



Stimulus Activities: teaching resources

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Overview

Resources that you can use to engage students in sustainability related stimulus activities such as debates and discussions.

Example lesson plans for debates



<u>Sustainable Development Toolkit: Tutor Resource and Student Activity Series</u> – Advanced HE toolkit curtesy from Prof Simon Kemp at the University of Southampton.

Sustainable Development Goals: media resources and topic

areas

Resources linked to the UN's Sustainable Development Goals that you can use to engage students in discussion and debate learning activities. The following resources are taken from:



SDG Academy

Education for Sustainable Development Goals Learning Objectives UNESCO (2017)



Suggested topics for SDG 1 No Poverty

SDG Academy library No Poverty

- Definitions of poverty.
- Global, national and local distribution of extreme poverty and extreme wealth and their reasons.
- The importance of social welfare protection systems and measures.
- The importance of equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance.
- The interrelation of poverty, natural hazards, climate change and other economic, social and environmental shocks and stresses.
- Work conditions related to poverty such as sweatshops, child labour and modern slavery
- Resilience of the poor and those in vulnerable situations.
- Consequences of poverty such as malnutrition, child and maternal mortality, crime and violence Development cooperation.
- Policy frameworks at the local, national and international levels, based on pro-poor and gender-sensitive development strategies.



Suggested topics for SDG 2 Zero Hunger

SDG Academy library Zero Hunger

- Definition of the concept of hunger and malnutrition.
- Groups that are particularly vulnerable to hunger and malnutrition.
- Main drivers and root causes of hunger and malnutrition, including the relation between climate change and food security and the depletion of soil quality.

- Consequences of hunger and malnutrition on the health and well-being of people, including practices like migration as adaptation.
- Physical, emotional and socio-cultural functions of food.
- Hunger in relation to food abundance, obesity and food waste.
- Global food import, export, cash crops, international taxes, subsidies, trading systems, merits, risks and challenges of utilising genetically modified organisms (GMOs).
- Institutions and movements related to hunger and sustainable agriculture like the UN's Food and Agriculture Organization (FAO), Foodwatch, Slow Food, community-based agriculture, the international movement Via Campesina, etc.
- Concepts and principles of sustainable agriculture, including climate-resilient practices, organic farming, biodynamic farming, permaculture and agro-forestry.
- Biodiversity of seeds, plants and animals, particularly in relation to wild species.



Suggested topics for SDG 3 "Good Health and Well-being"

SDG Academic Library Good Health and Wellbeing

- Severe communicable and non-communicable diseases.
- Health problems of vulnerable groups and in the most vulnerable regions, and an understanding of how gender inequalities may affect health and well-being.
- Direct strategies to promote health and well-being, e.g. vaccines, healthy food, physical activity, mental health, medical consultation, education, sexual and reproductive health education including education about pregnancy avoidance and safer sex.
- Indirect strategies (public health) to promote health and well-being: e.g. political programmes for health insurances, affordable prices of medicine, health services including sexual and reproductive health care services, drug prevention, transfer of knowledge and technology, reduction of pollution and contamination, early warning and risk reduction.
- Philosophical and ethical conceptions of life quality, well-being and happiness.
- Sexual and reproductive health education including family planning.
- Discriminatory attitudes towards people living with HIV, other illnesses or mental disorders.
- Road traffic accidents.
- Overweight and obesity, insufficient physical activity and unhealthy food.
- Chemicals, pollution and contamination of air, water and soil.



