

SMU seeks to prepare students for green jobs of the future

In this third part of the Straits Times-Singapore Management University four-part series on building a sustainable and resilient future for Singaporeans, journalist Ng Wei Kai talks to Singapore Management University provost Timothy Clark on what universities can and must do to arm students with the skills to work in sustainability

THE STRAITS TIMES EDUCATION FORUM 2023

IN PARTNERSHIP WITH SMU SINGAPORE MANAGEMENT UNIVERSITY

ST Education Forum

WHAT

The Straits Times Education Forum 2023, in partnership with Singapore Management University

TOPIC

Higher education's role in building a sustainable and resilient future

WHEN

Saturday, March 11, 10am-12pm

WHERE

Yong Pung How School of Law, Basement 1 SMU Hall, Singapore Management University

TO REGISTER

Go to str.sg/wtRe

The event is free and registration closes on March 8 at 6pm or when all places are taken.



It is working closely with sector towards this aim and ramping up sustainability training

All incoming undergraduates at Singapore Management University (SMU) from 2023 will get a foundational understanding of sustainability issues.

This move will be expanded in 2024 to require all incoming undergraduates to attain an intermediate mastery of sustainability before graduation by completing at least one course in the field.

This is part of an effort to prepare students for jobs that do not yet exist but could enter the growing field. This effort has become the business of higher education institutions everywhere, said provost Timothy Clark in an interview with The Straits Times in February.

What these future jobs will look like or require is unclear, but SMU is not leaving the development of necessary skills to chance, said Professor Clark, outlining how universities can build a talent pipeline for the emerging "green economy".

"There isn't necessarily a clear career path or job opportunities in all aspects of the green economy, which can make it quite difficult to prepare students for particular industries or particular occupations," said Prof Clark.

"These jobs are still developing - the role of chief sustainability officer is a very recent introduction in many companies... the career paths and job opportunities are themselves emergent."

To train students for these roles, a close relationship with the industry is crucial, he said.

"We are a very engaged university. Our city location enables us to be a very porous, open community with industry."

"What we're doing essentially is building relationships with key organisations and industries to learn how these skill sets are emerging and then translating them into our programmes."

HOW DOES SMU FIGURE OUT WHAT SKILLS THE FUTURE WILL NEED?

The green economy is set to grow very significantly over the coming years, both in Singapore and the rest of the world, said Prof Clark.

And so there will be many new job opportunities for students as well as new skills that they need to develop in order to be able to take advantage of them, he added.

The numbers bear this out. A report released by SkillsFuture Singapore in 2022 found that demand for workers with skills in the digital, green and caregiving spheres has surged over the past four years.

Skills related to sustainability came in hot. Demand for skills in green facilities management grew 23 times, while demand for sustainable investment management increased by 15.5 times.

Another 2022 report by consultancy Bain & Company and investment firm Temasek found that green investment has picked up regionally, with South-east Asia getting US\$15 billion (S\$20 billion) in cumulative investments since 2020, with the majority going to re-

newables and the built environment.

The report also found that entrepreneurial efforts are focusing on building and scaling sustainable solutions, especially in the energy and agri-food sectors.

But identifying the specific skills students will need to take advantage of this growth is the challenge facing educational institutions, especially given the rapid pace of development in the area, which can quickly render skills and knowledge obsolete.

Businesses can tell the university what skills they require graduates to possess.

Said Prof Clark: "We talk to them frequently to understand how they're developing, what their sense of critical skills is."

"And we work with them in terms of internships so that our students can build understanding early on."

This understanding also feeds back into the university, where lecturers use it to design their courses appropriately and make sure that they are keeping abreast of changes that dictate the skills required in different industries.

Prof Clark said: "If you look at something like the Singapore Green Finance Centre, for example, that's about working with a range of financial institutions to understand the issues they're facing and develop programmes accordingly."

"And so it's through these relationships that we can translate industry needs into our courses, and we have a whole range of relationships that enable us to do that."

The Singapore Green Finance Centre opened in 2020 as a collaboration between Imperial College Business School and SMU's Lee Kong Chian School of Business in climate science, financial economics and sustainable investing.

The centre is supported by the Monetary Authority of Singapore and nine founding partners: Bank of China, BNP Paribas, Fullerton Fund Management, Goldman Sachs, HSBC, Schroders, Standard Chartered Bank, Sumitomo Mitsui Banking Corporation, and UBS Group.

HOW ARE THOSE SKILLS DELIVERED TO STUDENTS?

After figuring out what skills the green economy will need, the next step is to get them to students.

"Our key motivation in relation to our education is to produce future-ready students who will be work ready," said Prof Clark.

To do this, SMU in 2019 launched Singapore's first sustainability undergraduate major.

Offered as a second major, it aims to develop graduates who have knowledge and skills to implement sustainable practices in business, said Prof Clark.

