German Geographical Society | DGfG

GEOGRAPHY

KEY TO THE FUTURE

Strengthening Geography education in schools

road map 2030

… because
Geography education deals with

key challenges of the 21st Century.

The United Nations identified global challenges of the 21st Century, which threaten biodiversity and human survival.

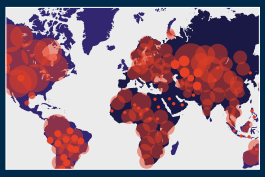
There is a strong spatial dimension to understanding global challenges and this is dealt with in Geography education.

human-induced climate change

absolute poverty

geopolitical conflicts

spread of diseases



biodiversity loss

global migration

limited natural resources

demographic change

adverse impact of globalisation

So many of the world's current issues - at global scale and locally - boil down to geography, and need geographers of the future to help us unterstand them.

Sir Michael E. Palin | British journalist

… because the study of Geography focuses on future oriented **solutions.**

The global challenges of our time are unprecedented and complex.

The study of Geography **encourages students' confidence to make a difference**.

Geography education counters resignation because it not only analyses complex interconnections, but also points out possible solutions.

By providing encouraging examples,
Geography education empowers students' willingness to take action and to shape our future.

Geography is a fundamental fascination [...] Its ambition [to tackle global challenges of the 21st century] is absurdly vast.
But we know it would be more absurd to abandon it.

Prof. Alastair Bonnett | Newcastle University (UK)

… because Geography is the

only subject that integrates
social sciences and
natural sciences.

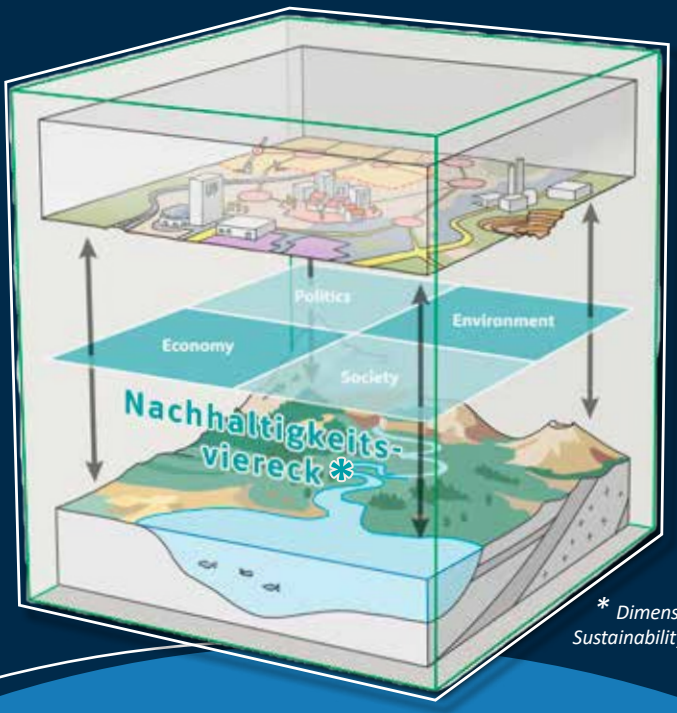
The **human-environment interconnection** is integral to thinking geographically.

In Geography, **students learn to take an integrative view of the world**.

For example, flood disasters result from a complex interaction between natural conditions and human activity.

Geographers see the world as an **integrated system of human-environment relationships.**

Geographers understand the world as an integrated human-enviroment-system.



