

# Investing in education: Returns, risks and career resilience

What price a liberal arts education, or a university education in general? Some factors that individuals and the state have to consider at a time of rapid change in the market for skills.

## Terence Ho

Eyebrows were raised at the recent disclosure of the cost of a Yale-NUS College (YNC) liberal arts degree: tuition came to \$90,800 a year, with the Government footing \$70,300 for each Singaporean student.

This is over three times the government subsidy for an arts or science degree at the National University of Singapore (NUS).

The tuition fees paid by Singaporean YNC students, at \$20,500 a year, are also more than twice that paid by their counterparts in arts or science, although less than what NUS medical students fork out.

YNC's high fees may be attributed to small class sizes that allow for close interaction between students and faculty. This is the hallmark of a liberal arts education, along with exposure to a range of disciplines to foster critical thinking and the ability to approach a problem from multiple angles.

One may ask: Is the amount spent on a liberal arts degree worthwhile for the individual and society? Some have gone further to question the sustainability of the traditional university model itself.

In an age where modular content can be delivered online by best-in-class instructors, going through three or four years of full-time education in a residential college may seem an inefficient way of acquiring knowledge and skills.

Others contend that a university education is not just about acquiring "hard skills", but also about "soft skills" picked up in the classroom, the opportunity to work collaboratively on projects, and the camaraderie and friendships forged during the college years.

How then should an individual choose from the smorgasbord of educational options that span the liberal arts to vocational education

to professional programmes? And how should education policies and funding be directed to achieve the best outcomes for economy and society?

One's choice of education type and programme may be guided by consideration of the potential returns and risks. At the national level, there should be a portfolio of educational options to cater to the needs of the economy while accommodating different individual constraints and preferences. Future-proofing education for career resilience will allow citizens and the state to prepare for and adapt to the ever-changing market for jobs and skills.

### RETURNS TO EDUCATION

The value of education, as many recognise, goes beyond pecuniary returns. It encompasses the joy of learning, the formation of character and other intangible merits that bring unique value to each individual. In weighing up educational options, most will of course give consideration to potential economic returns, to which education can contribute in several ways.

The first is the acquisition of specific skills necessary in certain professions or vocations. Examples include sporting skills, language proficiency, healthcare expertise and engineering know-how.

Those with scarce skills in high demand, such as sports stars and top professionals, are amply rewarded by the market. In Singapore, the starting salaries of computer science graduates have risen rapidly in recent years, reflecting strong demand for their skills in the burgeoning digital economy.

The second is the broad training of the mind that equips the student to deal with ambiguity and complex problems that cut across boundaries.

Closely related are interpersonal skills, including leadership,

communication, teamwork and intercultural facility, which can be developed through student projects, presentations and class discussions. These skills may be acquired via any course of study, but are particularly emphasised in the liberal arts curriculum.

Third, friendships forged in lecture and residential halls are valuable in themselves, and can also add to one's professional network. The adage, "whom you know is as important as what you know", has proved true for many.

Finally, a university degree may serve as a signal of intellect or ability. Recruiters often use qualifications as a proxy for general ability in shortlisting candidates for jobs.

This may, however, fuel a socially wasteful paper chase, if students pursue higher education primarily for the signalling effect rather than for passion or skills that contribute to performance on the job.

### HARD SKILLS AND SOFT SKILLS

The acquisition of hard skills may open doors to technical or professional jobs, allowing the job entrant to subsequently acquire valuable industry experience. On the other hand, specific skills are susceptible to obsolescence arising from new technology, automation or changing consumer preferences.

Hence, a significant investment in hard skills also comes at a risk. Some may prefer general degrees, whether in the arts, business or management, with a view to taking on jobs that do not require specific skill sets.

From the national perspective, economic and societal needs require a good spread of hard and soft skills in the workforce. It is sensible to make available a range of educational options, while ensuring there are sufficient numbers trained in critical domains, such as healthcare and engineering where indigenous capability is important. This may

require directed funding and scholarships to build a pipeline of skilled manpower.

