

Climate change is reshaping higher education

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The United Nations issued a study in 2021 warning that the world has fewer than ten years to restructure society in order to avoid catastrophic, irreversible climate change. We're talking about a massive societal shift, but sustainability is addressed as an afterthought in our degrees, indicating that the people who were teaching didn't get the significance. The ICRC through a survey in Cotton University, Assam Engineering College and Gauhati University students found almost 85% of the 110 students who responded to the survey felt their courses were not preparing them for future work in a world of climate breakdown. It's time to make climate-literacy components mandatory across schools/colleges/universities with guidelines on how schools/universities should teach climate. The debates playing out in Europe/Japan/US/Australia reflect a wider reckoning unfolding across higher education globally.

Climate change research has long been a domain of natural sciences, and later, engineering and other science-based design disciplines. Until recently, the climate was only mentioned in the humanities, social sciences, and arts as a focus in a postgraduate paper. However, as the effects of climate change have become more visible in recent years, and the breadth of the transformation required to combat it has become clear, law, medicine, literature programmes, economics departments, and other undergraduate programmes are incorporating climate into their curricula, grappling with how climate will transform their fields and attempting to prepare students to face those transformations in the labour market.

In India, students are still not taught about climate change in their

degree programmes, and there are still obstacles to implementing the kind of universal climate requirements that campaigners demand. This is due to a lack of knowledge and confidence among the teaching professionals who are unfamiliar with climate change, as well as time constraints within already overburdened curriculums. Many university departments may be hesitant to include climate change in their curricula if there are no mandatory requirements.

Climate education, on the other hand, continues to grow fast. Now is the moment for political scientists to consider climate migration and poverty, ethicists to consider rising inequality as a result of climate change, and economists to consider the economic consequences of catastrophic weather occurrences. Climate change is eventually becoming mainstream, regardless of field, because the connections are now so obvious: it affects everything.

When a topic as vast as climate change is not established in traditional understandings of a discipline, studying it in one module might be difficult. It's fairly rigorous in comparison to other types of courses we teach; for example, in political science, we look at how climate manifests at all levels of government, so the starting point is continually shifting. Students examine how politicians and governments construct their responses to climate change and its potential consequences, as well as local efforts and climate refugee politics.

Earth's life-support systems are

changing at an exponential rate, but education is changing at the rate at which a glacier moves. We teach much the same content that we did 50 years ago. While some schools have a climate focus and offer a variety of electives, there is no core curriculum that ensures that all students have the knowledge and skills they need to reduce emissions and keep buildings standing in an increasingly unstable climate.

Meeting a new climate framework will be a challenge for schools. We must consider a wide range of issues, some of which have never been addressed by education policymakers before, such as the circular economy and water pollution, as well as significantly increased engagement with concepts such as sustainable sourcing, energy efficiency and biodiversity protection.

In this context, we can propose a new 'climate core' that covers a wide range of topics in engineering courses, such as climate change impact on material degradation, life-cycle analysis, carbon analysis, more sophisticated risk assessments, and critical skills for dealing with uncertainty – the bare minimum of what we should be teaching students. Education will not be transformed overnight by new criteria. Meeting a new climate framework will be a challenge for schools. We must consider a wide range of issues, some of which have never been addressed by education policymakers

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If students want to be prepared for professions in an era of climate change and action, they must face several challenges. However, we must accept that our educational institutions are not nearly ready.

We're not graduating pupils with all of the skills they'll need to survive the climate disaster. More is desired by students.

Since 2018, a wave of youth activism around climate change, as well as worldwide reckonings on racial justice, health and inequality during the previous two years, has made the present generation of students increasingly insistent that their curricula address a rapidly changing reality. Their unwavering dedication to justice may be seen in the areas of climate and equity. They aren't

going to kick the can down the road on this. Universities must adjust more quickly.

Education in the arts and humanities is being reshaped by a revitalized appreciation of human life as inextricably linked to the environment:

■ The financial impact of environmental degradation is being studied by Buenos Aires economics students.

■ Individual responsibility and the duties owed to future generations are being debated by philosophy students in London.

■ Students studying media studies in Boston are delving into cli-

mate narratives.

■ Undergraduate law schools have begun to offer climate electives, and Bond University in Queensland, Australia, has gone even further, launching what it claims is the country's first undergraduate law degree focused solely on climate law – an area that is expected to become increasingly important in the future.

■ Argentina's Lower House overwhelmingly approved a law establishing a national policy for environmental education 'at all levels and in all educational formats' on March 27, 2021.

■ In France, the National Assembly is debating a climate Bill that includes a proposal to change the education code to incorporate environmental standards 'during school training, in a way tailored to each level and specialism'. According to France's minister of higher education, a new requirement for institutions to 'raise awareness and train [students] to deal with the difficulties of the ecological transition and sustainable development' would be included in a separate law on higher education.

■ In Spain, lawmakers have altered a climate Bill in Congress to require a 'cross-cutting' approach to climate education, which means that all disciplines should include climate from their viewpoints rather than having a separate climate-change subject.

■ The latter is the strategy taken in the Italian high schools, which have been required to educate one hour per week on environmental issues in every grade since September 2020.

At the moment, natural scientists are studying climate change, but engineering students are still learning about internal combustion engines as if they will still be viable in a few years. Our economies will not change unless we all focus on it.