • CARE • INSPIRE

By word and deed, through the care we give, we touch the lives of our students. We make a difference - leading and inspiring our students to believe in themselves and to be the best they can be.

As individuals and as a community of professionals, we seek continually to deepen our expertise. Respectful of fellow educators, we collaborate to build a strong fraternity, taking pride in our work and profession.

We forge trusting partnerships with families and the community for the growth and well-being of each student.

We Lead, Care, Inspire, For the Future of the Nation Passes through Our Hands.



We, the teachers of Singapore, pledge that:

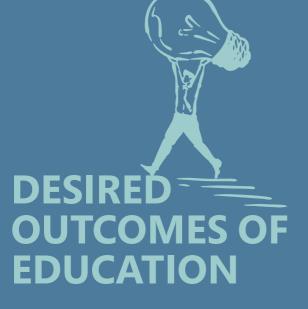
We will be true to our mission to bring out the best in our students.

We will be exemplary in the discharge of our duties and responsibilities.

We will guide our students to be good and useful citizens of Singapore.

We will continue to learn and pass on the love of learning to our students.

We will win the trust, support and co-operation of parents and the community so as to enable us to achieve our mission.



The Desired Outcomes of Education are attributes that educators aspire for every Singaporean to have by the completion of his formal education. These outcomes establish a common purpose for educators, drive our policies and programmes, and allow us to determine how well our education system is doing.

The person who is schooled in the Singapore Education system embodies the Desired Outcomes of Education. He has a good sense of self-awareness, a sound moral compass, and the necessary skills and knowledge to take on challenges of the future. He is responsible to his family, community and nation. He appreciates the beauty of the world around him, possesses a healthy mind and body, and has a zest for life. In sum, he is



a confident person who has a strong sense of right and wrong, is adaptable and resilient, knows himself, is discerning in judgment, thinks independently and critically, and communicates effectively;



a self-directed learner who takes responsibility for his own learning, who questions, reflects and perseveres in the pursuit of learning:



an active contributor who is able to work effectively in teams, exercises initiative, takes calculated risks, is innovative and strives for excellence; and



a concerned citizen who is rooted to Singapore, has a strong civic consciousness, is informed, and takes an active role in bettering the lives of others around him.

POST-SECONDARY EDUCATION PHILOSOPHY

TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING LANDSCAPE IN SINGAPORE

One of the key roles of the polytechnics and ITE is to equip students with industry-relevant and work-ready skills in order to prepare them for jobs in a wide range of economic sectors. Looking back at Singapore's history, as our economy developed, skills training had to be conducted in tandem with evolving industry trends for the workforce to respond nimbly to market changes. To meet the training needs of our workforce, the five polytechnics and ITE were set up over the years to spearhead technical and vocational education and training (TVET) in Singapore.

- The polytechnics and ITE offer a comprehensive range of programmes in a variety of sectors. These programmes adopt an industry-focused and practice-oriented curriculum that blends theory with application.
- Industrial attachments have become an integral part of the curriculum over time, to allow students to gain valuable on-the-job experience.
- Course offerings equip students with skills that are versatile and adaptable to the evolving needs of the future economy.
- Innovation and entrepreneurship are emphasised to give students ar entrepreneurial outlook and build their awareness of opportunities in emerging growth areas.

TEACHING IN THE POST-SECONDARY EDUCATION INSTITUTIONS

Preparing Students for the World of Work

Educators in the polytechnics and ITE play a big part in preparing their students for the future. Educators do not adopt a single approach, or a fixed set of methods to train students. Instead, they experiment, refine and share their experiences with the community of educators within and across the polytechnics and ITE. Their lessons are designed to engage students in their course of study, and encourage them to apply their learning at the workplace and to give back to society.

To continually enhance their students' learning experience, educators in these institutions stay up-to-date on industry trends and developments. Some also further their studies or take on courses to deepen their own skills in teaching, and some go on industry attachments, epitomising the spirit of lifelong learning.

SkillsFuture

The SkillsFuture movement, a national movement to provide Singaporeans with the opportunities to develop to their fullest potential throughout life, regardless of their starting points, has a significant impact on our education landscape and workforce. Educators in the polytechnics and ITE play an important role in this movement. They guide their students in their education, training and career choices and what it means to be a lifelong learner.

Educators in the polytechnics and ITE also contribute to the development of a high-quality system of education and training that caters to those already in the workforce. This includes training workers who wish to upgrade and deepen their skills to expand their job scope, or take up job opportunities in other industries. With the transformation of our economy, training needs will keep evolving and take on different forms. The role of our educators will become more important than before

Our educators in the polytechnics and ITE are critical pillars of our TVET system. Their selfless dedication and commitment to maximise the potential of every student is a key reason behind the success of our institutions. As we look ahead, we are confident that our educators will take our TVET system to greater heights.

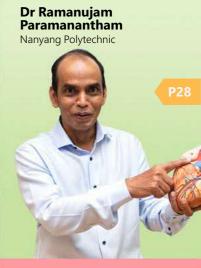
STORIES OF RECIPIENTS

Dennis Lim Chee Wei
ITE College West

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Koh Weining
Temasek Junior College

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Teo Yong ChinQueensway Secondary School



Ng-Siah Siew Ling Corporation Primary School



Khairiah Bte Hairoman Peirce Secondary School



Jason Khiang Jian Hao Ngee Ann Polytechnic



Sowmya Sathish Temasek Polytechnic



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AND FINALISTS 2021

Chua Siew Kheng Sengkang Green Primary School



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Jayasutha d/o Vijaya Kumaran Seng Kang Primary School



Tang Iman Temasek Polytechnic



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Leung Yulun Yuan Ching Secondary School



James HanBlangah Rise Primary School



Radin Rafeah Binte Ali Evergreen Primary School



STORIES OF FINALISTS 2021

HARNESSING TECHNOLOGY



TO EXCITE AND INSPIRE







Dennis Lim Chee Wei

Lecturer-Mentor

Institute of Technical Education College West



It's past midnight and you have a burning question about a topic learnt in school. What should you do? Tell it to AskCher.

Introduced in 2019, AskCher is an online chatbot ideated and co-developed by Dennis Lim, ITE Lecturer-Mentor of Service Management at the Institute of Technical Education (ITE) College West. It is currently available to his Higher Nitec students via the school's learning portal, but there are plans to encourage wider adoption across the campus.

Students can easily access this chatbot platform via their mobile phones or laptops. AskCher is trained to answer queries for specific modules. This helps to reduce barriers for students to seek help —seeking and empowering them to take ownership of their own learning, says Dennis.

He explained, "In a class of 40, we have students with different personalities. Some are

quiet and shy, so when they have doubts, they hesitate to ask questions in class. Students also prefer to message the teachers privately to clarify their doubts.

"I decided to develop the AskCher chatbot, so that students can ask questions as and when they want. Of course, if they have follow-up questions or wish to seek clarifications, they know they can still approach us."

Since the launch of AskCher, Dennis and his colleagues observed that the students have an improved understanding of the basic module content, which has freed up lecturers to tackle more complex queries and issues. Dennis estimates that the chatbot saves his colleagues and him some 10,000 man-hours annually.



I'm always trying to identify and address pain points on the ground, not just for the students, but also the teachers. I hope that by constantly innovating and leading by example, I can inspire my students to do the same for others.

DRIVEN TO DIGITALISE

tech tools like the AskCher bot and technology to make learning easier



24/7 ACCESS.... **AND COST SAVINGS TOO**

AskCher is just one of many initiatives that Dennis has mooted over the years, many of them aimed at helping students from disadvantaged backgrounds.

This sensitivity towards this particular group of students could be attributed to Dennis' younger days. As an active volunteer with the Chinese Development Assistance Council in his 20s, he interacted frequently with youths from low-income families. The stint proved to be a life-changing experience as it prompted Dennis to leave the comfort of his engineering career and become a teacher.

When he joined ITE College West in 2014, one of the first things he did was to kickstart a digitalisation drive. He converted the bulk of his teaching notes and materials into a digital format, so that his students could save money on printouts and buying textbooks.

He shared, "Students who come from financially challenged backgrounds receive financial support from the school. But some need to contribute to their families and may not have enough money for meals and other necessities

"It's also not environmentally-friendly to be constantly printing hard copies of textbooks. Besides the cost savings, students also appreciate that they can access their course materials digitally anytime, anywhere."

It also helped that ITE already had various financial and non-financial assistance schemes in place to ensure that every student had access to a computer or laptop. This facilitated the students' transition to digital materials.

CATERING TO DIFFERENT LEARNING STYLES

Observing that his students learn better when information is presented to them in bursts, Dennis champions the concept of micro-learning and converts his modules into step-by-step guides with key pointers.

He also turned to YouTube to learn how to design simple infographics, so that he could additionally summarise these pointers as graphics for students who were visual learners. A fringe benefit? Such materials could be shared easily via mobile phones and laptops.

The success of the micro-learning approach – the students showed better retention of information – inspired Dennis to create Revision Buddy, an award-winning chatbot platform that allows students to revisit lecture notes and check definitions based on a keyword search.

"The driving force behind Revision Buddy is to recognise the different learning styles and capabilities of our students. Not only does this chatbot allow students to learn by reading, it also allows them to learn by listening," Dennis shared. "Some of our dyslexic students face difficulty reading long text paragraphs. Revision Buddy's text-to-voice function allows them to listen to the content instead."

If you look at Dennis' teaching materials, you will also see that he always uses the Verdana font. Why is that so?

Dennis had signed up for a course to better support students with special education needs. There, he learnt that dyslexic students generally face language difficulties and are prone to committing spelling and typing errors, and that the Verdana font helps them to read better. He not only uses that font across platforms, it is a tip that he readily shares with others in the teaching fraternity and with industry attachment (IA) partners.

CREATING OPPORTUNITIES FOR MEANINGFUL INTERNSHIPS—

Besides the digitalisation drive, Dennis aims to make a difference in his students' lives by securing internship opportunities for them. Under his charge, the number of internship partners for the Higher Nitec in Service Management course jumped seven-fold within five years.



To achieve this, he tapped into his personal network, attended numerous networking events and spent hours convincing companies to give his students an opportunity through face-to-face meetings. Today, his students have the option of taking up internships with companies across a wide variety of sectors, such as finance, healthcare, retail, tourism and hospitality.

"I always encourage our partners to interview the students and let them take on positions with a wider job scope, instead of limiting them to only entry-level jobs. This is so that our students can have more career progression opportunities and in turn, command a higher salary later on," Dennis said.



"I really enjoy Mr Dennis' lessons because he is always cheerful, energetic and enthusiastic. His positive energy really rubs off on the class... I also learned how to communicate better, manage diversity and resolve conflicts by observing him."

- Li Jing Xin, 19 - [Final-year student, Higher Nitec in Service Management] -

CONSTANT QUEST TO ADDRESS PAIN POINTS

Often described by his students as "energetic and enthusiastic", Dennis is currently working on a few initiatives to help students learn with greater ease.



This includes a proposal for Virtual Reality (VR) internships amid pandemic-related uncertainties, such as temporary closures of shopping malls for disinfection and cleaning. Dennis hopes that by simulating a retail environment for students through VR, they can still learn about the key customer touchpoints in the absence of a physical experience.

He is also planning to further the microlearning approach for continuing education and training modules for adult learners, and make them available online.

And if you are wondering — another chatbot platform is in the works.

As a result of the success of AskCher, the school management has tasked Dennis to support the development of another chatbot. The new chatbot would help students rehearse

common job interview questions and have their responses recorded for feedback and development.

Dennis said, "I'm always trying to identify and address pain points on the ground, not just for the students, but also the teachers. I hope that by constantly innovating and leading by example, I can inspire my students to do the same for others."











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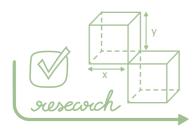
Koh Weining
Head of Department,
Economics

Temasek Junior College



Most educators will agree that more than achieving stellar grades, it is crucial that students find joy in acquiring new knowledge and skills. For Koh Weining, the Head of Department for Economics at Temasek Junior College (TJC), he walks the talk with his infectious embrace of technology and its applications.

Among his students and co-workers, Weining is known for his gung-ho approach to blended learning. Since 2018, the forward-thinking educator has begun the "flipped classroom" model with some classes, applying technology to teaching in a way that his peers had not attempted before.



"FLIPPING" THE LEARNING PROCESS THROUGH INSTANT FEEDBACK

Weining explained how traditionally, college students were required to collect and read their notes prior to lectures to improve content retention, before going away to apply what they had learned when tackling their homework. However, students come to lectures with different levels of preparedness, and many end up not grasping the concepts from the large-group presentation.

This makes the application of knowledge more difficult when students attempt their homework, and they will have to wait for tutorials before the feedback loop is closed, by which time, some discouragement may have set in.

Weining looked into improving the process by turning what would have been taught in a 50-minute, 400-pax lecture, into bite-sized

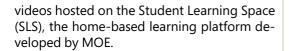


Learning is a skillset and a disposition. When we learn, that disposition can be caught by our students.

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POWERING CHANGE THROUGH INNOVATIVE THINKING

Through the adoption of the flipped classroom and other new ways of teaching, Koh Weining models the spirit of authentic learning.



Each lecture topic is split into multiple five-minute segments with multiple-choice questions in between to test the students' understanding. Their answers – right or wrong – provide useful data to Weining, which inform him on where and what to focus on during upcoming lectures. Weining also dishes out activities such as competitive quizzes during lectures, which in turn help him to refine what the tutorial should cover.

"There is now significantly less homework between a lecture and tutorial; at the tutorial, we do hands-on practice and they get immediate feedback. The application of knowledge is the more difficult part of learning, and this time, the teacher is there to hold their hands," explained Weining, who piloted this learning model with just one topic among a few class-



es before implementing it across all Economics classes in 2020.

Weining's passion for tech in education had its beginning years prior to joining TJC. During his stint at MOE's Curriculum Planning and Development Division, he played an active role in converting a basic set of economics syllabus onto SLS for teachers to adapt from.

"I had considered the option of teaching at a secondary school, which would have been a different challenge and an expansion of my teaching horizon. But having developed the SLS resources, I returned to Economics to complete the cycle, and see out its execution on the ground," he shared.

'WE ARE TEACHERS AND STUDENTS AT THE SAME TIME'

and the innovator was all ears to honest feed-

tation, there will be hiccups."

Weining shows that it is possible to be both a teacher and student at the same time. "Learnstudents." he said.

the Circuit Breaker was implemented in 2020.

he said. Nearpod became such a hit that the

days also showed that students who underthan those who did not.

dents are automatically directed to an earlier chapter if their performance on a quiz deter-

"All the hands-on and interactive work have made me enjoy the process of learning, rather than being too fixated on my grades though he helps us with that too!"



CHALLENGING STUDENTS TO LEARN AUTHENTICALLY

Weining does not just harness tech in his bid to get students to embrace Economics. He often brings in real-world issues so students can relate to the subject.

Covid-19 proved to be a goldmine for this purpose. When more old folks were observed in the lines to purchase face masks, he brought up the concept of opportunity cost for working adults to do the same. The rollout of vaccines gave students the opportunity to discuss ways for the public to embrace merit goods.

