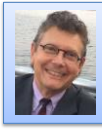
EXPERIENCES THAT MATTER: BUILDING SUSTAINABLE LITERACY INTO U.S. STUDY ABROAD PROGRAMS IN FRANCE

APUAF – ATELIER DU D.D. DU 19 NOVEMBRE, 2021 - PARIS



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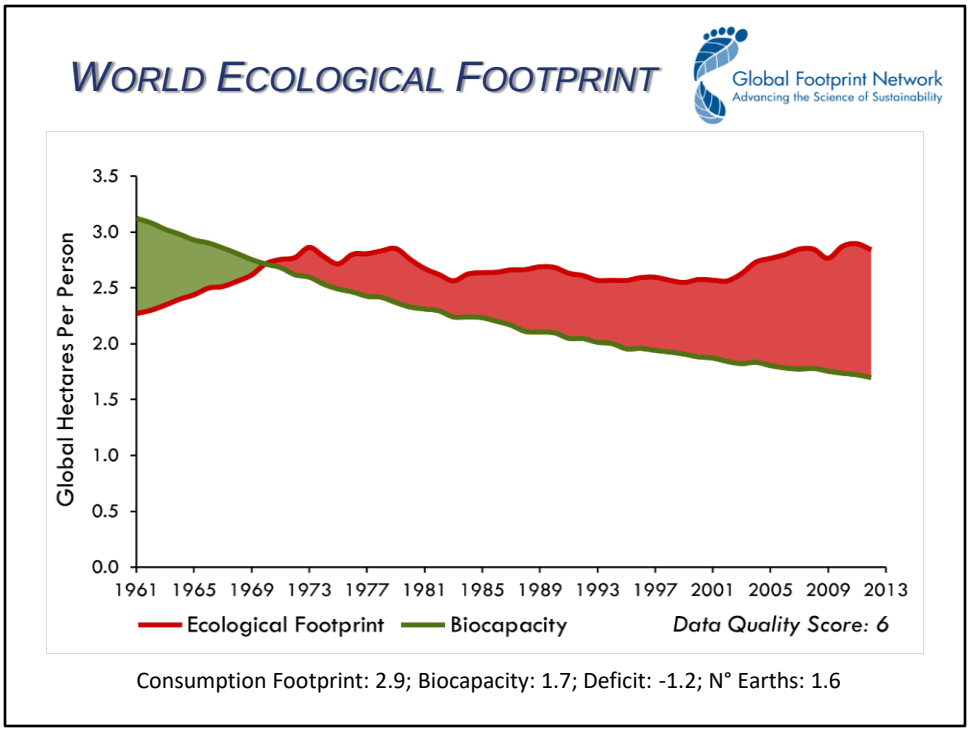
Graphic from: https://www.pinterest.com/visualoop/climate-change-infographics/

SESSION LEARNING OUTCOMES

1. *Develop advocacy skills* for making sustainability literacy a more intentional learning outcome of the study abroad experience in France
2. *Identify high-impact learning activities and pedagogical supports* that both staff and students can use to strengthen sustainability literacy among stakeholders
3. *Acquire assessment strategies* and easy-to-use instruments that empower Resident staffs to measure the impact of their programs in terms of increased sustainability literacy and behavioural change among both students and local community stakeholders.

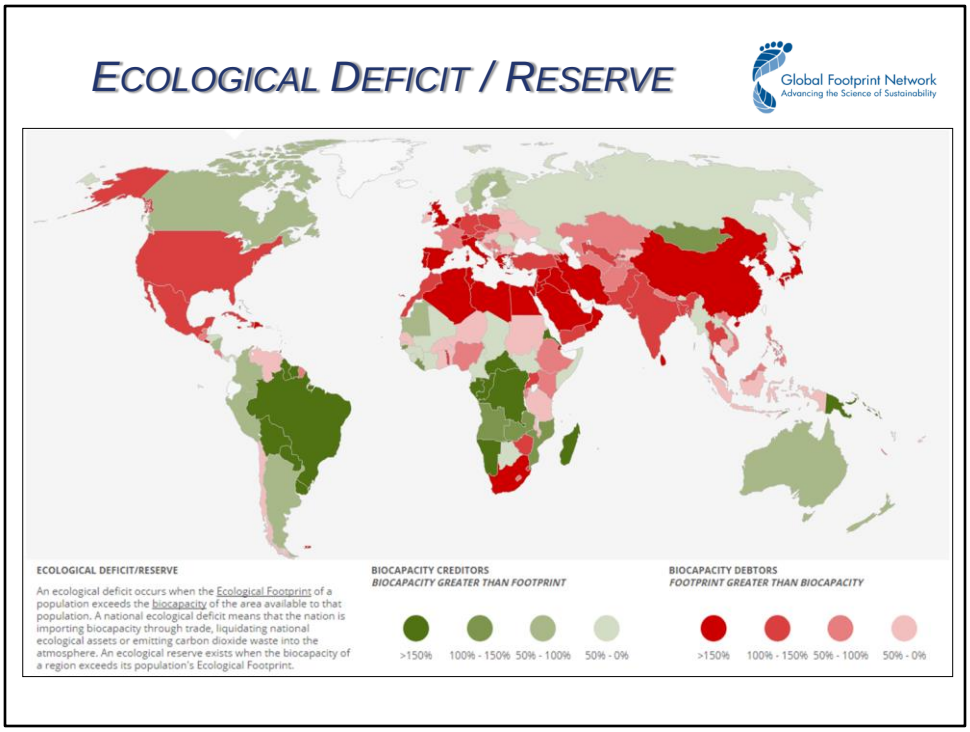


Here's the big picture of our environmental crisis.