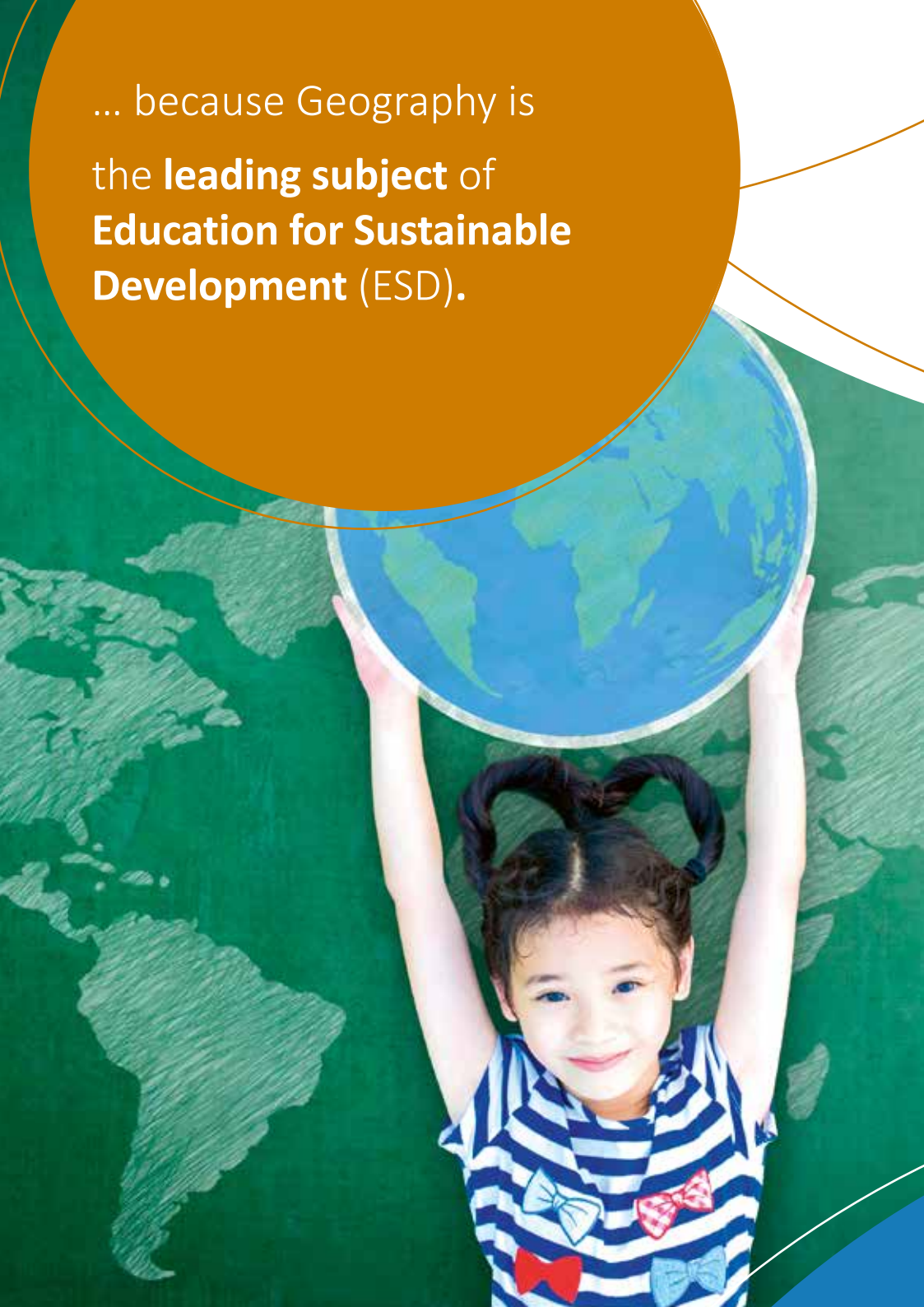
* *Dimensions of Sustainability*

Geographically educated individuals understand human relationships and their responsibilities to both the natural environment and to others.

IGU-CGE 2019

… because Geography is

the **leading subject** of **Education for Sustainable Development** (ESD)**.**



Education for Sustainable Development (ESD) cuts across all subjects.

As a human-environment focused discipline, Geography is at the heart of learning about ESD.

In Germany empirical studies show that **no other subject covers ESD in its curricula and textbooks as extensively as Geography.**

Geography education makes a significant contribution to all Sustainable Development Goals (SDGs).

Today more than ever, each school day should start with a geography lesson ... well ...except Fridays, of course.

Axel Hacke | famous German columnist

… because geographers

consider the connections between local and global scales.

Sustainability does not only aim at justice between people of different generations but also global justice.

This is why actions on a local scale must be examined for their effects in other parts of the world.

Constantly changing **spatial scales is an important principle for geography, being a spatial discipline**.

Geographers link global phenomena (e.g. globalisation) with specific actions on the local scale (e.g. consumption).

Think globally, act locally.