Every year, the department invites students to a live screening — complete with movie snacks — of the Singapore government's Budget speech with a running commentary by a teacher. "This is our way of building authenticity into the syllabus, to bring it alive," he said.

As a result of proactively connecting the syllabus to real-world events and making curriculum notes more succinct since Weining joined the school in 2018, about half of the H2 Economics students are now scoring As at the A-levels — up from 35% to 40% before.

Outside of Economics, Weining pushes his charges in the Temasek Humanities Programme, a programme for top students to broaden their perspective by researching social issues like inequality and hone leadership skills through hands-on practice.

For instance, he converted the annual Temasek Distinguished Speaker Series to a student-led project. Across half a year, students homed in on a theme — 2020's theme was climate change — and saw to the nitty-gritties of pulling off an engaging conference. These include organising pre-conference sessions for their peers to understand the topic on a deeper level, delegating tasks, and managing the schedule and budget.

"We give them the autonomy to run the event and I look at broad timelines. Economics knowledge comes in handy too. It's all about resource management," he remarked. In the



end, a total of 500 participants comprising students of TJC and other schools attended the engaging event.

Weining also actively leverages capstone projects for top humanities students to deepen their appreciation of the inquiry process — they research on a chosen topic and produce an academic paper that they will present to their peers. The objective of this exercise is to interest students in the art and science of inquiry, as they familiarise themselves with research methodologies, a process that some former students have found particularly useful in university where they had to peruse journal articles.

Not one to close the door on the unconventional, Weining supervised a project that was out of his domain. A student decided to investigate whether memes can hold the answer to whether a country's culture is individualist or collectivist. This was not a question of Economics but Weining was on board. "Using a topic that the humanities students were curious and passionate about, we could help them see the value of a rigorous inquiry process to better understand our humanity."

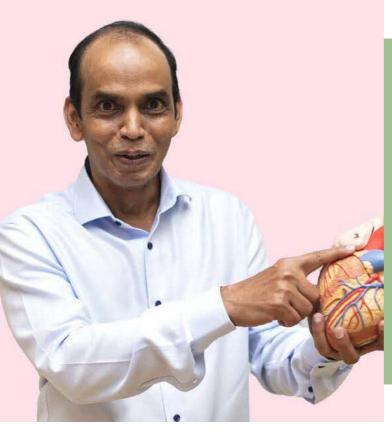
Such is the desire of Weining to stoke in students the love of gathering, even creating, new knowledge. "What we seek to accomplish is that they are self-directed and they enjoy that process. Success will look like good grades for sure but how we get there matters."

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Dr Ramanujam Paramanantham

Senior Lecturer and Senior Specialist , School of Health & Social Sciences

Nanyang Polytechnic



As a young general practitioner in India in the 1980s, Dr Ramanujam Paramanantham observed how appreciative his patients were when he took pains to explain their health issues in ways they could understand. Some three decades on, after doing his PhD in Singapore and moving into teaching, he is doing the same for his students, explaining complex concepts in ways that help them learn better

Dr Param not only "diagnoses" their issues but is also a bit of a gadget guy when deploying technology and other alternative ways to solve a problem.

"It's a combination of curiosity as well as need," said Dr Param, who credits his medical training for the observation skills he applies in his classroom at Nanyang Polytechnic. "As students ask questions and construct their knowledge, I can see that there are a lot of ways that teaching can be improved in terms of content as well as delivery. Then I

go and explore the tools available."

In Anatomy class, for instance, he noticed his students struggling to understand concepts about muscles, the same way he did as a medical student. A brainwave came and he brought a piece of rope to class the next day and attached it to the skeleton model, demonstrating how muscles pulled bones across joints.

"This made all the difference to them," he shared enthusiastically. "Where the students hadn't been able to wrap their heads around just how this action was carried out when I had explained it to them verbally, they were now not only able to understand the concept comprehensively, but also went on to apply it to other areas of the module."

As students ask questions and construct their knowledge, I can see that there are a lot of ways that teaching can be improved in terms of content as well as delivery. Then I go and explore the tools available.

KEEN EYE FOR DIAGNOSING LEARNING PROBLEMS

has led him to leverage technology to better deliver lessons and engage



FASCINATION WITH TECH-ENABLED LEARNING

Physical demonstrations are good but technology has been Dr Param's true ally in improving lesson delivery and student engagement. He often spends weekends poring over books and attending courses on this, and even dabbles in programming.

When he noticed that some of his students were too shy to participate actively in class, he researched and found Padlet, an online bulletin board that is useful for sharing ideas. comments and all kinds of multimedia content. He then incorporated it into Blackboard, a Learning Management System. Without needing to speak up, his students were more willing to chime up during class through the platform and could "pose all the questions they have there", said Dr Param.

He is also a fan of online learning materials, which allow students to learn at their own

pace, and complement in-person classroom interactions.

For example, when his students struggled to visualise microscopic structures such as the human cell, he used Articulate 360, an e-learning tool, to help bring the points to life. The tool allows him to create interactive learning materials combining videos, images and 3D visuals. To jazz things up further, he embedded quizzes and developed drag-anddrop activities and student surveys.

The buzz of response from these activities was encouraging, and Dr Param attributed it to how well the platform suited an adolescent demographic.



YOUTH-INSPIRED IMPROVEMENT

When Dr Param looked into better ways to engage his students, it did not stop at platforms and formats. He also thought about the language they relate better to.

In 2020, when he deployed an analytics tool to collect student feedback easily after each lesson, instead of settling for the usual satisfaction scale, he opted for a more casual set of responses that had been created by a colleague.

For example, when asked for "My learning experience for this topic", students pick their answer from "super", "easy peasy", "very cheem (Singlish for "complex") but I roughly get it", all the way to "alamak, (Malay expression of exasperation) I'm confused". Besides having fun with their replies, students can also ask

questions on the topic.

Teachers are finding the insights gathered useful for lesson planning. Dr Param's Assessing Learning in Real Time (ALERT) is now used in about 10% of the modules at the School of Health and Social Sciences; he aims for a 100% roll-out by December 2021.

A year after launching ALERT in the School of Health and Social Sciences, Dr Param is piloting EXSERLAN, or Extensible Seamless Real-time Learning Analytics. This time, the tool collects real-time feedback from students during the lesson, making their observations – and the teachers' responses – even more accurate and to the point. For Dr Param, it informed him exactly which topic he had to spend more time on.

"He takes time to explain if we don't understand something, even after the class is over. Once, I raised a question in class about the digestive system, and he actually looked for more information, and emailed diagrams and notes after the class to offer greater detail."

Alyssa Heng, 27

[Year 1 Student, Professional Conversion Programme in Nursing

PRESERVING THE INTEGRITY OF REMOTE ASSESSMENT

While Dr Param is passionate about helping his students, he is equally enthusiastic about applying technology to work processes.

One such area is online assessments, which also feeds nicely into how students like to communicate electronically these days, while cutting down on paper use too.

Since late 2019, he has been looking into ways to conduct e-assessments securely. The exploration was timely; when the pandemic struck and students had to sit for tests remotely, Dr Param was ready to launch the Respondus Lockdown Browser across the School of Health and Social Sciences.

When tests are administered with this tool, he explained, students cannot use keyboard shortcuts, open new tabs to look for answers nor copy and paste from the Internet, thus preserving the integrity of the answers. To further help with invigilation, an additional tool can monitor the assessment environment and help the teachers pick up on the students' movements.

Today, the Respondus Lockdown Browser is mandatory for online assessments in all schools across Nanyang Polytechnic, and the assessment procedure has been shared with other polytechnics and ITE.

He acknowledges that educational technology can be daunting and take practice before use.

To this end, he conducts training sessions and informal consultations for his colleagues to help with questions and deployment. He shared, "When they appreciate my efforts, that gives me motivation to go further and do more."











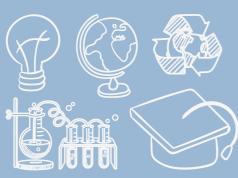
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STORIES OF RECIPIENTS AND FINALISTS 2021

BUILDING CONFIDENCE AND TRANSFORMING LIVES THROUGH A



CULTURE OF CARE





Chua Siew Kheng Head of Department, English Language

Sengkang Green Primary School



It was a chance recommendation from a friend's mother to do a stint of relief teaching that launched Miss Chua Siew Kheng on her path as an educator. Since then, she has gone on to carve her niche in teaching English and PE at a primary school for more than 30 years. Her secret to longevity in the profession is simple; she just enjoys working with children.

However, the road to success has not always been smooth as she recalls an exchange at a bus-stop with an ex-student who remarked that she had always stood out as a firm disciplinarian in his memory. This set her reflecting on the legacy she wanted to leave as a teacher and how going forward she would need to rethink her interactions with her students.

"As much as what you teach them and how you teach them are important, a good relationship matters a lot between a teacher and a student."

Hence in her substantial span of time as an

educator, she has learnt to constantly reinvent her methods to kindle the flames of curiosity and passion in her students through positive classroom culture.

MAKING THE CLASSROOM A SAFE SPACE

Siew Kheng sets out to build positive relationships with her young charges, starting with a safe and welcoming learning environment where students are eager to speak up. She tells her students that they should treat their classroom as a second home, since they spend a big part of their time there with their teachers and classmates.

"If this is your home and you care for it, you will want to do your best," she added.

To instill a sense of ownership in her students, she lays down a few ground rules: They have to be responsible for the upkeep of their classroom, and they have to treat each other with respect.



Respect is very important. It makes children feel safe. I let them know that everybody's views are important and respectful listening is expected, so we all have to practise active listening.



MAKING THE CLASSROOM A SECOND HOME

Students who step into Chua Siew Kheng's class know that they have entered a safe, nurturing space where their views and opinions are respected and heard.

"Respect is very important. It makes children feel safe. I let them know that everybody's views are important and respectful listening is expected, so we all have to practise active listening."

Siew Kheng's students know that they can freely share their views and opinions with little fear of judgement from their fellow classmates. It makes her class a close-knit one where the atmosphere is lively and interactive.

To make the physical classroom a more conducive place for learning, Siew Kheng is working on designing a prototype classroom that promotes collaboration in the lower primary students. In the past, the classroom setup was fixed such that the teacher always stood in front facing rows of students. "Today, we want our students to come together to share, collaborate, and create," she explained. Thus, furniture is made more portable to be easily rearranged and desks are arranged in different configurations – singly, in pairs or threes



and in groups - to adapt easily to any learning activity.

"My Primary One students would stand around and write their ideas on big, standing whiteboards when working on group activities, and there are open spaces that allow students to sit or lie on the floor to write on big lined-paper." All these to aid learning.

MAKING A CONSCIOUS DECISION TO LIKE EVERY STUDENT

With 31 years of primary school teaching experience under her belt, Siew Kheng has distilled two simple axioms that she applies with her students.

The first is making a conscious decision to like every student. In fact, at the start of every school year, she declares to each new class, "As long as you are in my class and you're one



of my students, I will make sure that I like you."

She admits that this is not always easy as some students have challenging behaviour.

"Even if there are 10 things you don't like, there will be at least one thing you like about a child. Build on that one thing you like first," she said.

She finds that such positive affirmation makes a huge difference to the students' behaviour. The children listen better, are less antagonistic, and share their thoughts more freely in class. The second axiom she believes in is that every child wants to learn. She cited a recent incident where she was helping a trainee teacher manage her Primary 3 class, and had to pull aside a challenging student who had been rude and disruptive in class.

The student had told her defiantly that he did not want to be a good boy. When she told him that she didn't believe him, he was taken aback. When she asked if he meant that he did not know how to be good, he admitted it.

She acknowledged that it can be hard work trying to meet a teacher's expectations and assured him that his teachers would be there to guide him so that he would know what to do and not get into trouble again.

By consistently using this approach, Siew Kheng recasts the role of teachers in the eyes of her students. Instead of being strict disciplinarians, students see their teachers as mentors who are there to guide them in their learning journey.

MORE AUTONOMY, MORE FUN

As the English Language Head of Department in her school, Siew Kheng takes a similar child-centred approach to teaching.

She worked with the Principal to develop the "Language Learning is Progressive" teaching strategy to refresh and raise the standards for teaching and learning of English in the school. Via this game-changing move, certain skills were identified as more critical for success and hence given more focus, especially during the transition years of Primary 2 to 3, and Primary 4 to 5. Proper scaffolding was done to enable effective learning of concepts and skills.

Siew Kheng also coaches teachers to adopt a more nurturing approach by equipping them with skillsets to develop students of different strengths, interests and needs.

A common theme in their teaching strate-

gies is giving students greater autonomy and choice in their classwork.

Differentiated Instruction in reading assessments is one such strategy. To cultivate confidence and the joy of reading, she worked with her colleagues to give students a choice of texts at varying levels of difficulty.

Lower Primary students get to pick some reading and writing activities according to their interests and proficiency. Some opt for draw-and-write exercises while others prefer composing short poems.

"The children find it more fun. Because of that, the teachers and I have found that they are then keener to write."

Observing how students struggle to answer comprehension questions, Siew Kheng and her colleagues introduced annotation strate-

gies to help them decipher the text: By identifying important elements in the text and relating it to information they have read, heard or experienced, students "think aloud" to improve their understanding.

TEACHERS, EXPLAIN WHY YOU ARE BEING STRICT"

Over the years, when Siew Kheng hears about the unhappy memories that some people have of school, she reflects on the influence that teachers have beyond the classroom.

When teachers are strict – they may punish the whole class for the misdemeanour of a few, or insist that their students do things only a certain way – they have good intentions but often fail to share them, she says. Others believe that time is the best teacher and stu-

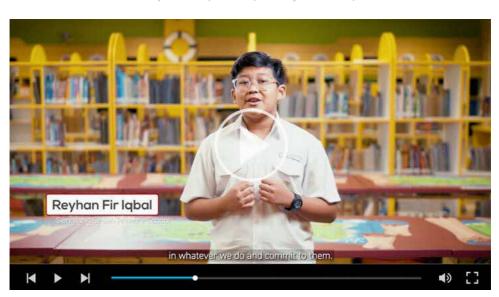


dents will grow up and in reminiscing, realise that their teachers meant well.

But Siew Kheng challenges teachers not to take chances but instead, to seize the moment to build a stronger relationship with their students, and show that deep down, "I care for you as a teacher, that's why sometimes I'm a bit stricter with you. I believe that the children can understand that."

"Miss Chua told me kindly that I had potential in performing. Her expression showed me that she believed in me. That left a deep impression on me, because even though she was strict, I knew she cared."

Reyhan Fir Igbal, 12 - [Primary 6 student]











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Edwina Cheng Wei Na

Year Head

Compassvale Secondary Schoo



Long-term absenteeism, low motivation, lack of family support.

These are some of the problems that Edwina Cheng tackles head on as one of the teachers overseeing her school's Gear-Up programme, which provides after-school support and care for students, some of whom come from disadvantaged backgrounds.

Attendance at the programme was low, hovering around the single digits, due mainly to the stigma associated with it.

