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Director's Message



As our society rapidly advances, it is crucial for us to understand and harness powerful technological tools to shape a brighter future. In this issue, we highlight some remarkable experiences and initiatives that showcase the intersection of technology, innovation, and public service.

In this issue, you will read about the insightful experience of one of our students who had the privilege of receiving the PUB Engineering Scholarship and his internship with PUB. This internship provided hands-on experience in data analysis and improving the accuracy of scripts connected to water meters. The rollout of approximately 300,000 Smart Water Meters in Singapore demonstrates how technology can enhance efficiency and sustainability in public utilities. These meters allow for real-time tracking of water consumption, empowering users to manage their usage more effectively and contributing to our nation's water conservation efforts.

The EDGE orientation offered an eye-opening visit to Changi Airport, where students learned about crisis management and the sophisticated technologies employed to ensure safety and efficiency. Mr. Ivan Tan, Senior Vice President of Corporate and Marketing Communications of Changi Airport Group, shared insights on the critical role of preparedness in handling emergencies, highlighting the importance of leveraging technology to enhance operational readiness and resilience.

The inaugural Public Service Exploration Programme and Apprentice Programme provided students with a comprehensive understanding of careers in the public sector. Through interactive sessions and firsthand accounts from public service professionals, our students gained a deeper appreciation of the dedication and innovation required to serve the public effectively. This event highlighted how technology and artificial intelligence are increasingly integral to public service, driving improvements in efficiency, transparency, and citizen engagement.

In addition to these technological insights, we also share inspiring stories from the Youth Expedition Project to Laos. This journey not only broadened our students' horizons but also demonstrated the power of community service and cultural exchange. By engaging with local communities, our students learned invaluable lessons about empathy, teamwork, and the impact of their contributions.

As we navigate this era of technological revolution, it is imperative that we remain curious, adaptable, and committed to making a positive impact. I encourage each of you to explore the opportunities presented in this newsletter and to consider how you can contribute to the ever-evolving landscape of technology in the work you do.

Mr Clarence Chua
Department of Student Services



EDGE Orientation 2024:

Embracing Leadership and Learning



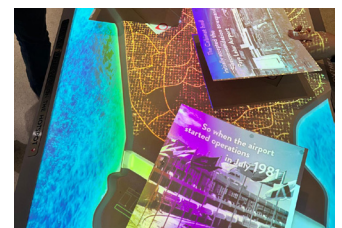
Contributed by:
Crystalyn Tan Yu Xin
School of Business, DBKF

The EDGE Orientation at Changi Airport was more than just a tour; it was a journey into the heart of leadership and resilience. EDGE students caught a good glimpse of the complexities of managing one of the world's leading airports, gaining invaluable insights into crisis management, innovation, and the power of collaboration.

The day kicked off with an enlightening session led by Mr. Ivan Tan, Group Senior Vice President of Changi Airport Group (CAG). Mr. Tan's narrative journeyed through the history of Changi Airport, unveiling pivotal decisions and challenges faced by the aviation hub. From navigating crises like aviation incidents to adapting amidst global challenges such as the COVID-19 pandemic, Mr. Tan emphasized the importance of resilience and adaptability in achieving success.

Mr. Tan's discussion on crisis management provided us with a deeper understanding of the intricacies involved in handling emergencies at Changi Airport. We learned about the three types of crises - aviation, terminal, and non-aviation-related incidents - and gained insights into the meticulous planning and swift response required in crisis situations. The Bobcat 2023 drill served as a poignant example, showcasing the coordinated efforts of various agencies and the importance of prior preparation.

A highlight of the orientation was the emphasis on partnerships and innovation driving Changi Airport's success. Collaborations with agencies like CISCO, DNATA, and SATS were crucial for ensuring seamless operations



and enhancing passenger experiences. EDGE members also gained insights into Changi's innovative initiatives, such as fully automated check-in systems and advanced baggage handling technologies, which reflect the airport's commitment to excellence.

As we explored the airport operation zone for crisis management, we were inspired by the resilience and dedication of the airport's workforce. All in all, it was a transformative experience because we were armed with the lessons learned from Changi Airport Group, namely the importance of good leadership and to approach learning with an open and resilient mind.