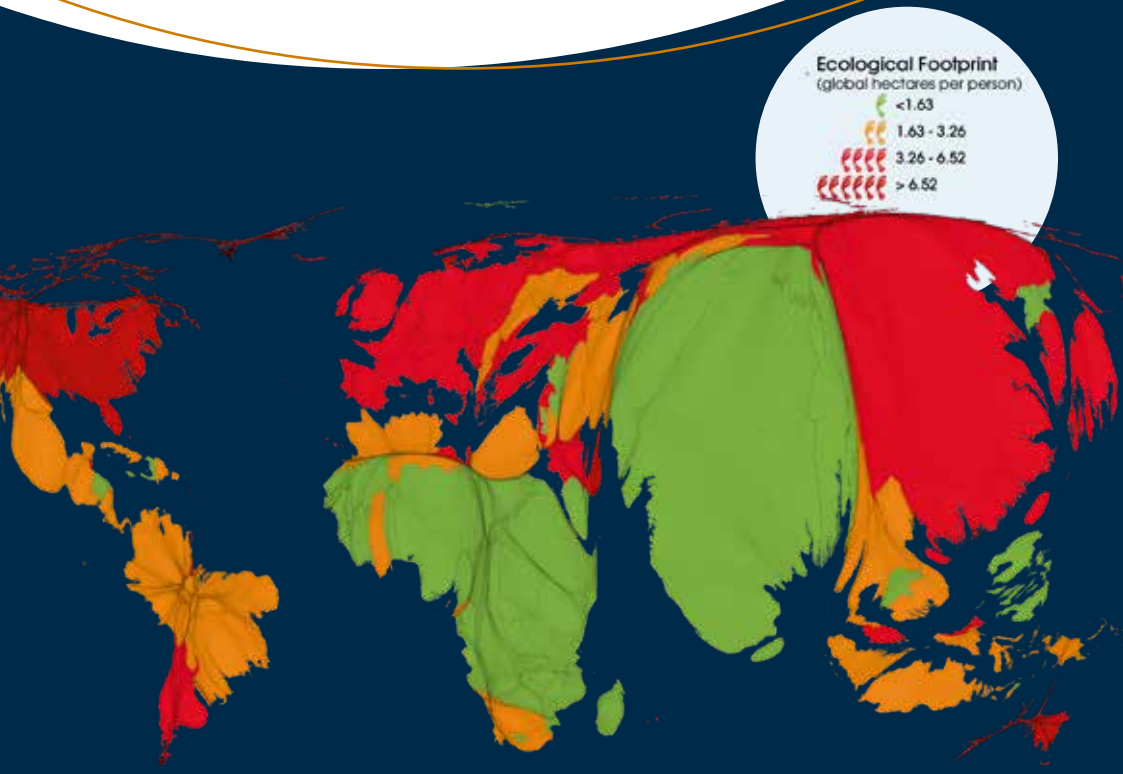
Sir Patrick Geddes | 19th century geographer

… because
Geography provides

orientation.

Humans live in, are connected to and profoundly shape the information and use of places and spaces.

Spatial orientation is a basic skill such as reading, calculating or writing. An understanding about spatial orientation **contributes substantially to education overall.**



This map shows the land surface resized by its population overlaid with data about each country's ecological footprint.

A society that has no idea about place and space fumbles around in the global village. This is almost more dangerous than a society that cannot write and read properly.

Christian Deysson | business journalist

… because students learn

‚to read' places, spaces and environments.

Geographers are experts of space and place.

Field trips inspire students by providing genuine encounters between people and the environment which encourages a willingness to take responsibility for one‘s actions.

[space in mind]

Geography education also deals with the social construction of spaces and asks question such as:

- Why do people perceive some spaces negatively and some spaces positively?
- How do media reports influence perception about specific places and what are the consequences?

** Night of Industrial Culture*

The geographer‘s beginning and end is and remains the field.

geographical saying

… because geographical learning also involves

intercultural learning.

Cultural diversity is crucial to developing forward-thinking or future-facing solutions.

Geography helps
to question stereotypes,
to achieve a deeper understanding of different cultures,
and **to shape a respectful co-existence**
in the global village.

Geography education encourages people to see the world from different perspectives.

The study of Geography is [...] about understanding the complexity of our world, appreciating the diversity of cultures that exist across continents and in the end, to use all that knowledge to help bridge divides and bring people together.

Barack Obama | 44th US president

… because the study of geography makes an

important contribution to citizenship education.

Populist and radicalised tendencies increasingly impact public discussions.

With its spatial focus, the study of Geography helps to understand the complex causes of such tendencies (e.g. migration, shrinking villages, „problem districts“, transportation changes, globalisation etc.).