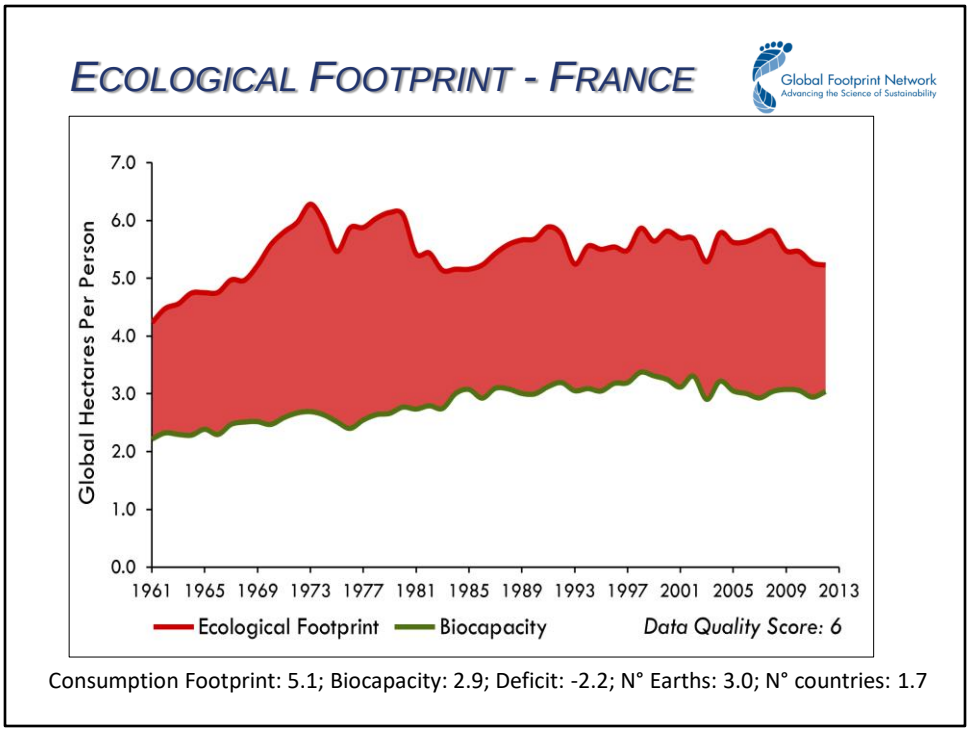
Ecological Footprint is the area of land and water it takes for a human population to generate the renewable resources it consumes and to absorb the corresponding waste it generates, using prevailing technology. In other words, it measures the "quantity of nature" that we use and compares it with how much "nature" we have.

Biocapacity serves as a lens, showing the capacity of the biosphere to regenerate and provide for life. It allows researchers to add up the competing human demands, which include natural resources, waste absorption, water renewal, and productive areas dedicated to urban uses. As an aggregate, biocapacity allows us to determine how large the material "metabolism" of human economies is compared to what nature can renew.

A **Biocapacity Deficit** results when the ecological footprint of consumption exceeds biocapacity.

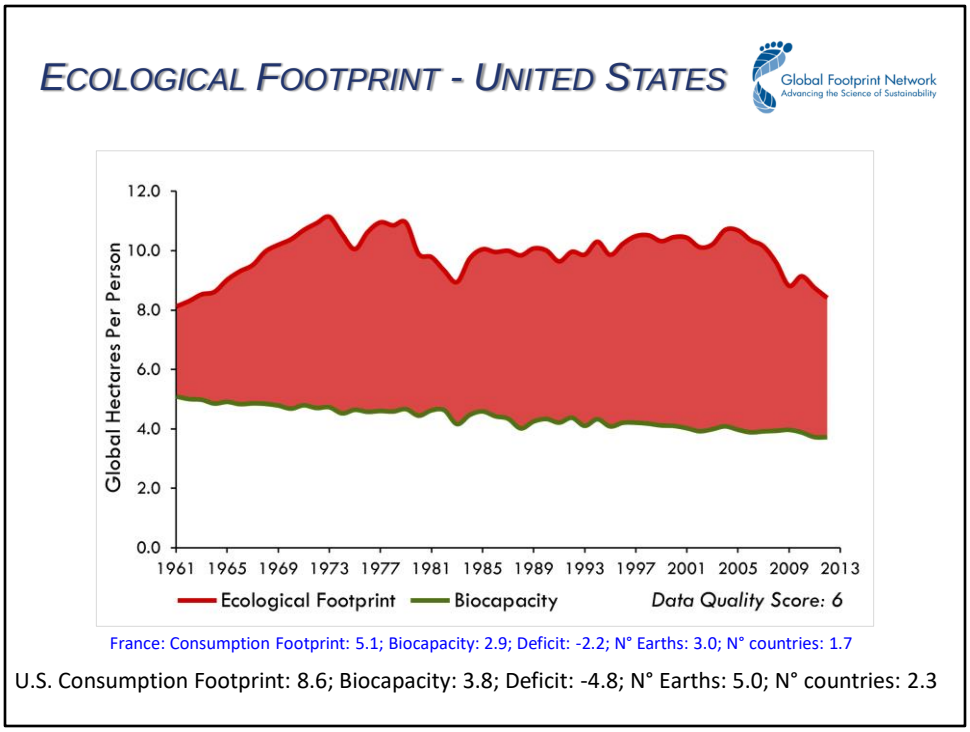


Here is a look at how widespread the problem is across the globe.