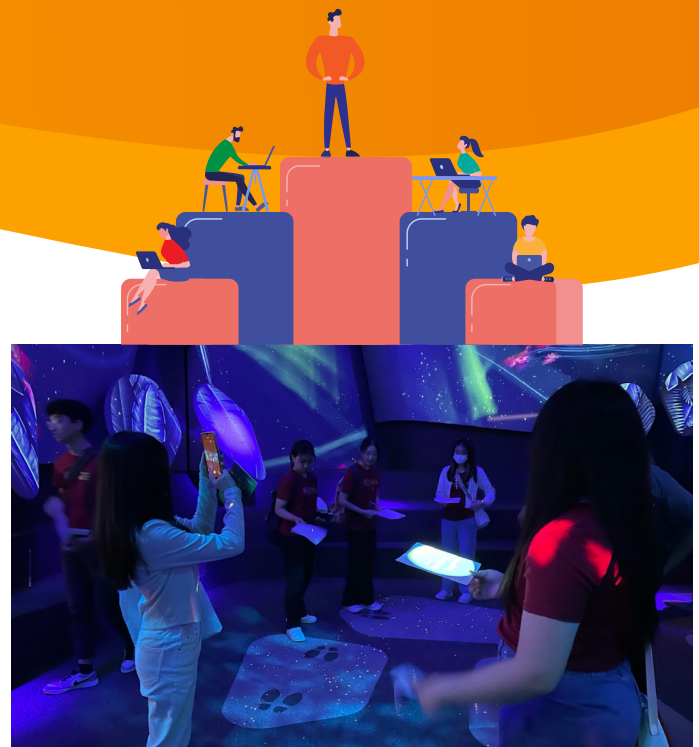


Contributed by:
Lee Ai En Phoebe,
School of Mechanical and Aeronautical Engineering, DME

The EDGE orientation took place at Changi Airport Terminal 2, where we toured the Crisis Management Facility of the Changi Airport Group, which includes a family holding area with private rooms for families, counseling rooms, and the crisis management center. Viewing the comprehensive crisis management facilities and the support provided for anxious family members during air crisis, I was inspired by Changi Airport's commitment to delivering quality even during emergencies.

After watching a video on Operation Bobcat, a major emergency exercise that tests the readiness and effectiveness of the airport's emergency response and relevant agencies in dealing with crises like crashes, Mr. Ivan Tan, Senior Vice President of Corporate and Marketing Communications of Changi Airport Group followed up with an informative presentation on crisis management at Changi Airport. He described various levels of airport-related crises, which could range from minor incidents like otters on the runway to national emergencies, such as an airplane crash in a housing estate.

Highlighting serious airplane incidents worldwide and in Singapore, Mr. Tan emphasized the importance of preparedness for airport emergencies, as most crises occur without warning. Therefore, emergency teams must be ready at a moment's notice to manage the situation and minimize the loss of life. We also learned about the history



of Changi Airport, including how the late SM Lee Kuan Yew relocated Singapore's airport from Paya Lebar to Changi. Truly, I was impressed by the immense effort required to provide impeccable services on such a large scale.

One piece of advice that resonated with me was how the Changi Group never becomes complacent about its successes and never rests on its laurels. The group is diligent in constantly improving its operations and seeking innovative and creative solutions to deliver excellence to its customers and stakeholders. Similarly, as EDGE members, we should also be conscientious in seeking out opportunities for growth and never take our successes for granted.

Finally, we took the Skytrain to Jewel to participate in the Changi Experience Studio. I left the event happy and informed about career paths in the airline industry and plan to visit Terminal 5 when it is finally completed.



PUB Scholarship and Internship



Contributed by:

Soh How Herng, Samuel

School of Mechanical and Aeronautical Engineering, DME

The Public Utilities Board (PUB) is Singapore's National Water Agency and is a statutory board under the Ministry of Sustainability and the Environment (MSE), responsible for ensuring sustainable and efficient water supply in Singapore.

One noteworthy initiative is PUB's rollout of approximately 300,000 Smart Water Meters in selected areas of Singapore. Unlike normal water meters, Smart Water Meters feature a metering interface unit attached to the base water meter, which transmits consumption data directly to PUB's database. This allows both PUB and users to track water consumption in real-time, eliminating the need for PUB to manually read water meters every two months. Users can monitor their water usage habits and be more mindful of their consumption.

I was privileged to receive the PUB Engineering Diploma Scholarship and intern with PUB, where I focused on data analysis for a regression model and improved the accuracy of an existing script connected to a water meter, aiming to reduce false positives.

For those on their internship now or going to internship soon, it is essential to not only focus on the technical aspects of the internship but also take the initiative to understand more about the company and the purpose behind its projects. Understanding the purpose of my projects allowed me to see their impact and appreciate how my work contributes meaningfully at a macro level. This insight can be a powerful motivation, encouraging us to explore our work with joy and purpose.

Interested in the PUB Engineering Diploma Scholarship? Here's an overview of the Scholarship:

PUB, Singapore's National Water Agency has launched a new

Bond - Free Engineering Scholarship

**Open to Year 1 - 3
Singapore Polytechnic Civil,
Mechanical and Electrical
Engineering students**

PUB is a statutory board under the Ministry of Sustainability and the Environment (MSE). It is the national water agency, ensuring a diversified and sustainable supply of water for Singapore. PUB has also been appointed the national Coastal Protection Agency and tasked to lead and coordinate whole-of-government efforts to develop long-term strategies to protect Singapore from the threat of rising sea levels.