An education in Geography will greatly contribute to **the empowerment of young people and increase participation in political discourse**.

Geography education helps young people to be critical of supposedly easy solutions.

The most dangerous worldviews are from those who have never viewed the world.

Alexander von Humboldt | explorer

… because
digital geomedia
can change the world
for the better.

Mobility, smart farming, energy transition, hazard protection, …

Digital geodata (information with spatial references)
is the resource of the 21st century.

Digital geomedia such as Google Earth or GIS (geographic information system) help students to analyse spatial processes (e.g. traffic flows) and develop alternative solutions (e.g. sustainable transport options).

[citizen science]

SenseBoxes are based on GIS and enable students across Germany to collect environmental data on air quality (e.g. dust pollution).
Data automatically uploads and becomes available to the public on a digital map.

Geography creates spaces of opportunity for the future.

Prof. Ute Wardenga | President of the German Geographical Society

… because Geography education

encourages and empowers students to actively shape their environment.

In Germany, Geography is one of the few subjects to explicitly state „action“ as a field of competence in its educational standards.

The main goal of studying Geography is the development of a spatially-oriented competence aimed at action.

Geography education provides students with a voice to stand up against injustice and contribute to the shaping of a sustainable future.

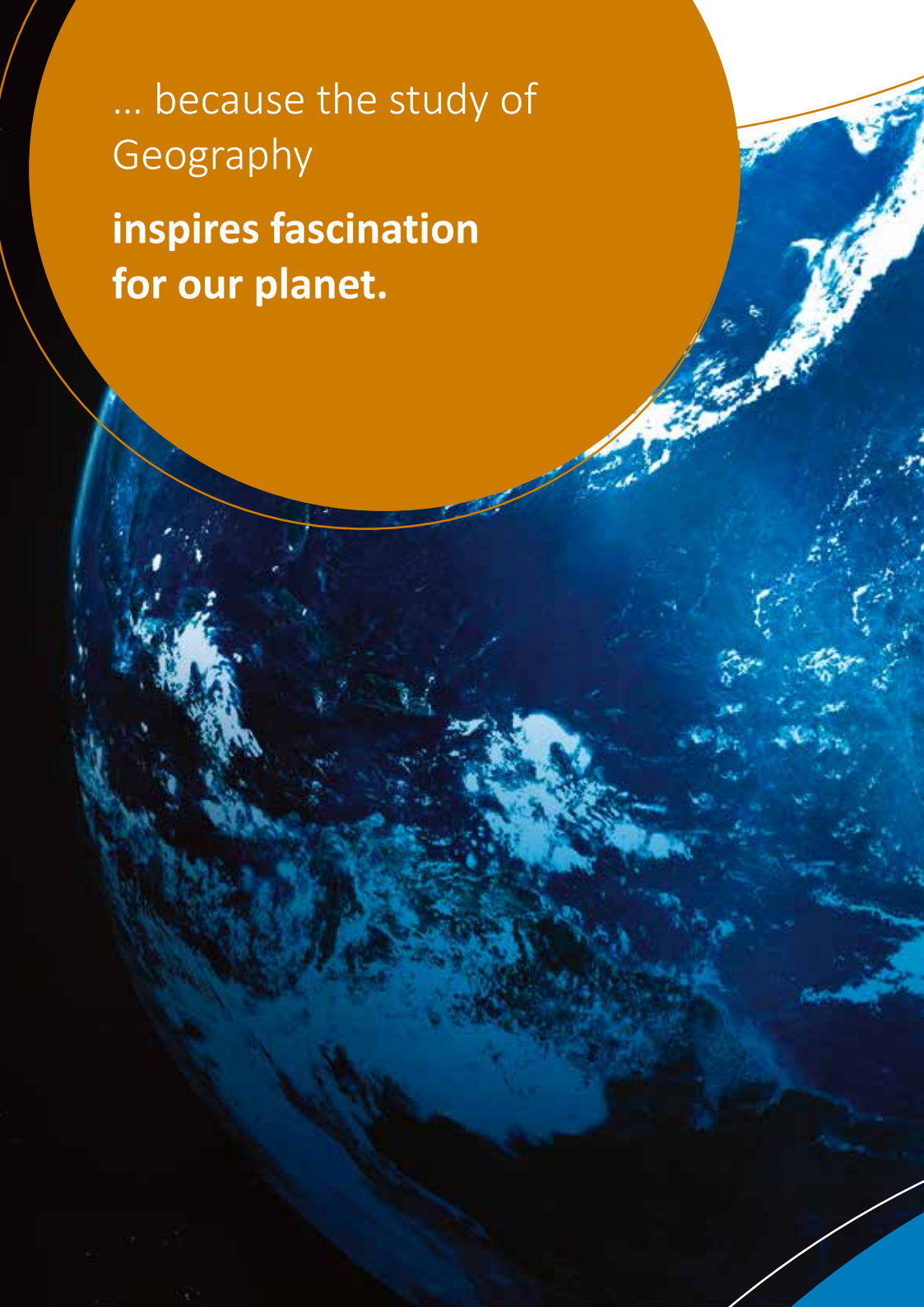
In schools all around Germany, young people have established the „fair trade“ approach towards consumtion which is inspired by their Geography lessons.

