

# TAKING ACTION



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# CLIMATE CHANGE

Wawasan Open University (WOU) gathered local and international experts to discuss measures to fight the climate crisis.



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## EDITOR'S NOTE

Climate change has become a buzzword these days. Everyone is talking about it, from the "little men to the big guns", since we all can make a difference.

Corporations tend to jump onto the climate change bandwagon to exhibit their corporate social responsibility (CSR), but may be hesitant to take on measures that affect their operations or revenues.

WOU, through the George Town Institute of Open and Advanced Studies (GIOAS), recently organised a conference on climate change that saw a gathering of local and international experts. A renowned environmentalist shared how the environmental issues in Malaysia have changed over the last five decades, as have the responses from the authorities.

However, one thing we must embrace is that each individual can make an impact - from simple acts like walking instead of driving to diminish carbon emissions, reducing wastes, practising recycling, and shunning littering.

We can also pressure, directly and indirectly, corporations and government agencies to do their part through our choices. These include factors like who we purchase from, lodging complaints through various channels, undertaking community-level actions, casting electoral votes, and so on.

An important idea mooted by GIOAS Chairman Tan Sri Andrew Sheng was the introduction of a social stock exchange in Malaysia for social enterprises to raise capital from the public to implement projects that help communities and the environment.

In this issue, we also acknowledge the innovative work-study model for programmes offered under the School of Digital Technology (DiGiT). This model is gaining the confidence of employers and industries. It received a merit award at the Top in Tech Innovation Awards 2022.

The University welcomes collaboration with other higher education institutions and the industries to improve students' learning experiences, and also to share knowledge with prospects and the public at large. In this regard, we trust that our collaboration with Universiti Malaya will reap benefits for both parties.

Last but not least, WOU maintains its CSR initiatives, most recently through its support of the annual Relay for Life Penang, and the hosting of a seminar featuring subject matter experts to help SPM students gear up for their exams.

**Chief Editor:** Professor Dr Lily Chan (*Chief Executive and Vice Chancellor*)

**Editorial Team:** Agnes James, Rasidah Mion, Selvarani Suppiah, Wong Peng Lin

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# DiGiT SCHOOL EARNs TECH INNOVATION MERIT AWARD FOR UNIQUE STUDY MODEL

WOU's new School of Digital Technology (DiGiT) has gained traction and recognition by the Top in Tech Innovation Awards 2022 for its unique work-study model offered to students.

DiGiT, headed by Dr Lee Heng Wei and Dr Andrew Tan Kian Lam, was a Merit Recipient under the 'Most Impactful Academia-Industry Collaboration (Commercial)' category. The award "recognises a University or Polytechnic that has shown strong collaboration with industry since January 2022 to strengthen the delivery of its curriculum and ensure graduates are industry-ready from the get-go!"

The Top in Tech Innovation Awards, organised by Malaysiakini and Digital News Asia, recognises innovation and digital adoption by organisations, groups and individuals from across Malaysia, all telling their unique innovation story.

The competition is acknowledged by the Ministry of Science, Technology and Innovation (MOSTI). "This award recognises the DiGiT model that has shown a strong collaboration with the industry in delivering our curriculum and ensures our students are industry-ready," said a thrilled Dr Lee.

"Compared to other conventional universities, our model is unique. We frontload our Year 1 students with relevant job skills through intensive Pro-Camp that involves industry experts actively teaching and mentoring in their day-to-day classes.

"Students are well-trained in the first year, which allows them to secure placements as full-time interns in the industry

while continuing their education on weekends, giving them a chance to stay ahead of the game with a degree and work experience."

In DiGiT's work-study model, students pursuing the Digital Business and Software Engineering programmes undergo an intensive first-year of full-time study where they are equipped with the necessary digital knowledge and skills.

From the second year until programme completion, the students undergo paid apprenticeship with industry partners while pursuing their studies on a part-time basis.

All the students in the first cohort have already secured jobs in various companies, owing to the DiGiT learning model which is more skills-based rather than theoretical.



◀ Dr Lee (right) and Dr Tan with the award.

## BE INDUSTRY-READY WITH DiGiT PROGRAMMES

### A. BACHELOR IN SOFTWARE ENGINEERING (HONOURS) (APPLICATION DEVELOPMENT) [BDSE]

Software engineering skills are in demand due to digital transformation of operations and the work environment as businesses seek to remain relevant and competitive in the era of the Fourth Industrial Revolution (IR 4.0).

Students will learn software development, web and application development, database design and implementation, software testing and reengineering, system security, deep learning, and software project management.

#### Career opportunities:

Software developer; technical lead; solutions architect; cloud engineer; cloud architect; DevOps engineer; product manager; UX/UI developer; scrum master; automation QA.

### B. BACHELOR OF DIGITAL BUSINESS (HONOURS) [BDBS]

With increasing global digitalisation, universities are compelled to modify and expand their curriculum to meet the growing demand for digital know-how in the real-work environment.

Learners will pick up business management and digital skills like digital marketing, Google analytics, digital content creation, search engine optimisation, social media marketing, information security, and digital commerce.

#### Career opportunities:

Digital marketing and strategy specialist; digital transformation specialist; digital business analyst; business development specialist; digital media and content specialist.



# GEARING UNIVERSITIES TO BE 'FIT FOR PURPOSE' IN THE FUTURE LANDSCAPE



▲ Vasbinder (file pic)



▲ Sim talks about the impact of AI on higher education.

Universities must be able to cope with changing conditions to remain sustainable, and be adept in embracing artificial intelligence (AI) such that it adds value to one's studies and work.