Here's a quick look at France, the country now ostensibly leading the struggle for alternative energies against climate change.

Number of Earths Required: This represents the number of planet Earths that would be required if everyone in the world lived the average lifestyle of a resident in this country.
Number of Countries Required: This represents how many times the country's biocapacity is needed in order to provide for the country's consumption Footprint
N.B. These numbers assume people use biocapacity fully. However, wild species also require biologically productive space. When subtracting a portion of biocapacity for wild species, the ratios get larger.

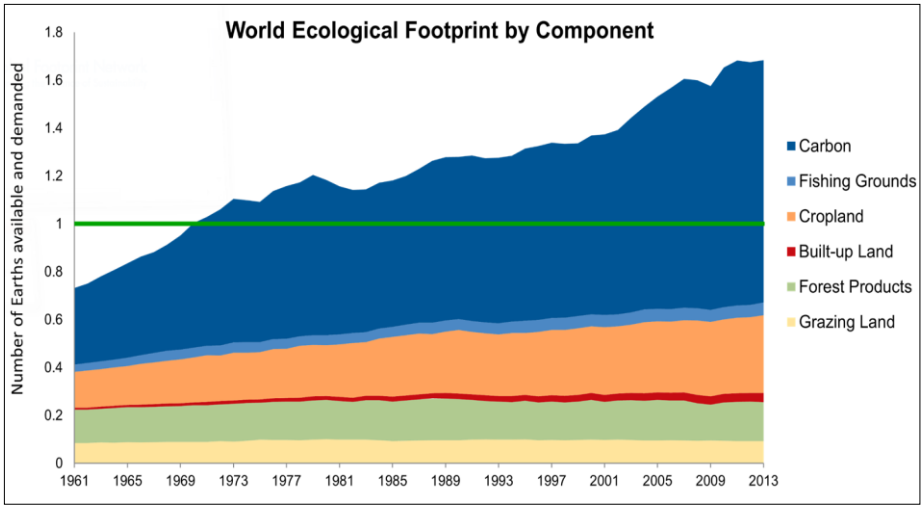


Here's a look at the United States.

Number of Earths Required: This represents the number of planet Earths that would be required if everyone in the world lived the average lifestyle of a resident in this country.
Number of Countries Required: This represents how many times the country's biocapacity is needed in order to provide for the country's consumption Footprint
N.B. These numbers assume people use biocapacity fully. However, wild species also require biologically productive space. When subtracting a portion of biocapacity for wild species, the ratios get larger.

WORLD ECOLOGICAL FOOTPRINT BY ECONOMIC SECTOR

Global Footprint Network
Advancing the Science of Sustainability



Here is how the various economic sectors of human activity contribute to this crisis.

LIVING PLANET REPORT 2018

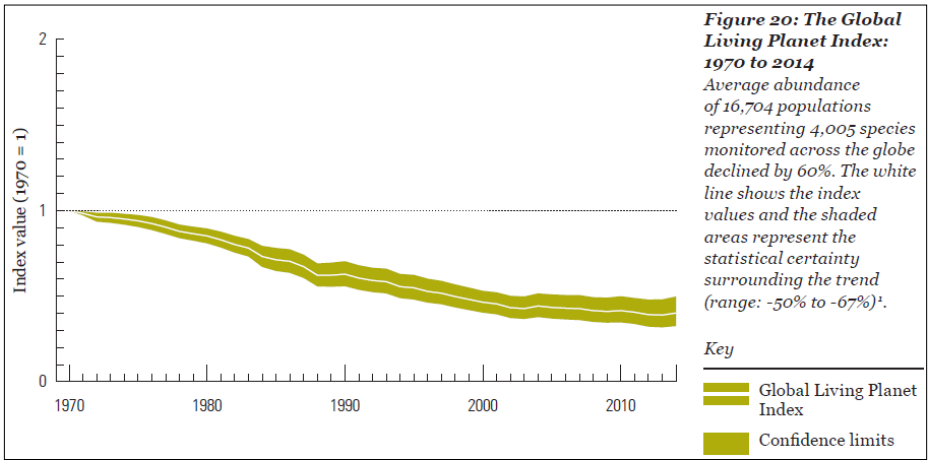
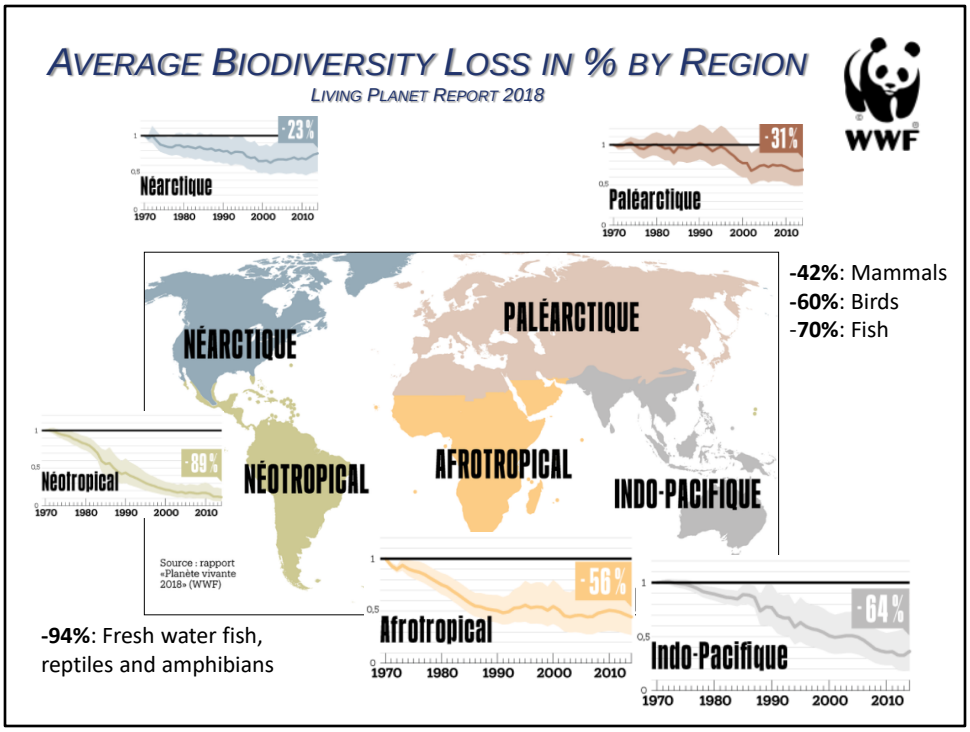


