



Education in the Anthropocene: Yale-NUS College as a case study of higher education

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Abstract

This poster originates from an interdisciplinary environmental humanities essay on higher education in the era of Anthropocene. It argues that education in the Anthropocene requires a new set of knowledge, skills, and values. Employing discourse analysis, it contends that Yale-NUS College, a newly-established liberal arts college in Singapore, teaches correct lessons in unsustainable ways and indirectly teaches wrong lessons in its curricular and co-curricular programs, residential education, and campus design.

Background

- > Global warming, climate change, environmental disasters and crises, and sustainability are big topics that almost all students learn at schools in the 21st century
- > Scholars have coined the term 'Anthropocene': referring to the current geological epoch; highlighting the extent of which human activity has been a dominant influence
- > As a current undergraduate student myself, I am prompted to ask: what should and can education do in the Anthropocene? What should schools teach students and how are they doing it?

Anthropocene

- > The current generation during which human beings cause and suffer from environmental problems such as climate change, pollution, and biodiversity loss (Stockholm University, 2015).

Education

- > A functionalist view suggests education serves to equip students with the right qualities and skills to function in the prevailing socio-economic conditions (Yang & Cheng, 2018); a historical view is that it is to facilitate survival in different contexts (Assadourian, 2017)
- > Education needs to address the biggest problem that humanity is facing today at the current age of Anthropocene (Müller, 2018); many scholars believe it to be climate change (Plowright, 2016, Maxwell, 2007)
- > Education is one of the target actions to combat climate change, as outlined by the UN Sustainable Development Goal 13.3

New Education Goals

- ◆ Education for the Anthropocene should seek to help mitigate the deleterious effects of past human behavior and to ensure that future behavior causes no further damage (Bonnet, 2019); a whole set of new **knowledge, skills, and values** have to be the new focus of education as students need them to function and survive in the Anthropocene (Assadourian, 2017; Throop, 2016; Wi & Chang, 2018)

Knowledge

- ◆ Knowledge is eco-literacy; it is a basic understanding of how human beings are affecting the natural environment. Being ecologically literate means knowing the facts and scientific truth around the environment and the human activities that are altering it.

Skills

- ◆ Skills means the ability to recognize issues and environmental problems and the capability to improve the status quo. These skills include interdisciplinary learning and systems, critical and creative thinking, leadership, and collaboration (Sweeney, 2017; Humphreys et al, 2017, Weissman, 2012, Lim, 2018, Maxwell, 2007; Silverman, 2016; Assadourian, 2017; McGrath & Martinez, 2017)

Values

- ◆ Values are virtues, qualities, and character traits that students have to possess so they have the willingness and disposition to use the capability (knowledge and skills) to create change in themselves and in the world. Examples of relevant values include humility, sense of duty, kindness, just, awareness, empathy, mindfulness, service, and responsibility.

Higher Education and Liberal Arts Education

- ❖ Lots of educators propose that universities need to stress skills and values for the Anthropocene. For instance, Eduard Müller (2018), Bryan Edward Penprase (2018), and William Throop (2016).
- ❖ In particular, Throop (2016) suggests that it would be easiest to strengthen virtue education at residential liberal arts colleges and Frank H.T. Rhode (2006), former president of Cornell University, even wrote that sustainability is the 'ultimate liberal art'
- ❖ With the spread of liberal arts across the world (Godwin, 2013; Godwin, 2015; Altbach, 2015), it is pertinent to investigate what new liberal arts colleges are set out to do and how they are doing it
- ❖ Several studies have suggested that liberal education helps students develop a sense of social responsibility (Xerox, 2002; AACU, 2019); most American liberal arts colleges educate on 'responsible citizenship' and pride themselves on empowering their students to be future 'change-makers' (Nussbaum, 2004)
- ❖ Liberal arts education is also widely believed to hone critical, creative, and interdisciplinary thinking skills in students (National Archives of Singapore, 2008; Fischer, 2013; Lewis, 2018)

Case Study

- ◇ **Yale-NUS College**, a liberal arts college that stresses interdisciplinary learning and residential education, was founded in Singapore a few years ago. While Yale-NUS College never claims to be solely dedicated to environmental education, it stresses that it aims to prepare students to succeed as 'tomorrow's leaders' and 'solve complex problems' (Tan, 2018)

The school also claims to (Yale-NUS, 2016; Tan, 2017; Tan, 2018; Garsten et al, 2013; Yale-NUS, 2019):

- ◇ 'nurture students who want to make a difference in the world with bold ideas, fresh perspectives and big thinking'
- ◇ educate for 'a rooted and responsible citizenship' and 'growth of the human character'
- ◇ be a 'community of learning' that is 'galvanized by a culture of trust, respect, and duty, and dedicated to making a difference'
- ◇ embody values such as 'exceptional quality, respect, empathy, compassion, inclusivity, empathy, patience, resilience, responsibilities, willingness to engage opposing views'

The above quotes reflect how the school perceives itself and its students, and the skills and values mentioned are also those that are necessary and important in the Anthropocene.

