

**A CONVERSATION WITH NUS PRESIDENT: NURTURING A FORWARD-LOOKING UNIVERSITY
14 JULY 2021**

Questions and Answers

- 1. I see that the interdisciplinary modules are mostly foundational/lower-level ones. Will interdisciplinarity be encouraged in more advanced modules? Equally important is how has the teaching faculty been pushed to adopt interdisciplinarity in their modules, given the traditional silos between departments?**

The approach is to provide a broad intellectual foundation to all students, which will prepare them to continue learning and re-pivot every few years to meet the fast-changing industry requirements.

Faculties understand the value of collaboration and the benefits they bring to our students. For instance, within NUS' Department of Communications and New Media (CNM), a curriculum review has been ongoing since 2017 to reflect rapid changes in media, including the rise of ubiquitous computing and AI, the datafication of society and culture, and the digitalisation of markets. The close collaboration between FOE and SDE also involves SDE colleagues contributing to new common modules in design thinking, project management, and Liveable Cities, while FOE colleagues provide modules that teach AI/Machine Learning and Digitalisation, and Prototyping.

- 2. Would there be more faculty exchanges in the upcoming years e.g. Medicine/Nursing with FASS to prepare students to be global thinkers? We have been too engross in grade performance and outcome.**

As a start, our initial implementation of interdisciplinary education already involves the four main faculties (Arts and Social Science, Science, Engineering and Design & Environment), which account for two-thirds of NUS' undergraduate enrolment. Moving forward, we have plans to reform legal education in response to changes in the profession, in particular, combining legal skills with technological and business sensibilities. We will also reimagine health sciences education to better prepare graduates in medicine, dentistry, nursing, pharmacy, and public health for work amidst transformative shifts in the healthcare ecosystem and the dramatic changes taking place as the population ages.

NUS Business School will be adopting a new grading system in the new semester which will be implemented for Masters-level students; enabling them to focus on the learning instead of stressing over assessments; and to be bolder in exploring new topics and building a more collaborative learning culture. To encourage learning and discovery, NUS had also introduced the grade-free 1st year for all undergraduates since 2016.

- 3. NUS has worked with MOE many years on ensuring quotas of freshmen intake for certain faculties. Would this not hinder students' ability to choose their ideal course of**

study? Is this still helpful, given that graduates may need to pivot regardless of their initial course of study, in response to where opportunities are available in the workforce when they graduate?

In the new interdisciplinary curriculum, students do not enrol directly into a faculty. For instance, students enrolled in the College of Humanities and Sciences can choose to major in the Faculty of Arts and Social Sciences or Faculty of Science or both. They select their specialisation after being exposed to a common curriculum for about one and a half years. The common curriculum provides flexible pathways and enables graduates to remain agile to keep up with changes in the workforce, as well as pursue their interests and passions.

- 4. Is university education's key value-add in its coursework, projects, and research, or actually more in "meta" aspects like time management, interpersonal communications, juggling responsibilities, etc? It seems more of the latter for those who end up working outside their initial course of study. If so, how can we make the university education process less time-consuming and more efficient, since students spend around 4 years?**

There are many technical skills which are critical in the university education, whereas skills like time management is less effective when taught in class. NUS is mindful that the standard classroom learning is becoming less effective and is moving more towards experiential learning, such as projects that solve real-life problems and internships.

- 5. How excited are our students towards the interdisciplinary approach? I would also share my wishlist as an employer for students to be adequately exposed to entrepreneurship as it provides relevant context and exposure to our ever-changing world & demands. Often, I find many prospective candidates lacking the mindset to embrace changes and to overcome uncertainties.**

It is evident that the interdisciplinary approach is well-received as NUS saw an increase of 7% in undergraduate enrolment, with the implementation of common curriculum in the College of Humanities and Science and Design and Engineering. In addition, more than 70% of the successful applicants had indicated NUS as their first choice. For exposure to entrepreneurship, opportunities such as the NUS Overseas Colleges are available. Further, the interdisciplinary curriculum provides opportunities for students to interface with different mindsets and become more agile to embrace changes.

- 6. Prof Tan mentioned that it's a goal of the university to groom students to imbue the entrepreneurial mindset i.e. be more adventurous, take more risks, embrace failures - besides providing Graduate Research Innovation Programme (GRIP), does the curriculum provide such development so that all students will benefit?**

Besides GRIP, NUS also provides opportunities for entrepreneurial development through the NUS Overseas Colleges (NOC) programme and the Minimal Viable Product (MVP) Studio. Students selected for the NOC programme will do internship in technology-based start-ups in the world's leading entrepreneurial hubs and take classes at reputable foreign universities. The MVP Studio by NUS Industry Liaison Office was established to create commercially-focused prototypes of NUS technologies built by teams of apprentices under the guidance of Master Engineers.

- 7. I'm currently a Student Mentor with NUS Engineering. The student I mentored were majored in aviation. I have real world problem projects from the aviation industry. The problem is that I would like to volunteer (just like student mentorship) to be the project supervisor for these students as I know the requirements from these companies and would be able to supervise the student better. Would NUS consider such programme as it benefits both students and the industries?**

NUS has existing programmes within the faculties to connect students with companies to solve real world problems. [NUS Alumni Relations](#) will be happy to assist to link alumni who are able to offer relevant opportunities to the faculty liaison in-charge of these programmes.