PUB is constantly on the lookout for engineering talents to be involved in developing and managing Singapore's water resources and to write the next chapter in Singapore's water story.

With this Diploma Scholarship, PUB hopes to attract young engineering talents to develop their career in PUB.

Scholars will receive:

1. Full sponsorship of tuition fees
2. Provision of book & laptop allowance for Yr 1 students;
3. An internship with PUB in the third year of study

For more information, go to
www.pub.gov.sg/scholarship

There is no better place to establish yourself as a water engineer, than in PUB



Public Service eXploration Programme



Contributed by:

Kwek Yuh Tyng, Tan Zhi En Kaedence

School of Chemical and Life Sciences, DAPC

The Singapore Public Service employs about 150,000 public officers working in 16 Ministries and more than 50 Statutory Boards. Within the Public Service is the Civil Service, comprising about 86,000 officers working in the Ministries. They work in various schemes of service, including the Administrative Service, legal, education, police, civil defence as well as other generic schemes. The Singapore Public Service is integral to the nation-building process and continues to be purpose-driven. Attending the Public Service eXploration Programme (PSXP), we gained a better understanding of how complex and multi-faceted working in the public sector can be and the event lent fresh insights into what it took to be a good fit for the public service.

The event kicked off with a presentation on the basics of the Public Service, which also clarified common misconceptions students have about the public service. For example, presidents and ministers do not fall under the label of "Public Servants," which surprised us, and the public service can be divided into 5 work nature, namely, Strategy, Operations, Comms & Engagements, Policy and Tech & Engineering. To lend authenticity to the exploration, a 'Human Library,' where current public servants shared their public work experiences and clarified any doubts we have about a given public sector, was set up for us to have a complete immersive experience.

We attended the Social Sector helmed by a former public servant Yeo Han Liang who is currently pursuing his Master of Science in SUTD and the Centre-of-Government sector helmed by Loh Yuh Yiing, who is now in SPH Media and



was working in the Prime Minister's Office 2.5 years ago, to discover their day-to-day operational challenges as well as the ups and downs they went through in their course of work. One thing that I did not expect to learn was that both Han Liang and Yuh Yiing did not major in their area of work, yet they were able to deliver because they were willing to embrace lifelong learning and conscientiously picked up the required skills as they break into their roles. For them, the uncertainties they face are what kept the job exciting for them, as their work is never repetitive and mundane.

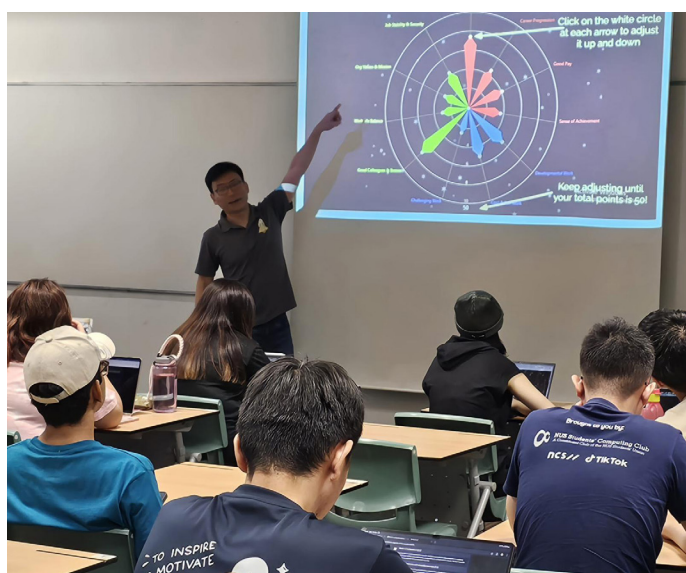


Han Liang, armed with an Engineering and Economics degree, shared how he helped families in financial duress to ensure that they receive the help they needed in a timely manner when he was working in the social service sector. Rendering support, however, is never a formulaic paper-shuffling process and it took interviews, follow-ups and discretion to disburse the right amount within the right duration to the right applicants. Prudence meant that clients are supported in a responsible way, and public resources are allocated in an equitable manner.

Yuh Ying, formerly a strategy and planning officer, does not have the luxury of sitting down at her table from 9 to 6, strategizing only in front of her computer. Instead, her job requires her to meet different stakeholders to discuss different aspects of a project and the intensity of such meetings and discussions could result in her clocking 10,000 steps daily! We also realised that planning is a multi-faceted work because both the immediate needs of the community and the future needs must be simultaneously catered to during the planning process. For instance, managing the COVID-19 pandemic requires the planning officers to contact the vaccines companies, track vaccines developments and procure the right amount for Singaporeans to embark on the national vaccination program. The breadth of projects that Yuh Ying was involved in saw her also participating in the procurement of our Mass Rapid Transit Trains. It is easy for us to take for granted the public facilities and infrastructure that are available to us so conveniently, and when we hear first-hand how tedious the work behind the scenes were, we gained a greater respect for public servants and their honest desires to serve fellow Singaporeans!