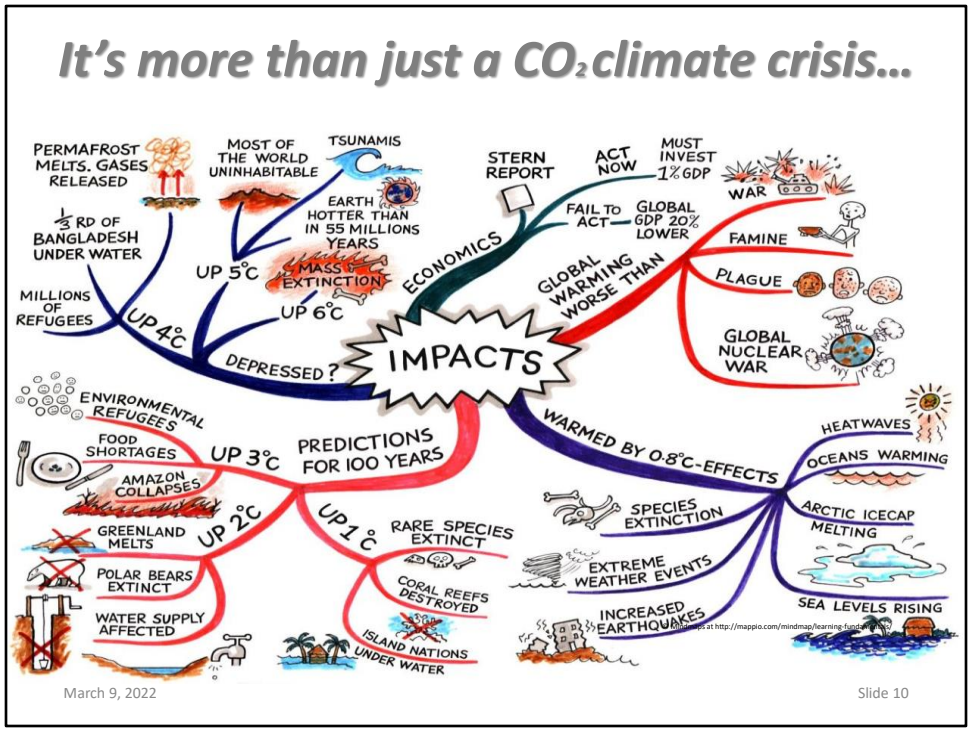
Figure 20: The Global Living Planet Index: 1970 to 2014
Average abundance of 16,704 populations representing 4,005 species monitored across the globe declined by 60%. The white line shows the index values and the shaded areas represent the statistical certainty surrounding the trend (range: -50% to -67%)[1].

Here is the impact of Homo sapiens on the rest of the living world, this from the October 29, 2018 Living Planet Report 2018.

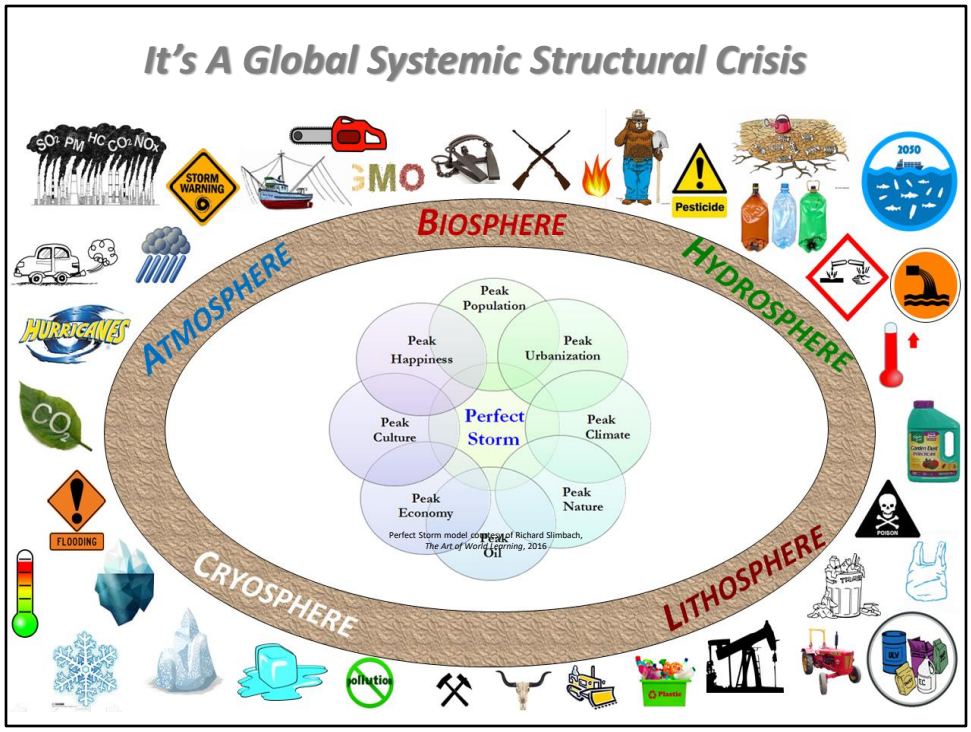
https://www.worldwildlife.org/press-releases/wwf-report-reveals-staggering-extent-of-human-impact-on-planet