Suggested topics for SDG 4 "Quality Education"

SDG Academy Library Quality Education

- Education as a public good, a global common good, a fundamental human right and a basis for guaranteeing the realization of other rights.
- The Education 2030 agenda, and innovative and successful case studies from across the globe.
- The relevance of inclusive and equitable quality education and lifelong learning opportunities for all (formal, non-formal and informal learning, including the use of ICT) and at all levels for improving people's lives and sustainable development.
- Reasons for a lack of access to education (e.g. poverty, conflicts, disasters, gender inequality, lack of public financing of education, growing privatization).
- Global attainment of literacy, numeracy and basic skills.
- Diversity and inclusive education.
- Basic skills and competencies needed in the 21st century.
- Knowledge, values, skills and behaviours needed to promote sustainable development.
- The concept of education for sustainable development (ESD), whole-institution approach as a key strategy to scale up education for sustainable development, and pedagogy for developing sustainability competencies.
- Youth empowerment and empowerment of marginalized groups.



Suggested topics for SDG 5 "Gender Equality"

SDG Academy Library Gender Equality

- Gender as a social and cultural construct.
- Gender inequality, traditional gender roles and structural discrimination.
- Gender equality and participation in decision-making.

- Gender and labour, including pay disparity and recognition of unpaid work.
- Gender and education, including gender equality in achieving primary, secondary and tertiary levels of education.
- Sexual and reproductive health and rights.
- Gender and poverty, including food security and financial dependence.
- Gender in community dynamics (decision-making, governance, childcare, education, conflict resolution, disaster risk reduction and climate change adaptation).
- Exploitation and trafficking of women and girls.
- The intersectionality of gender with other social categories such as ability, religion and race.



Suggested topic for SDG 6 ""Clean Water and Sanitation"

SDG Academy Library Clean Water and Sanitation

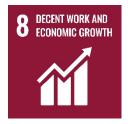
- The global water cycle and water distribution.
- The importance of equitable access to safe and affordable drinking water (achieving water security under climate change: e.g. coping with social and economic pressure caused by frequent waves of droughts and hence water shortages, and by floods and hence too much water).
- The importance of adequate and equitable sanitation and hygiene, water quality and quantity parameters for health.
- The human right to water and water as a global common good.
- Impacts of pollution, dumping and release of hazardous chemicals and materials on water quality.
- Water scarcity and water use efficiency Importance of water-related ecosystems.
- Water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies, water patents, landscaping for groundwater recharge as well as integrated water resources management
- Water exports (virtual water).
- Water and sustainable development (e.g. water and gender, water and inequality, water and health, water and cities, water and energy, water and food security, water and disaster risk reduction, water and climate change, water and the green economy, water and jobs).



Suggested topics for SDG 7 "Affordable and Clean Energy"

SDG Academy Library Affordable and Clean Energy

- Different energy types, especially renewable energies like solar, wind, water, geothermal, tidal.
- Energy production, supply, demand and usage of different countries.
- Energy efficiency and sufficiency in energy usage.
- Strategies: Centralized versus decentralized energy production; energy selfsufficiency, e.g. via local energy supply companies (LESCOs).
- Political, economic and social dimensions of energy and linkages to power constellations, e.g. in mega energy projects like large scale solar farms or dam projects – potential conflict of interests (political and economic power (across borders), rights of especially indigenous people).
- Environmental impacts and issues of energy production, supply and usage (e.g. climate change, grey energy5).
- The role of the public and private sectors in ensuring the development of low carbon energy solutions.
- Peak of oil production and energy security (over)dependence on non-renewable energies like oil.
- Bridging technologies and technology for a 'cleaner' use of fossil fuels.
- Gender issues related to energy production, supply and usage.



Suggested topics for SDG 8 "Decent Work and Economic Growth"

SDG Academy Library Decent Work and Economic Growth

- The contributions of economies to human well-being, and the social and individual effects of unemployment.
- Economic ethics.

- Theoretical assumptions, models and indicators of economic growth (GDP, GNI, HDI).
- Alternative economic models and indicators: steady-state economies, commonwelfare economies, de-growth, subsistence economies, Inclusive Wealth Index, Global Hunger Index.
- Concepts and phenomena in financial systems and their influence on economic development (investments, credits, interests, banks, speculations on the stock exchange, inflation, etc.).
- Labour force (increase in population through birth rates, migration, etc.).
- Gender equality in the economy and the (economic) value of care work.
- Inequalities in the labour market: representation and participation of different social groups, and different income/wages and weekly worktime between countries, sectors, social groups, genders.
- Formal and informal labour, labour rights, especially for migrants and refugees, forced labour, slavery and human trafficking.
- Entrepreneurship, (social) innovation, new technologies and local economies for sustainable development.