In summary, we left the event having a new perspective of public sector work and a new appreciation of the many scholarships it has to offer. Not only is the public service the largest employer in Singapore, the breadth and scope of its offerings is unmatched in the Singapore work landscape. Indeed, many Singaporeans spend their entire careers working tirelessly to build up the capabilities we now boast of and enjoy as a nation. We sincerely hope to see the realisation of a world-class public service sector that will prosper and engage Singaporeans for many generations to come.



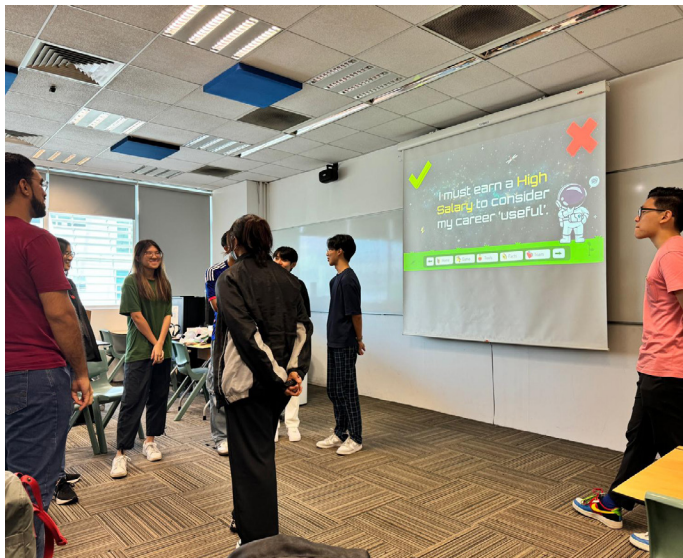
Public Service Apprenticeship Programme (PSAP)

Contributed by:
Seah Qi En, Marilyn
Media, Arts & Design School, DMAD

Following the one-day Public Service eXploration Programme (PSXP) taster by The Astronauts Collective (TAC), I had the opportunity to participate in their 6-day Public Service Apprenticeship Programme (PSAP). This programme was designed for students to gain a deeper understanding of the roles of public servants across various ministries and statutory boards. It was a pivotal experience for me as it provided clarity on potential career paths within the public service and helped me assess my suitability for such a career.

One standout aspect of the programme was the thematic sector assignments, and I opted for the 'Sustainability' track. TAC mentor, Koh Kai Qian, Assistant Director at the Ministry of Sustainability and the Environment Sector and Edwin, an undergraduate at the Singapore Institute of Technology in Sustainable Infrastructure Engineering helmed the discussion for a group of eight of us. Through the passionate and transparent sharing, I learnt firsthand about the policies and initiatives being spearheaded in Singapore to combat climate change. It broadened my perspective beyond my initial assumptions, showing me how my background in design could contribute meaningfully to sustainability efforts, which I previously believed were restricted to the creative industry.

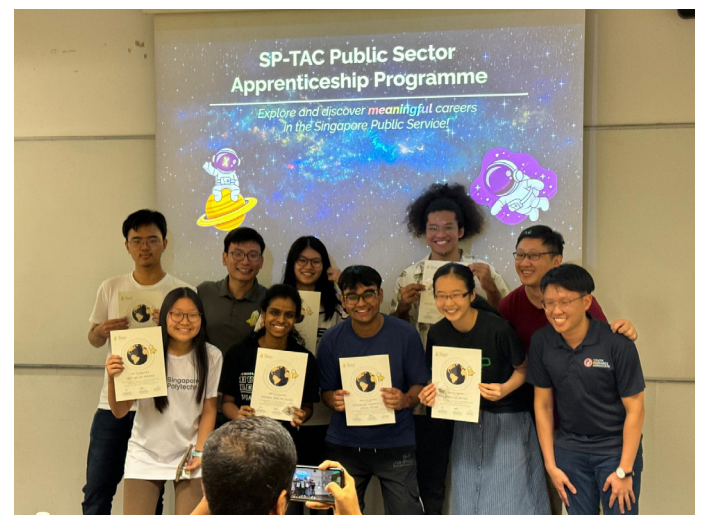




Our mentors were incredibly supportive – offering valuable insights into the work culture and remuneration structure of the public service, which prompted me to reflect deeply on which areas of public service could align with my personal values and career aspirations. Engaging in detailed conversations about various job roles and our core work values, I was able to crystallize what I prioritize in a career.

