

An Arctic transformation; from an in-person international summer school to a digital MOOC*

* Massive Open Online Course

*Shephard, G. E., Gaina, C., Pozdnakova, A., Wilson Rowe, E., Kapoor, N.,
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University of Oslo

Centre for Earth Evolution and Dynamics and the Department of Geosciences

Scandinavian Institute of Maritime Law, Faculty of Law

The International Summer School

LINK – Centre for Learning, Innovation & Academic Development

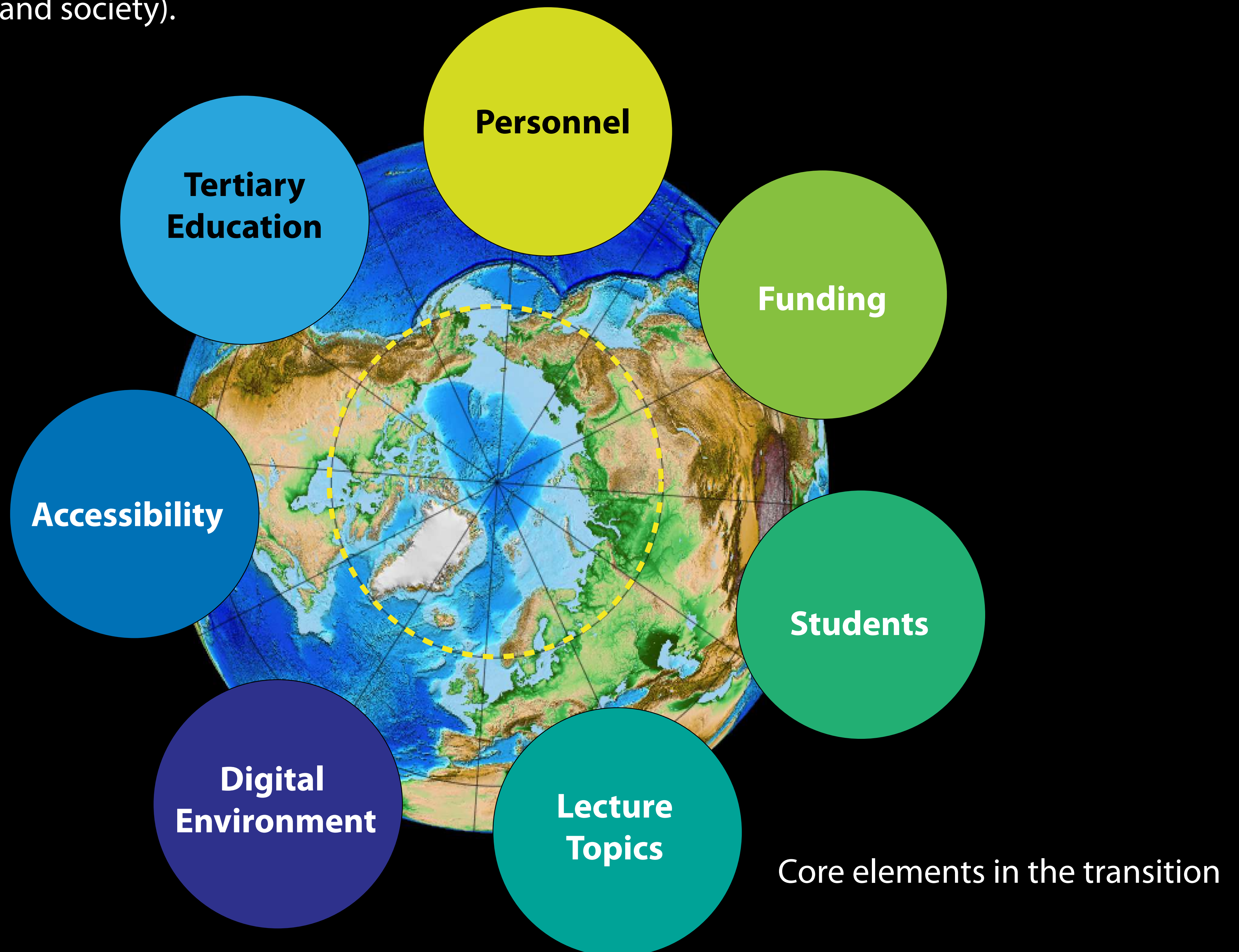
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“A Changing Arctic”

The circum-Arctic is undergoing change across all scales. The past, present and future are all intertwined and an interdisciplinary perspective is critical. As such, there is an increasing demand for state-of-the-art knowledge about the region from truly interdisciplinary viewpoints and multi-scale perspectives (e.g. past, present and future changes, as well as feedbacks between and within the environment and society).



