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S'PORE EDUCATION FOR THE REAL WORLD

Universities may polarise incomes unless they change

RICHARD HARTUNG

Students in Singapore assume that university education is the key to higher incomes, social mobility and economic growth. The reality, according to British professors Philip Brown and Hugh Lauder, is vastly different.

Seismic shifts in the world economy may instead mean that the current tertiary education system will increasingly lead towards polarised incomes, less social mobility and risks to growth. As the United Kingdom's Teaching and Learning Research Programme (TLRP) describes the dilemma, advanced countries such as Singapore could end up with a "high-skilled, low-waged economy".

This new reality does not stem from not having top-level academic programmes here. To the contrary, universities here have created a multitude of new academic and research programmes over the past several years.

The College of Alice and Peter Tan at the National University of Singapore (NUS), for example, puts students in small seminars where they participate and learn differently.

New research centres like the Institute on Asian Consumer Insight at the Nanyang Technological University (NTU) are doing leading-edge analysis. Only a small number of top students actually participate in programmes like these, however, so the challenge is how to educate all the other students.

AT COST OF CREATIVITY?

A majority of students participate in traditional classes with lectures for learning and exams to measure results. Even though some schools use more technology, such as recording 70 per cent of lectures that Pearson Chief Education Adviser Michael Barber lauds at NTU, students largely learn like students have done for decades and Mr Barber said many students listen to recordings only before exams.

As one financial services professional told former Economist Intelligence Unit Researcher Sudhir Vadaketh, the system has created gifted, technically capable people at the cost of creativity and lateral thinking. Mr Vadaketh attributes the gap to students being less willing to challenge convention and to Singaporeans' "well-established risk aversion".

An NUS professor gave an example: When students were told there would be a new technology-driven format for the class and participation would be an important part of their grades, students ranked the course very low since they preferred more traditional teaching styles. Singapore Management University (SMU) Assistant Professor Marcus Lee said students pick courses with zero ambiguity, lack courage to be wrong and often prefer courses with multiple choice question exams.

Profs Brown and Lauder say universities must give students the frameworks for knowledge that global companies need or the capabilities to become entrepreneurs. What Mr Barber calls a radical transformation in higher education is needed to ensure students gain strong theoretical foundations for knowledge and a keen understanding of real-life applications.

Without change, Profs Brown and Lauder also say, university education may no longer deliver the "graduate premium" most expect. If only a small number of top students from special programmes obtain top incomes, society could become more polarised.

REAL-WORLD NEEDS ...

So what needs to be done? While a multitude of changes may be needed, several areas stand out.

One is to look at what students study. Nearly a third major in engineering, for example, even though the demand for engineers has decreased and many of those students go into banking or other fields.

Mr Barber lauds the Singapore Committee on University Pathways for making sure the 3,000 new university places have applied degree pathways with close connections to the economy. Enabling more students to study relevant subjects, developing the capacity for continual knowledge growth and learning, and expecting participation in entrepreneurship programmes could shift students towards studying what they actually need.

Another, as the Curriculum Committee of Yale-NUS College concluded, is to shift from educational models based on rote memorisation towards models emphasising more flexible and analytic styles of thought. As the TLRP noted, companies around the world want soft skills like initiative and teamwork, since they can teach technical skills themselves.

Rather than focusing only on becoming better at calculus, for example, maths courses could instead focus more on teams using modelling and applying the subject in the real world.

SMU's Marcus Lee suggests making courses really relevant and having students work collaboratively on real-life problems.

... REAL-WORLD EXPERIENCE

Finally, the research institutes and centres here could make sure more students learn from experts and get real-world work experience.

A number of leading-edge research or policy institutes here seem to have brought in foreign experts more to do research and less to teach students. Having those experts teach or mentor more students and then pushing companies to give students real-world internships — perhaps even for 12 months as in the Professional Experience Year at the University of Toronto — could give them the preparation they need.

With millions of students pouring out of universities in Asia and working for less pay than graduates in Singapore, simply teaching students hard skills is no longer enough. As Profs Brown and Lauder indicate, rapidly reinvigorating tertiary education to produce creative, questioning and knowledge-seeking students for the workforce of the future is essential for Singapore to continue to thrive.

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● Richard Hartung is a consultant who has lived in Singapore since 1992.