With a growing interest in the sustainability sector, I was delighted to visit Gardens by the Bay and the Singapore Sustainability Gallery to explore how wetlands contribute to climate change mitigation and how Singapore had taken innovative approaches to waste management and recycling, demonstrating practical steps towards a circular green economy.

Overall, the PSAP was instrumental in shaping my understanding of public service careers and reaffirming my interest in sustainability-focused roles. It provided both theoretical insights and practical experiences that have inspired me to pursue a career path where I can contribute effectively to societal and environmental challenges.





Visit to Yale NUS College

Contributed by:

Hor Justin

School of Electrical and Electronic Engineering, DCPE

Yale-NUS College is Singapore's first liberal arts college with a comprehensive residential program that seamlessly integrates living and learning. Drawing on the rich resources and traditions of its founding universities, Yale and the National University of Singapore (NUS), the college promotes broad-based interdisciplinary learning across the natural sciences, social sciences, and humanities, while also providing depth of expertise in one's major. I signed up for the visit because NUS, a globally renowned institution known for its rigorous and immersive curriculum, top-notch facilities, and vibrant student culture, is one of the universities I am considering should I decide to further my tertiary studies locally.

Our host, Ms. Winnie Yong, Head of Admissions (Outreach) thoughtfully arranged for former polytechnic students to share their experiences transitioning from polytechnic to university life. Hearing firsthand accounts from student ambassadors like Ethan, Prathibaa, and Gautham, who are thriving academically and cultivating diverse interests at Yale NUS College, clarify my decision to apply to NUS as one of my university options.

Ethan, a 2021 SP graduate pursuing Politics, Philosophy, and Economics at Yale-NUS College, gained our trust and admiration with his easy demeanour and witty humour. He enthusiastically shared how the cross-disciplinary opportunities at Yale-NUS broadened his horizons and sharpened his perspectives by encouraging him to integrate knowledge from diverse fields. A module on inequality, for instance, taught him to examine the issue not only from an economic standpoint but also, through philosophical debates, around the views from social justice and policymaking.



As someone who now gravitated towards the humanities and social sciences after having majored in Biomedical Engineering at SP, Ethan exemplified how the Yale-NUS College program bridges seemingly unrelated fields, fostering a unique and enriching educational experience for the individual.

As we toured the campus, I could feel the strong sense of community, largely due to the residential experience that is seamlessly integrated into the curriculum. The campus is self-sufficient, with dining, housing, and a well-stocked library easily accessible to both staff and students. Hall activities and interest groups further strengthened the sense of camaraderie, fostering a thriving ecosystem where friendships are forged, and peer support is abundant. The visit was particularly beneficial, and I would strongly encourage our students to attend university open houses to gain a clearer understanding of their academic options and campus life.



EDGE Youth Expedition Project to Laos 2023

Contributed by:
Timothy Lim Zhi Heng
School of Chemical and Life Sciences, DBS

A group of 20 students and teachers from EDGE visited Oudomxay, a mountainous area in northern Laos, in December 2023 for a community service project meant to benefit the students of Phuanmit School. Due to the lack of basic infrastructure in the village, many young children struggle to access education, and those who do often cannot continue their studies beyond elementary school. To educate students and help them eventually break the cycle of poverty, Korean missionary Mina Kwak, who has been involved in education and healthcare in Laos for the past 20 years, established the school. Our time at Phuanmit school revolved around two main activities: the construction of a new stage in front of the school, and imparting knowledge to the students.

My job was to design the Science curriculum – a seemingly innocuous task that turned out to be more complex than I thought. The primary objective was to reinforce English Language through engaging Science experiments, rather than simply teaching Science concepts. Due to language barriers, we had to overcome miscommunications, and there was much fine-tuning to do before we finally delivered a series of five satisfactory lessons to our beneficiaries. Incidentally, “Phuanmit” means “friendship” in Lao, and the trip not only lent us the opportunities to improve the lives of others over eight days where we taught Primary 1 to Secondary 5 4 students, and participated in the school’s expansion efforts, it also forged many great friendships.

During our free time, I exercised with Mr. Medo, a teacher from Nagaland, and shared a meal of bamboo worms, which was his favorite source of protein. As I marveled at this novel dish, Mr. Medo shared his life experiences with me, and I was impressed by how fluent he was. My team and I sang on the bus and played football with the students and teachers in the evenings. While there were stressful moments, especially when we needed to deliver on the lessons, the experience was also memorable, and taught us perseverance. Our newfound friends organized a “Cultural





Night” for us on the eve of our departure. We belted out pop songs and Christmas carols freely. To this day, Ms. Mina’s beautiful smile still radiates in my mind as I recall her joining in our dance most sportingly.

