Balancing International Education and its Carbon Footprint

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In the era that we first travelled abroad for our studies, there was little discussion about the environmental footprint related to flying. There were also limited alternatives to physical mobility with the internet being in its infancy. Now we know that the carbon footprint of student mobility is considerable (Shields, 2019) and that a number of virtual alternatives exist. But does that mean that these new modes of internationalization are equivalent? And can we expect current and future students to be satisfied with these alternatives? Aren't they entitled to the experiences our generation has had? Are there other caveats to consider?

Personally, we have derived significant value from our international education experiences. Getting to know areas, cultures and people in other parts of the world continues to have great appeal and benefits to individuals, countries and our global community. At best, international education can create global citizens by enhancing tolerance and intercultural understanding–essential skills when trying to solve global issues such as the climate crisis. How do we protect and amplify this impact whilst taking responsibility for our environmental footprint?

A number of greener modes of international education exist. Examples of such modes include better utilization of internationalization at home, transnational education opportunities replacing student travel and enhanced use of online/distance delivery, such as virtual exchanges/collaborative online international learning. For physical mobility, institutions can incentivize more regional mobility, low(er) carbon means of transport, and, as a last resort, compensate for all travel-related emissions.

A number of dilemmas warrant further consideration. For instance, more regional mobility may result in a narrower understanding of the world and different cultures. Also, lower carbon modes of transportation can mean that students will spend less time at their destination. Moreover, it has to be acknowledged that, hitherto, physical student mobility has been an option for a small group of students only (Salisbury et al., 2011). Virtual mobility may break with this inequality by, in principle, offering more opportunities to develop international competencies. However, this option may not be feasible for students in many countries that still lack stable and widespread internet. Hence, virtual mobility and other alternative modes of internationalization are not unproblematic.

In 2019, the Climate Action Network for International Educators (CANIE) was established as a grassroots initiative to incentivize international education practitioners across the globe to step up and act on climate. CANIE's work has enhanced the sector's understanding of the issue and available solutions. In recent years, there has been a wider acknowledgment of this topic in the media targeted to higher education and international education professionals as well as by a growing number of academics in the field (see also Hale, 2019; Long et al. 2014; Nikula, 2019; Rumbley, 2020; Shields, 2019).

However, more research is required to explore the intersection of international education practice/policy and the climate crisis. To balance the benefits and the footprint associated with international education, one of the areas of future research should focus on expanding the excellent work done by Robin Shields (2019). This could include research measuring emissions of non-degree-seeking mobility, such as study abroad/short-term mobility programs (e.g., Hale, 2019; Long et al. 2014) and international mobility associated with compulsory schooling. In addition, a better understanding of all emissions related to student mobility is required, such as emissions related to other travel by students/family members (Davies & Dunk, 2015), overall home-destination country differences in emissions, and emissions related to different delivery modes, such as virtual versus physical mobility (see e.g., Versteijlen et al. 2017).

A different perspective on this topic is from the educational point of view. Which alternatives to traveling deliver equal learning outcomes for students? Can students be stimulated to adopt greener lifestyles through global citizenship skills development? If that is the case, do these effects outweigh the carbon footprint of developing those competencies? Inclusion and equal opportunities are important values. What is a fair distribution of travel miles among staff and students?

From the organizational perspective: which policy measures are most effective in reducing carbon emissions of international education while posing the least limitations? How can national or institutional policies on internationalization be connected to sustainability policies? (van Gaalen et al., 2020). What role can grant schemes play in greening mobility? How can a change in culture in terms of the choice to travel be achieved? (De Jonge Akademie, 2020; Wynes et al., 2019)

The intersection of international education practice/policy and the climate crisis requires further examination. In this post, we have suggested questions that warrant research by those involved in critical internationalization studies. Moreover, we have highlighted a number of dilemmas that practitioners need to consider when designing low(er) carbon international education alternatives.

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