These were among the thought-provoking themes from the book *Fit for Purpose? The Futures of Universities* that were highlighted by its editors during a special launch of the publication at the WOU City Campus on 28 January 2023.

The event, featuring editors Jan Wouter Vasbinder and Jonathan YH Sim, was organised by WOU's George Town Institute of Open and Advanced Studies (GIOAS). It was moderated by WOU Board of Governors Chairman Tan Sri Dr Koh Tsu Koon.

The book aims to inform and inspire discussions on key issues that must be addressed if universities are to be fit towards equipping learners for the future, especially in the face of accelerated global changes.

**Vasbinder**, founder of Institute Para Limes, Netherlands, explained that such changes have led to "differences between the knowledge produced and taught in universities, and the knowledge needed in a continuously evolving society".

He read a chapter that discusses the history of universities. It includes an account of the Humboldt University model whose success is based on four ingredients – education and research; academic community of scholars and students; joint responsibility of public and private sectors for the university; and academic freedom and independence.

Another chapter questions whether universities have fulfilled – through education and cutting-edge research – the tasks bestowed by society to contribute significantly towards

solutions for sustainable human wellbeing, civilisation and security for all. It includes suggestions on how universities can be made fit for the future.

"It is the young people, who are at the beginning of their productive lives, who will transform the present into the future," Vasbinder emphasised.

"Universities can be set to be future-ready or ready for purpose in the future if they can deliver students who are future-ready."

## MAKING STUDIES ENGROSSING IN THE AGE OF AI

**Sim**, who is a lecturer at the National University of Singapore (NUS), delved on issues surrounding ChatGPT, one of many emerging AI devices. As a chatbot, ChatGPT can produce essays, answer multiple choice questions, and even generate programming codes.

Sim works with the NUS Teaching Academy to explore the impact of artificial intelligence on higher education. His task includes proposing how the university can embrace AI to prepare students and academics to be future-ready.

He expressed a feeling that educators are at risk because students may find that ChatGPT can teach better. "Educators need to add value by embracing AI in their teaching so that students still want to come to university," he said.

Sim shared two ways that educators can achieve this. Firstly, instead of asking students to write essays, educators can grade them on how well they edit an essay generated by ChatGPT. The learning objectives would then shift. He noted that educators may be reluctant since it would entail a lot of work to change every assignment for a course.

Secondly, educators should move away from grading, since AI can do content generation, and focus on building the students' portfolios in terms of teamwork, leadership, and such.



▼ Vasbinder with Sim (right) and Tan Sri Dr Koh.

# UNIVERSITIES AS CRUCIBLES OF HUMAN CAPITAL DEVELOPMENT



▲ Prof Faisal (LinkedIn pic)



▲ Prof Lai (NUS pic)



▲ Prof Zehnder  
(The Academy of Europe pic)



▲ Tan Sri Azman (MCOBA pic)

Universities today play a dynamic role in helping to produce capable and competent talents, especially in the digital era. It is important that they not only nurture compassionate and ethical global citizens, but also equip learners with technological competencies.

Several higher education leaders presented their views during a public forum on the *Role of the University in Digital Transformation*. Held at the WOU City Campus on 28 January 2023, the event was organised by WOU's George Town Institute of Open and Advanced Studies (GIOAS).

The panellists were Tan Sri Azman Mokhtar, Chairman of the International Centre for Education in Islamic Finance (INCEIF); Prof Alexander Zehnder from Nanyang Technological University of Singapore (NTU); Prof Dato' Dr Faisal Rafiq Mahamd Adikan, former Vice Chancellor of Universiti Sains Malaysia (USM); and Prof Dr Lily Chan, Vice Chancellor of WOU.

The forum was moderated by WOU Board of Governors Chairman Tan Sri Dr Koh Tsu Koon.

**Tan Sri Azman** shared that universities have a threefold function. They solve society's problems by providing knowledge, research and talents. They also equip students to earn a decent living. Ultimately, they create better human beings. "For better human beings and better human capital with ethics, the crucibles are the universities," he said.

Universities could also be a convening platform for networking, specifically of academics, students and industry, to tackle societal concerns, he stressed. And they must embrace digitisation if they are to produce employable graduates.

**Prof Zehnder** remarked that good universities are those with curiosity-driven research, as this can lead to real findings and breakthroughs. They must educate the future leaders, and people who are "highly flexible, highly adaptive," besides producing socially compatible human beings.

"Universities should be the ideological free space in the world,

and must fight to keep that freedom of ideology," he asserted.

He cited graphical data that showed that the more the money invested by countries in higher education and research, the higher the GDP of that country. "So if you educate your people right, if you give them all these degrees of freedom, the whole society will, at the end of the day, profit from it," he summed up.

"Universities have their huge strengths, and must be supported."

## BALANCE USE OF TECHNOLOGY WITH STUDENT ENGAGEMENT

**Prof Faisal** said that the university's roles consist of social mobility through graduate employability, serving as a test bed for social experiments, and making upstanding citizens.

He opined that universities need the support of industries to create industry-ready talents, in view of the fast-changing work environment.

Universities should also balance technology adoption with students' engagement with peers, academics and other stakeholders. "Universities are still relevant to help young students discover themselves and prevent mental health problems," he concluded.

**Prof Chan** shared her aspiration to position WOU as an open and flexible, distance and digital learning university, that provides working adults access to quality education.

Special guest speaker **Prof Lai Choy Heng** from the National University of Singapore (NUS) said universities must serve as examples that digital transformation works by providing enhanced student experiences and nurturing the learners' adaptability to different environments.