"Some of them think that Gear-Up is for 'naughty' students and do not want to be labelled as such," said Edwina, an Elementary and Additional Mathematics teacher who has been teaching at Compassvale Secondary School for 15 years. "Others do not find the planned activities appealing and would rather go home." There are also those who have to support their family by working part-time after school; after making adjust-

ments to their work schedule or obtaining financial aid for the family, the school aims to occupy the children after school with healthy activities.

So what did she do when she helmed the programme in 2019? She rolled up her sleeves, as she usually does, by "doing things with" her students rather than "for" them. Since refreshing its strategy and activities, attendance has jumped over two-fold.

Edwina is an advocate of the Social Discipline Window, a concept aimed at helping those in positions of authority – such as teachers – to build a more positive and restorative community.

Through this direct, pragmatic and solution-focused approach, she finds ways for her students to answer their own questions.

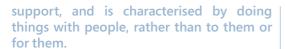
She explained, "The framework combines high expectations of behaviour and high



It's important to see our students as individuals, someone who wants to feel appreciated, and who wants to be respected. I believe that all students want to learn, do well and feel good about themselves.

LAPTOP-DOWN, HANDS-ON APPROACH TO BUILDING CONNECTIONS

At-risk students often find their conceptualised by Edwina Cheng.



"For example, if there is a futsal class for Gear-Up, I'll make sure I'm there alongside the students - doing warm-up exercises with them, cheering them on while they are training, and taking photos of them in action. I won't be on my laptop doing my work or sending out emails."

BREAKING BARRIERS

As one of two teachers overseeing the Gear-Up programme, Edwina and her colleague work closely with community partners to organise activities for her students.

One key change the pair mooted was to take over the planning from external vendors. Instead, they had a candid discussion with the students to find out what they hoped to gain from the programme. The takeaway was clear: Sporting activities and workshops that



offered hands-on learning ranked high on the students' wish list

Since then, various interest-based activities have been organised. From futsal and yoga to K-pop dance classes and bubble tea-making workshops, every planned activity was the result of a teacher-student discussion, and people started turning up.

Today, some 20 to 30 students show up regularly for the programme's twice-weekly sessions.

"If the students associate the programme with 'punishment', they naturally wouldn't want to come. So we share that we want to help them develop their skills, and identify and highlight their strengths through fun and interesting activities."

Besides imparting knowledge and developing

capabilities, Edwina also ensured that the activities strengthen the students' social-emotional competencies and social skills. For example, a video recording of them performing a K-pop dance routine and playing the cajon was shared with a senior activity centre to bring Christmas cheer amid the pandemic. After making bubble tea or pastries, the students would learn the posture of service by presenting them to school staffers.

Edwina also provides regular Gear-Up updates to the students' form teacher or subject teachers, and invites them to participate in the activities

Ritchell Choong, an Assistant Year Head and regular Gear-Up volunteer, shared, "Through the programme, the students have grown to become more confident and positive in their demeanour and attitude. Many of them have built strong social bonds with the Gear-Up students and teachers, and also opened up more to their form teachers and classmates."

FROM PROBLEM-SOLVERS TO MENTORS AND CHANGEMAKERS

Amid the bustle of the programme's increased engagements, Edwina has not lost sight of the intent behind these activities — to connect with the students and help them do well in school.

Her efforts are paying off. When Secondary 2 student Amy* was first invited to join Gear-Up, she refused to attend, but relented when Edwina and her colleague took the time to reach out to her. Each time she turned up, they would make it a point to chat with her during the activity breaks. Over time, she warmed up to them and the other students.

A year on, Amy, now a regular face at the sessions, gladly took on the role of emcee at a Gear-Up parent engagement session and even wrote the script on her own. Said Edwina, "She has also started to share more about what's happening at home, and what struggles that she's facing. We take heart that she's slowly opening up to us."

Edwina also came up with an idea of a peer support system, where students like Amy who saw benefits from the programme could serve as mentors to newcomers.

"I thought, why don't we open up more avenues for them, and get them to be a leader within Gear-Up itself? We decided to call them 'Changemakers', because we know that they will make positive changes in their lives and in the lives of others."

There are six Changemakers in a certain Secondary 4 class whose personal growth is so evident that their form teachers have remarked on the change: Stemming from their strong sense of belonging to the Gear-Up community, the students appear more accountable for their behaviour, and when they were made mentors to the newer members, they exuded a healthy glow of pride.

BRINGING INNOVATIVE PRACTICES TO THE CLASSROOM TOO

Edwina's passion for hands-on learning extends to the classroom.

For example, when teaching her students the Pythagoras' Theorem, getting them to learn how to apply the formula and solve problems was just one aspect of it. To make the lesson

more interesting, she would ask her students to create a Wheel of Theodorus drawing inspired by the theory.

Similarly, during a lesson on the surface area of sphere, she once asked her students to find out the surface area of an orange in class by peeling it and laying it out to see its relation to the formula.

"The kids enjoyed the peeling, the juice got into their eyes and trickled down their arms, and they eventually ate the fruit. I enjoy conducting such hands-on activities and get my students to move around and interact with others," she enthused.

Interestingly, Edwina struggled with Maths when she was a student. However, through sheer determination and hard work, and with good teachers along the way, she gained confidence in the subject in junior college, and even professed a love for it. This is a personal anecdote that Edwina often shares with her students to inspire them to press on in the face of learning difficulties.



"It's important to see our students as individuals, someone who wants to feel appreciated, and who wants to be respected. I believe that all students want to learn, do well, and feel good about themselves."

*Name changed to protect student's identity.

"She always wants us to see the positive in every situation, instead of focusing on the negative. She makes me realise that life will have many obstacles, but with logical thinking and resilience, we can always go uphill."

- Mathilda Choo, 16 - [Secondary 4 student] -









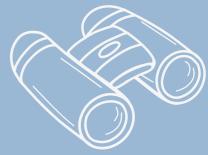




Penny Chong Chew Luan

Visually Impaired Coordinator

Ahmad Ibrahim Secondary School



It is a sea of change for most visually impaired (VI) students when they enter Ahmad Ibrahim Secondary School, after spending their early years in a special school.

For starters, they need to navigate far bigger premises, and learn alongside sighted students, many of whom are making friends with persons with disabilities for the first time.

Within a year or two, however, the differences between them are smoothed when those same students could be attending camps, performing for the public, and serving the community together.

The woman at the centre of these integration efforts is Penny Chong, who is herself visually impaired and an alumnus of the school.

NAVIGATING THE WAY AHEAD

Penny lost her sight at nine years old after her optic nerves were damaged due to a medical condition, which led her to enrol in a school for the visually impaired.

When she joined Ahmad Ibrahim Secondary School in the 1990s, she had to adjust from being in a class of three to a class of 40. There were hurdles too when it came to learning materials that had not been adapted for the visually impaired.

She recalls how there was a literature guide that she and her classmates needed that was not available in Braille. Along came her teacher, Deborah Ng, who was also visually impaired, who took it upon herself to create the Braille version.

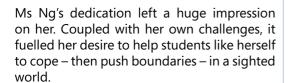
"What touched me most was, being totally blind herself, she couldn't read print books," said Penny. "Yet, she manually built the Braille version, word for word."



Building awareness is actually very broad. It's not just about the public understanding of Visually Impaired (VI) people; VI people must also do their part."

TEACHING INDEPENDENCE IN A SIGHTED WORLD

comfort zone, seize opportunities and give back to the community.



In the last 13 years of her teaching career, the National University of Singapore history major has been a dedicated resource teacher for all subjects that her VI charges undertake.

This may involve converting academic materials into Braille, developing additional material, or adhoc projects like learning an online tool for music composition in order to assist a student how to use it for his music examination at O-level.

She checks in with the VI students every school day (there are six of them currently enrolled), aiding and encouraging them on their journey to be independent learners, which will serve them well when they move on to higher education.



CHALLENGING VI STUDENTS TO DREAM THE IMPOSSIBLE

At the heart of it, Penny wants to challenge VI students to stretch themselves and take on tasks they did not think were possible. This in turn will build their resilience, confidence and adaptability to the world around them.

Such is her resolve that this year, her 16-yearold student Toh Bo Sheng, who is partially sighted, became the first VI student in Ahmad Ibrahim to take the N-Level examinations for Chinese Language.

This is no mean feat on several counts.

Firstly, Chinese Language, unlike languages based on the English alphabet, does not translate naturally in Braille, and this increases the difficulty of learning the language exponentially. VI students are thus exempted from



subjects such as Chinese Language and Tamil Language and offered a mother tongue language such as Malay Language in Braille.

Secondly, Bo Sheng had never learned Chinese Language in school. In Secondary 1, he took Malay Language, but his grades were weak. When Penny realised that he speaks Mandarin fluently, thanks to his love for Mandarin documentaries, she recommended that he switch to Chinese Language in Secondary 2.

To help him and other VI students taking up Chinese Language, it helps that Penny is a huge fan of technology.

She uses a computer with a screen reader to train the students to listen to and type in Chinese, in addition to other assistive devices such as a Braille note-taker (it works like an electronic Braille book where students can upload soft copy books and read rows of pins that move up and down, reflecting the words on the screen).

"Technology is really crucial," she reiterated. "If a VI person does not have that, it's very difficult to survive in society today."

However, for subjects such as Maths, Penny prefers to use tried and tested tactile methods where students feel shapes such as pyramids or cubes, to help students visualise and grasp mathematical concepts. Meanwhile, she teaches topics like graphs by using strawboards. VI students place a Braille graph paper on the strawboard and use pins to plot graphs.

STANDING TALL IN A WORLD OF THE SIGHTED

While working on her students' academic progress, Penny is also conscious about promoting inclusion in and outside of school. She creates opportunities for VI students to interact with sighted students and getting them involved in activities externally, where they work with mentors to pursue their interests or showcase their talents.

For example, in 2016, she worked with creative producer Alecia Neo on Unseen Constellations, a project where VI people worked with the sighted, to stage skits and other productions for the public. One of her students,

John Danesh, created a play based on crime. At the time, John was unused to moving around independently, and the event nudged him to further his interests and sidle outside of his comfort zone.

Because of his interest in criminal psychology, he eventually connected with two mentors, one a blind counsellor who works in the prison, and a police officer. Fast forward to today, and John is studying a subject he loves in a university in Tasmania, Australia, and hopes to be a lawyer one day.

VI PEOPLE PAY IT FORWARD TOO

Staying true to her belief that VI people are givers as well, Penny has also been encouraging her students to do their part for the community. In 2019, she co-organised a two-day camp with members of NUS' College of Alice and Peter Tan, where five VI students and four sighted Ahmad Ibrahim students bonded over games and sharing sessions before paying a community visit to seniors at St Luke's FlderCare.

In the same year, her students participated in a community project at Tasek Jurong, a charity that helps disadvantaged youths and ex-inmates.



"A year later, I started learning Chinese
Language. I didn't even know I was allowed
to take the subject as a visually impaired
student. But Mdm Chong encouraged me to give it a go.
And I'm glad I did. I really enjoy learning Chinese and it
feels good to be the first student in the school to take
the N-Level exam this year."

Toh Bo Sheng, 16 - [Secondary 4 student]

Such engagements benefit all parties, she said. "Building awareness is actually very broad. It's not just about the public understanding of VI people; VI people must also do their part."

Yet, Penny acknowledges that while awareness about the visually impaired has improved over the years, understanding about their capabilities is still lacking. She cites a general reluctance of employers to hire VI people if they didn't check off on lists with all the standard competencies, without considering, for example, how some tasks could be modified or replaced to allow for the visually impaired to also get the job done.

Seeing her students move on to higher education motivates her to support them even after they graduate. She works with Special Education Needs officers of ITE Central and

ITE East and, polytechnics and universities to share information on teaching tools that help VI students, such as Braille printers that print material in tactile form.

Looking at the challenges that Penny helps her students to overcome, one wonders how she managed as a student 20 to 30 years ago at a time when the world had fewer resources for persons with needs. She shares how her family, comprising her father, mother and sister, would read books and her classmates' study notes to her after school while she took notes down in Braille. "I have a very supportive family...! consider myself very blessed."









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Teo Yong ChinSubject Head, Physical Education and Outdoor

Queensway Secondary Schoo



At the end of each semester, form teacher Teo Yong Chin tasks her students with writing a note of appreciation to a classmate. In the process, they learn not only to thank but also to receive thanks.

Her effort to cultivate values such as empathy and gratitude in her students pays off when the students start writing these notes for people outside of their class too, including their teachers and school staff.

As Subject Head of Physical Education and Outdoor Education at Queensway Secondary School, Yong Chin also works values into the skills inculcated on ball courts and football fields, because sports should not only be about winning.

Having taught at Queensway Secondary since 2007, and as teacher-in-charge of the boys' and girls' volleyball teams for the past 14 years, the former Combined Schools netball player has been motivating her students to be disciplined, resilient, and to give back, even in the face of challenges.

Some students join the sport with no experience, others may come with issues related to discipline, attendance and academic results at school. But to all her players, no matter their background, Yong Chin reminds them that life is about doing your best not just on the court but off-court too.

In fact, she is known for her philosophy in life – "be good, do good, be grateful" – as an athlete and as a teacher.

"You have to be good because it is the right thing to do, not because somebody asks you to do so. And you do good not because you want to be rewarded," says Yong Chin.

"A lot of teachers say that children in sports CCAs behave very differently in the field than when they are in the classroom, which is true, so, we need them to have that mind-



You have to be good because it is the right thing to do, not because somebody asks you to do so. And you do good not because you want to be rewarded."

'BE GOOD, DO GOOD, BE GRATEFUL'

that they do, whether in sports or

set that here and there is the same. You have to give both 101%."

What 101% looks like can be seen clearly on the school's volleyball court. Thanks to the leadership of Yong Chin and her coaches, the girls' team were South Zone champions in 2015, 2017 and 2018. For the boys' team, the C Division boys made it to the finals for the first time in the South Zone Championships in 2018, achieving second place.

LEADING BY 'DOING GOOD'

After graduating from Tanjong Katong Secondary Girls' School, Yong Chin would return regularly to coach the school's netball team. Over the years, she has been helping other netball coaches sharpen their skills, and has been coaching the Singapore national schools' netball team for the past 10 years.

The deep ties that the sports community offers and the strong spirit of giving back is



something Yong Chin cultivates and celebrates at her school.

"Recently, I decided on an impromptu training session on a Saturday. I messaged some of them the night before and a team of seniors showed up the next day," she shared happily about the alumni's strong rapport.

She attributes the success of the girls' team to the commitment and hard work of everyone involved, including coach Ng Chee Hoe and the volleyball alumni. One of these alumni, Lee Pei Ying, now 27, started with no knowledge of volleyball but grew to love the game, thanks to Yong Chin's and Chee Hoe's dedication. Lei Ying is today the captain of the Singapore national women's volleyball team.

These success stories belie Yong Chin's commitment to develop her students by addressing their different competency levels and ability to pick themselves up when they fall.

One way she does this is to encourage them to proactively modify exercises or use other equipment based on their fitness levels. This enables them to "experience firsthand how it feels to acknowledge their differences and be comfortable in their own skin", she said.