Here is the WWF 2018 Living Planet Report from October 2018 on the global decline and downward trends of biodiversity from region to region.



As this mind-map indicates, there are many ways in which carbon pollution upsets the delicate balance of Nature's interconnected systems. And these impacts become greater as the average global temperature increases. According to the *Climate Action Tracker* report just out this week, humanity is fully ***off-track*** for meeting the 2015 COP21 target of a 1.5 degree increase. At current CO_2 emissions levels—*that are still increasing today*—we'll now on target to hit between 2.5 and 2.9 degrees of warming. This alone would put more than a billion people at risk of fatal heat and flooding events. And the mind-map highlights all sorts of other very bad things that will happen at this level of warming—millions of environmental refugees, food and water shortages, mass extinctions, and a great deal of human suffering, misery, and loss of life.



But what we face is more than just a climate crisis—it's a global systemic structural crisis that is degrading Earth's five natural systems of the Lithosphere (Land), Hydrosphere (Water), Cryosphere (Ice), Atmosphere (Air), and most importantly, the Biosphere (Life). What we have is a perfect storm of peak population, peak carbon emissions, peak oil, peak urbanization, and peak consumerism that is now degrading biodiversity, cultural diversity, global human health, and simple human happiness and well-being. In short, human activity is out of sync with Nature—out of sync with what the planet can provide in natural goods and can absorb as human-generated waste. In the end, we despoil our home when we ignore the laws of science; the laws of nature.

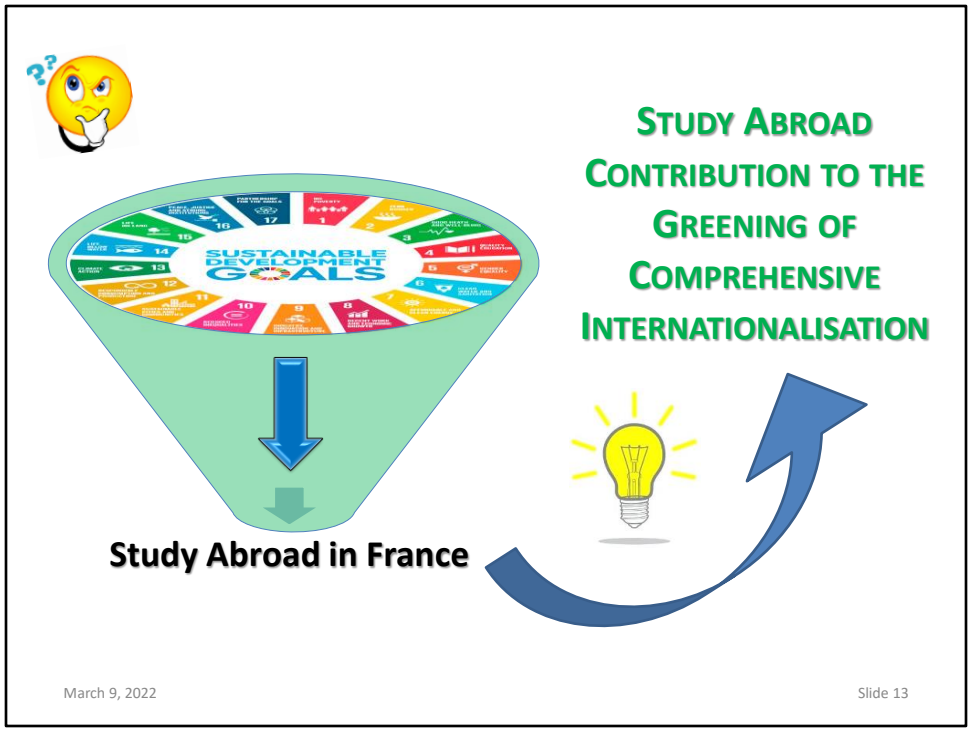
Taking up the 2030 agenda for sustainable development offers a possible pathway out of this dilemma. Universities have already begun to think with intentionality, purpose, and imagination about how these 17 goals should inform the work of educational leaders, administrators, faculty, staff, and students. But there is still so much work to do.

We All Know About the UN Sustainable Development Goals.
The Sustainable Development Goals (SDGs) are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

These 17 Goals build on the successes of the Millennium Development Goals, while including new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities. The goals are interconnected – often the key to success on one will involve tackling issues more commonly associated with another.