He cautioned against the zealous pursuit of digital technologies at the university, and called for constant reflection on the adoption so that the university stays true to its educational goals.

# UNIVERSITI MALAYA DELEGATION DISCUSSES COLLABORATION



◀ The UM delegation (seated, from left): Dr Ng, Dr Elsa and Prof Rafidah - and the WOU academics.

A delegation from Universiti Malaya (UM) recently paid a benchmarking visit to WOU for the purpose of improving their offering and delivery of programmes via the open distance learning (ODL) mode. The three-member team also discussed future collaboration to offer joint programmes, leveraging on WOU's vast experience in the field of ODL.

The visitors were led by UM's Quality Management and Enhancement Centre (QMEC) director Prof Ts Dr Rafidah Md Noor. She was accompanied by the centre's Analytical and Quality Enhancement Division head Dr Ng Siew Cheok, and Quality Standardisation Section coordinator Dr Elsa Haniffah Mejia Mohamed.

Besides aiming to optimise best practices for implementation of programmes via ODL, the delegation also wanted to benchmark the process, system and documentation in preparing self-instructional materials (SIM), and to build a collaborative network with WOU for ODL.

Prof Rafidah explained that UM established its ODL Centre in 2017. It currently offers four approved ODL programmes - two in engineering, one in English language, and one in Islamic studies. Nine more are in the pipeline.

The visitors met with academics from WOU's School of Education, Humanities and Social Sciences (SEHS), led by the Dean, Assoc Prof Dr Thomas Chow. Also present at the meeting held at the main campus on 7 February 2023 were Head of the Centre for Foundation Studies (CFS), Jasmine Emmanuel; Director of the Centre for ODL Experiences (COLE), Dr Dewi Amat Sapuan; and representatives from other faculties.

In his briefing, Dr Chow highlighted the support system provided by WOU in ODL - including tutorials, self-

instructional materials (SIMs), and the interactive learning management system, FlexLearn, adopted in September 2020.

Emmanuel stressed on the need for best practices in tutor management, the learning management system and student engagement. She also touched on building a supportive community for the learners, the teaching styles for ODL, and dealing with attrition and maintaining retention.

Dr Dewi elaborated on the timeline and progress of WOU's transition from the Moodle-based learning platform to FlexLearn. Further user engagement and user experience enrichment are respectively planned for this year and next.

During the discussion, Prof Rafidah shared that UM is in need of experts in ODL from WOU for its Master of Data Science programme, and has plans to invite more experts from WOU to give talks and training to develop their learning management platform.

Dr Ng pointed out that UM would also need ODL subject matter experts in its panel to evaluate the ODL programmes, including ascertaining whether the SIMs are up to standard.

Dr Chow and Prof Rafidah concurred on the potential areas of collaboration, namely exchange of expertise, and offering a joint WOU-UM programme. Another suggestion from Dr Chow was for UM to channel any overflow of PhD students to WOU.

Further discussions are needed with the top management of both institutions in ironing out the details, and working towards forging a memorandum of understanding (MoU) to facilitate collaboration, beginning with the data science programme.



# NOVEL IDEA OF SOCIAL STOCK MARKET FOR FUNDRAISING IN MALAYSIA

The stock market is in for a remarkable transformation should the idea of a “social stock exchange” be implemented, giving social enterprises, as well as micro, small and medium enterprises (MSMEs), the opportunity to get public listing.

Tan Sri Andrew Sheng, Chairman of WOU's George Town Institute of Open and Advanced Studies (GIOAS), described such a move, which would help raise capital from the public for financing social projects, as the way for the future.

Setting the pace, India started consultations on this matter in July last year. The efforts eventually led to the National Stock Exchange of India receiving approval from the Securities and Exchange Board of India to launch a Social Stock Exchange.

The exchange is expected to give social enterprises a new avenue to finance social initiatives, offer greater visibility, and ensure better transparency in the utilisation of funds.

Tan Sri Sheng shared his views on the prospects of having a Social Stock Market (SSM) in Malaysia, serving as a fundraising platform for social projects, in an interview on Astro Awani's *Notepad with Ibrahim Sani* aired on 8 February 2023.

“We all want stock markets to grow, but there are only 55,000 listed companies in the whole world, and probably 500 million MSMEs that cannot get public listing or finance from the public,” he said. “So how do we use the capital markets to help small people help themselves to deal with climate change and uplift their incomes at the same time?”

Most “mom-and-pop shops” – small, independent, and often family-owned businesses – are in fact social enterprises. “Selling nasi lemak is actually a social enterprise because what they are doing is not for profit; it is to feed the family,” he clarified.

## IMPORTANCE OF SOCIAL IMPACT AUDIT

Tan Sri Sheng, who is also a Distinguished Fellow at the Institute for Capital Market Research Malaysia (ICMR), defined a social enterprise as an organisation or a



community able to run a project that can raise capital in the SSM.

The platform would be trading zero-coupon, no return instruments to facilitate social impact projects instead of being profit-oriented. Some examples of these projects include community development initiatives such as building a better bridge, providing better education, improving water supply, and helping the poor.

In calling for the creation of a social stock exchange in Malaysia, Tan Sri Sheng also stressed on the importance of social enterprises being audited. Instead of delivering profits or dividends, the enterprises would have a social impact audit to assess whether their social projects fulfil prescribed standards.

He explained that the establishment of the International Sustainability Standards (ISS) under the International Financial Reporting Standards (IFRS) in 2021 has provided auditors with a set of global guidelines for social audit of projects undertaken by social enterprises.