And when the students need moral support, Yong Chin is there, showing up at their games with a "high five" or a consoling word.



'BEING GOOD' IN THE CLASSROOM, AS ON THE FIELD

Yong Chin's steady influence on the sports field can also be felt in the classroom.

As she used to teach Maths, some students would find their way to her for help when facing difficulties in the subject.

One of them, a Secondary 3 footballer, had been failing Maths since she was in Primary 1, and was looking for a way out of the doldrums. "She started talking to me some time last year," Yong Chin said. "I'd go to their football practice and she heard about me from her friends. That was when she started asking me for help with Maths."

Yong Chin offered her learning tips and worked with her football CCA teacher and Maths teacher to motivate her. They helped to overcome some family issues too, which had led to her frequent truancy. This year, the student not only passed a Maths test for the first time in her life, she also topped her class.

Dorcas Chu, 19, Yong Chin's former student and now a footballer on the national team, also struggled with Maths. She remembers being distraught at failing a test in Secondary 3, despite having studied diligently for it. She was on the verge of giving up when Yong Chin reached out to her to remind her it was okay to make mistakes, and remember to learn from them.

It was a lightbulb moment for Dorcas – her attitude and hard work mattered too, and who knows where Yong Chin's mantra to "be good" could take her? Dorcas, who started off

"When I decided to take the GCE O-Level examinations, I knew the transition wouldn't be easy. But she was there to help me every step of the way. I believed in myself because she believed in me. I wouldn't be where I am now without her guidance and support."

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Dorcas Chu, 19
[Former student.

Year 2 student at Temasek Polytechnic,
pursuing her Diploma in
— Social Sciences in Gerontology 1—

in the Normal (Technical) stream in Secondary 1, went on to the Normal (Academic) stream a year later, and sat for her GCE O-Level examinations in Secondary 5.

Yong Chin recalled Dorcas' journey with pride, "She was so determined to prepare for her GCE O-Level examinations that she stuffed her luggage with books when she went overseas to compete in a football match."

Dorcas added, "I knew the transition wouldn't be easy. But she was there to help me every step of the way. I believed in myself because she believed in me. I wouldn't be where I am now without her guidance and support."







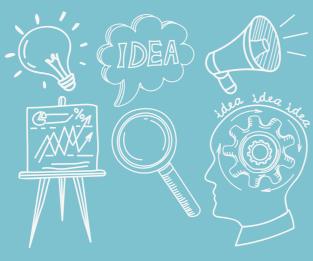




STORIES OF RECIPIENTS AND FINALISTS 2021

ENGAGING STUDENTS THROUGH

Social Media INNOVATIVE TEACHING DAGOGIES



TEACH TO INSPIRE, INSPIRE TO TEACH



Ng-Siah Siew Ling
School Staff Developer
Corporation Primary School



One thought-provoking question; a flurry of ideas and activities. This is the magic that happens when you light that spark for inquiring young minds. For Ng-Siah Siew Ling, the question that got her class all excited was: "Do you think animals should be kept in captivity?"

This question, meant to be a lesson for English Oral practice, captured the students' imagination, and Siew Ling was quick to maximise the learning opportunities presented.

Students debated passionately about animal rights, they wrote pieces, created posters, and discussed attendant issues, like poaching and endangered animals. Students went on to do their own research as well.

"There was so much thinking and deep learning going on," said Siew Ling.

Posing open-ended, thought-provoking questions to inquisitive young learners is a

conscious move on Siew Ling's part to build her students' oracy and thinking skills. It is also based on the premise that students learn best in teams, where they can tap the rich diversity of ideas and talents of every member to debate and resolve an issue.

The success of this particular lesson caught the attention of the Harvard Graduate School of Education, where Siew Ling was doing a course, and they asked to use it as a model in their outreach for teachers.

"It started from just one simple question," recalled Siew Ling. "The question is very important, to serve as a springboard to multiply learning."

LEARNING THE "MOVES" TO TALK

Siew Ling's students' ability to fluently articulate their opinions and thoughts did not come about by accident.

As an English teacher for the past 16 years,



We teachers don't always need to be there.
The students are able to take charge of their own learning. Children have diverse talents so when you give them the right opportunity for growth, they will unleash their potential.

COMMUNICATING STARTS WITH ASKING THE RIGHT QUESTIONS

cators is the passion of language advocate Ng-Siah Siew Ling, who is also driven to share teaching techniques and knowledge to groom in-



Siew Ling has been putting the knowledge gleaned from her professional training courses into practice. One such technique is the 'Talk Moves' placemat developed by the English Language Institute of Singapore. Students are guided to ask probing questions through 'Talk Moves', or conversational prompts and sentence starters. These conversational cues progress in stages of increasing difficulty from the Lower Primary to Upper Primary levels.

Observing that the younger students could use only the first three stages, Siew Ling and her colleagues developed an expanded placemat with easier "moves". With the customisation, the Lower Primary students were able to ask better questions and give more insightful answers.

Siew Ling shared the English Department's success with the other teachers. Inspired by how the initiative sharpened the students' verbal and thinking skills, her Mother Tongue colleagues created Chinese, Malay and Tamil versions of the technique and saw much progress in their students' conversational skills.

CREATING OPPORTUNITIES FOR STUDENTS TO SHINE

The students' language fluency skills were put to the test when Siew Ling tasked her Primary 6 students to publish a book to commemorate the school's 45th Anniversary. It turned out to be the right decision and a perfect talent showcase.

The publication team, comprising students drawn from different classes, rose to the occasion, pitching their theme to the Principal and conceptualising the stories. In teams of three, they photographed, filmed and interviewed over 20 school stakeholders, including current and ex-school staff, parents and alumni.

Like any major project, there were moments when it was hard to tell how things would turn out. On the day of a particular interview, for instance, a last-minute turn of events kept Siew Ling out of the video call, and the student team had to conduct the entire interview by themselves. Their confidence and professionalism impressed the interviewee so much that she called Siew Ling after the session to praise them.

After eight months of hard work, with the students constantly juggling their studies and publication duties, the book was produced. It was an engaging read, filled with creative features like poems, "Instagram stories" and hand-drawn comic strips. Besides English articles, the students also showed off their flair for their Mother Tongues with stories and poems in Chinese, Malay and Tamil.

Siew Ling said with pride, "We teachers don't always need to be there. The students are able to take charge of their own learning. Children have diverse talents, so when you give them the right opportunity for growth, they will unleash their potential."

She shared an example of a group of students who were struggling academically. They had lost their confidence and were unmotivated Siew Ling got them to do some journaling and realised that they loved photography. So she arranged for a mini workshop on photography and videography, and got them involved in the publication. "They really grew They were involved in this big project, so they really wanted to learn. When they did an ora presentation in class, they spoke up and received a standing ovation."

As Siew Ling said, "Every child has their own talent and their potential. It is for the teacher to find what these talents are, to help them discover them so that they can unleash their potential. I tell myself: You only have one chance to work with them. Cherish this moment. Make it a meaningful and memorable learning process, so that they continue to love learning in secondary school when they move on."

HELPING OTHER TEACHERS TEACH AND LEARN

Siew Ling is always on the look-out for new and better ways to help her peers learn as well. As the school staff developer, she looks into the training needs of teachers, admin staff and executives.

One pedagogical tool that she has helped her school embrace is Lesson Study. Unlike Lesson Observation, which assesses the teacher's classroom performance, Lesson Study focuses on how students learn. Making detailed observations of how their students respond to customised lessons has enabled Siew Ling and her colleagues to identify teaching strategies that work. It also benefits the school's teaching culture.

"Our teachers have become a learning community. They actively come together to develop curriculum materials and to craft out research studies. The quality of my teachers' conversation has also changed."

Using Lesson Study has earned Corporation

Primary School recognition among international educators. The school has been invited to share their teaching research projects every year at the World Association of Lesson Study conference since 2018.

Another unexpected avenue to help teachers learn came from Siew Ling's appointment as an Official Assessor with Enterprise Singapore. Her then principal had told her about the opening and encouraged her to take up the role.

To Siew Ling, it was an opportunity to expand her horizons beyond the education sector. She felt that it might provide lessons useful to her teaching role. As an Assessor, she had to accredit companies which demonstrate business excellence in their daily operations. It exposed her to various corporations' best practices and the skills that were in demand outside of school.

Eager to share her experience. Siew Ling



tapped the industry connections made through the experience and organised learning visits to well-known companies such as 3M, Sheng Siong and Mount Alvernia Hospital for her fellow teachers. Her purpose? To give educators an insight into the kind of knowledge and skills desired in the working world, so that they could better prepare students for it.

Such industry visits were eye-opening experiences for the teachers. The outcome was a school-wide plan to build skillsets like creativity, effective communication and collaborative teamwork in students.

In Siew Ling's view, it is vital that teachers be constantly learning in order to keep abreast of new ways of teaching.

"It is through our collective learning that we strengthen our pedagogy and nurture our learners. Learning is the bridge from who you are now to who you want to become."

"Miss Siah doesn't just teach us communication skills. She also teaches us values like self-discipline and time management. One incident that left a particularly deep impression on me was when she counselled us in class about our mobile phone usage. She told us, 'We control the phone; the phone does not control us'."

Kevin Anthony Velasco Orjalo, 12 - [Primary 6 student] -











Tweet Download



Khairiah Bte Hairoman
Head of Department, Humanities
Peirce Secondary School



It was a beautiful day. This was pre-Covid, and some 38 Secondary 4 students from Peirce Secondary School were out on the school field. Everyone had a paper airplane in their hands and a cheeky grin on their faces.

At the cue from their History teacher Khairiah Bte Hairoman (also known as Khai), they gleefully tossed their planes into the air, hoping their own plane would glide the longest distance. Once satisfied, they picked up another plane that wasn't theirs, unfolded it, and read its contents.

The activity may seem puzzling or even frivolous to passers-by. However, what the students had written on their paper airplanes were actually their personal responses to a question raised by Khai in class earlier: "Do you think America did the right thing in dropping the atomic bombs in Japan in 1945? Why or why not?" By reading someone else's response, the students gained a

perspective that was different from their own.

Khai, who has been teaching History and Social Studies to upper secondary school students for some 17 years, said, "A humanities education allows you to gain multiple perspectives and develop empathy by looking at history, and by discussing contemporary societal issues."

THE POWER OF STORYTELLING

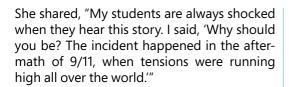
Personal stories are a key part of Khai's lessons. It's one of the ways in which she brings her subjects to life.

For example, when discussing the topic of racial prejudice in Singapore, Khai would recount how she and a fellow Malay-Muslim friend were once called out as terrorists by a group of American boys on a public bus in Singapore.

I would like to think that anything can be discussed during my classes. The knowledge we impart is essential, but what's equally important are the stories shared in the classroom and the student reflection that follows.

LET'S TALK ABOUT THE WORLD

No topic is off-limits in Khairiah's History and Social Studies class as of the world through stories and



In discussing such anecdotes, Khai's students are able to draw connections, and see how events in other countries can have an impact closer to home. "It's always about putting things in context to facilitate understanding," Khai emphasised.

She similarly encourages her students to talk about their personal experiences. To make sure that the class discussion is never dominated by a few vocal students, she employs creative strategies that encourage mass participation, such as the paper airplane activity, a debate, or even a quiz.

These varied activities also double up as informal assessments to help Khai motivate different types of learners.



At times, even art is involved, "Once, after going through the Mukden Incident and the Marco Polo Bridge Incident of the 1930s, I got my students to draw their understanding of the two incidents." Khai shared. "This allowed the more visual learners in the class to experience a sense of achievement as they could articulate their thoughts on a platform that is more accessible and comfortable for them."

Khai also occasionally invites external parties to share their perspectives. For example, for a Secondary 3 project on migrant workers in Singapore, Khai invited a representative from the Migrant Workers' Centre to give a talk during school assembly.

The session reached a turning point when video interviews conducted with migrant workers were shown.

Khai elaborated, "Some of the workers broke down during the interviews. They shared that they feel hurt whenever people walk past them and cover their noses, or that they have to send every earned dollar back to their families.

"It was an eye-opener for the students because they were able to see migrant workers as real people facing real issues for the first time." The session impacted the students so much that many of them started asking if they could do more for the migrant workers. With guidance from the teachers, the students suggested organising a donation drive, and every class in the cohort contributed daily necessities

SPARKING CURIOSITY, CONTROVERSY AND CONVERSATION

Where appropriate, Khai also likes to employ a dose of controversy to grab her students' attention and engage them in lively discussion.

For example, when teaching her class about the Korean War, the lesson would open with a video on Otto Warmbier, the American tourist who was arrested for allegedly stealing a propaganda poster in a hotel in North Korea. She would then segue into talking about the Trump-Kim summit in Singapore and help her students see the significance of the meeting against the backdrop of the Warmbier incident and the Korean War.

Similarly, Khai doesn't shy away from discussions initiated by her students. Instead of dis-

missing someone who makes an off-the-cuff remark, she would guide the student to support his or her point of view by using questions such as "Why do you think that is so?", or "What makes you say that?" By doing so, she is able to maintain a classroom environment where open conversations are encouraged.

"I would like to think that anything can be discussed during my classes. The knowledge we impart is essential, but what's equally important are the stories shared in the classroom and the student reflection that follows," Khai said.

KINDNESS, EMPATHY, AND LEARNING TRIPS OVERSEAS

Beyond lesson plans and pedagogies, Khai believes that positive relationships are the bedrock for keeping students motivated and participative in class.

"When students misbehave or act out in class, it is usually because there are underlying issues. So I make it a point to get to know every single one of my students and their families. Family background is crucial for helping me to better understand my students," she said.

Khai speaks from personal experience. She grew up in a single-parent family and faced financial difficulties in her growing-up years. Revision for her O-level examinations took place mostly at the void deck because her family didn't have a place of their own. It was those trying years that made Khai realise that education is key to breaking out of the poverty cycle.

She shared, "When I was young, I always wanted to travel, but I never had the opportunity to do so. Now that I've been to some 30 countries, I want to do the same for my students. Even though bringing a large group of students overseas is no mean feat, I would always organise an overseas learning trip every year."

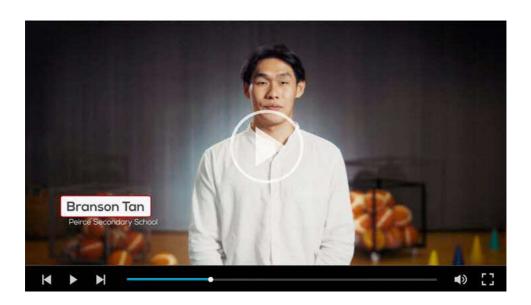
Over the years, Khai has brought her students to various countries. From Bali and Vietnam, to Taiwan and Sri Lanka, each trip has opened the eyes of her students to a world outside of their own. Besides appreciating the historical significance of these places, Khai also teaches her students to develop empathy for others by getting them involved in community work during these trips.