Besides Oudomxay, we also visited Vientiane. Despite Vientiane being the capital and largest city in Laos, I was surprised that it lacked the look and feel of a modern city. At Vientiane, we visited Xon Phao Disabled Village where Laotians with disabilities can learn vocational skills to find employment. I was inspired by these individuals’ resilience and unyielding positive spirit. Instead of dwelling in self-pity, they put in the effort to live independently, earn an honest living, and take ownership of their lives. Observing the pride they took in their learning filled me with gratitude for the many blessings in my life and motivated me to put my best foot forward in everything I do.

Luang Prabang, a famous tourist belt in northern Laos is another stop we visited. At ‘Big Brother Mouse,’ a bookstore where foreigners helped Laotian students practice their English through informal conversations, I learned about the students’ aspirations, such as clinching a scholarship, becoming a teacher, or becoming a football player. We also visited Lao Buffalo Dairy, a social enterprise that supports the local community with the aim of improving rural prosperity, welfare, nutrition and health of the local population with a focus on buffalo farming. They achieve those goals by teaching the residents how to vaccinate farm animals and how to milk buffalos. Additionally, they also have a nutrition program aimed at reducing the high malnutrition rate in Laos. I was touched by the story that the owner shared about the trials and tribulations involved to secure nine different government licenses in order to operate, and in the pursuit of finding a perfect formula for their buffalo cheese.

Lunch at “MyBanLao,” a premium hotel built on the former home of a Lao general, and founded by a Singaporean businessman, got me thinking about how powerful visions can be. Both the Lao Buffalo Dairy and the Hotel became possible only through the courage to dream and the will



to fulfil those dreams. As I drifted through our nightly facilitations, I heard fresh perspectives from my teammates and that made me reflect more deeply on how I should not limit my own dreams because I believe that I can make a meaningful impact through thoughtful, small successes.

All in all, just as my palate was excited by the local cuisines offered at the night market of Luang Prabang, all the new sights and new friends I acquired on this trip will stay with me for a long time. They encourage me when I am down and remind me that while life cannot be all smooth sailing, we can still savor the journey in unexpected ways if we do not give up and focus on being optimistic.



Current Affairs Writing Competition Winning Pieces



Contributed by:
Tan Zng Hiong
School of Mechanical and Aeronautical Engineering, DME

Topic: Discuss how Singapore has capitalized on technology to advance the green economy.

According to the United Nations Environment Program, a green economy is defined as one that is low-carbon, resource-efficient, and socially inclusive. In such an economy, growth in employment and income is driven by investments in economic activities that increase production while preserving resources. Singapore exemplifies this approach, ranking 126th in carbon intensity out of 142 countries and emerging as Asia's leading carbon services and trading hub. The city-state hosts the highest concentration of carbon service providers in Southeast Asia and more than 100 international and local clean energy companies, cementing its position as a regional solar hub. With its strategic location, robust Public-Private Partnerships, and advanced infrastructure, Singapore is poised to unlock the region's vast renewable resources.

Singapore's economic dynamism is further bolstered by the Smart Nation initiative, which drives the adoption of green technologies, including smart grids, smart farming, and smart infrastructure. Key initiatives such as the National Hydrogen Strategy aim to create new jobs and ecosystems while advancing global hydrogen supply and storage. Meanwhile, the "Sustainable Jurong Island" project focuses



on reducing emissions and increasing the output of green products, transforming the island from a fossil fuel haven into a sustainable energy and chemicals park. These efforts place Singapore at the forefront of achieving its green goals.

To foster an ecosystem of innovation, research, and collaboration, the Singapore government incentivizes domestic businesses to integrate into the green economy. Enterprise Singapore's "Enterprise Sustainability Programme" supports local businesses through workshops and financing, while the Economic Development Board's "Resource Efficiency Grant for Energy" guides manufacturing companies in reducing emissions. Additionally, the National Environment Agency's "Energy Efficiency Fund" facilitates the adoption of energy-efficient technologies through capacity-building decarbonization programs.



Notably, the “Lao PDR-Thailand-Malaysia-Singapore Power Integration Project” aims to reduce Singapore’s carbon emissions by 40%. Domestically, renewable imports from Indonesia are expected to commence within the next few years, with power sector emissions projected to peak this decade and steadily decline to net zero by 2050. Conservation technology, such as the Forest Fire Detection and Monitoring System, enhances biodiversity monitoring and rapid response, alleviating manpower burdens and ensuring timely resource deployment for firefighting.

Environmental conservation is an integral aspect of any holistic climate change strategy, yet it must be balanced against economic realities. The Singaporean public must choose an economic pathway that avoids ecological destruction, while the government must leverage growth strategies that promote sustainability. Programs like the “Singapore Green Plan 2030” emphasize co-creation and public buy-in, especially given that only 43.7% of Singaporeans view climate change as a serious and immediate threat to their country’s well-being. Beyond leveraging green technology, it is crucial to convince the nation to support these green initiatives, as this collective commitment will lend greater meaning and purpose to a sustainable green economy in the long run.