A social enterprise with a record of successfully delivering a project in a village may potentially draw investment from a public listed company, he added. “If a social enterprise uses RM50,000 to build a bridge in a village, a public listed company may commit to contribute RM50,000 a year as part of its corporate social responsibility (CSR) activity.”

He asserted that social enterprises listed on the SSM would show the world that they can deliver on their designated objectives, in terms of impact, and hence be able to raise more capital.

# CHANGING LANDSCAPE OF ENVIRONMENTAL ISSUES IN MALAYSIA



▲ Gurmit highlights the environmental issues in Malaysia.

Although climate change is beginning to garner more attention in Malaysia, especially among NGOs and the government, there are several environmental problems that still lack much-needed action on the ground.

According to Gurmit Singh, an environmental and social activist of over five decades, activities like logging and deforestation continue getting scant attention on the ground. Other issues

like biodiversity loss, pollution of the Klang River, rising solid waste, illegal dumping of toxic wastes, energy wastage, poor implementation of laws, and unsustainable lifestyle practices like littering still persist.

He lamented civil engineers' tendency to "cut and fit" for hillslope development, leading to major threats of erosion and siltation recurring in the country. "Much of the development on hilly areas is 'cut and fit' and not built along contours," he said. "We get floods because all our drainage systems are allowed to clog up."

Gurmit was speaking on *Malaysia's Changing Environmental Issues* during a day-long conference on climate change in Penang on 29 January 2023. The event was organised by WOU's George Town Institute of Open and Advanced Studies (GIOAS).

Gurmit's eventful journey in environmentalism goes back to when he set up the Environmental Protection Society Malaysia (EPSM) in 1974, helping it as founding president until 1994. He is presently the immediate past chairman of the Centre for Environment, Technology and Development, Malaysia (CETDEM) which he founded in 1985.

During his 20 years with EPSM, he led studies on the pollution of the Klang River, land mismanagement in the Klang Valley, and solid waste management in Kuala Lumpur.

He recounted some of the losses he has seen in the battle for the environment. They include the construction of the Bakun Dam in the rainforest of Sarawak, pollution of rivers, scourge of smog in the Klang Valley, degradation of land, loss of soil, and slope failures due to development across the country.



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## MILESTONES IN THE CONSERVATION STRUGGLE

However all is not lost despite these setbacks. Gurmit lauded the formation of the Department of Environment (DOE) and implementation of the Environmental Quality Act (EQA).

He hailed the cancellation of the Tembeling Dam and of plans to commercially develop Penang Hill, as well as the reduction of palm oil effluents in some rivers as positive milestones in Malaysia's conservation efforts.

He highlighted some other key victories. These include the cessation of logging in the Endau-Rompin National Park, institutionalisation of the Environmental Impact Assessment (EIA), inclusion of NGOs in the Environmental Quality Council (EQC), acceptance of renewable energy as the fifth fuel, and promotion of energy efficiency.

He noted that climate change awareness is increasing, with biodiversity, climate change and environmental policies in place, but proper enforcement of these policies are wanting. Plastic waste is getting a higher profile and people are talking about zero waste, including that of food.

CETDEM recently undertook collaboration with other NGOs to improve public transportation systems nationwide as emissions have been assessed to be high. "There seems to be little concern from relevant stakeholders to effectively reduce these emissions," Gurmit said, observing that Malaysia has the largest car usage per capita in this part of the world, with high fuel consumption by urban households.

He pointed out further related changes through the years, such as social media surpassing mass media in facilitating citizens to reach out and mobilise, and more MPs showing an interest in environmental matters.



# OWNING OUR FUTURE TO MAKE A DIFFERENCE AGAINST CLIMATE CHANGE



▲ Tan Sri Sheng talks about climate change action. (filepic)

More than ever before, climate change today is at a critical point and is a present danger to the world.

To make a difference, says Tan Sri Andrew Sheng, it is important that technology, funding, and management skills be made available to parties at the forefront of climate action – particularly communities, start-ups, and non-governmental organisations (NGOs).

According to the Chairman of WOU's George Town Institute of Open and Advanced Studies (GIOAS), many community-level people and NGOs in different parts of the world are struggling with shortages of talent, funding and branding. "We can support them to work on environmentally friendly projects like reforestation, cleaning up of water, and clearing air pollution," he explained.

The availability of Wi-Fi and other technological tools can accelerate these social enterprises' capacities to draw on deep knowledge, and thereby help their projects and programmes at the grassroots level.

Tan Sri Sheng highlighted this during his talk on *How to Focus on Climate Action – Global or Local* at the GIOAS conference on climate change on 29 January 2023.

The day-long conference in Penang attracted experts from Netherlands, United States, United Kingdom, Switzerland, Singapore and Malaysia. It reviewed the progress of climate action globally and within Malaysia, looking at opportunities and threats.

He said that as individuals we are all part of a larger community, and our daily and collective actions can make a difference. "We have to own our future. Nobody is coming to save us; we have to do it ourselves. We can make a difference, and we should," he said. He remarked that climate change has illustrated that everything is interrelated, from individual and family to the community, and to national and global levels.

"Radical thinking is required to facilitate transformation as climate change involves complex systems change," he said.

"This means we must tackle climate problems from bottom-up, from community to global levels."

## EMPOWERING GRASSROOTS COMMUNITIES

Tan Sri Sheng observed that many NGOs are under-funded and have difficulty getting the right expertise and talent. "NGOs need talent, branding and funding," he stressed. "They don't have the talents because they don't have the money to attract or keep them. No money means they cannot do branding. Without branding, you cannot attract funding."

