

# Как переориентировать образование согласно принципам устойчивого развития

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Почему нам следует  
переориентировать образование  
согласно принципам устойчивого  
развития?

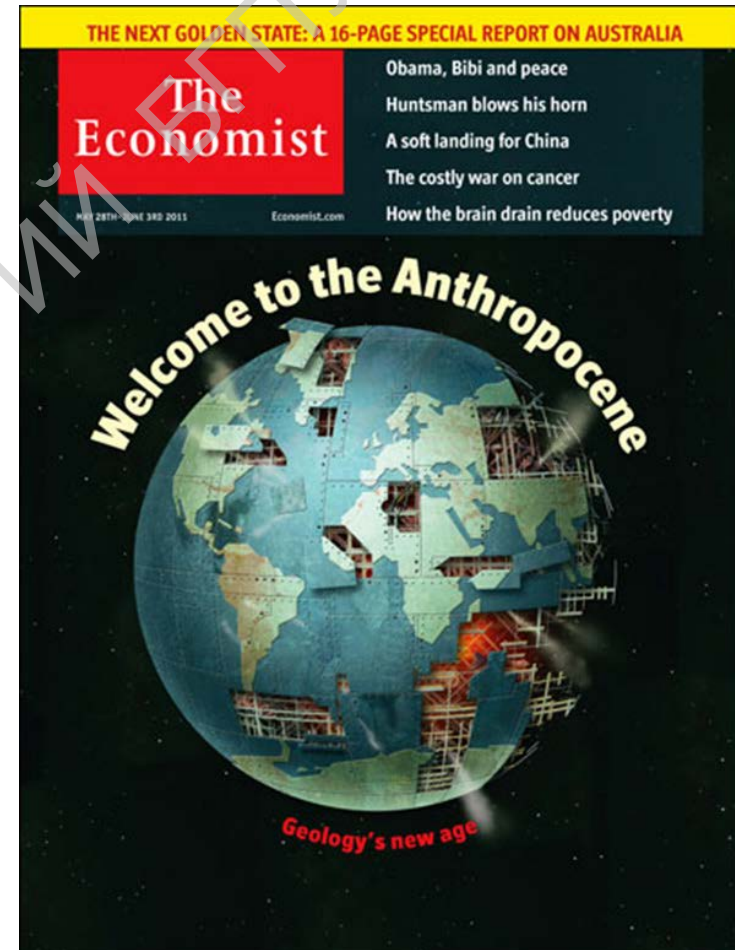
РЕПОЗИТОРИЙ

# Новый взгляд на мир: в перспективе – вся планета



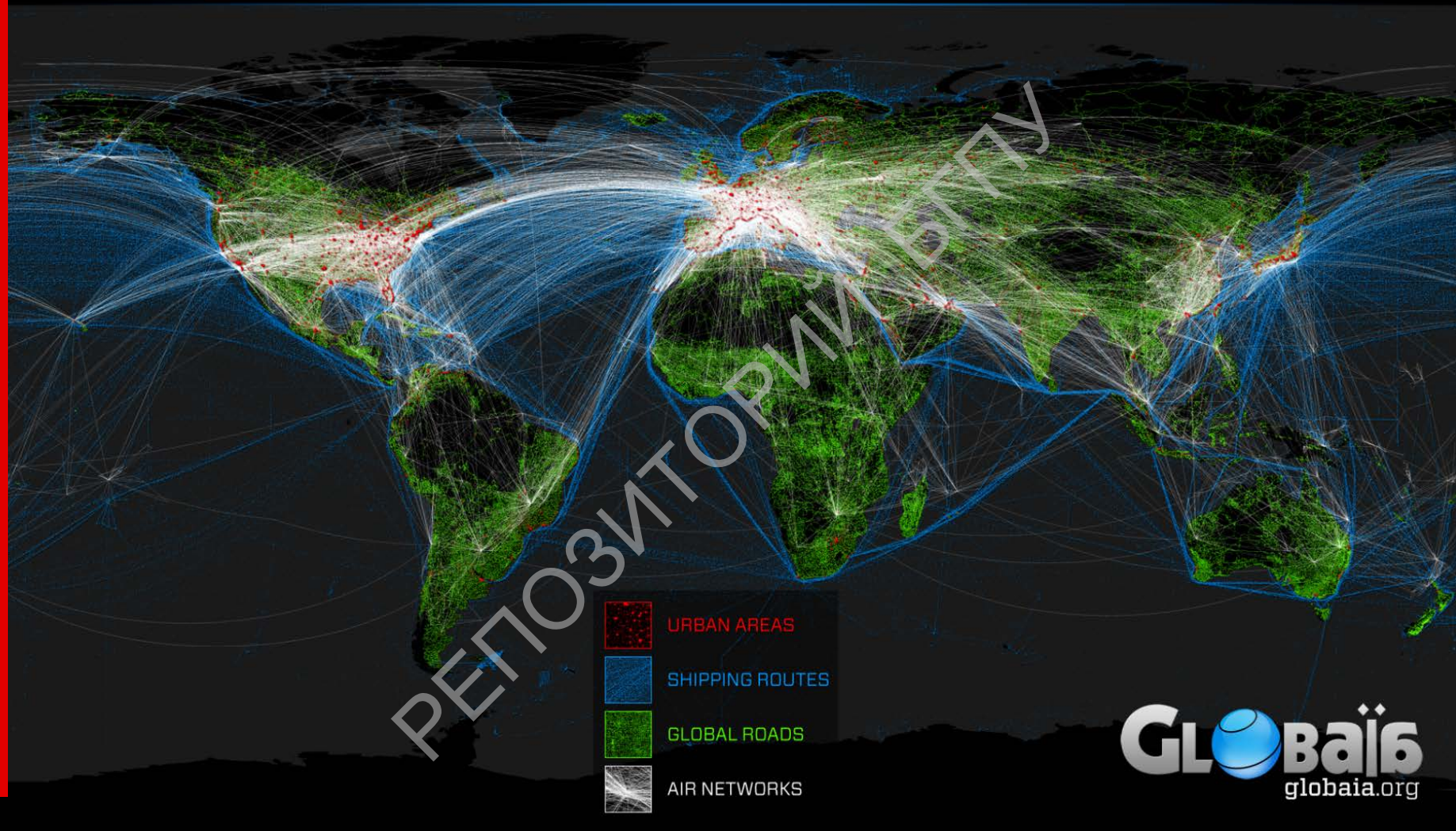
«Blue Marble», фотография планеты Земля, сделанная 7 декабря 1972 экипажем космического корабля «Аполлон-17».