You are never to small to make a difference.

Greta Thunberg | climate activist

… because the study of Geography

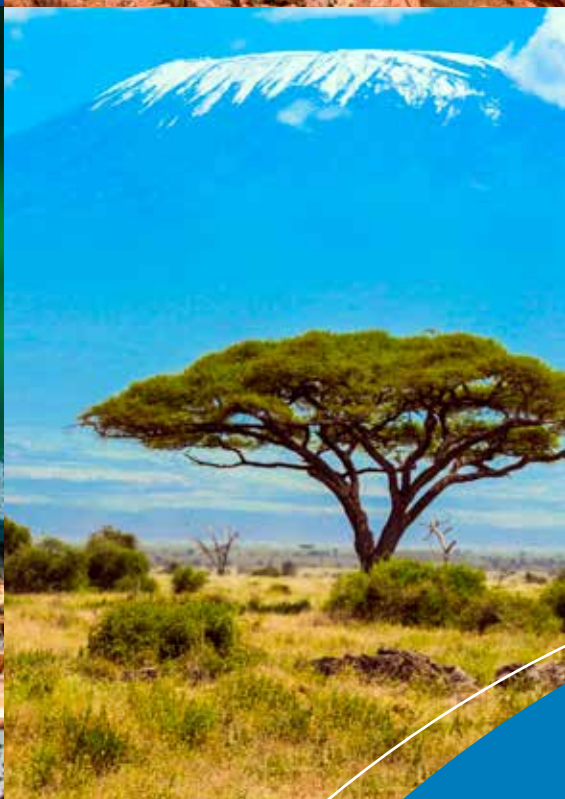
inspires fascination for our planet.



Geography helps us answer the question of „how do we wish to live?“ in an informed way [...] and helps us plan for uncertain futures.