He said Malaysia can be exemplary in terms of leading global climate action because of her rich natural resources and human talent. By empowering grassroots communities to initiate climate action, he opined, many NGOs, social enterprises and start-ups can overcome their under-funding and access global expertise and talent.

"We should work on smart villages that develop through technology, but then stable Wi-Fi is a vital infrastructure for the rural areas to access global know-how and markets," he noted.

Tan Sri Sheng also called for the creation of a Global Creative Commons (Wiki-Ori) to network social enterprises so that they can be taught how to access the relevant expertise and funding.

He added that artificial intelligence and big data have further opened possibilities of matching the supply and demand for knowledge and funding between social enterprises and potential funders.



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# GLIMPSES INTO OVERCOMING THE TROUBLED STATE OF THE SUPPLY CHAIN

*The University recently held two talks on the issues dogging the supply chain - focusing on the disruptive factors and mitigation steps needed, and on the role of artificial intelligence in supply chain management.*

## THRIVING AMID DISRUPTION IN A DAUNTING AGE



▲ Companies need to adapt, says Tan.

As the global supply chain continues to be chaotic largely due to unavailability of raw materials, companies need to work towards minimising the impact of this situation on their production. CK Tan, Vice President of NationGate Solution, Penang, advised affected companies to adapt to the current unpredictability.

"Establish a mechanism for tell-tale signals to detect potential delay, defective

products, or something out-of-norm from suppliers," he said. "If you can define and track the tell-tale signals earlier, then you can go to an alternative supplier to avoid being hit with a short supply, and hence lessen the negative impact."

Tan was speaking at a webinar on *Supply Chain Issues and Development* organised by WOU's School of Science & Technology (SST).

The disruptions are brought about by dominant PESTLE (political, economic, social, technological, legal and environmental) factors. These include the recent pandemic, US-China tensions, global recession, rising inflation, and relocation of industries to their own regions. Occurrences like riots, labour shortages, sanctions and wars, natural disasters, congested ports, and insufficient containers or sea fleets also contribute to the situation, he said.

Tan advised companies to forge positive supplier relationship management. "Build a good relationship with all your raw material suppliers so that they can reasonably support you well. Have focused communication with them and monitor for tell-tale signals," he said.

He suggested that companies overstock with "buffers" to minimise any impact during disruptive supply chain periods. They can also adopt the "edge strategy" where one makes use of existing resources for current customers to serve other customers or industries to generate optimum revenue. One can even collaborate with competitors to weather the crisis.

## AI FOR BETTER OPERATIONS OF SUPPLY CHAIN



▲ Dr Kan talks about AI in supply chain.

Artificial intelligence (AI) has been proven to significantly improve complex supply chain management. As supply chain undergoes rapid transformation, AI helps in refining the services to meet consumer demands with the use of data, forecasts and customer reviews, and make shipment of goods smoother and quicker.

"AI increases operational efficiency through demand forecasting, laying out best

delivery routes, and last-mile deliveries and driverless cars," said WOU's School of Business & Administration (SBA) lecturer Dr Kan Wen Huey during a virtual talk on AI adoption in supply chain.

"AI offers better visibility for inventory management and order management. AI can boost resilience through predictive analytics for risk management, and digital twins." (A digital twin is the digital recreation of an actual supply chain in a virtual world to forecast the supply chain's behaviour and develop an action plan.)

She cited ways in which AI is revolutionising supply chain management. These include providing the knowledge needed to reduce operating costs and inventory, and responding to clients quicker; increasing supply chain management productivity; and enhancing demand forecasting accuracy.

"The method used when we conduct an online product search enables AI to analyse massive amounts of data, improving the precision of customer demand forecasting," said Dr Kan.

"AI can also improve supplier selection and increase the effectiveness of supplier relationship management, and enhance customer experience. It also helps with production planning and factory scheduling."

*AI offers better visibility for inventory management and order management.*

# LEADERS MUST DEVELOP A WORK CULTURE THAT EMBRACES DIGITAL TRANSFORMATION

According to a study, 90% of CEOs believe that the digital economy will impact their industry, but less than 15% are executing a digital strategy.

In view of this, Isaac Leow, Director of Owlz International Group, encourages leaders to proactively create a culture of change and promote a digital mindset across the whole organisation. After all, digital transformation leads to increased efficiency and greater business agility. It unlocks new value for employees, customers and shareholders.

Learning new technological skills is essential for this but it is not enough. "Leaders must motivate employees to use their skills to create new opportunities, and bring about the right work culture so that everyone works towards the company's ultimate direction," he said.

Leow was speaking at a webinar on *Leadership in Digital Transformation* organised by WOU's School of Business & Administration (SBA) recently. He described digital transformation as the "process by which companies embed technologies across their businesses to change the way of work". This includes CRM (customer relationship management) for sales, and various other apps.

Leaders can push the change culture by making it clear to employees how digital transformation also serves their interests. "Transforming into a digital enterprise is not a one-off project but a journey where the changes you will address span across people, processes and technology," Leow said.

"It is a culture that needs to be developed by the company, the CEO, the management team, and it is a continuous process. The CEO must encourage digital transformation in the day-to-day operations. Companies that quickly adapt to these changes can have a great competitive advantage and be more relevant in the market."

Every successful digital transformation is driven by a combination of people, processes, and technology. "It is the people who drive the change within an organisation to reach their goals. You can have the best process, the best technology in your company, but if people are not implementing it, there is no progress," he asserted.