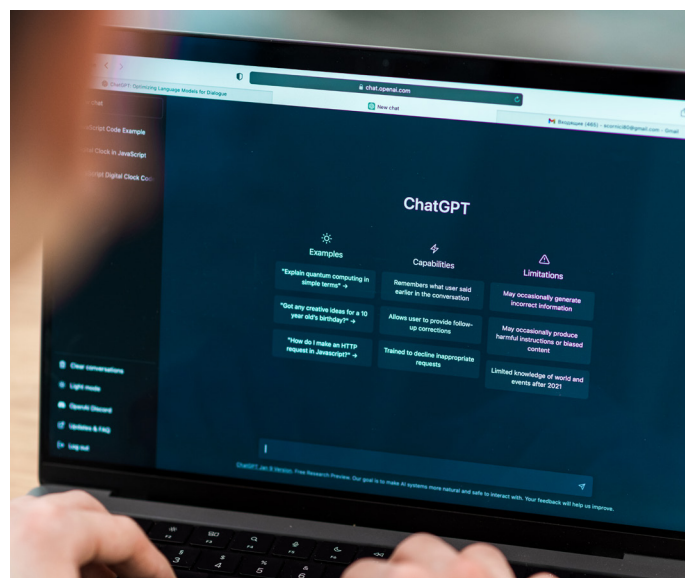
Looking ahead, despite the significant progress achieved, much work remains to be done. Technological adoption is crucial for Singapore’s continued relevance in the global economy. However, the management of unintended effects, such as the rise of e-waste, has lagged. Singapore’s low e-waste recycling rate of 6% underscores the need for improvement. As many green technologies are still in early development stages, it is essential for the government, industry, and public to brace for potential setbacks inherent in the iterative process of innovation. By closely monitoring the applications of green technology, Singapore can continue to advance its green economy optimally.



2 Contributed by:
Chan Keng Yeow
School of Electrical and Electronics Engineering, DASE

Topic: In what ways can emerging technology enhance teaching and learning in Singapore?

Emerging technology such as Artificial Intelligence (AI) – powered platforms can enhance teaching and learning in Singapore schools, making research more efficient and convenient. Large language models like ChatGPT have taken the education world by storms, with educators scrambling to review the way they learn, teach and test students. While tools like ChatGPT can enhance self-directed learning, it has also created issues such as plagiarism and getting all educators to embrace technology in their day-to-day teaching. Since the accessibility of such tools make it impossible to deny students' access, it becomes important to set the tone right on how students use such tools. For instance, at my school, Singapore Polytechnic (SP), it has introduced a Common Core Disciplinary Module titled "Artificial Intelligence and its Impacts," that all students must take. This module covers not only the technical aspects of AI but also its ethical considerations and practical applications in education. While AI-powered platforms can adapt to the learning pace, preferences, and needs of individual students, it is essential that students learn the ethical use of such technology and leverage them to optimise learning and not undermine it. Teachers have also been routinely sent for training to upgrade their skills, so that they become more proficient in the use of Edutech in class.