Suggested topics for SDG 9 "Industry, Innovation and Infrastructure"

SDG Academy Library Industry Innovation and Infrastructure

- The sustainability of information and communication technology (ICT) including supply chains, waste disposal and recycling.
- The relation of quality infrastructure and the achievement of social, economic and political goals.
- The need for basic infrastructure like roads, information and communication technologies, sanitation, electrical power and water.
- Inclusive and sustainable innovation and industrialization.
- Sustainable and resilient infrastructure development.
- Sustainable electricity: national grids, feed-in tariffs, expanding sustainable renewable sources, conflicts.
- The sustainable job market, opportunities and investments.
- The sustainability of the internet from green chat groups to the ecological footprint of search-engine servers.
- The sustainability of transport infrastructure.
- Alternative currencies as investment in local infrastructure.



Suggested topics for SDG 10 "Reduced Inequalities"

SDG Academy Library Reduced Inequalities

- Social, economic and political inclusion versus inequalities (on national and global levels) typical discriminatory categories.
- Different indicators to measure inequality.
- The meaning of rights to land, property and natural resources for equality and the impact. of inequalities on vulnerabilities and capacities.
- Fiscal, wage and social protection policies.
- Global trade systems and regulations (including tax regimes).
- Labour standards.
- Representation of different social groups/nations in governments/on boards of meaningful and powerful institutions.
- The amount and effects of international development aid.
- Historical roots of current inequalities (including the role of multinational companies)
- Migration and mobility of people.



Suggested topics for SDG 11 "Sustainable Cities and Communities"

SDG Academy Library Sustainable Cities and Communities

- The need for shelter, safety and inclusiveness (human needs, contextualizing our different individual and collective wants and needs according to gender, age, income and ability).
- Management and use of natural resources (renewables and non-renewables).
- Sustainable energy (residential energy use, renewable energies, community energy schemes) and transportation.

- Sustainable food (agriculture, organic agriculture and permaculture, community supported agriculture, foodshed8, food processing, dietary choices and habits, waste generation).
- Urban ecology and how wildlife is adapting to humanity's settlements.
- Sustainable resilient buildings and spatial planning (building materials, energy saving, planning processes).
- Waste generation and management (prevention, reduction, recycling, reuse).
- Communities and their dynamics (decision-making, governance, planning, conflict resolution, alternative communities, healthy communities, inclusive communities, ecovillages, transition towns).
- Water cycle and restoring ground water through urban design (Green Roofs, rainwater harvesting, daylighting old river beds, sustainable urban drainage).
- Disaster preparedness and resilience, resilience to weather problems and in the future and a culture of prevention and preparedness.



Suggested topics for SDG 12 "Responsible Consumption and Production"

SDG Academy Library Responsible Consumption and Production

- Advertising, peer-pressure, belonging and identity-creation.
- Production and consumption history, patterns and value chains, and management and use of natural resources (renewables and non-renewables).
- Environmental and social impacts of production and consumption.
- Energy production and consumption (transport, commercial and residential energy use, renewable energies).
- Food production and consumption (agriculture, food processing, dietary choices and habits, waste generation, deforestation, overconsumption of food and hunger).
- Tourism.
- Waste generation and management (prevention, reduction, recycling, reuse).
- Sustainable lifestyles and diverse practices of sustainable production and consumption.
- Labelling systems and certificates for sustainable production and consumption.
- Green economy (cradle-to-cradle, circular economy, green growth, degrowth).