- 8. Going forward, should NUS consider broadening its approach to include non-academic subjects too? Would that be duplicating current institutions such as LaSalle?**

Non-academic subjects such as interpersonal and interview skills are currently available in NUS' curriculum. Students may also find the opportunity to pick up additional skills/interests by joining the various student clubs and societies, which are well-supported by the University.

- 9. With the changes at the undergraduate level, what would be the impact to the graduate programmes? Would they become more stackable?**

The changes in the undergraduate education will have an impact on graduate programmes. For one, graduate programmes tend to be interdisciplinary. All NUS alumni will be automatically eligible for CET courses under NUS L3. These provide options to stack the courses into qualifications such as graduate diplomas, or even bachelor's or master's degrees.

- 10. Given that digitalisation has become a critical requirement in future jobs, has NUS any plan to at least equip all graduates with a minimum knowledge in this area?**

NUS has in place modules under the common curriculum to equip students with the necessary skills to leverage on current technologies. Computational Thinking, Data Analytics, etc are examples of such modules. NUS also created the Learning Innovation Fund-Technology (LIFT) to seed technology-enhanced learning (TEL) projects and to

expose our students to 2D/3D visualization, virtual/augmented/mixed reality and gamification learning platforms.

- 11. As Professor Tan had mentioned in his speech, the university will continue to support graduates in their lifelong learning (L3) till the age of 40 years old. Could this be extended even more? Say, beyond retirement age? I graduated from the Science Faculty in 1985. After a successful teaching career of more than 30 years, I am now working part-time at SEAB and BTTSAL. I always want to write fictional books for children. But, I do not know how to go about doing it. I am sure that there are many graduates like me out there in the country. What we want is to be able to give back to society in our own ways. Could there be an avenue in the university which can provide guidance or informal training over the internet for us to do so?**

NUS is taking a phased approach towards providing lifelong education for all graduates. At the current initial stage, the targetted group is those up to the age of 40, which makes up approximately 50% of the alumni population. Yes, OAR, NUS Libraries and SCALE have been organising Lifelong Learning webinars and workshops for professional and personal development which caters to the wider interests and needs of our more senior alumni. Please do visit <https://scale.nus.edu.sg/programmes/executive-courses> to find out more.

- 12. i. Would NUS consider providing fully online courses to increase accessibility to those who are unable to commit to full time courses or unable to attend physically? Some courses may also be more beneficial to be fully taught online - what is NUS' view on this?**
- ii. I graduated from NUS 2 years ago and considering taking a Masters soon. Some US universities are experimenting full online graduate degrees, such as Georgia Tech's Online Master of Computer Science, Upenn and Berkeley. Will NUS consider full online learning mode for graduate degree?**
- iii. I'm heartened to hear that NUS is providing more Lifelong Learning opportunities which will be very useful for working PMETs. Is it possible to provide more quality online learning courses, self-paced learning from videos of lectures and/or evening/weekend classes to enable better balance with work and family commitments?**

The NUS educational model comprises five components - Academic, Global and Experiential, Industry Relevant, Lifelong Learning and Entrepreneurship. The Global and Experiential component, Industry Relevance, or Entrepreneurship component, for instance, cannot be effectively imparted in a fully online teaching mode. For Lifelong Learning and CET, a good range of online courses are available at the School of Continuing and Lifelong Education (SCALE). Our approach is to provide a blended format, that balances the convenience of online with effective face-to-face sessions, for more effective learning. Please visit <https://scale.nus.edu.sg/programmes/executive-courses> to find out more.

13. How do we ensure there would be good learning quality regardless on or off site learning, how would NUS assess their teaching staff to join their teaching faculty?

Our appraisal for teaching assessments is comprehensive and are drawn from four evidentiary domains: (1) student feedback and rubric-based assessments, (2) peer review of classroom teaching and assessment materials, (3) professional activities that contribute to teaching performance, and (4) self-assessment. The Centre for Development of Teaching and Learning (CDTL) and the Centre for Instructional Technology (CIT) provides training and resources to support our teaching staff with the skills and knowledge to do online teaching. They have also created a new online publication, Teaching Connections, for teachers to share best practices.

14. Which 2 or 3 leading universities in this globe do we want to emulate, if at all? And why? Should we consider having a first degree for generalists (say 2 years); Then to specialise and get a professional degree (say 3 years)?

The NUS educational model is a hybrid of the US and UK universities, and is constantly evolving to meet the needs of each generation.

The recently introduced interdisciplinary learning framework, is new and uncommon among top universities, aims first to equip all undergraduates with a broad-based and "connected" intellectual foundation through an eighteen-month common curriculum. Thereafter, they then select one or more areas to advance and specialise in. The 3+2 Bologna framework is the framework used in the EU. While the framework is one important aspect of higher education, the pedagogy is equally important. Our focus on interdisciplinary learning is unique for a large university.

15. Would NUS report on its graduates in the same way as now i.e. cert, transcript of grades, testimonials? Any other ways you see?

Since December 2019, NUS issues electronic degree scrolls and official transcripts to graduates from the Class of 2019 onwards.