As the saying goes, "Experience is the best teacher." By offering her students myriad experiences, Khai opens up multiple windows to the world.



"Ms Khai has taught me the value of hard work. She believes that hard work can make you achieve great things, because there's no shortcut to success. She has also taught me to be kind to others, because you never know what a person may be going through."

- Branson Tan, 19 - [Former student, Class of 2019] -













Jayasutha d/o Vijaya Kumaran

Subject Head (Malay and Tamil Language)

Seng Kang Primary Schoo



A Primary 5 student stood nervously in front of a classroom. He took a deep breath and recited a tongue twister in Tamil out loud, which drew appreciative laughter from his classmates. He smiled, pleased at having met the mini challenge set by his teacher.

Recounting the incident, Mdm Jayasutha Vijaya Kumaran – better known as Vijay or Mrs Vijay among her Seng Kang Primary School colleagues and students – shared, "This student of mine is of mixed parentage. He hardly speaks Tamil at home and he doesn't speak up at all in my class. So I tasked him to memorise a tongue twister because I knew his classmates would enjoy it, and that would make him feel more confident.

"I was so proud of him because he managed to say the phrase!"

All over the world, there is evidence that children gravitate towards the language of their peers and larger community as they mature. For many in Singapore, that language is English.

As such, some students may resist speaking their mother tongue, but Vijay hopes to change that by bringing laughter into the classroom. She believes that fun and learning need not be mutually exclusive, and that teachers do not always have to be serious to be effective.

POWER OF HUMOUR, PERSONAL NARRATIVES AND SMALL WINS

Vijay's father is a key inspiration behind her teaching approach, which is to use humour as a way to bond with her students.

She shared, "When I was growing up, my father would always share funny quotes and watch comedies with me. He is in his 70s now and he still sends me jokes and videos via WhatsApp. When that happens, I'll always laugh no matter how I am feeling that day.



Learning a language is not just about reading from the textbook, or writing in the workbook. I believe you can also encourage students to develop a passion for their mother tongue through the arts.

BRINGING LANGUAGE LEARNING AND LAUGHTER TOGETHER

From using humour and sharing personal stories, to driving interest in the Tamil language through the never a dull moment in her class.

"Because of my father, I was inspired to use humour to make my students feel relaxed around me. It's not about being a comedian in class. Rather, the aim is to establish a rapport with them."

Vijay also believes in using storytelling as a teaching tool, and often shares personal stories and experiences with her students. This includes showing them videos of herself as a young national team debater to pique their interest in the Tamil language.

She said, "The children would laugh and comment, 'Mrs Vijay, your hair looks so funny!' But they would also reflect and say, 'If my teacher can do it (be a national debater), so can I."

Teaching over two decades has made Vijay aware of students' different learning preferences and learning how to cater to the needs of different students.

One of Vijay's key techniques involves break-



ing up the learning into chunks to make the material or skills easier for her students to understand. She also makes it a point to set appropriate levels of challenges, empower them to make decisions about their learning, and celebrate their achievements, no matter how small.

Take spelling for example. Instead of making everyone in the class memorise and write the same number of words, Vijay assigns an individual target to each student based on his or her proficiency. She then lets the students decide which words they would like to learn and to be tested on, based on a list provided. The rest of the words in the list will be tested verbally with guidance from Vijay.

By using this approach, Vijay observes that her students are less inclined to feel overwhelmed or easily defeated, especially those who are weak in the subject, or have learning needs like dyslexia.

In her quest to create an inclusive learning environment, Vijay also once procured a Tamil keyboard for a student who struggled with handwriting due to a health condition. She taught the student typing skills using the keyboard so that he can use it as an assistive device for class assignments, and so that he would not be left behind in his work.



CULTIVATING LANGUAGE INTEREST THROUGH PLAY AND PERFORMANCE

Vijay's passion for teaching is evident and she is always brimming with new ideas to encourage creativity in learning.

In 2018, her interest in debate and drama led her to launch Seng Kang Primary School's inaugural Tamil language competition, Kalaicharam. From character portrayal and singing to public speaking and debate, every participant was given a chance to perform in front of an audience. Vijay even roped in teachers from other primary and secondary schools to be part of the judging panel in the final round of the competition.

"Learning a language is not just about reading from the textbook, or writing in the workbook. I believe you can also encourage students to develop a passion for their mother tongue through the arts," she enthused.

Kalaicharam proved to be a hit with both students and parents alike. By popular demand, the competition was held again in 2019, and returned in 2020 in the form of a virtual event.

Not one to rest on her laurels, Vijay plans to develop a physical board game targeted at lower primary students next. The aim is to make the Tamil language more relatable and accessible to them. She also hopes the board game will promote family bonding and offer an alternative to screen time.

Although the specific rules of the game are still being worked out, she envisions the gameplay elements to include instructional cards requiring players to express themselves in Tamil, before they can advance on the board. For example, they may have to say a proverb, spout simple poetry, sing a nursery rhyme or answer a question.

Vijay added, "I think the board game would provide a great opportunity for the young to play with their parents, grandparents and siblings. From a language development perspective, it would also 'force' the players to speak the language for the entire duration of the game in a fun way."

"Participating in Kalaicharam has boosted my confidence in speaking Tamil. Initially, I was pretty nervous and I thought I should give up. But Mrs Vijay kept encouraging me and told me I could do it, and I just need to try my best. Because of her positive words, I have improved and I actually really like to speak in the Tamil language in front of a crowd now."

Suresh Priyan, 11 - [Primary 5 student]

A TEACHER OF TEACHERS

Vijay attributes her strong foundation in the Tamil language to her primary and secondary school teachers. As a young child, she used to emulate her Tamil teacher in primary school, Mrs Rajan, during pretend play. Coincidentally, Mrs Rajan was also Vijay's colleague when the latter first started teaching. She remains close to Mrs Rajan and even invited her to join Seng Kang Primary School as a flexi-adjunct teacher in recent years.

In turn, Vijay's enthusiasm for the language has inspired two of her former students to become Tamil teachers. She continues to pay it forward by mentoring new teachers in her school. She shared, "I always emphasise to my mentees two things: First, we must practise what we preach. When I am with my fellow Tamil teachers, I would insist we speak in Tamil. We can't be telling our students to speak the language when we are not setting an example ourselves."

"Second, if you see teaching as just a job, you may excel in it but you won't have the fire in you to go the distance. So find ways to keep your passion for teaching alive.











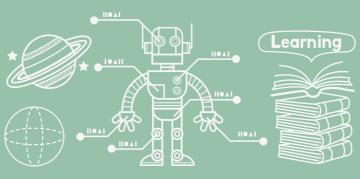
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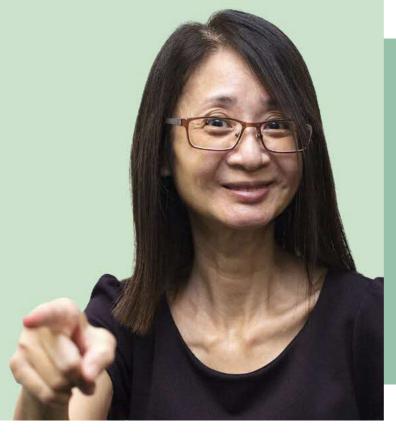
STORIES OF RECIPIENTS AND FINALISTS 2021

adopting 🍪

INTERDISCIPLINARY AND AUTHENTIC PROBLEM-SOLVING APPROACHES

IN TEACHING AND LEARNING





Tang Iman
Lecturer,
School of Informatics & IT
Temasek Polytechnic



Last year, several hundred adults in Singapore became more data literate, thanks to Iman Tang and her team of 15 trainers at Temasek Polytechnic (TP).

Iman, who teaches subjects such as logic and mathematics, and data visualisation and analytics, has been conducting short courses on data analytics for adult learners since 2016. Over the years, she expanded some of the existing courses into a series of stackable courses, which would take participants through the entire data analytics life cycle – from data interpretation to visualisation, data storytelling and predictive analytics.

When the Covid-19 pandemic struck, Temasek Polytechnic's courses caught the attention of companies looking to upskill their employees' data capabilities. There was a significant increase in enrolment for introductory courses such as Basic Business Analytics @ Work. From doing 15 runs of the course in 2018, Iman went to doing 36 runs in 2020. She also trained a team of 10 instructors to cope with this increased demand.

Iman, a data specialist, is thrilled.

She says, "I want people to know that data can help them make better decisions. I want to help people find passion in what they do."

And that's exactly what she sees through the experiences of her former students.

A group of social service sector employees used their newfound data knowledge to do a geographical mapping of cases in Singapore to learn how to better allocate resources; an aircraft maintenance personnel compiled handwritten texts from pilots and engineers to aggregate the most common problems so as to improve his maintenance schedule and order the right amount of spare parts; a telco executive predicted churn rates—industry speak for rate of customer loss—so the team could retain customers with the right campaigns.

What made this even more heartening for Iman is that some of these students were data newbies who did not have much prior



Unlocking the motivation to learn in each individual student is one of the most rewarding aspects of teaching.

LOOKING INTO THE **HEART OF DATA**

transform and help people make



"This is also one of the challenges of adult education", acknowledges Iman. Iman was redeployed from teaching mathematics to teaching data analytics in 2012, despite having no background in the subject matter. Therefore, as an adult learner herself, Iman is able to empathise with the students in her CET classes who come from varied backgrounds and help them connect the learning objectives with their prior knowledge and experience.

"In the same class, we can have someone in the tech business and another who hardly needs to touch an Excel sheet," she said. "But at the end of the day, when the newbies produce a data dashboard on their own and see the potential of using it in their work, they are very thankful."

Whatever their skill level, Iman aims to help all her students up their game - whether it's a retiree, an upskilling adult learner or a young student. With that in mind, she de-



signed a dual track for her courses - one for business users and the other for aspiring data scientists.

For those who need more help, she starts them off on the basics, or partners them with a tech savvier classmate for peer support.

For instance, for adult learners intimidated by the remote learning environment, Iman makes sure she covers the fundamentals from the get-go. "In home-based learning during Covid-19, the first thing we teach is how to share screens and how to toggle between windows," she shared.

Once the initial hurdles are cleared, she encourages students to apply data sets that most can identify with to their hands-on course work. "This makes it easier for them to relate to the subject," she said.

THINKING SKILLS BEFORE TOOLS

For Iman, at the heart of data analytics lies the ability to think critically about data. What issue is the data set looking to solve? "This is fundamentally more important than chasing technology and worrying over what software tools to use," says Iman. "This is similar to how we don't focus on learning the functions of the calculator but rather the mathematical concepts," explained Iman.

"Once that thinking process is in place, the software tool becomes just a means to an

end. Even if the technology tool they use becomes obsolete one day, these students would be able to stay relevant because they would have acquired the thinking skills to solve problems."

Iman and her team's practical and nurturing approach has brought them many 'repear customers'. Past students sign up for the next module of her stackable courses or introduce colleagues to sign up for the courses.

NUMBERS TO THE RESCUE

Even with her younger students, Iman shows a similar approach to data, i.e. using it to help improve outcomes.

She worked with a team on the Assessing Learning in Real Time (ALERT) project, which enables teachers to identify learning gaps in students.

Each week, students from across 20 classes are given a quiz to assess their understanding of the main concepts taught in class. This data goes into a dashboard for analysis. ALERT tells teachers at a glance whether their students have understood the topic and if there are parts of the topic they need to go over again.

Iman took the analysis a step further to identify individual students, who were finding cer-

tain concepts challenging, and then stepping in to improve their understanding.

Iman continued to make tweaks to the data collection system, making it easier for her colleagues to use it. Over time, 12 tutors came on board to use the learning analytics system, saving 12 man-hours per week across the semester and enabling early intervention to help students in need.

"What's good is that students recognise and appreciate that their tutors are responsive to their learning needs and this makes them perk up and put more effort into what they are doing," she added.

It's once again about data helping to make better decisions.

INDIVIDUAL ATTENTION

Iman goes out of her way to ensure that her students benefit from her lessons. Back in 2012, Iman spent four months converting all her lectures into some 220 videos for students to watch before going into class.

"In the lecture theatre, students can be passive. They may understand your lesson only up to a certain point. With videos, they can stop, rewind and re-watch to understand the topic. This helps them take ownership of their own learning," she said. This also means that during class, they can spend time on more

productive discussions, clarify doubts and engage in hands-on tasks.

She adds, "I believe that every student can continuously improve themselves if given the right motivation. Every student has a unique profile. Some can be motivated by enriching classroom activities, some by fostering a sense of community via peer teaching and learning. For the unmotivated, it can take a bit more time and effort to draw them out."

She shares an anecdote of a student, who was

afraid of programming. You could see the resistance in her body language, shared Iman. Iman sat with her and helped her solve small challenges, starting with learning how to import the dataset. Over time, the student overcame her fear.

Says Iman, "I try to guide less motivated students to achieve bite-sized successes one small step at a time until they gradually build their confidence. When such students eventually feel 'safe' enough, they begin to take more responsibility for their learning and commit to upping their skills. I find that unlocking the motivation to learn in each individual student is one of the most rewarding aspects of teaching."



"Because Ms Tang makes data analytics simple to understand, she has inspired me to pursue a career in this field"

Siya Modi, 17 - [Year 1 Student, Diploma in Big Data & Analytics]











Tweet Download



Koh Hock Tong Section Head, Mechanical Engineering Department ITE College Central



A smart walking cane for the elderly that "sees" and "warns" its user when the floor is wet and slippery.

A wheelchair with self-locking wheels inspired by airport trolleys.

A handy device equipped with a hydraulic lift and a lateral slider that allows for the safe and easy transfer of a wheelchair-bound person between a car and a wheelchair.

These state-of-the-art, brainy inventions may sound like they came out of some high-tech engineering lab run by Elon Musk, but they are really the brainchild of ITE students at the Assistive Technology Makeathon.

Emblematic of ITE College Central's push towards social-conscious engineering and innovation, these three award-winning devices make daily life easier for the elderly and those with disabilities. It is also the perfect showcase of the fabrication skills and knowledge of the college's Mechani-

cal Technology students, mentored by their Section Head and Makeathon organiser, Koh Hock Tong (better known as Jeff among his ITE College Central colleagues and students).

GIVING STUDENTS A SENSE OF PURPOSE_

Jeff is a man on a mission.

The Section Head for Nitec in Mechanical Technology at ITE College Central came into teaching with a clear purpose – to motivate students to be their best selves, for themselves and for society.

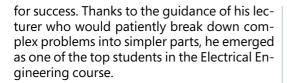
The affinity that Jeff feels for his students stems from his own bumpy start in school. Calling himself an unmotivated student back in secondary school, he took two attempts to pass his O-levels.

It was not until he entered Singapore Polytechnic that Jeff found the impetus to strive

Students can see that their skill sets are of value and relevant to the industry. By doing so, we hope to reduce any leakage of engineering graduates to non-engineering industries.