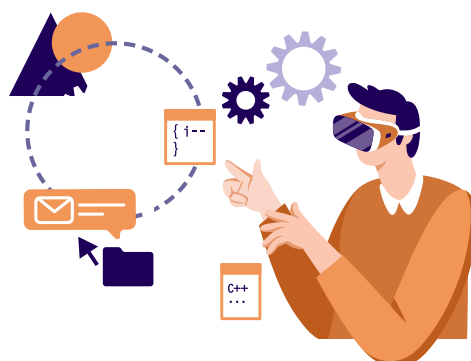


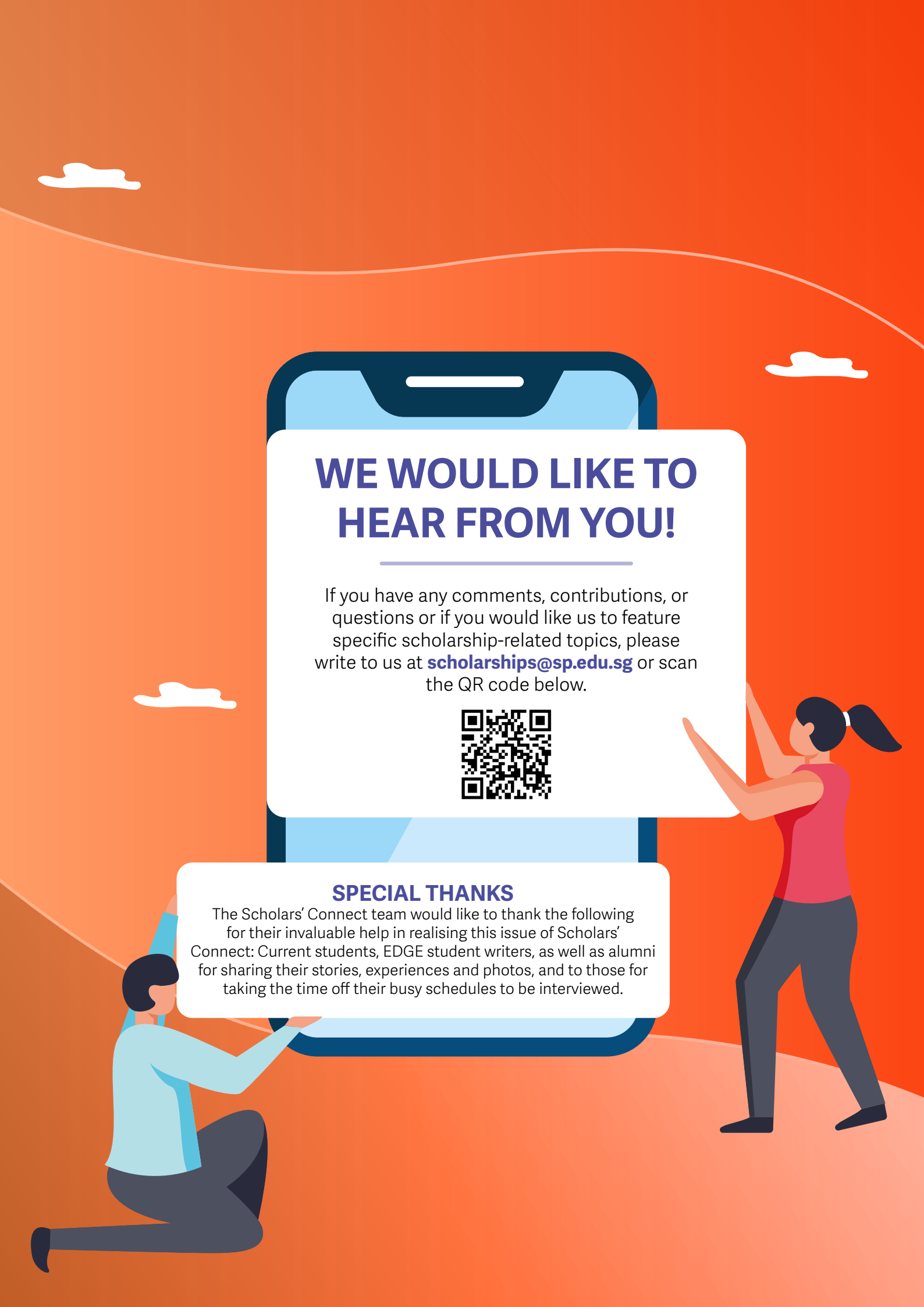


Furthermore, Edutech such as Augmented Reality (AR) can make education more personalised and interactive, with customised feedback that identify learning gaps, and even suggest resources to help students improve. The immersive capability of AR makes learning more engaging for students, especially for topics which are technical and dry. This aspect of technology may help to capture the short attention span of students and make learning more fun in the classroom. During the COVID-19 pandemic when schools across Singapore were closed, the integration of AR into virtual learning can motivate students to log on to their lessons, and this is important in the absence of in-person supervision that is possible only during class time. To further illustrate the benefits of integrating AR into teaching, I took an Aircraft Electrical Systems module in SP where an AR simulation enabled users to interact with the machine virtually, replicating real-world laboratory experiences. This technology supplemented my hands-on learning with virtual experimentation, reinforcing my understanding of my course materials in a safe yet immersive environment when in-person classes were moved online.



Finally, while emerging technologies present numerous opportunities to enrich teaching and learning in Singapore, empowering educators to deliver more immersive, personalised, and effective educational experiences, an over-reliance on technology risks sidelining traditional teaching methods and diminishing the interpersonal interactions critical to a holistic education. In primary and secondary schools, where the full integration of AI and AR may not yet be feasible, the shift towards these technologies in tertiary institutions represents a substantial leap. Even now, the transition from classroom learning to self-directed learning poses a significant challenge in polytechnics and universities, and this gap could widen with the further implementation of AI and AR. Striking a balance between technology-enhanced learning and face-to-face instruction is crucial to preserving a well-rounded educational experience for Singaporean students. By strategically harnessing these technologies, Singapore can develop a workforce equipped with the knowledge, skills, and adaptability needed to thrive in the increasingly digitised global economy of the 21st century.





WE WOULD LIKE TO HEAR FROM YOU!

If you have any comments, contributions, or questions or if you would like us to feature specific scholarship-related topics, please write to us at scholarships@sp.edu.sg or scan the QR code below.



SPECIAL THANKS

The Scholars' Connect team would like to thank the following for their invaluable help in realising this issue of Scholars' Connect: Current students, EDGE student writers, as well as alumni for sharing their stories, experiences and photos, and to those for taking the time off their busy schedules to be interviewed.