The traditional model of full-time university education confers considerable benefits beyond hard skills, and may still be a worthwhile investment for citizen and country. Concurrently, there is a need for part-time or modular courses, as well as on-the-job training, to cater to those constrained by time or finances, or who wish to pair learning with employment.

State subsidies for education and training are easily justified when aligned with national priorities, especially when grant recipients are subject to a service bond.

However, higher education subsidies are often regressive, with disproportionate benefits accruing to the better-off who are more likely to pursue tertiary education. University graduates, particularly those from certain disciplines, can also expect high incomes on entering the workforce.

Hence, tertiary education financing requires a judicious mix of bank loans, state grants and bursaries, as well as privately funded financial assistance.

### CAREER RESILIENCE

Investment in education, like other forms of investment, is inherently risky. Both individuals and policymakers would therefore do well to think about future-proofing education for career resilience.

Establishing strong foundations in literacy and numeracy through school and college will facilitate the subsequent acquisition of close-to-market skills.

For example, mathematics and quantitative reasoning underpin much of the sciences, engineering and social sciences. Foundational skills can be imparted through both academic-type programmes, as well as more hands-on, experiential pedagogy, to cater to

different learning styles.

There is also a place for the humanities, which speak to what it means to be human and may confer an enduring advantage in an era of automation.

Many have found interdisciplinary exposure useful in honing a supple mind, so important for tackling "wicked" problems in the workplace and society. In institutes of higher learning, this can be achieved through a core curriculum, more flexible subject combinations or complementary course pairings. For instance, engineering students may find modules on communication and business management useful in complementing the hard skills they have acquired.

While trying to predict future skills demand anywhere beyond a horizon of three to four years may be fraught with uncertainty, investing in "high tech" and "high touch" skills is likely a safe bet. Many jobs will entail working with technology and interacting with people, even as automation takes over routine tasks. Digital literacy will be a baseline skill necessary for all, while advanced info-communications technology skills will command a significant premium.

Besides interpersonal skills, Singapore institutions of higher learning are also emphasising "Asia readiness" – preparing students to tap opportunities in Asia and particularly our immediate neighbourhood, South-east Asia.

With technological advances transforming jobs and upending business models, knowledge acquired in school or college will unlikely be able to carry one through working life without a periodic refresh. Many will have to acquire new skills to pivot to new job roles in the course of their careers. Some may even consider pre-emptive "second skilling" for access to alternative career options. At the national level, a well-oiled

framework to facilitate reskilling and career transition is critical to help workers take up new opportunities as "creative destruction" reshapes the economy and job market.

In Singapore, the Government provides wage support, through career conversion programmes, to companies that hire and train job seekers for new roles. The SkillsFuture initiative supports both employer-led and self-directed learning, which can be delivered in-house by companies, or via industry training centres, tertiary educational institutions and private training providers.

Learning is a muscle that can atrophy with disuse. It is up to the individual to continually exercise this muscle in and out of the workplace. Employers and the state can help by providing the time and space, as well as funding if needed, for skills acquisition and upgrading.

Finally, one's educational and career choices should be guided by passion, to the extent practicable. The alignment of interest and aptitude can make all the difference – enabling a person to go further and achieve more in both studies and career.

For the employer, this translates into greater output, productivity and job satisfaction, with attendant benefits to national competitiveness and innovation. For the individual, it is about self-actualisation – to achieve in one's work the "flow", so named by psychologist Mihaly Csikszentmihalyi, where engagement, passion and skill come together for personal and collective gain.

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There are some who contend that a university education is not just about acquiring "hard skills", but also about "soft skills" picked up in the classroom, the opportunity to work collaboratively on projects, and the camaraderie and friendships forged during the college years, says the writer. ST FILE PHOTO