We are in the process of transforming a popular 6-week Master's level summer school course "A Changing Arctic" (15 ECTS) into a digital course, open to everyone. This year the summer school will be digital and held from 28 June-August 6 2021 (31 students accepted a place). The MOOC is planned for release in late 2021.

Core elements in the transition

University of Oslo - International Summer School (ISS)

The “A Changing Arctic” course was previously held 2014-2018 - always during northern summer months (holidays). A number of other Bachelors and Masters level courses are offered. Part of the Nordic education model - free education (semester fee for students only). In-person attendance led to few cancellations. Scholarships available to support travel and accommodation. Strong additional ISS focus on networking and cultural exchange .

Massive Open Online Course

Formal, free, high-quality and widely accessible educational resource. Flexible access from homebases and to suit individual schedules and timezones. Pre-recorded with possibility for live or feedback elements. Regular review and updating required. Students can meet and discuss in forums.

Interdisciplinary considerations

The “Arctic” is a very large topic; course covers natural sciences, humanities and social sciences, governance and law. Specific terminology, concepts, teaching styles. Need for overarching and linking weekly thematics - coordination between lecturers (up to 15 individual lecturers). Reflect and respect diversity of Arctic citizens, residents, stakeholders. Need for unified examination and assessments.

Digital environment

FutureLearn.com is the digital platform to host the MOOC (ISS primarily using Canvas). Internal quality assurance and e-learning tips. Digital classrooms - must be engaging, short videos, very different to in-person 1-2 hour lectures. Filming of lectures can occur in video studio at Uni.Oslo (n.b. current COVID-19 limitations).

International Students

Typically 20 (in-person), 40 (digital course) or unlimited (MOOC). Formally enrolled students (Bachelors, Masters, PhD) or general interest. Previous students including from Nordic, UK, Mexico, Russia, USA, Brazil, China. Digital reaches those unable to attend campus - all ages, corners of the globe!

Funding

Primarily for lecture payment and course development. Employees at Uni. Oslo but also external lecturers (including payment and in-kind). Currently, the MOOC funding via UArctic with additional support from UiO:Norden - more is welcome, future-proofing!

Personnel

Lecturers - local (Uni.Oslo), national (Norway) and international lecturers, aiming for diversity. Many are also Arctic residents and stakeholders. Critical support from **education and administrative specialists** (e.g. ISS staff), and **technical and digital support** (e.g. UiO LINK – Centre for Learning, Innovation & Academic Development).

Weekly-plan and example lectures

Week 1 - Introduction and Overview

e.g. Arctic governance, legal regimes, geography

Week 2 - The terrestrial Arctic

e.g. Permafrost, ecology, Svalbard Treaty, Indigenous peoples

Week 3 -The marine Arctic

e.g. Sea-level, shipping, security, blue economy

Week 4 - Dynamics and change

e.g. climate change, climate politics, geology

Week 5 - People and Society

e.g. Arctic engineering, Nordic cities, colonialism

Week 6 - Future and Summary + Exam

e.g. pollution preparedness, Outer space and the Arctic



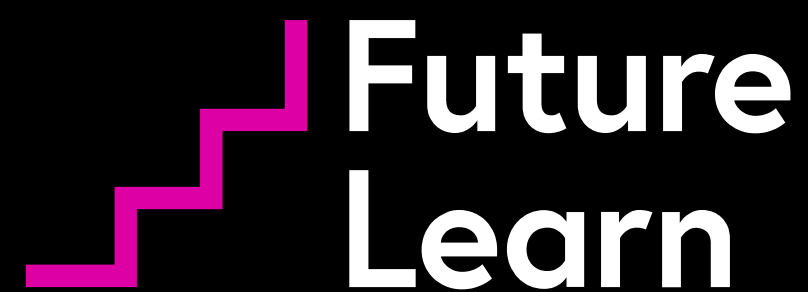
Links and references

Contact: Grace Shephard (grace.shephard@geo.uio.no)

<https://www.uio.no/studier/emner/iss/sommerskolen/ISSMN4030/index.html>

<https://www.futurelearn.com>

<https://www.uarctic.org/>



UiO : International Summer School
University of Oslo



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“A Changing Arctic”

The circum-Arctic has gained increased public, political, commercial, and academic interest over the last decade. The Arctic and surrounds are undergoing change across all scales; fishing, indigenous peoples, sea-ice, shipping routes, jurisdictional boundaries, geology, climate, ecology, permafrost, and more. The past, present and future are all intertwined and a interdisciplinary perspective is critical. As such, there is an increasing demand for state-of-the-art knowledge about the region from truly interdisciplinary viewpoints and multi-scale perspectives (e.g. past, present and future changes, as well as feedbacks between and within the environment and society).