Prof. Anna Davies | Trinity College Dublin



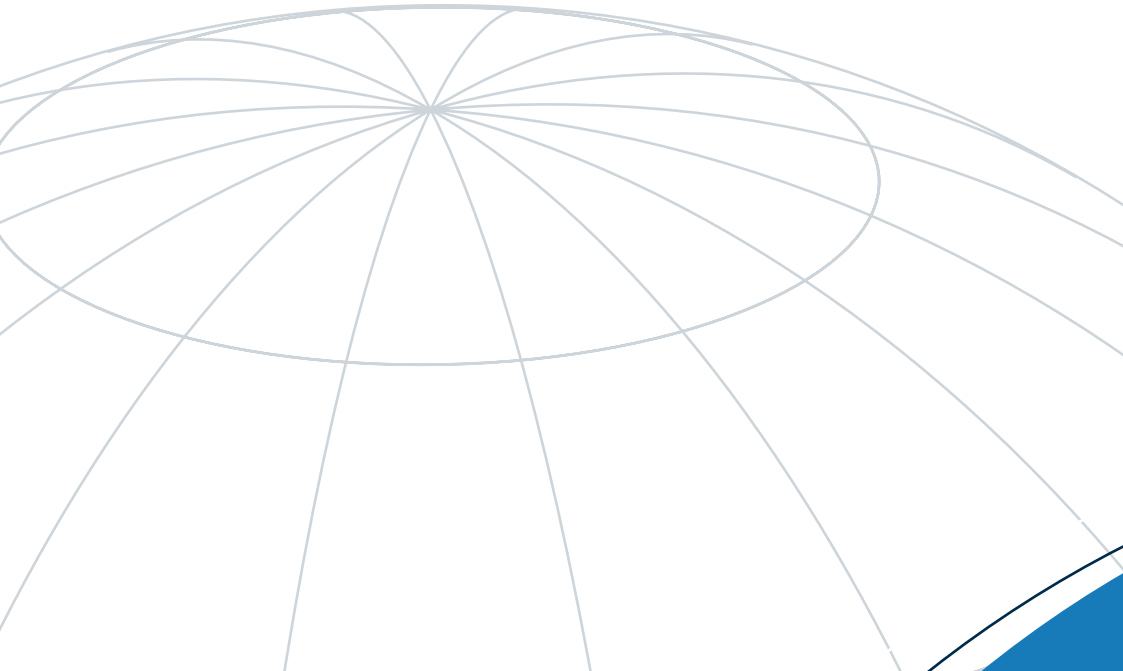



The world is the greatest sight there is - go see it.

Kurt Tucholsky | author

This is why we demand

strengthening the subject of Geography.



… in agreement with the renowned **German Council for Education:**

In particular, the subject of Geography offers unique potentials to strengthen Education for Sustainable Development in schools.

Accordingly, the subject of ***Geography*** *should be given*

more importance

in the discussion about ***core subjects****, especially* ***regarding the number of lessons taught****.*

Excerpt from the expertise „Sustainability in the education system – what needs to be done now“

10 demands for Geography
Key to the future

1. Teaching Geography lessons continuously

In Grades 5-10, Geography should be taught as an independent subject for two lessons weekly. Regardless of the type of qualification pursued, all students have the right to foundational geographical education. This is essential for adressing global challenges such as climate change, and also national issues such as structural change in the Ruhr region.

2. Including Geography as a subject of choice for senior student

Geography should be on equal footing with other subjects. In the face of 21st Century global challenges it is essential to strengthen Geography as the leading subject of sustainability. Consequently, compulsory enrolment in subjects such as History or Political Studies must be abolished in favour of choice between all available subjects.

3. Teaching Geography as an independent subject

Geography should not only be associated with other subjects of the social sciences. Geography is both a social science and a natural science. A onesided focus contradicts the complex understanding of Geography and removes its unique and special strength: an interconnected system of human-environment relationships.

4. Teaching Geography only through specialist teachers

Each teacher of Geography needs to hold a teaching degree with Geography as a major area of study. Using out-of-field teachers to teach Geography leads to a considerable loss of knowledge and reduces the quality of geography education. Only specialist geography teachers can meet the demands of the complex subject and appropriately discuss the global challenges of the 21st Century.

5. Establishing Geography as a leading subject of ESD

Geography should be officially identified and designated as the leading subject of Education for Sustainable Development (ESD). The interdisciplinary nature of Geography, as both a social science and a natural science, means it is uniquely equipped to examine and reflect the integrative principles of sustainability most effectively.

6. Acknowledging human-environment interconnections as important to Geography

In schools, Geography should be recognised as a social science and a natural science. As an integrative discipline focused on human-environment relationships, Geography as a school subject should be placed in both fields of study. This way, students in the senior grades can choose Geography as a natural science, instead of only Biology, Chemistry or Physics.

7. Boosting the emphasis on STEM in Geography

The curriculum should expand the natural science dimension of Geography, and in doing so will contribute even more to the STEM-related education of students. A STEM emphasis in Geography will help students to thoroughly understand and adress global challenges such as desertification, soil degradation or ocean acidification.

8. Expanding digital education in Geography

A secure, creative and reflexive use of digital geomedia should be promoted further in Geography education. In a digital world, a spatial element becomes strengthened through the use of digital geomedia (Google Earth, GPS, ...) and the responsible use of geoinformation (spatial citizenship).

9. Making field-trips mandatory

„The geographer‘s beginning and end is and remains the field“. Exploring the field is an essential part of studying Geography. Only through fieldwork can important content (spatial features, soil composition, ...) and skills be adressed properly. This is why the curruculum has to encompass at least one mandatory field-trip per year.

10. Using the name „Geography“ for the subject

Across the country, the subject should be called „Geography“, instead outdated terms such as „Erdkunde“ which is still the case in some federal states. „Geography“ better serves the rigorous scientific core and character of the subject.

10 demands for Geography
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8. Expanding digital education in Geography
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digital version:

IMPRESSUM

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