Suggested topics for SDG 13 "Climate Action"

SDG Academy Library Climate Action

- Greenhouse gases and their emission.
- Energy, agriculture and industry-related greenhouse gas emissions.
- Climate change-related hazards leading to disasters like drought, weather extremes, etc. and their unequal social and economic impact within households, communities and countries and between countries.
- Sea-level rise and its consequences for countries (e.g. small island states)
- Migration and flight related to climate change.
- Prevention, mitigation and adaptation strategies and their connections with disaster response and disaster risk reduction.
- Local, national and global institutions addressing issues of climate change.
- Local, national and global policy strategies to protect the climate.
- Future scenarios (including alternative explanations for the global temperature rise).
- Effects of and impacts on big eco-systems like forests, oceans, glaciers and biodiversity.
- Ethics and climate change.



Suggested topics for SDG 14 "Life below Water"

SDG Academy Library Life Below Water

- The hydrosphere: The water cycle, cloud formation, water as the great climate regulator.
- Management and use of marine resources (renewables and non-renewables): global commons and overfishing, quotas and how they are negotiated, aquaculture, seaweed, mineral resources.
- Sustainable Marine Energy (renewable energies, wind turbines and their controversy).

- Marine ecology the food web, predators and prey, competition, collapse.
- Coral reefs, coasts, mangroves and their ecological importance.
- Sea level rise and countries that will experience total or partial loss of land; climate refugees and what a loss of sovereignty will mean.
- The oceans and international law: international waters, territory disputes, flags of convenience and their related issues.
- Ocean pollutants: plastics, microbeads, sewage, nutrients and chemicals.
- The deep ocean and deep-sea creatures.
- Cultural relationships to the sea the sea as a source of cultural ecosystem services such as recreation, inspiration and building of cultural identity.



Suggested topics for SDG 15 "Life on Land"

SDG Academy Library Life on Land

- Ecology: competition, predator-prey, community dynamics, energy flow through food webs, dispersal and ranges. Specific ecosystems local and global native ecosystems and also human-made ones, e.g. managed forestry plantations.
- Threats to biodiversity: habitat loss, deforestation, fragmentation, invasive species and overexploitation (caused by unsustainable production and consumption practices, unsustainable technologies, etc.).
- The dangers of extinction: Individually endangered species, how extinction is forever, the long time needed to form species, and the six mass extinctions.
- Restoration of wildlife and seeing humans as a healing force.
- Climate change and biodiversity, ecosystems as carbon sinks, disaster risk reduction and ecosystems (ecosystems as a natural barrier to natural hazards).
- Soil and its formation and structure.
- Desertification, deforestation and efforts to combat them.
- The human's connection with nature the natural self.
- Ecosystem services (cultural, provisioning, regulatory and supporting).
- Evolution and genetics, genetic resources, ethics.



Suggested topics for SDG 16 "Peace, Justice and Strong Institutions"

SDG Academy Library Peace Justice and Strong Institutions

- Definitions of justice: retributive and rehabilitative.
- Crime and punishment, comparing laws and punishments across the globe.
- Climate Justice.
- Trade Justice.
- Child labour and exploitation of children.
- Global treaties and agreements related to war, peace and refugees.
- Corruption and how to measure it.
- The illegal weapons trade.
- Drug abuse and its trade.
- The international criminal court and its role.



Suggested topics for SDG 17 "Partnerships for the Goals"

SDG Academy Library Partnerships for the Goals

- Global partnerships between governments, the private sector and civil society for sustainable development, their shared accountability and possible conflicts between the different actors.
- Local, national and global systems, structures and power dynamics.
- Global governance and policies and the global market and trading system in the light of sustainable development.
- The prisoner's dilemma and tragedy of the commons as challenges for creating global governance and markets promoting sustainable development.
- Global citizenship and citizens as change agents for sustainable development.
- Cooperation on and access to science, technology and innovation, and knowledge sharing.

- Global distribution of access to the internet.
- Development cooperation, development assistance, and additional financial resources for developing countries from multiple sources.
- Capacity-building to support national plans to implement all the SDGs.
- Measurements of progress on sustainable development.



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