ENGINEERING THE MECHANICS OF KINDNESS

selves and to serve the community are a major part of Jeff Koh's lesson



Buoyed by the momentum, this once lackadaisical learner went on to achieve First Class Honours for his university engineering degree. After graduation, Jeff got a job as a process engineer and was promoted in two years. But at the back of his mind, he was always thinking of the help he received from his lecturer that turned his life around. He thought of ways he could pass this on - including writing a book on how to help people unlock their potential. When he saw an ITE recruitment ad for lecturers, he took the plunge and found the sweet spot that married his love for engineering and nurturing the younger generation.

"I tell my students that I was once like them. I wanted them to know that they can be successful as long as they put in the effort. My



message to all my classes is always the same: Your result is proportional to your effort."

BUILDING SKILLSETS, CHANGING LIVES

Coaxing students to stay the course is just the first step. For those who come from difficult backgrounds or face learning challenges, Jeff and his fellow lecturers go the distance to keep their students on track and motivated.

Students who do not have a conducive learning environment at home are invited to study at the school library. Jeff would encourage them to look for him at his office if they need help. For the Mandarin-speaking student who struggled to understand him in class, Jeff would go through the material again with him after class, but this time, in Chinese.

Some may also wrestle with self-doubt, having struggled with their studies in primary and secondary school. That's why Jeff encourages his students to participate in competitions and organise makeathons, so they have opportunities to showcase their products. If they win, it's a form of recognition for them. And even if they don't, they would have learned to work in teams and present their products to a panel of judges -- valuable life skills that

benefit them in the long run

"For some of them, it could be the first time winning an award... They feel like they achieved something, and they feel proud of their work and project," he explained. "We need to give them the confidence to progress in the later stages of their lives."

A LEG UP IN THE WORKING WORLD

Jeff also prepares his students for life by developing in them soft skills that will put them in good stead in the workforce.

Before his second-year students participate in a six-month internship, for example, he gets them to think about this question, "How can you value add to the company?"

He developed a half-day design thinking course where students are taught to identify pain points that the company may face, through observations or asking questions, develop and pitch ideas to solve the problem, as well as brainstorm ways to test these solutions.

"We don't just want them to go through the motion of an attachment...six months is a long time, we hope they can contribute to the company by applying their skills or suggesting ideas to improve things."

One student put this learning into application during his internship, when he noticed that the workshop tools were in a mess and the technicians had trouble locating them. He put forth a suggestion on how to organise the tools and mark the tool cabinet up clearly — a simple idea that was well-received and implemented by the company.

For those who were keen to join the workforce right after graduation, Jeff tapped on his industry contacts to hold seminars where he would invite major firms such as Exxon Mobil to engage his students about their sector. Besides speaking about the technology they utilise in their business, these companies would also share career opportunities.

"Students can see that their skill sets are of value and relevant to the industry. By doing so, we hope to reduce any leakage of engineering graduates to non-engineering industries."

MANUFACTURING FACE SHIELDS AND OTHER COMMUNITY APPLICATIONS

The college's push towards assistive-technology projects is also Jeff's brainchild. Such projects tap on the strengths of the students in his Mechanical Engineering course, which has a heavy focus on fabrication.

These skills came to the fore at the start of the Covid-19 pandemic last year. The College's authentic learning internship programme for students was interrupted when engineering companies could not operate during the Circuit Breaker.

Jeff and his fellow lecturers noticed face

masks and face shields were in severe shortage at nursing homes at the time. So as an alternative to workplace internship, they decided to marry product development and community service. Under their guidance and tutelage, their students designed and developed face shields for the care staff working at these nursing homes.

Some 1,200 face shields were manufactured with the help of corporate sponsors and the entire Engineering faculty pitched in to assemble them. This quick pivot allowed the school to give its students a meaningful

hands-on learning experience even during the period of Home-Based Learning.

As Jeff put it, "We hope what the students take away when they leave school are the skillsets that we taught them and a heart for the community. We want them to be someone of good character who also cares for society."

STAYING AHEAD OF THE CURVE EVEN OUTSIDE OF SCHOOL

As the Section Head looking after his staff's learning needs, Jeff looks out for opportunities for them to keep abreast of the latest tech and engineering trends and industry relevant knowledge. They also enjoy working together on informal passion projects outside of school hours.

One such project is the Follow-Me Trolley, an invention that they came up with to help their older colleagues cart heavy equipment around the school campus. While the device was simple — essentially a trolley mounted



atop a robot with wheels — the programming involved was challenging. Using Lidar, a remote sensing technology that uses light to measure distances, Jeff and his team taught themselves programming and built a successful working model.

As this avid life-long learner explained, "If they see their Section Head being very active in the project they are engaged in, it will inspire them to innovate and to find out more. I'm not just asking them to learn, I am learning together with them."

"Ever since I participated in these projects, whenever I see seniors or people with disabilities, I tend to pay more attention to them and think of ways to help them."

> Seah Yi Ting, 19 -[Class of 2020, Nitec in Mechanical Technology]











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Jason Khiang Jian Hao Course Chair, Diploma in Design

Ngee Ann Polytechnic



Many of Khiang Jian Hao's students may be fresh out of secondary school, but he fervently believes the sky is the limit to what they can achieve.

"As much as they are young, I don't see them as kids," enthused Jian Hao (better known as Jason among the Ngee Ann Polytechnic (NP) community), the force behind the curation and launch of NP's interdisciplinary Diploma in Design a couple of years ago.

"Today, even 12-year-olds can be successful entrepreneurs. It is up to us educators to give them the exposure and help them connect the dots," he added.

Jason's conviction is apparent in the way he structured the diploma course. From day one, his intention was to simulate industry conditions while helping students master the fundamentals of design skills. This involved prepping students for pitch presentations and making their creations marketable

He is also quick to bolster confidence in his young charges. "We tell them from Day 1 that they're going to be the next generation of innovators and disruptors, and we are here to enable them to do that. This includes cultivating the mindset that it's better to fail fast, fail early. Most importantly, never stop trying," said Jason.

As a result, even before graduation, many aspiring designers from NP are legitimate practitioners with commercialised products—some have even started their own business.

TEAMWORK MAKES THE DREAM WORK

Jason, who became a full-time educator in 2016, after working in various design centric companies and agencies, is adamant that successful designers cannot work in silos.

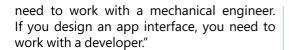
Drawing on his past experience, he says, "If you are designing a physical product, you'll



As an educator and a practitioner, I am very fortunate to be able to influence and impact. It was a proud moment, when my student was also able to do the same in return. It's like things have come full circle.

THINK LIKE A BOSS

to hold their own in the real world.



This is why interdisciplinary collaboration underpins NP's Diploma in Design programme. Prior to its rollout, lecturers were mainly working within their modules. But Jason wanted students to see the connections between subjects and their combined relevance for a real-world project.

He began sourcing for industry partners, ranging from furniture companies and banks to non-profit organisations and public sector agencies, to discuss the ways his students could potentially come up with feasible innovative solutions for them through design.

The industry projects have become a main thrust of each term and they require students to apply domain knowledge from various modules such as model making, design thinking, research and more. The projects and



modules in the three-year course expose students to the core pillars of design, business, technology, and innovation, based on a skills framework drawn up by the Design Singapore Council.

"Today you see designers working not only in design firms, but increasingly in the non-design sector as well. By giving them a broadbased education, we allow them to fit into any company through the power of design," Jason said

TAKING IT TO MARKET

Complementing the course is etc lab, an interdisciplinary design and research centre which Jason co-chairs.

"etc" stands for "empowering the communities". The lab embodies the belief that good design can empower communities. Jason,



together with the etc.lab team, identifies opportunities for partnerships with organisations and mentors students in projects.

The lab, housed within NP, helps students commercialise their ideas, with the support of a hired designer and architectural associate. They have completed projects such as designing playgrounds, and a student hangout space cum banking branch within NP in partnership with UOB.

SPREADING THE WORD

While interdisciplinary work requires lecturers in the department to work in a different way, Jason's colleagues were quick to back his vision. They saw the potential in rigorous industry projects and the increased demand for interdisciplinary designers. "It wasn't hard to get the team's buy-in because everybody wants the best for our students," he said.

"At first, we introduced this interdisciplinary way of working within the product design

course. Later, we collaborated with the architectural course, which worked out even better. We are now exploring collaboration opportunities with other schools within Ngee Ann Polytechnic and we are thinking of curating such collaborations into our service-learning model. This means allowing students to collaborate across schools to do more for under-served communities." Jason said.

GIVING OPPORTUNITIES TO SHINE

There is never a dull day for Jason's students, who are put through the challenge of pitching their ideas to companies every term while honing their technical skills and design thinking. Some of their big efforts have resulted in huge payoffs, including the chance to exhibit their work at high-profile events and network with potential employers.

Before the Covid-19 pandemic, students would regularly showcase their works, along-side those by renowned designers, at SingaPlural, the flagship event of Singapore Design Week and the International Furniture Fair Singapore (IFFS). "We have never failed to shock the community in a positive way. Visitors didn't realise they were students' works!" Jason recalled with pride.

By exhibiting at high-profile events, students become comfortable sharing about their designs, sometimes to Ministers, and some have even been offered jobs by design companies.

"Presenting becomes second nature to them after that," he added.

At the height of the pandemic in 2020, Jason urged his students to be entrepreneurial and think of ways to serve the community. As a result, a few students initiated a fundraising campaign by designing and selling T-shirts to benefit migrant workers. They ended up exceeding their target of raising \$6,000, thanks to a viral social media drive.

Most recently, in collaboration with Jalan Besar Town Council and a few other community partners, his Year 2 students were hard at work trying to revamp community spaces based on interviews and observations conducted with residents. To help bring these ideas to life, some partners have even requested for his students to join their company as interns.

These are only a small selection of success stories that Jason and his colleagues have fa-

cilitated for each cohort of 70-odd students. More than just developing technical knowledge, Jason hopes that the exposure to different types of projects and stakeholders allows his students to hope their soft skills.

"It is easy to throw around the word 'collaboration', but it is really difficult to do. It is understanding that you cannot do this alone, that you need to respect other people's opinions and learn how to influence others," said lason.

His latest project: formulating a new Design Entrepreneurship module, which requires students to crowd-source public support for their ideas through platforms like Kickstarter and Indiegogo.



"A lot of the lessons he's taught me are what I fall back on today. He always told us to be bold and to not be afraid to fail."



- Charlotte Ho, 22 - [Class of 2019, Diploma in Product Design & Innovation] -

OUTSIDE THE 'DESIGNER'S CAVE'

While the Diploma in Design is only in its second year, Jason is proud to share that graduates of its preceding course (Diploma in Product Design & Innovation)—which he also taught—have already seen the benefits of having a broad mindset. "They didn't have difficulty landing jobs or qualifying for university," he said.

Jason strongly believes that the upcoming cohorts will only continue to achieve greater success by going beyond their silos— he calls it a "designer's cave" — and expanding their circle. "It's not helpful for us to say it's important to go and know more people. We have to show them how networking works. All this bridging we do with the industry eventually broadens their network. They soon realise it's easier to do projects when they know other people. Success stories spread like wildfire so they are more motivated to practice it," he said.

His proudest moments run a wide gamut, from seeing industry recognition for his students' works to being able to help even the most self-doubting students stay the course, graduate and eventually even win awards.

A memory that stuck was the time he hired a former student to work on a project together. The alumnus ended up teaching him many new and better ways of doing things. "As an educator and a practitioner, I am very fortunate to be able to influence and impact. It was a proud moment, when my student was also able to do the same in return. It's like things have come full circle." he said.









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Back



Sowmya Sathish Lecturer, Green Building and Sustainability



When a primary school approached green building professional Sowmya to take a look at what was causing the heat and discomfort in their auditorium, and propose solutions, she decided to rope in her Year 2 Temasek Polytechnic students.

A hundred of them.

The school was game, so, as Sowmya said, "We arranged a field visit for the students to observe the issue and engage with the users before proposing solutions."

For Sowmya, who believes that sustainable building design is about a thoughtful response to the context of the building, such opportunities for students to problem-solve in the real-world are vital.

She said, "I use such case-based learning as a tool to help students see the direct implication of their skills in everyday life."

"Students, and even many of us, change our career roles through life. If students realise

their potential to positively impact their immediate surroundings and people around them, I believe they will continue to be involved in meaningful projects irrespective of their career choice."

HOLISTIC SOLUTIONS

Sowmya is speaking from personal experience. As a green building consultant in the private sector, she struggled to put sustainability at the heart of good design and not as an add-on or after-thought. In wanting to bring about this change, she became a teacher, so that she could nurture, she says, "a generation of professionals for whom sustainability or circular economy is no longer a target but the basis of design".

She added, "If you notice vernacular buildings such as the kampung houses at Pulau Ubin, our ancestors had conceptualised them holistically and without depending on technology. This is quite challenging for us today."

Students, and even many of us, change our career roles through life. If students realise that they could positively impact their immediate surroundings and people around them, I believe they will continue to be involved in such meaningful projects irrespective of their career choice.

A WORLD OF DIFFERENCE

to come up with bold ideas by the environment, community and even themselves.

Back at the primary school, her students set about their task to tackle the heat build-up issue. After simulating the environmental conditions through technology and analysing the results, students suggested, among other ideas, a solar chimney to replace the skylight to release heat. They also suggested strategies such as a green roof with reflective panels, and permeable paving and greenery to generate a cooler atmosphere around the premises. The proposals were data driven, sustainable and simple rather than a quick fix, like air-conditioning.

Sowmya is so invested in such case-based learning that she has even 'staged' such events in the absence of real ones. Her students think they are meeting real clients, but they are lecturers and managers from other departments, who have been roped in to play the part of clients. In one such event, her students were called on to propose designs for an indoor/outdoor gallery at the Glocal Connect Village building on campus. The 'cli-



ents' described their vision and the students pitched their ideas.

Said Sowmya with a laugh, "These 'real' conversations help increase the engagement of students in the project and address issues from a practical perspective. But such enactments take a lot of effort, and we cannot repeat the same 'drama' for at least a few years as it would reveal our 'reality show' to the students."

GET THEM THINKING

It's all part of the immersive learning experience, where students see the sustainability possibilities in their everyday life outside the classroom. And Sowmya is happy to challenge her students to look beyond the obvious answers.

So, when her students couldn't move beyond

ideas such as recycling and rainwater harvesting for a project inspired by TP's zero-waste drive, she organised a workshop on upcycling in collaboration with the Building and Construction Authority's ibuildSG programme. As part of this, students designed lamps using milk cartons



A virtual tour of the Sustainable Singapore Gallery got students thinking about how in Bishan Park, rainwater is naturally filtered, purified and used to beautify the environment.

This led to a flurry of ideas from students: they suggested aquaponics, where waste matter from fish provides the necessary nutrients for plants that purify the water; cans turned into walls; tree trunks into park benches; and crates into furniture

"It was important to steer students towards self-directed learning without providing direct answers," said Sowmya.

BUILDING CONFIDENCE

If you would like to spot Sowmya on campus, you are most likely to find her holding consultations with students along informal spaces, like the benches in the corridor or the group study spaces at the library.

"I see myself as a friend-mentor rather than their lecturer," said Sowmya.

"I believe that students can only work towards fulfilling their potential when their basic needs, like being esteemed for who they are and being safe, are met."