▲ Leow (LinkedIn pic)

## COMMUNICATING THE BENEFITS OF CHANGE

Elaborating on altering people's mindset, Leow stressed that leaders must examine the language they use to promote change. "The way you think and talk about change is important. When someone makes a change towards the betterment of the company, celebrate and praise it. Encourage every small win."

"Next, connect with the people. Involve them in the planning and implementation of your solution to reduce resistance and improve their buy-in to the change," he added. "People support change that they help create and for their own reasons, not just for the interest of the company."

With effective communication on the need for change and its benefits to the organisation, more people will adopt changes willingly, Leow stressed. "You will notice a marked improvement in employee performance. It happens when they feel supported and understand the purpose of change."

"Thirdly, when you as a leader encounter resistance to the change you want to make, embrace the resistance as your friend. Ask questions and listen to the concerns. Understand why they refuse to change. We need to identify the potential barriers to making change, to increase our odds of building support."

He reiterated that the leader needs to maintain the change culture across the organisation. "For successful digital transformation, leaders must identify and empower people who have the knowledge needed to streamline changes as they surface, and bring in external talent to augment internal capabilities," he concluded.



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# A FULBRIGHT JOURNEY THAT SPURRED AN ACADEMIC'S INTEREST IN ODL

When Ooi Li Hsien participated in an exchange stint in the US for two semesters from August 2009 to May 2010 under the prestigious Fulbright scholarship programme, it ended up being a truly life-changing experience.

The senior lecturer from WOU's School of Education, Humanities & Social Sciences (SEHS) was recently given the privilege of recounting his enlightening Fulbright journey. Intriguingly, it allowed him to become familiar with online learning.

"I was placed at Minnesota State University, Mankato," he recalled. "I took master's level courses while I was an undergraduate and that was the beginning of my exposure to online learning as my professors then were experimenting with various online platforms to deliver their lessons. I was also exposed to research and learned up on referencing and academic writing."

The programme also had a community service component where he took the opportunity to visit a correctional centre and share about Malaysia.

"I was also the founding committee of the World Languages Society under the International Office where a group of us international students taught various languages to the community. We shared our cultures and the community brought food to share with us. It was a very nice bonding experience."

Ooi was sharing his personal recollections during the MACEE@60 Conference themed *Exploring Opportunities*



in Higher Education with Fulbright Malaysia and the United States. The event was held at the Ministry of Higher Education's (MOHE) headquarters in Putrajaya on 9 February 2023.

This year marks the 60th anniversary of the setting-up of the Malaysian-American Commission on Educational Exchange (MACEE), which oversees the Fulbright Malaysia programme.

Ooi is an alumnus of the Global Undergraduate Exchange Programme (Global UGRAD), which is implemented under the Fulbright Malaysia Programme. Besides the cost of the round trip, the scholarship covers monthly allowance, lodging and food, and health insurance.

## PRIMARY STUDENTS MASTER WORD PROBLEMS THE VISUAL, MATHEMATICAL WAY

For many pupils, solving mathematical word problems makes for a rather formidable task as they struggle to even understand exactly what is presented to them. However, about 50 pupils from Standard 4 to 6 at Tenby Schools Penang recently had a fascinating eye-opening experience in this regard during a talk titled *Use of Bar Models to Solve Word Problems*.

WOU's School of Education, Humanities & Social Sciences (SEHS) senior lecturer Dr Tan Saw Fen delivered the talk at the school in conjunction with its STEAM (Science, Technology, Engineering, Arts and Mathematics) Week.

The bar model method is a pictorial representation that helps pupils visualise the given mathematical problem using rectangles and bars of different sizes. The size of each bar is proportional to the number it represents.

Dr Tan gave examples to familiarise the pupils with the bar model method before engaging them in a practical session. What pupils need to do is convert the textual information

in a word problem to visual language using the bars. By applying this technique, they are then able to visualise abstract mathematical concepts for a deeper understanding to effectively solve word problems.



# EDUCATIONIST UNDERLINES APPLYING A LEARNER-CENTRED APPROACH



▲ Prof Ó Tuama from Ireland.

In the shift towards a learner-centric approach in education, practitioners are often faced with the challenge of understanding the learner's needs and establishing where they are in their learning journey.

Addressing this, Prof Séamus Ó Tuama, Director of ACE (Adult Continuing Education) and a senior lecturer in politics at University College Cork, Ireland, explained the idea

of reflexive modernity – that individuals each have a personal identity portfolio that defines them. It is important how the learner is placed in the centre because the individual's learning journey is part of that identity portfolio.

"They will thus have an idea of where they want to go in their lives," he said in a recent talk on *Shaping a Learner-Centred Approach: Reflexivity and Capitals of Learning* for academics at the WOU City Campus.

Prof Ó Tuama is also Chair of the ASEM Education and Research Hub for Lifelong Learning (ASEM LLL Hub), an inter-governmentally supported network for university cooperation between Asia and Europe. He is on the UNESCO Institute for Lifelong Learning (UIL) Advisory Group to the international research project on 'Universities' contributions to lifelong learning'.

## THE FIVE LEARNING CAPITALS LINKED TO LIFELONG LEARNING

He expounded on five learning capitals and their relevance to lifelong learning against the backdrop of reflexive modernity. The first, **seed capital**, is the baseline from which the learner starts. It includes the capacity to accumulate additional capital and opportunities to invest any capital the learner already has.

Then there is **identity capital**, which refers to one's self esteem. It can be greatly enhanced through education. "It's important to bear in mind that when engaging the students, we are also engaging with how they view themselves, how they change our perspectives of themselves," he said.