Adopted in September of 2015, the SDGs came into effect in January 2016, and they will continue to guide UNDP policy and funding until 2030.

http://www.undp.org/content/undp/en/home/sustainable-development-goals.html



Given today's discussion topic, our challenge is in finding ways to channel the 17 SDGs into the ethos and outcomes of international education. An important part of the solution—and the reason we are gather here today—is to identify practical ways to embed the content and vision of the SDGs into institutional strategies for comprehensive internationalization.

Participant Information

5 Most Important SDGs for Students

5 Most Important SDGs for Programs

THE GLOBAL GOALS

11 APUAF Sustainable Development Committee

We educators are like hummingbirds, able to carry but a few drops of water in our beaks in an effort to put out a great fire that has broken out in the forest that we call home. We can only but do our part, however small, to help out in a very great challenge.
(See "The Story of the Hummingbird": http://sechangersoi.be/EN/5EN-Tales/Humminbird.htm)

So, as educators, we can't end poverty and hunger, or rebuild urban infrastructures, or invent renewable energy by sending students abroad for 4-week summer or 15-week semester programs. But we can do our part in promoting and teaching the importance and urgency of sustainable development for students who join our programs. We can, in short, focus on those aspects of the SDG's that are within our modest grasp. So, what we can do, because we are educators, is design the learning environment and shape larger student experience abroad in ways that influence student attitudes, values, knowledge acquisition, and especially behavioral patterns related to our climate and biodiversity crisis. We can do our part.

As such, resident staff can look to 5 key SDGs that help guide us in the design, delivery and assessment of our many study abroad programs. Here are five to focus on.

#4 on Quality education
#12 on Responsible consumption
#13 on Climate action
#14 on Life below water, and
#15 on Life on land

Let's look at each of these a bit more closely. And afterwards, we'll provide some examples of some of the initiatives we can take to advance these goals.

Quality Education…*Abroad*

Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Goal 4.7. By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

Goal 4.7 is perfectly adapted to the vision and values of education abroad specifically and student mobility in general. The focus on learners, education for development, promotion of peace, the cultivation of global citizenship, the celebration of cultural diversity--these are the core values of an ethically-grounded international education, whether a business education or one in the liberal arts. Such values align perfectly with the promise of international education generally and with the vision, mission, and values of ethically grounded study abroad programs specifically.

<u>Key Education Objectives and Desired Student Learning Outcomes</u>

- Education for sustainable development (Sustainability Literacy)
- Fostering workforce skills related to SDG priorities
- Contributing to corporate/community capacity and resilience
- Green job creation and youth employment

Responsible Consumption…*Abroad*

Goal 12. Ensure sustainable consumption and production patterns

Goal 12.8. By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

Here is the 2nd of the UN's SDG's that education abroad programs can focus on. Understanding consumption and production patterns is at the very heart of basic education. Ensuring that such patterns align with the aggregate biocapacity of the natural world is both common sense and good educational practice for today's students.

<u>Key Education Objectives and Desired Student Learning Outcomes</u>

- Sustainable input sourcing and procurement processes
- Resource efficiency of goods and services
- Raw materials recycling
- Product and services transparency and labeling

Climate Action…*Abroad*

Goal 13. Take urgent action to combat climate change and its impacts

Goal 13.3. Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Here is the 3rd UN SDG that education abroad programs can pursue. Along with habitat destruction and the corresponding decline of biodiversity, climate change constitutes perhaps the greatest challenge Man and society have ever faced. Addressing this challenge will require a new mix of knowledge, skills, attitudes, behavioral patterns, and competencies that education abroad programs should be particularly well-adapted to providing to tomorrow's leaders: e.g., sustainable corporate-community partnerships, new green-business models, long-term supply-and-demand accounting, resource management, technological innovation, entrepreneurship, and many others.

<u>Key Education Objectives and Desired Student Learning Outcomes</u>

- Fossil fuel energy use and efficiency
- Alternative energy innovation
- Capital and infrastructure risk management
- CO2 and related GHG accounting and mitigation

Life Below Water…*Abroad*

Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Goal 14.1. By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution**.** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Here is the 4th of the UN SDG's that education abroad programs can address. Total estimated marine and ocean assets are valued at $24 trillion and together represent the world's 7th largest economy. As both a source of protein (16% of all world animal protein consumed by humans) and a wide variety of basic and strategic industrial minerals, the oceans constitute a valuable capital resource that tomorrow's leaders will need to learn to exploit far more sustainably than under current practice. Viewing river, wetland, lake, ocean, and river habitats as essential capital investments in which essential future returns depend, constitutes one of the most basic principles of economics and business management. All students abroad should develop basic sustainability literacy in such areas.

<u>Key Education Objectives and Desired Student Learning Outcomes</u>

- Redefine our relationship with the natural world
- Waste, water, spills management
- Sustainable sourcing of marine products and services
- Preservation of marine habitats/economy
- Marine environment investments