"Another critical initiative is having a university-wide sustainability education framework for all undergraduate students," he said.

"Our aim is that from 2023, all of our students will have a founda-



All incoming undergraduates at Singapore Management University from this year will get a foundational understanding of sustainability issues. This move will be expanded next year to require all incoming undergraduates to attain an intermediate mastery of sustainability before graduation by completing at least one course in the field. ST PHOTO: KUA CHEE SIONG

About Timothy Clark

A management expert by training, Professor Timothy Clark became provost of Singapore Management University in 2019.

Before that, he was pro-vice-chancellor (social sciences and health) at Durham University in Britain, where he was also executive lead for computer and information services, and estates and buildings.

He joined Durham as professor of organisational behaviour in 2002, and became chair of the board of studies (head of department) at Durham University Business School in 2007.

He was later appointed dean of graduate school and internationalisation at Durham University and dean and deputy to provost-chancellor (education) (2012-2015).

Before joining Durham, he served as a research fellow in international management at the Open University and a reader in management at King's College London.

Prof Clark's research focuses



Professor Timothy Clark became provost of Singapore Management University in 2019.

on understanding the role and nature of management consultants and management gurus in the diffusion of management knowledge.

In recent years, he has conducted a series of research projects into different aspects of the management consultancy industry, including the factors underpinning the selection and purchase of consultancy, the management of the client-consultant relationship, the role of consultants and management gurus in the diffusion of management ideas.

Prof Clark did his undergraduate degree in sociology at the University of Leicester and later attended De Montfort University, where he received his PhD.

tional mastery of sustainability issues."

All students will be equipped with an understanding of how to respond to sustainability challenges, he said, elaborating on plans to beef up the university's sustainability curriculum across the board.

That entails taking a freshman module in the field.

Prof Clark added that from 2024, first-year undergraduates will be given what SMU calls an intermediate mastery of sustainability.

"We will have a system where there is a sustainability graduation requirement and all students will have to meet the requirement. One way to do so is to read at least one course on sustainability as part of their studies."

SMU is also trying out a variety of strategies which vary from the traditional four-year degree in one or two subjects, including bespoke degrees and work-study programmes.

To help students come out of university with the most up-to-date skills, SMU in 2022 set up a College of Integrative Studies, where students design their own degrees.

Prof Clark said: "Fundamentally, its purpose is to offer a very flexible approach to a major. One of the key motivating factors behind de-

veloping and launching that college was jobs that aren't necessarily there, that are emerging as they enter their studies.

"(The flexibility) enables them to align their skill sets to emergent areas... Essentially, they curate their own courses to develop a bespoke major."

SMU also focuses on giving students on-the-job training, he said. It is compulsory for every student to complete an internship before graduating.

But on top of that, SMU also offers work-study courses, programmes and degrees.

Prof Clark said: "If they're doing a work-study course, for example, students are spending four days a week in a company, one day a week on campus... We're providing many different opportunities for students to have a real-world job experience."

MOVING AT SPEED AND GETTING TO ADULT LEARNERS

Complementing SMU's undergraduate efforts is its professional and adult education arm SMU Academy, which the university hopes to introduce to its students while they are still studying full-time.

Prof Clark said: "How to create li-

felong learners, I would say that's something that all universities in Singapore are putting considerable emphasis on.

"It's something we are developing. We have our academy and we offer courses to our students in the academy. But what we want essentially is to inculcate into our students, while they're studying with us, the importance of continuing to learn."

The university offers its full-time students free taster courses with the academy and keeps in contact with its alumni to understand what courses they may need as they advance in their careers.

The academy, which offers several thousand courses of varying lengths, is an agile organisation that is able to "move at speed", said Prof Clark.

"We have a range of postgraduate professional programmes that we offer our students and we have green skills built into those programmes - for example, sustainable finance."

In other words, the academy aims to deliver courses to upskill Singaporeans through lifelong learning.

TACKLING SUSTAINABILITY WILL TAKE MORE THAN HARD SCIENCE

While SMU does not focus on the hard science behind sustainability, its expertise in areas such as finance is just as necessary to tackle complex issues like climate change.

Said Prof Clark: "If you take something like recycling - and Singapore is rolling out a very significant recycling programme right now - a lot of this requires people to change their behaviour. And this requires us to understand how people make decisions."

There are financial aspects to sustainability, as well as how companies build their visions, missions and strategies, make decisions, motivate their staff, compete and understand the competition in their marketplaces, he said.

All of these skills are developed at a university like SMU, he added.

"So it's one thing to have the technology. It's another thing to then know how to market that technology, how to build a market for that technology, how to build relationships and how to collaborate."

"So you can have the best technology. But I would argue that it's these skill sets and knowledge areas that will actually determine your success."

ngweikai@sph.com.sg

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