The third, **cultural capital**, refers to the competencies one has to participate in society. "Everyone has an opportunity to extend their cultural capital in a reflexive way that allows



▲ GIOAS chairman Tan Sri Andrew Sheng (right) with the speaker.

them to identify their priorities, goals and ambitions," said Prof Ó Tuama.

He shared that education deepens **social capital**, which represents the connections that people make. In the case of those from marginalised groups who have otherwise poor connections outside their own circle, it allows them to network for job and career opportunities.

Finally, **human capital** covers skills we use in the workforce. However, human capital can become outdated very quickly, Prof Ó Tuama cautioned.

"For somebody who graduated in computer science in 2000, is everything they learned still relevant today?" he asked. "We need to be careful that we are not providing courses that are centred around our skills rather than the needs of the learners."

Prof Ó Tuama emphasised that educators should adopt a holistic outlook, follow a demand-led and learner-centric approach, offer quality programmes, be realistic in what can be delivered, and, most importantly, leave no one behind.

*"We need to be careful that we are not providing courses that are centred around our skills rather than the needs of the learners."*

# BALANCING VARIOUS ASPECTS OF LIFE FOR **GOOD MENTAL HEALTH**

Most people do not realise it, but mental illness is not always visible. There are those who may seem happy on the outside and yet have negative thoughts.

According to the World Health Organisation (WHO), one in four people suffer from some form of mental illness. This makes up over 1.5 billion people - but less than 1% seek treatment.

Revealing these facts, Dato' Dr Florance Sinniah, founder and president of Snehama Malaysia, a welfare organisation that provides counselling services, shared that people get stressed coping with normal challenges in life. Every stage of life has its own set of challenges, and people must learn to balance the different aspects for a healthy mind.

Mental illnesses include depression, anxiety and bipolar disorders, schizophrenia, suicidal tendencies, and other behavioural and emotional difficulties. To make things worse, comments like "toughen up", "no one said life would be easy" or "others have it worse than you" invalidate a person's own struggle with mental health, and make them feel worse than they already do, she said.

She was delivering an online talk recently on *Mind and Health Matters* organised by WOU's School of Business & Administration (SBA).

She also noted WHO statistics which show that 800,000 people die globally by suicide every year. This equates to one death in every 40 seconds. "Suicide is the fourth leading cause of death in 15 to 19-year-olds," she stressed.

In Malaysia, the Police recorded 1,708 suicides from Jan 2019 to May 2021. Of these 51% were of 15 to 18-year-olds, she highlighted.

## **IDENTIFYING WARNING SIGNS AND HANDLING PROBLEMS**

Dr Florance explained that a healthy mind manages thoughts, feelings and behaviour better. This helps one enjoy life, have adequate rest and sleep, socialise, and maintain good relationships. One may perform daily activities, work productively and contribute to the community, cope with change and uncertainties, and achieve goals and potential.

The early warning signs of an unhealthy mind include quarrelling, and disputes or fights with family and



◀ Dr Florance offers a few mental health tips.

friends. Other signs are the inability to focus or think properly, overeating or not eating, thoughts of self-harming, feeling helpless and hopeless, and suffering extreme mood changes.

She listed several factors that can affect mental health, such as childhood abuse, trauma or neglect, social isolation/loneliness, and experience of discrimination and stigma. Other causes are social disadvantage, poverty or debt; loss of a loved one; long-term physical illness; unemployment or job loss; homelessness; being a long-term carer; drug and alcohol misuse; domestic violence; bullying, abuse or significant trauma as an adult; and being victim of a violent crime.

An awareness and acceptance of how people feel, and actively making changes, can help them deal with mental health issues. "Recognise why you are feeling this way, the cause (e.g. breakup), and how to respond," Dr Florance said. "Accepting will allow you to tolerate painful and negative feelings, past losses, and distressing situations in a measured and mindful way."

She continued, "Increase your engagement with things, other people, and the world even if your first instinct is to withdraw. Seek help from a loved one, undertake self-help, or get a combination of support systems and resources."

She provided the following advice for maintaining a healthy mind: connect with others; stay positive; do physical activity; help others; get proper sleep; surround yourself with good people (not toxic ones); and set realistic goals.



## TIMELY SEMINAR TO GEAR SPM STUDENTS TO FACE CRUCIAL EXAMS

Over 200 Form Five students from all over Penang benefitted from a day-long seminar on answering techniques for the Sijil Pelajaran Malaysia (SPM) examinations, held at WOU's seaside main campus.

The programme was timely and valuable as the students are required to achieve a mandatory pass (A+ to E grades) in the Bahasa Melayu (BM) and History subjects to pass SPM. Additionally, they must get a minimum credit (A+ to C grades) in BM for admission to undergraduate programmes.

They were thus given useful tips and techniques on tackling questions in these two subjects, and also on generally preparing for the exams.

Held as one of WOU's corporate social responsibility initiatives, the programme was organised by its Centre for Foundation Studies (CFS) in collaboration with the Chief Minister's Office, VSchool Trend, Smart Excel Educare & Learning Centre, and Akademi J & W.

The seminar kicked off with a session focusing on BM facilitated by Wong Hooi Mun, a BM subject advisor for VSchool Trend. Wong is a language expert designated as a 'Munshi Dewan' by Dewan Bahasa dan Pustaka, the Malaysian government body responsible for overseeing the development and preservation of Malay language and literature in the country.

The students also received pointers on tackling questions in the History paper from VSchool Trend's History advisor Foong Seong Tuck, an education expert well-versed on the subject.