To create this safe space, Sowmya even makes 'conscious' mistakes to show that it is normal to do so. "We troubleshoot issues together. Once they realise we are on the same page and an experienced professional can also encounter similar problems, students tend to feel comfortable to make mistakes and try to overcome them using similar strategies."

Sowmya thinks nothing of staying on her feet for six hours in a day, walking around the class, sharing personal experiences and having small group conversations. "I have never sat down during lessons," she said.

To build her students' confidence, Sowmya practises 'feed-forward' instead of 'feedback'. As she explained, feedback is given after an

assignment, and often the learnings are not transferred to the next assessment due to the time-lag in application. After seeing this learning gap, Sowmya started feed-forward. This approach may take different forms: Sowmya may comment on probable pressure points of certain topics; students could mark their own submissions for self-evaluation; or there could be a two-stage submission, where the initial feedback is reflected in the final submission. The focus is as much on the process as the product, she says. These constructive comments offer opportunities for improvement that are seen in the grades.

In another effort to build confidence, Sowmya taught her students to put together e-portfolios. She explained, "While preparing students for internship interviews or talking to graduates, they seemed to lack confidence integrating their learning from the various modules for industry application."

So Sowmya set out to put together a workshop to teach students how to build webbased portfolios that would show off students' projects as artefacts along a journey and not as separate, unconnected pieces. "I wanted to make the student's learning visible, creating a sense of confidence and achievement, while also enabling the interviewer to see that accomplishment." "As polytechnic students, we know we're expected to take responsibility for our own learning. But Mrs Sowmya tells us that she is always there for us when we need her."

Syabil Hayyan, 17 - [Year 2 student]



OPEN TO IDEAS

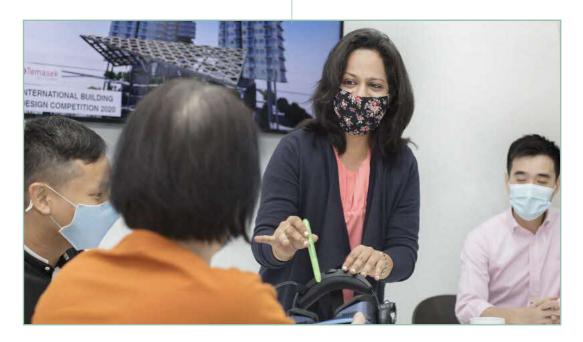
In trying to empower her students, Sowmya has found herself in some tricky situations outside her comfort zone.

She recalls a student, who wanted to change his approach to a given project. He wanted to try an advanced approach that relied heavily on computational simulations. "We discussed the risk factors, that he may not be able to hit all learning outcomes in the event of failure, but we were willing to experiment. Today I admire this attempt and showcase his work to my students."

Another student requested to use Minecraft, a gaming software, to help her get comfort-

able with 3D modelling and visualisation before using the tools that she had learnt in her previous module. As a lecturer, Sowmya felt uncomfortable with the proposal as students are meant to use the actual software being taught and not gaming apps. However, believing that learning needs vary for every student, she crafted a plan integrating the gaming approach as an additional stage to the learning process rather than a replacement.

"I told her that I would provide feed-forward based on the app only for the initial idea. After all this generation has more experience gaming than software tools, so why not?"











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STORIES OF RECIPIENTS AND FINALISTS 2021

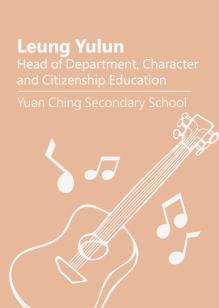
TEACHING

VALUES AND LIFE SKILLS

THROUGH SCHOOL PROGRAMMES







At Yuan Ching Secondary School, students follow an influencer of a very different sort. The influencer in question? None other than their school's Head of Character and Citizenship Education (CCE), Leung Yulun.

Yulun, who is also a subject teacher for Chemistry, stumbled into the role of a social media influencer. As a young educator busy with the daily demands of his teaching job, he was looking for a way to marry his love of music with his work.

An avid guitar and er-hu player who loves to sing and compose his own songs, Yulun's solution was to create songs infused with key Chemistry concepts. He explained his rationale, "Articulating the lyrics will help the students remember all the facts, but I make sure that every verse is conceptually connected, like a mind map. This helps to deepen their understanding of the topic."

Set to the catchy melodies of Taiwanese

singer Jay Chou's pop hits, each of the audio compositions that he wrote and sang himself was a runaway success among his students. "Learning Chemistry Is So Fun" made his students look at kinetic particle theory in a different light. Another song unpacked Collision Particle Theory to the soulful tune of a Mandarin pop song.

It was a breath of fresh air. "The feedback from my students was very encouraging and heartening," he recounted.

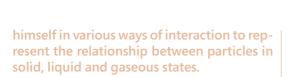
Being digital natives, Yulun's students suggested that he turn the audio recordings into videos for greater impact. Yulun obliged by conceptualising, storyboarding and shooting a set of Chemistry music videos with the help of his school's ICT staff, and uploaded them onto YouTube.

To illustrate kinetic particle theory in the video, for example, Yulun played the role of a particle and 'cloned' multiple copies of



Teaching values should not be confined to just the **Character and Citizenship Education (CCE) lesson.** Any school experience can become a CCE lesson. need to be intentional in creating teachable

THE SCIENCE OF BONDING



The videos were a hit with his students and came with a bonus. "My students told me that during the one month of self-study at home before the O-level and N-level examinations, they felt very lonely. But they could easily access my music videos online, which helped them feel connected and supported," he shared.

Yet another unexpected chemical reaction? This year, his Secondary 4 class wanted to perform in his videos.

"Chemical Bonding Is So Easy" became a teacher-student collaborative effort that involved half the class taking up a role, whether in playing the piano or, for the student trained in Chinese dance, using dance movements to illustrate ionic bonding.



RAISING HIS SOCIAL MEDIA GAME

While his Chemistry songs may seem like mere entertainment to some, to further engage his students and extend his reach, Yulun started an Instagram account to share his Chemistry music videos as well as snippets of his personal life. Posts of school events and activities are juxtaposed with posts of him playing the guitar or erhu, shooting hoops in the basketball court, or doing volunteer work on weekends.

For Yulun, his extracurricular activities reflect his belief that it is important to live a meaningful life. For instance, his volunteer work packing and delivering free lunches to the elderly in the neighbourhood stems from a simple desire to help and be a useful member of the community he lives in.

"I felt that if I use Instagram right, I can provide a more formative support for my students. On IG, the main objective is to share about the positive purpose and passion in life.

It's not just about Chemistry anymore."

As the main proponent of CCE initiatives in his school, it is evident that Yulun takes a deliberate yet active approach in teaching students positive values.

"Teaching values should not be confined to just the CCE lesson. Any school experience can become a CCE lesson. Because not every moment can be teachable, we need to be intentional in creating teachable moments," he pointed out

To Yulun's delight, even students not taught by him step up to chat with him about the contents of his Instagram posts or YouTube videos. At Meet-the-Parents sessions, parents are happy to recognise him from his music videos, making it a good icebreaker.

FIGHTING A VIRUS WITH POSITIVITY

Fresh opportunities to create teachable moments came when the Covid-19 pandemic hit last year. With the Circuit Breaker, Home-Based Learning and other safe management measures in place, it was difficult for the students to go out and do their regular Values-in-Action projects.

So Yulun collaborated with ground-up initiative BraveheartSG to launch "Love Letters To Our Healers", a campaign where the entire school – students, teachers, office staff, canteen vendors, security personnel and even parents – wrote letters of appreciation to the frontline healthcare staff battling the pandemic in the hospitals.

Najla, a Secondary 4 student, shared, "It made me realise how a few words of encouragement can greatly impact a person. I also learnt more about the hardships faced by healthcare workers and appreciate them more." Likewise, when the school found out that migrant workers had been relocated from their quarters to temporary housing blocks in Taman Jurong – just a stone's throw away from the school – as part of safe management measures, Yulun helmed a campaign with community organisation Welcome In My Backyard (Wimby) to welcome them with warm messages of encouragement.

The momentum of the school's WIMBY campaign has carried on to this year. With the migrant workers still largely confined to their dormitories, the Performing Arts Club at Yuan Ching volunteered to put together an e-Getai concert to entertain them. And in anticipation of the day when the workers will be able to venture off-site, the students created a video introducing places of interest in Taman Jurong which they could visit.

'HEART' AND SOFT SKILLS IN THE MAKING

By role-modelling positive values in his every-day life, Yulun has built a deep culture of care in the school that he has been teaching at for the past 14 years. As Head of Department, he looks out for the well-being of his fellow colleagues at work, and is certain that the values embedded in the care and consideration he shows them are passed on to their students.

Beyond the CCE lessons in the school curriculum, he instituted a Values-of-the-Month programme, where selected classes celebrate the nominated value with the rest of the

school via creative ways like songs and skits. This way, students learn not to view values in the abstract, but also try to relate them to their daily lives.

As an example of values-in-action, Yulun got the students to share good deeds and positive stories which they might have come across in school, which may involve school personnel such as the cleaners, canteen vendors and security staff.

'We show the students that the educators in

Yuan Ching are not only their teachers, but also these aunties and uncles who role model for us good values," he said.

The culture is so infectious, his educator colleagues spontaneously share short stories of good deeds during the morning assemblies. It has permeated to his fellow teaching mentors, who take at-risk students from his school's GEAR-UP programme under their wings.

Yulun's student Tan Jian Yao summed up the impact of these activities this way, "I've learnt that learning is more than just about ourselves. We have learnt to lend others a helping hand."



Said Yulun, "The knowledge and the hard skills that we equip them with will be outdated by the time they enter the job market. But what will never be outdated will be the values and the soft skills that they learn here."

"The most important thing I learnt from him is to be caring to one another. I now have my friends and my classmates in my heart. If help is needed, then we will consult the teacher together. We don't leave anyone behind."

Tan Jian Yao, 16 - [Secondary 4 student]











Tweet Download



James Han Choon Boon

School Staff Developer
Blangah Rise Primary School



The idea of cultivating a virtuous student body may seem like a lofty ambition, but thanks to James Han, even seven-year-olds at Blangah Rise Primary School are now embodying traits like responsibility, moderation and self-discipline.

This was the result of the schoolwide implementation of The Virtues Project, a popular international framework of 52 virtues, that has been adapted for the school in 2020. The framework was intended to reshape teacher-student relationships, help students be more engaged in school, and solve student management issues.

At the heart of it, James and his peers are striving to be better mentors to their students.

Beyond all this, it also became clear that the need to impart strong virtues was becoming increasingly urgent. "We're trying to help students build a strong moral compass in the digital age so that their sense of worth is not defined by superficial likes and dislikes,"

said James, who helms the project.

"Every child has innate virtues. It is our role as teachers to awaken them," he adds.

MAKING VIRTUES ACCESSIBLE AND FUN

James and his colleagues developed a holistic framework for engaging even the youngest students. To do that, they used the Five Strategies of the Virtues Project, first of which was to speak the language of virtues. When teachers speak the language of virtues to acknowledge, guide or correct, students learn how their actions are related to the virtues.

As their understanding of the virtues may be vague, it is important to show the children what the virtues look like and what the signs of success are," he emphasised, citing how a student who admits to forgetting to do his or her homework will have demonstrated responsibility, and it is important to acknowledge that.

We're trying to help students build a strong moral compass in the digital age so that their and dislikes.

VIRTUES IN ACTION

Iteration in myriad forms has been key to the programme's early success. There are multiple ways through which James and his fellow teachers make virtues age-appropriate and digestible, ranging from morning conversations and journaling, to the Virtues Challenge Board where students are encouraged to put up shoutout cards to affirm classmates who have demonstrated a 'virtue'. In James' class, his students manage and curate the contents of the board on their own.

TEACHERS ARE MORE THAN KNOWLEDGE TRANSMITTERS

What has morphed the most, however, is the definition of the teacher's role within the school and the way they address their students — to speak the "language of virtues" in their daily interactions.

Within the virtues framework, a teacher is collectively a coach who imparts skills and knowledge; a cheerleader who celebrates a student's every success, big or small; and a counsellor, the significant adult whom children can confide in.



Since last 2020, each student has been assigned two or three teacher-mentors who could be his or her form teachers, subject teachers or co-curricular activities (CCA) teachers, and is encouraged to approach them for troubling issues.

"My personal reflection is that when I practise active listening without judging, my students are willing to share more about themselves," he said.

Another strategy is for teachers to recognise teachable moments, which are often fleeting. James recounted the story of a boy who took the initiative to purchase foolscap paper for a classmate who had run out. He immediately praised the student for his caring behaviour. "This was an instance of catching him doing good and recognising it. Teachable moments do not always have to come from something negative," he said.

The Virtues Project falls neatly into the goals

of the Character and Citizenship Education (CCE) syllabus in 2021, said James, which are to build strong character and help students become active future-ready citizens while ensuring their social and emotional well-being. He uses the analogy of the head, heart and hands to explain the school's three-pronged approach.

The Seven Habits of Highly Effective People,

FAR-REACHING IMPACT OF IMPARTING VIRTUES

"If you want the child to submit work on time, you awaken diligence by building routines. You want your students to put in effort, you awaken the virtues of excellence and responsibility," said James, who helped his teaching colleagues see the intricate link between character building and learning engagement.

Among James' students who demonstrated transformation through the Virtues Project was Jansen (not his real name). He had little confidence in English class because he had never passed a test since Primary 4 and felt unacknowledged by his classmates who always had the right answers.

That was when James started to actively play the role of the cheerleader. In class, James encouraged Jansen to answer the simpler questions to "set off the quick wins". He also made the subject more fun by getting Jansen to create a game for his younger sister to help her learn some simple idioms. Together with a partner, Jansen selected and wrote the phrases and game instructions onto little cards.

"The outcome was that he passed his English for the first time, in the PSLE last year," said James, who during the year kept in consistent contact with Jansen's parents, his other subject teachers and his CCA teacher to work together on his growth.

James also recounted the story of Jansen's classmate Mary (not her real name), who struggled to write a 200-word composition the first time she entered his class. Mary had a fixed mindset that she was not able to do it then. By coaching the virtue of diligence

which the teachers impart, are the simple actions (hand) that students can enact quickly daily. The "head" is the growth mindset that James encourages the team to adopt towards their students—that is to say, every individual has the potential to be more. The Virtues Project then forms the heart of the CCE programme by instilling morals.



through deliberate practice and instilling a growth mindset, Mary blossomed and achieved her goal of entering the Express stream.

That was not all.

James shared that since starting the Virtues Project, disciplinary cases have generally come down across the school. With Virtues Circles, teacher-mentors come together to discuss how to best support students in need. The circles begin with the teachers' reflections, using virtue reflection cards to set the stage for a virtues-focused discussion. "It is no longer just 'your student' or 'my student' but 'our student' and teachers are more open to discussion," he said.

Another shift James noticed during Virtues Circles held among the teachers, is that the teachers now preface student reviews with their innate strengths, before talking about the virtues that they intend to rouse in the student.