Life on Land…*Abroad*

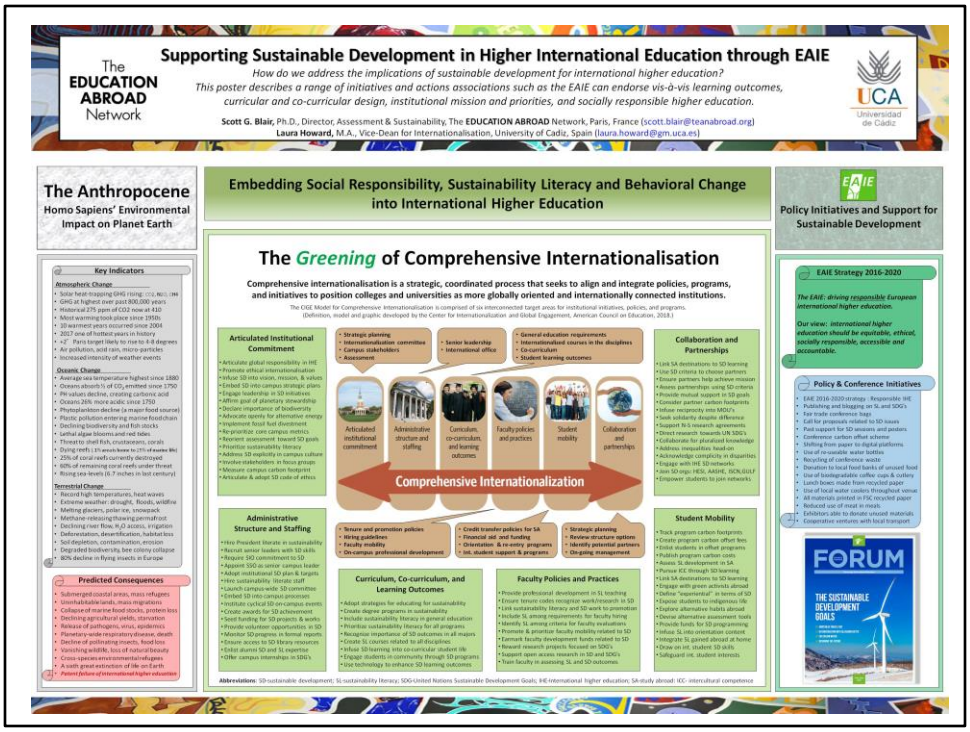
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Goal 15.5. Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

Here is the 5th of the UN SDG's education abroad programs can strive to help achieve. The impulse towards short-term extraction and immediate personal gain over long-term sustainable management and saving of limited resources is the root cause of most of society's environmental problems. Traditional economic theory and practice have, to date, largely ignored the problems of externalities and the tragedy of the commons. Ethically grounded study abroad programs with foresight intelligence and a focus on sustainable economic practice have a historic opportunity to posit and advance new and innovative educational principles and practices that align with the imperative of sustainable development.

<u>Key Education Objectives and Desired Student Learning Outcomes</u>

- Forest, land and soil management
- Environmental economics
- Synthetic and alternative product design and development
- Genetic diversity of farming
- Animal management



So, what would an integrated model of green international higher education look like? This poster (presented at the 2018 conference of the European Association of International Education) provides a model of comprehensive green internationalization. The old model of comprehensive internationalization (in brown) was developed at the Center of Internationalization and Global Engagement at the American Council on Education. The model contains six pillars, each with a list of bullet-points highlighting the nature and attributes of each pillar. In the surrounding green boxes, corresponding to each of the six CIGE pillars, you will find ideas and suggestions on how to pursue the goal of internationalization (as articulated in each pillar) through the lens of sustainable development and sustainability literacy.

The many ways we can begin "greening" each of the pillars suggest that the traditional strategy of internationalization, however necessary, is no longer sufficient. The end-game of the desired outcome of internationalization--a more globally oriented and internationally connected student learning experience--is only meaningful if such orientation and connectivity are explicitly linked to the reality, urgency, and stakes of global and biosphere sustainability. There is no sense in internationalizing if, in the end, the process fails to singularly engage students in the single most important societal and global challenge in history--learning to live as a species among others within the constraints of the carrying capacity of planet earth. If educators and educational institutions fail in this endeavor, it will be the most spectacular and costly failure in human history. And there is no reason at all to think that education abroad programs don't have their own specific role to play in helping avoid the coming collapse.

Networks For Programs Abroad to Join?

- **CANiE – Climate Action Network for International Educators**
- **AASAP/UK Sustainability Framework (Plus EUASA and founding members)**
- **Copernicus Alliance**
  - European Network on Higher Education for Sustainable Development
  - Focus: networking, policy and representation, professional development, outreach
  - 19 European members but Incredibly, not a single member from France (€1000 annual fees)
- **Campus Responsables**
  - Network of 27 French/Belgian business schools committed to sustainable development.
  - 1st French-speaking network of universities, "*grandes écoles*" and engineering and business schools
  - Members include: EM Lyon, EM Normandie, EM Grenoble, HEC, IUT Nancy, Institute Pasteur, Kedge BS
- **UE4SD**
  - University Educators for Sustainable Development
  - 3-year project of 52 partners from 33 European states seeking to re-orient the HE curriculum to address SDGs
  - Many resources and publications available online
- **GUPES**
  - Global Universities Partnerships on Environment for Sustainability
  - Flagship program of UN Environment's Environmental Education and Training Unit
  - 800 universities and regional partners contributed to resources and best practices
- **HESI**
  - Higher Education Sustainability Initiative : UN partnership created in 2012 to pursue SDGs through Higher Ed
  - Provides HE institutions with an interface between higher education, science, and policy making.
- **Sulitest**
  - The Sustainability Literacy Test
  - Developed at Kedge Business School

Here are several associations, groups, initiatives and resources education abroad programs in France could turn to for additional support and examples of good practice.