▲ Wong shares some useful tips.

▲ Foong in action.

## OFFERING SUPPORT FOR RELAY FOR LIFE IN THE BATTLE AGAINST CANCER



▲ WOU students and staff take part in the walkabout.

WOU has been supporting the Relay for Life Penang event, which promotes cancer awareness, celebrates cancer survivors, and remembers those who have lost their lives to the ailment, since 2007.

The philanthropic spirit and passion for volunteerism is alive and well among the University's learning community till today.

About 25 staff and On-Campus Learning (OCL) students joined cancer survivors in a walkabout on the grounds of Penang Hospice Society during the most recent observance of the annual event held on 4 December 2022.

As a silver sponsor, WOU contributed RM5,000 to the gathering, which made a return after a two-year hiatus caused by the pandemic.

In her speech, Dr Saraswathi Bina Rai, chairperson of National Cancer Society of Malaysia Penang branch (NCSM Penang), said, "Female breast cancer is the most commonly diagnosed cancer, followed by lung, colorectal, prostate and stomach cancers."

She pointed out that the increasing incidence of cancer is linked to lifestyle factors, asserting that "30% to 50% of all cancer cases are preventable if we practise a healthy lifestyle".

Dr Saraswathi proffered some critical advice for cancer prevention: do not smoke; maintain healthy body weight; eat a well-balanced diet; consume plenty of vegetables and fresh fruits daily; limit red meat and fat intake; and exercise regularly.

# MECHATRONICS STUDENT ON THE CUSP OF AN ENGINEERING DREAM

Ipoh boy **Kesavan Balan** has been working in Singapore with an international solar energy company, a pioneering enterprise in the field, since December 2022. It was the experience gained while pursuing the Bachelor of Technology (Honours) in Mechatronics (BTME) at WOU that emboldened him to seek a career there.

The 28-year-old technician, who enrolled in the January 2018 intake, is closer to his dream of becoming a professional engineer after he graduates with the BTME. He owes his career trajectory to his continual learning mindset that has equipped him with the needed skills.

"The BTME programme has really refreshed what I had learnt in my diploma. This gave me the confidence to apply for the job in Singapore," said Kesavan, who holds a diploma in mechanical engineering from Politeknik Sultan Abdul Halim Mu'adzam Shah, Kedah.

His present job at REC Solar Pte Ltd is to fine-tune sensors, check wiring voltage, change relays, do programme editing, and perform mechanical parts service and replacement. The knowledge from the electrical and mechanical courses in BTME helps him in his tasks to efficiently perform troubleshooting for errors and problems.

Kesavan started working in 2017 as a technician with Unisem, a provider of packaging and test services for semiconductor companies, in his hometown of Ipoh. He then moved on to Western Digital in Penang in 2021.

He recalls his four years with Unisem as being "like a great training centre" where he gained practical skills on work



*The BTME programme has really refreshed what I had learnt in my diploma. This gave me the confidence to apply for the job in Singapore.*

procedures, SOPs, and ISOs. "I also learnt about diverse workplace cultures and gained better understanding of electrical applications." At Western Digital, he got to experience an MNC work environment and deepen his practical knowledge of the various machines.

"It's a totally different experience in Singapore, with never-ending learning development, where I am acquiring electrical, mechanical, pneumatic, hydraulic, programming and soft skills," he added. Kesavan's passion and dream is to become an engineer.

"This is what drives and motivates me. With the MQA-accredited BTME, I would have gained the required skill sets and qualifications." Upon completion of his degree, he plans to return to Malaysia to further himself professionally.

## Contact Us

### MAIN CAMPUS

Wawasan Open University  
54 Jalan Sultan Ahmad Shah,  
10050 Penang, Malaysia.  
Tel: 04-218 0333  
Fax: 04-226 9323

### WOU Regional and Support Centres

Open Tuesday to Sunday:  
10.00am - 7.00pm

#### Penang Regional Centre

54 Jalan Sultan Ahmad Shah,  
10050 Penang, Malaysia.  
Tel: 04-218 0133/4  
Fax: 04-228 4500

#### Ipoh Regional Centre

Wisma Gerakan,  
80 Persiaran Greenhill,  
30450 Ipoh, Perak.  
Tel: 05-242 6323 / 243 6323  
Fax: 05-254 9323

### Kuala Lumpur Regional Centre

Level 3 Menara PGRM,  
8 Jalan Pudu Ulu,  
56100 Cheras, Kuala Lumpur.  
Tel: 03-9281 7323 / 9283 8323  
Fax: 03-9284 9323

### Bandar Utama Regional Support Centre

L2-6, Wisma BU8,  
11, Lebuhraya Bandar Utama,  
Bandar Utama,  
47800 Petaling Jaya,  
Selangor.  
Tel: 03-7629 7223 / 7629 7123  
Fax: 03-7629 7023

### Johor Bahru Regional Centre

48, Jalan Pertama 1  
Pusat Perdagangan  
Danga Utama,  
81300 Skudai, Johor  
Tel: 07-5624875 / 5564323 /  
5566323

### Kuching Regional Centre

14 Westin Avenue,  
Jalan Tun Jugah,  
93350 Kuching, Sarawak.  
Tel: 082-578 923  
Fax: 082-576 923

## LET US HEAR FROM YOU

Email us at [enquiry@wou.edu.my](mailto:enquiry@wou.edu.my) | For more details, visit [wou.edu.my](http://wou.edu.my) | Call Toll-free 1-300-888-968 (WOU) | ☎ 019-474 9323