The next step is to enhance the school's discipline framework. With the perspective that discipline should be restorative, not retributive, James advocates for misbehaving students to take on service learning projects to rebuild their relationship with the school community. "It's like, we know you're good at soccer. Why don't you teach some younger ones? This way, you can do something for the community," he explained.

"My top three words to describe Mr Han would be 'caring', 'kind-hearted' and 'likeable'. He always tries to make things fun for us and he thinks about others before thinking of himself"



Rooney Lim, 12 - [Primary 6 student, class monitor and boy scout]

SEEING THE GOOD IN EVERY CHILD AND TEACHER

James' mindful approach is heavily influenced by what transpired during his junior college days. Coming from a financially disadvantaged family, he took on a part-time job at the 7-11 convenience store, and ended up dozing off during lectures and falling behind in his grades.

"Instead of reprimanding me, my form teacher Mrs Leong sat me down and gave me a vitamin C tablet," he said. The show of care for his health opened the way for a good conversation. Through her counsel, James eventually left his part-time job; he went on to do well enough to enter NIE to become a teacher, to pay it forward.

"I see the potential in some of these students. They may be held back because of circumstances beyond their control. I really want to encourage them to try their best," said James.

Beyond what the Virtues Project is doing for the children, James has gone many extra miles in being a positive force for his colleagues. "Instead of just saying 'good job' when teachers demonstrate innovation in their work, we celebrate it by entering them in the MOE Innergy Schools Award," said James, who has submitted about 20 projects for nomination over the last two years — two of them received commendation awards.

He also manages an "Inspiring Teacher Award" to recognise colleagues who have excelled in teaching, leading CCAs and using blended learning techniques, among other areas. In addition, he launched Staff Bulletin, newsletter to recognise best practices, put together a learning journal for coworkers to aid in their planning and reflection, and devised frameworks for teachers to come together in Professional Learning Teams. For his efforts, James picked up the MOE Distinguished InnoChamp Award and Associate of AST Award in 2020.

While accolades are affirming, nothing is as satisfying as witnessing the growth of his charges. Last year, James ran into former students who are now in polytechnics, who said they never forgot how he had encouraged them not to give up. His encouragement was enough for them to act on his words.

James mused, "That reaffirmed to me that it is through the passage of time that we see changes. It was really a moment to savour."











Radin Rafeah Binte Ali Head of Department,

Aesthetics & Special Projects

Evergreen Primary School



Radin Rafeah Binte Ali remembers her primary school days well, when she was battling self-esteem issues which affected her studies. It took a teacher to shine a light on what seemed like dark clouds ahead.

"My Primary 5 form teacher Mrs Khoo, who was also my Art teacher, saw my passion in Art," said Radin "She helped me in my studies, and she also encouraged me to take part in art competitions in school." The results were lifechanging for Radin, who is today the Head of Department (HOD) of Aesthetics & Special Projects at Evergreen Primary School.

"When I started winning at the competitions, I finally felt I was good at something," shared Radin. "That motivated me to study very hard and I got a decent score for PSLE." She would later graduate from the National University of Singapore with a degree in statistics.

ART AS A SPRINGBOARD

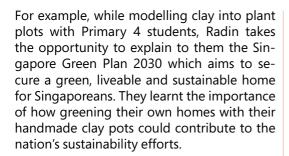
Art was the springboard to her newfound confidence in life, so when Radin became an educator, she held on fast to the belief that art can change lives.

This belief is evident in Evergreen Primary where Radin has taught for 14 years. Setting foot into the school, one can sense the buzz of vibrancy in the air with various Art-related activities taking place. At first glance, they seem like regular art lessons that impart art knowledge, techniques and skills. However, Radin ensures that they have been infused with topics on environmental and social issues. These issues seek to prompt a response from students that engender the values of respect, responsibility, integrity and empathy.

"There is always a larger outcome that I try to infuse in their learning," Radin explained. "I don't want Art to just be another subject and for them to go away thinking that there is no use for it in real life."



There is always a larger outcome that I try to inin real life.



Another lesson conducted during the homebased learning (HBL) period, involved creating toys from materials found readily in their homes to teach students the importance of recycling. Subsequently, students posted videos of their upcycled creations on Padlet and showcased their toy designs. Radin was particularly impressed by a soccer game which showed resourcefulness in using different materials whilst incorporating the scientific principle of tension by using a rubber band to launch a soccer ball.

Her philosophy towards teaching is very much focused on giving students autonomy



in their learning. For example, when students had to learn from home during the COVID-19 pandemic in 2020, the Art teachers piloted a programme whereby Primary 3 students could choose one of three assignments to do. The assignments ranged from easy to challenging. The teachers did not influence the students' choices, except to nudge them along on a progressive path.

"We want them to have the opportunity to go back to it and try to see if we can move up to the next level," she said. "If they have decided on the task with the lowest difficulty level. they can challenge themselves to go further the next time."

When more confident students choose challenging assignments and complete them, they are encouraged to advance their learn-



ing by researching on the topic in depth, applying skills and knowledge in other works, or guiding their peers via face-to-face interactions when possible.

By providing students with more autonomy, it encourages them to be more committed to the project and builds their confidence in the process, said Radin.

WHERE EVERYONE IS RESPECTED

Radin sees the benefits of breaking down walls, and spearheaded various initiatives among the teaching staff to encourage a healthy exchange of ideas and experiences. She introduced the 'open classroom' concept, where any teacher can sit in on her lessons to borrow techniques and strategies for their own use.

She facilitates and encourages collaborative learning among her teachers where they come together to discuss and create interesting lesson plans, share learning points, tweak and improve lessons. She has also conducted art workshops where teachers can come together to learn something new.

For the students, Radin leads the school's signature Multi Modal Programme (MMP), where all students spend about 90 minutes every week during curriculum time on activities outside of their schoolwork and CCAs. These could be anything from fencing, self-management and life skills, to financial literacy – Radin and her team refresh the activities periodically to keep things relevant and interesting for the students, who take part in the MMP from Primary 1 to 6.

MMP, which is into its fourth year, was conceptualised and planned with the aim to uplift all students through raising their self-confidence and self-efficacy by helping them uncover their innate strengths and talents and building on their interests through varied experi-

ences. Students are given choice and voice, and encouraged to express themselves, make mistakes, and go out of their comfort zones. It provides a "safe environment" for students to learn through play.

Each module runs for a term of 8 weeks. Students collaborate to realise a shared intended outcome; either a showcase of what the students had learnt or they teach the other levels of students what they had learnt. Everyone has a part to play, and every contribution is celebrated regardless of their readiness levels or talents.

MMP is an inclusive programme. All students including those with special needs are given the opportunity to enjoy learning and experience success. Tasks and roles are sometimes differentiated. For example, in drama modules, special needs students might be given the easier roles, however, they also take centre stage during performances. Said Radin, "Everyone is valued by the school. Dignity and respect are accorded to every student."



"I like that she is very caring and makes me think positively about everything, whether it is friendship or schoolwork."

Sanjannah D/O Vinesh, 10 - [Primary 4 student]

GOING THE EXTRA MILE

Taking a leaf from the teachers of her youth, Radin thinks nothing of going the extra mile to help a student in need. In fact, she values every opportunity to do so.

She laughed, recalling how one student repeatedly nominated her for the Caring Teacher Award, even after she had left Evergreen Primary School. Then there was a rebellious 12-year-old who was often troubled and did not hand in her homework regularly. This all led to poor academic results. Radin would check in with her and tutor her after school.

She also encouraged her to keep a journal and express her emotions through art. Together with other forms of counselling, the student became better at managing her emotions and her performance at school improved.

Radin feels that paying it forward is the natural thing to do. "Because my teachers believed in me and gave me so many opportunities, I want to be that someone who believes in my students and give them the confidence and opportunity to succeed in life."











Tweet Download

PRESIDENT'S AWARD FOR TEACHERS

PAST AWARD RECIPIENTS

1998

Mrs Lim Tai Foon St. Hilda's Primary School

Mrs Geetha Creffield Anglo-Chinese Junior College

1999

Mrs Juliana Donna Ng Chye Huat Nan Hua Primary School

Mr Wilfred Philips James Dunman Secondary School

2000

Mrs Ng Peng Huat Nan Hua Primary School

Mdm Tan Liang See The Chinese High School

Mrs Caryn Ann Leong Ping Yi Secondary School

2001

Mrs Chin Ngan Peng Kong Hwa School

Mr Lim Chiow Huat **Broadrick Secondary School** Mrs Nora Teo Punggol Primary School

Mrs Audrey Ting Yee Han Nanyang Girls' High School

2002

Mdm Stefane Tan Hugue Hwan

Meridian Primary School

Ms Koe Heong Yin

Mdm Tong Wai Han Ang Mo Kio Secondary School

The Chinese High School

Mdm Long Miaw Ying Jurong West Primary School

Mrs Roger Teng Siok Fun North View Secondary School

Mrs Kheng Samuel nee Chua Mui Yee Lakeside Primary School

2004

Ms Goh Siew Hong Admiralty Primary School

Mr Koh Cher Hern St. Hilda's Primary School

Mdm Ranjit Singh Pasir Ris Secondary School Mrs Pramageetha Velmurugan

Huamin Primary School

Mdm Rabiathul Bazriya Compassvale Secondary School

2005

Miss Lim Siew Gek Ahmad Ibrahim Primary School

Mr Chew Tec Heng Edwin

Sembawang Secondary School

2006

Mdm Bong Fui Lian Shirley Montfort Junior School

Mr Nur Johari Salleh

Deyi Secondary School

Mr Sulaiman Bin Mohd Yusof

Sembawang Secondary School

2007

Mdm Yip Jee Cheng Jessie

Mayflower Primary School

Mr Yeo Leng Quee

Peirce Secondary School

2008

Mrs Ong-Chua Li Ling Eileen

Haig Girls' School

Mrs Lim-Ng Yee Ping Diana

Coral Secondary School

2009

Mr Terry Tan Chee Liang

Anglo-Chinese School (Primary)

Mdm Wong Lai Fong

Anderson Secondary School

2010

Mdm Emelyn Soon Bee Hong

CHIJ (Kellock) Primary School

Miss Teh Wan

Townsville Primary School

2011

Mdm Chua Mui Ling

Woodlands Ring Primary School

Mdm Dianaros Bte Ab Majid

Haig Girls' School

Mr Ganesan s/o Raman

Fairfield Methodist School (Secondary)

Mdm Noorismawaty Bte Ismail

Jin Tai Secondary School

Mrs Tan Swan Liang Doris

Temasek Primary School

Mrs Goh Hui Cheng

Paya Lebar Methodist Girls' School (Secondary)

Mdm Parameswary d/o Sundar Rajoo

Montfort Junior School

Mdm Norlita Binte Marsuki

Sembawang Secondary School

Mrs Lee Kok Hong

Temasek Primary School

Miss Cardoza Sharon Ann

Farrer Park Primary School

Miss Lucy Oliver Fernandez

Catholic High School (Secondary)

Mr Devindra Sapai s/o Indrasapai

Seng Kang Primary School

Mrs Mohana Eswaran

Regent Secondary School

Miss Serene Han Tui Kin

Montfort Junior School

Mr Chong Jack Sheng

Woodlands Ring Secondary School

PRESIDENT'S AWARD FOR TEACHERS

PAST AWARD RECIPIENTS

2012

Mdm Anwara Khatun d/o Moklis Khan

Haig Girls' School (Primary)

Mdm Tan Ying Fong Irene

Telok Kurau Primary School

Mr Yap Boon Chien

Tanjong Katong Girls' School

2013

Mdm Shakila Jamal Mohamed

Da Qiao Primary School

Mr Lee Beng Wah

Bedok Green Secondary School

Mdm Lim Chye Ling @ Nurul Huda

Kent Ridge Secondary School

Mdm Chee Mui Choo Valerie

Mr Gejendran s/o V Krishnan

Geylang Methodist School (Secondary)

Xinghua Primary School

Ms Koh Su-Cheng

Da Qiao Primary School

Mdm Lee Yee Tyng Hougang Secondary School

Mdm Chan Puay San

Innova Junior College

2014

Mdm Lim Yen Peng Linda

Da Qiao Primary School

Miss Sim Lucy

Guangyang Primary School

Dr Muhammad Nazir Bin Amir

Kent Ridge Secondary School

Miss Rezia Rahumathullah

Da Qiao Primary School

Miss Wong Yoke Chan Wendy

Geylang Methodist School (Secondary)

2015

Dr Tay Lee Yong

Beacon Primary School

Mdm Safidah Bte Samsudin

Da Qiao Primary School

Mdm Tan Dai Hwee

Anderson Junior College

Mdm Tauled Tunisha Bte Mohd Paser

CHIJ (Kellock) Primary School

Mdm Halimah Bte Jumaha

Bedok South Secondary School

Mr Muhammad Salahuddin Bin Ibrahim

Serangoon Junior College

2016

Mdm Juliana Bte Johari

Qihua Primary School

Mdm Tang Sheng Lien Michele

Catholic High School (Secondary)

Mr Tharmendra Jeyaraman

Siglap Secondary School

Ms O Guat Bee

Temasek Primary School

Mr Anil s/o Vasudevan

Marsiling Secondary School

Mdm Phoon Lyvenne

Spectra Secondary School

Mr Jahangeer Bin Mohamed Jahabar

Endeavour Primary School

Mdm Lim Hwee Sian

Cedar Girls' Secondary School

Ms Asrina Bte Abdul Samad

Institute of Technical Education

Dr Ow Yeong Wai Mang Bishan Park Secondary School

Ms Kwa Lay Ping

Singapore Polytechnic

Ms Goh Wai Leng

Geylang Methodist School (Primary)

Mr Ong Yong Cheng Matthew

St Andrew's Junior School

Mr Edzra Bin Iskandar

Bedok South Secondary School

Ms Tan Lay Khee

Temasek Polytechnic

Mdm S Nirmala Devi

Guangyang Primary School

Ms Ng Sheh Feng

Ahmad Ibrahim Secondary School

Dr Lim Yi'en

National Junior College

Mr Teo Keng Ann

Singapore Polytechnic

Mdm Sarah Koh Hui Khoon

Holy Innocents' Primary School

Mr Svam Lal s/o Sadanandan

Bukit Batok Secondary School

Mr Lim En-rui, Joel

Fairfield Methodist School (Primary)

Dr Koh Noi Sian

Nanyang Polytechnic

Mr Chew Ansheng, Victor

Rosyth School

Mr Mohamed Azhar Bin Mohamed

Innova Primary School

Ms Siu Yee Nar Ella

Republic Polytechnic

Mdm Shanthi Deenathayalan

Guangyang Primary School

Miss Yeo Cheng Yong

Fuhua Secondary School

Mr Tang Yee Fun Francis

Outram Secondary School

Dr Chia Hui Teng

Singapore Polytechnic

Mdm Wong Bing Sum

Radin Mas Primary School

Mdm Ira Wati Bte Sukaimi

Mayflower Secondary School

Mr Oh Chee Kiat

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Parents

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Students

For showing appreciation to your teachers who care for you

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