# Антропоцен





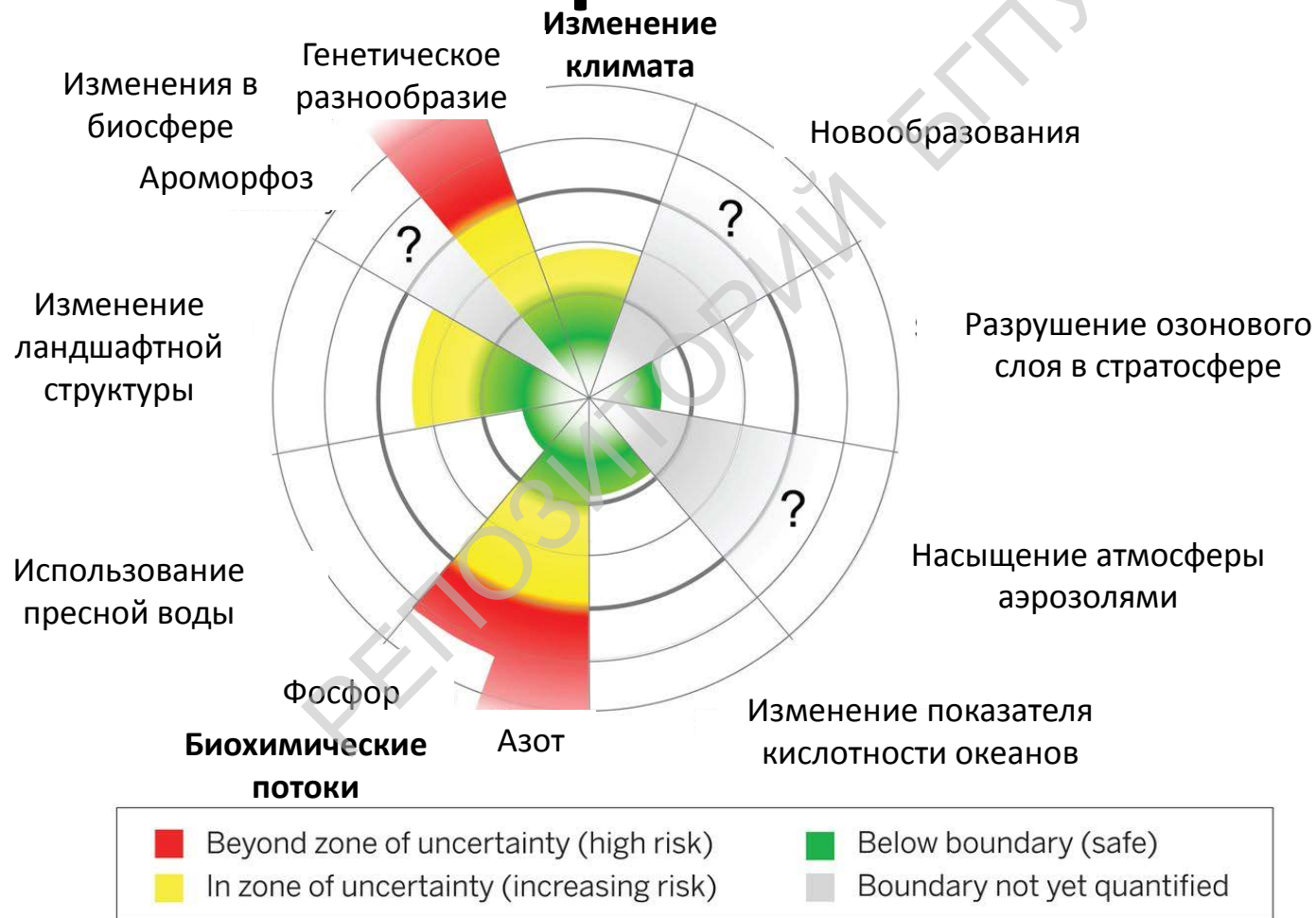
# THE ANTHROPOGENIC PLANET



# Глобальные изменения = глобальные ВЫЗОВЫ

- Что является правильным, а что – нет?
- Что делать, что оставить после себя?
- Мы сталкиваемся с проблемами, о которых не знали наши учителя и отвечаем на этические вызовы современности
- Нашим детям придется решать иные проблемы
- Итак, чему обучать молодежь?

# Планетарные границы: Guiding human development on a changing planet



# The Challenge of Post-normalism

- Complexity
- Uncertainty and indeterminacy
- Unexpected side-effects
- Contestation and controversy – extinction of ‘truth’
- Shallowness and hyper-connectivity – erosion of meaning
- Emergence – reflexivity

(altered after Prof. Arjen Wals, Wageningen University)



# It's easy to recognize unsustainability







# Principles of Sustainability

Economy, Society, Environment: A Nested Relationship



United States Environmental Protection Agency

# **„Learning our way out of unsustainability“**

“make the case for more radical forms of learning that begin to question the normalization of planetary destruction, inequity, discrimination and marginalization through so-called transgressive forms of learning”