We decided to transform a popular 6-week Master’s level summer school course “A Changing Arctic” (15 ECTS) into a digital course, open to everyone - and is currently under development. We share some key considerations and areas of challenge learned from the process so far. This year the summer school will be digital and held from 28 June-August 6 2021 (31 students accepted a place). The MOOC is planned for release in late 2021.

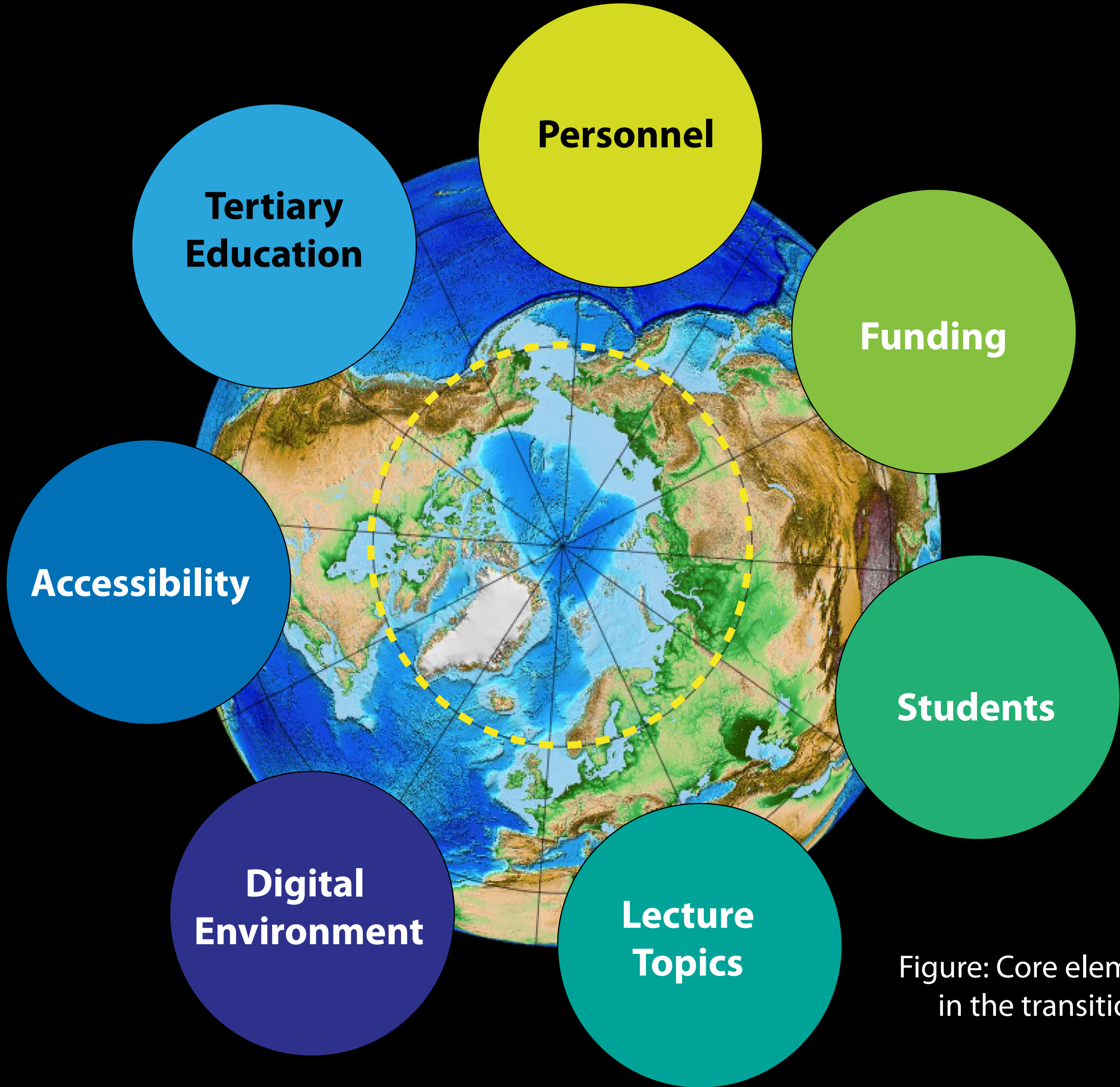


Figure: Core elements
in the transition

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