Methodology

- An analysis of institutional discourse on approaches to skills and virtues cultivation so as to explore the priorities and ideals of Yale-NUS College. Gathering data from prospectuses, bulletins, the curriculum report, the school website, and speeches made by senior administrators of the school

- The focus will be on the institutional narratives and the top-down descriptions of policies and practices, which are often grand-sounding and thus cannot be entirely objective. My analysis has inherent limitations since institutional discourse does not reflect the actual implementation and execution of fancy-sounding aims and goals

- Nevertheless, my analysis does signal the institutional priorities from the college's perspective, elucidate the mission and vision that the school administration has, and highlight the endeavor, beliefs, and intentions demonstrated in school policies, without which skills and values for the Anthropocene will not be delivered.

Results and Discussions

Curricular and Co-curricular Programs

- There is a mandatory common curriculum that accounts for 31% of the total academic experience (Yale-NUS College 2019)
- The common curriculum 'exposes students to different modes of inquiry and understanding' and encourages students 'to be multi-disciplinary and to drive critical, creative and active thinking' (Tan, 2018)
- The school believes that when students take the compulsory common curriculum to acquire a diversity of knowledge resources, it translates to systems and transdisciplinary thinking skills, while having intellectual breadth makes students think critically
- The curriculum also strives to cultivate character traits and virtues, including responsibility, service, and collaboration. An important line is used repeatedly in official documents and in presidential speeches: 'When we were preparing the curriculum for Yale-NUS, we asked: 'What must a young person learn in order to lead a responsible life in this century (Lewis, 2017)?'
- Through co-curricular activities, including service learning projects and community-based activities, the school hopes to 'encourage students to participate in public work and instill them with 'a strong norm of service, and a sense of individual and social responsibility' (Garsten et al, 2013)

Experiential Learning and International Experience

- Yale-NUS Prospectus states: every Yale-NUS student is guaranteed the opportunity to travel overseas and 100% of the students have the opportunity to study and travel as part of their learning journey (Yale-NUS College, 2016)
- The school asserts: these trips turn education into 'innovation' (Lewis, 2016), push students to develop confidence, creativity, and cultural sensitivity, and help students understand the world and develop empathy (Wang, 2015)
- However, the school sends students overseas purposefully in the name of learning; the travel is deliberate, and the subsequent carbon emissions are inevitable. Even assuming that the noble learning outcomes are fully met, the school is not cultivating skills and virtues in a sustainable manner. In the pursuit of creativity and empathy, the school is subtly forgoing other virtues such as frugality and mindfulness

A Diverse Residential Community of Learning

- Full-time residential living is another distinctive feature of a liberal arts college, and Yale-NUS College calls 'close-knit community' one of its 'distinct qualities' (Yale-NUS College, 2019)
- A diverse community, inhabited by students and professors from different countries, highlights the Yale-NUS brand of residential education. International students from over 60 countries make up 40% of the school's population while professors have been recruited 'internationally' (Yale-NUS College, 2019)
- The list of character traits that the school wants students to gain from living and learning with other students from different backgrounds include empathy, inclusivity, understanding, humility, and mutual-respect (Tan, 2018)
- Interestingly, diversity, in particular, is conducive to education in the Anthropocene. Multicultural education, what Yale-NUS College is doing, is closely linked to environmental education (Nordström, 2008)
- Ferreira, Bowers, and Heise all agree on the close association between cultural diversity and biodiversity (Nordström and Heise, 2008), meaning that the more students respect and appreciate cultural diversity, the more they the value biodiversity

Results and Discussions (cont'd)

Campus Design and Architecture: a sustainable campus with biodiversity

- A very green campus: received several awards and certifications for its campus sustainability such as Green Mark Platinum Award and Landscape Excellence Assessment Framework (LEAF)
- A biofiltration pond that captures and filters stormwater (Lekker, 2019)
- Biodiversity: lush greenies and rich flora and fauna presence, garden within gardens, an ecosystem and a diverse collection of plants and spaces

The Campus as an Artificial Instrument

- Employing nature as an instrument and creating a very artificial space, artificially-constructed, different local and regional shrubs, trees, and other plants are artificially brought together and organized meticulously to build different gardens and courtyards, manifests the unnecessary human control over nature
- Not very resource-efficient and entirely necessary, demonstrating excessiveness and abundance in campus design and construction
- Nature is aimed toward external gains such as community building, provide shade and ventilation, and to reduce urban heat effect complicit with anthropocentrism and domination
- The school does not even steward nature well

Concluding Thoughts

1. Yale-NUS College teaches correct lessons in unsustainable ways and at the same time indirectly teaches wrong lessons in the school's curricular and co-curricular programs, residential education, and campus design
2. Other educational institutions can consider adopting similar priorities and beware of the failures seen in the school
3. Research should be done on students' actual experience on how they receive such education and investigate whether and how students narrate different experience than those promoted by the school. It is only through understanding the discrepancies and misalignments between institutional discourse and students' experience will we truly understand how knowledge, skills, and values should and can be effectively transferred to students in the Anthropocene.

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References

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