**Prof. Dr. Arjen Wals, Wageningen University**

UNESCO Chair of Social Learning and Sustainable Development

# But there is something special about education as David Orr wrote:

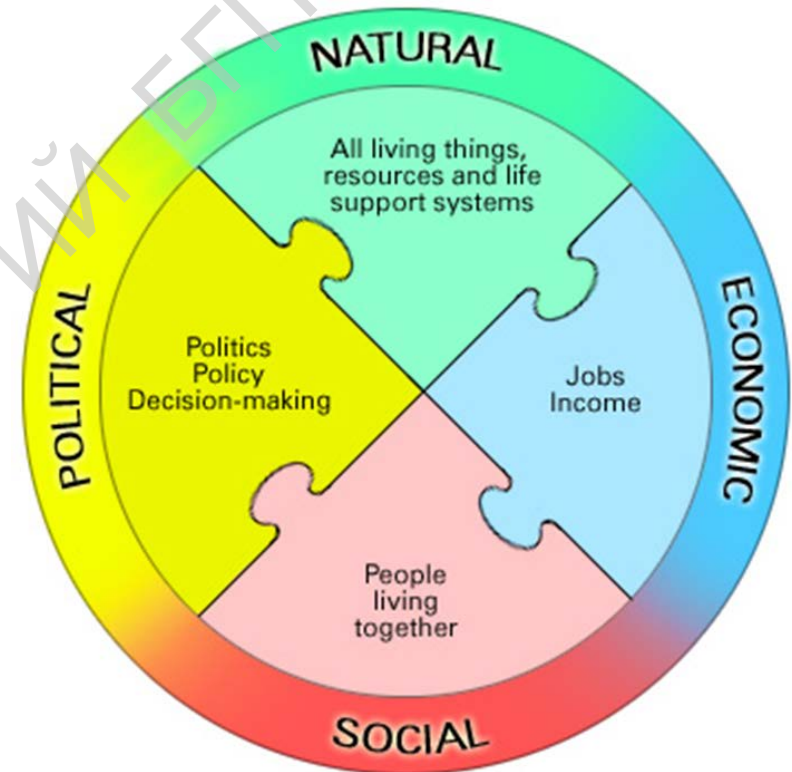
- “Education is not widely regarded as a problem, although the lack of it is. The conventional wisdom holds that all education is good, and the more of it one has, the better. The truth is that without significant precautions, education can equip people merely to be more effective vandals of the earth.”

**David W. Orr (2004): Earth in Mind - On Education, Environment, and the Human Prospect**



# New ways of thinking

- systems thinking
- critical thinking
- problem solving
- decision making
- showing leadership



Systems thinking -  
Patterns of interdependent systems  
[www.unesco.org](http://www.unesco.org)

# New ways of thinking need new ways of teaching

- Shift from teaching to learning
- Action research
- Problem-based learning
- Participative learning
- Learning in collaborative projects with partners
- Self-directed learning processes

ESD aims at changing education and traditional educational schemes by...

- 1) inter-, transdisciplinary and holistic learning
- 2) values-based learning
- 3) critical thinking rather than memorizing
- 4) multi-method approaches, incl. art, drama, debate
- 5) participatory decision-making
- 6) locally relevant material rather than national
- 7) transformative approaches in teaching

after Prof. Hans van Ginkel, former President of UN University, Tokyo

# Re-orientating Education towards ESD means re-orientating Teacher Education

РЕПОЗИТОРИЙ БГУ

# A Long Call for Action

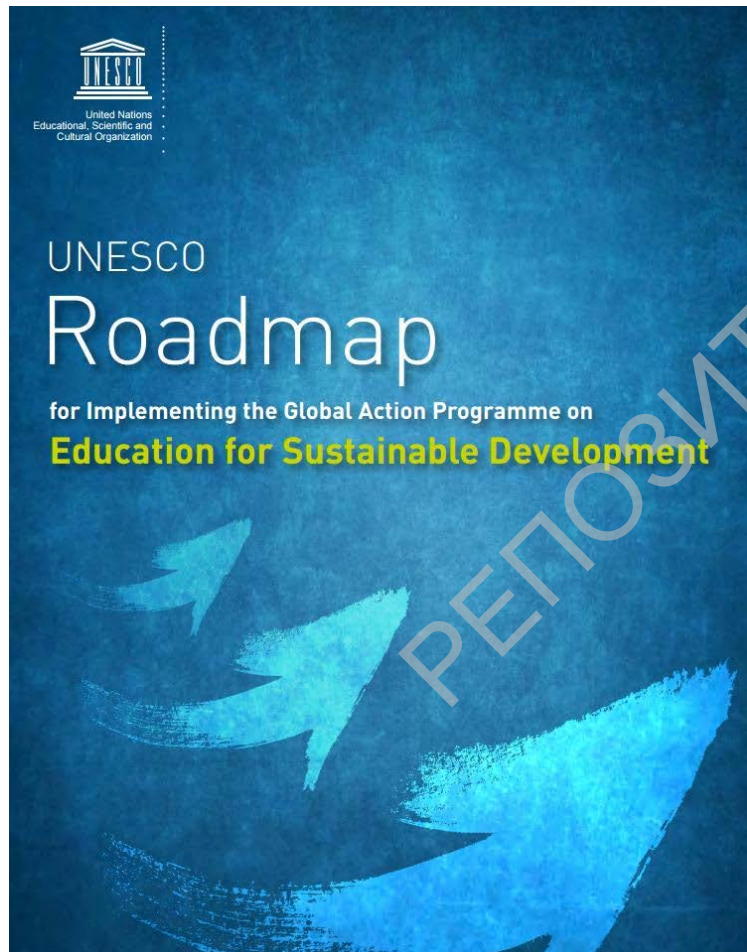
Report of the Brundtland-Commission to the UN  
„Our Common Future” 1987

- „The world’s teachers will have a crucial role to play in bringing this report to [the people]...”
- „The changes in attitudes (...) will depend on vast campaigns of education...”

(Foreword by the commission’s president Gro Harlem Brundtland)



# United Nations Global Action Programme Education for Sustainable Development 2015 - 2019



- *There is now a growing international recognition of ESD as an integral element of quality education and a key enabler for sustainable development.*

# New ways need new methods – the challenge of teaching sustainability

- **Learning content:** Integrating critical issues, such as climate change, biodiversity, disaster risk reduction (DRR), and sustainable consumption and production (SCP), into the curriculum...

(UNESCO Roadmap GAP for ESD 2013)

# New ways need new methods – the challenge of teaching sustainability

- **Pedagogy and learning environments:** Designing teaching and learning in an interactive, learner-centred way that enables exploratory, action-oriented and transformative learning. Rethinking learning environments – physical as well as virtual and online – to inspire learners to act for sustainability.

(UNESCO Roadmap GAP for ESD 2013)

# New ways need new methods – the challenge of teaching sustainability

- **Learning outcomes:** Stimulating learning and promoting core competencies, such as critical and systemic thinking, collaborative decision-making, and taking responsibility for present and future generations.

(UNESCO Roadmap GAP for ESD 2013)

# New ways need new methods – the challenge of teaching sustainability

- **Societal transformation:** Motivating people to adopt sustainable lifestyles.
  - Empowering people to be 'global citizens' who engage and assume active roles, both locally and globally, to face and to resolve global challenges and ultimately to become proactive contributors to creating a more just, peaceful, tolerant, inclusive, secure and sustainable world.
- (UNESCO Roadmap GAP for ESD 2013)



# Learning Competences for Sustainability

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## A Central Issue for Change

# Competence Orientated Education

- Competence orientated education is focusing on output rather than input as conventional education does
- Output orientation: what problem-solving strategies and abilities for social action should learners have
- Don't think what should be taught, but: what should be learned

(Prof. G. de Haan, longtime chairman of Germanys ESD national committee )

# Sustainability competence

(after Prof. Arjen Wals)

- Competence to think in a forward-looking manner & to deal with uncertainty
- Competence to work in an interdisciplinary manner
- Competence to achieve open-minded perception, transcultural understanding and cooperation
- Participatory competence
- Ability to feel empathy, sympathy and solidarity
- Competence to motivate oneself and others
- Competence to reflect in a distanced manner on individual and cultural concepts

# Gestaltungskompetenz

- ‘Gestaltungskompetenz’, or ‘shaping competence’, means the specific capacity to act and solve problems.
- Those who possess this competence can help, through their active participation in society, to modify and shape the future *of* society, and to guide its social, economic, technological and ecological changes along the lines of sustainable development.
- ‘Gestaltungskompetenz’ makes possible an open future that can be actively shaped and in which various options exist.

G. de Haan 2006

# Gestaltungskompetenz

1. gather knowledge in a spirit of openness to the world, integrating new perspectives;
2. think and act in a forward-looking manner;
3. acquire knowledge and acting in an interdisciplinary manner;
4. deal with incomplete and overly complex information;
5. co-operate in decision-making processes;
6. cope with individual dilemmatic situation of decision-making;
7. participate in collective decision-making processes;
8. motivate oneself as well as others to become active;
9. reflect upon one's own principles and those of others;
10. refer to the idea of equity in decision-making and planning actions;
11. plan and act autonomously; and
12. show empathy for and solidarity with the disadvantaged