Join prominent educational associations focused on sustainability:

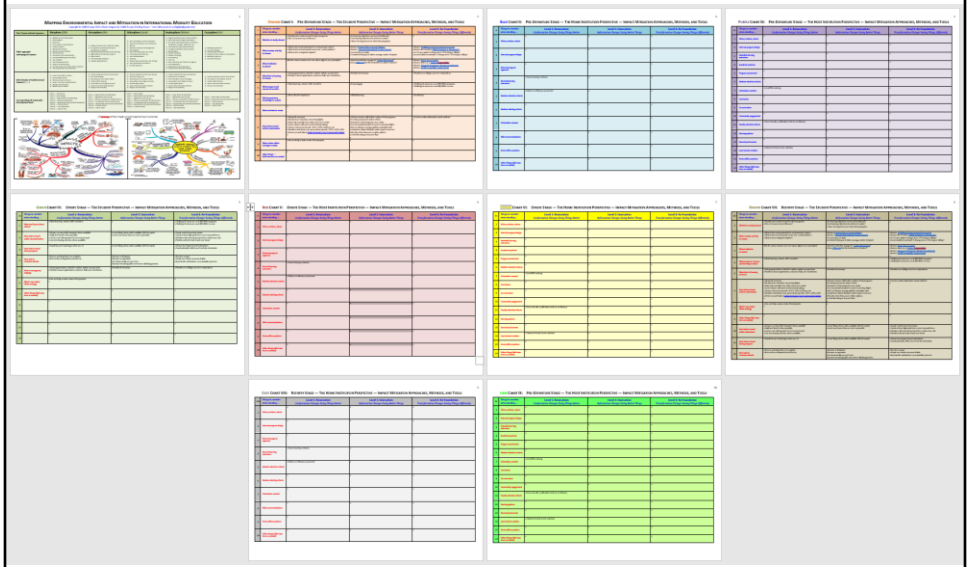
University Leaders for a Sustainable Future

ISCN - International Sustainable Campus Network

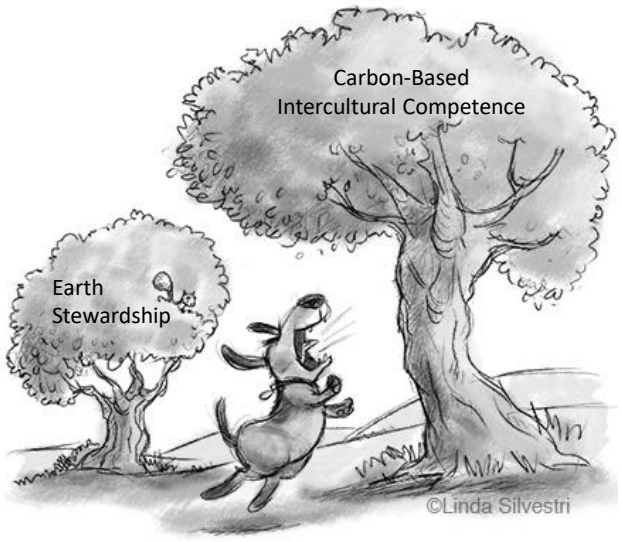
The Environmental Association for Universities & Colleges

Mapping Environmental Impact and Mitigation in International Mobility Education

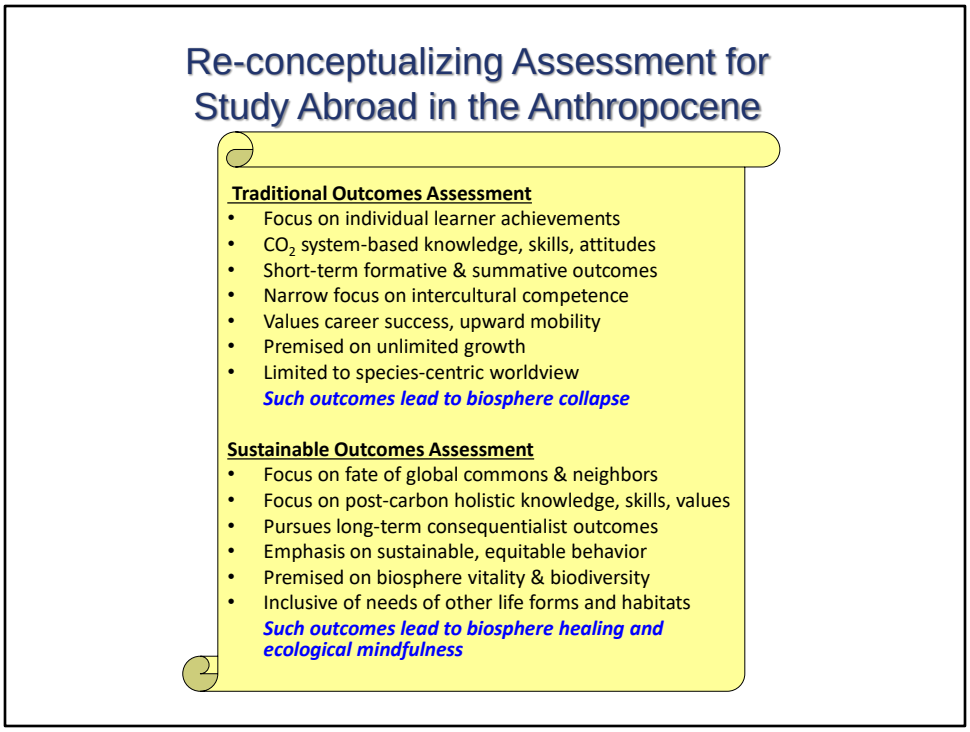
CANiE



Assessing Up The Wrong Tree

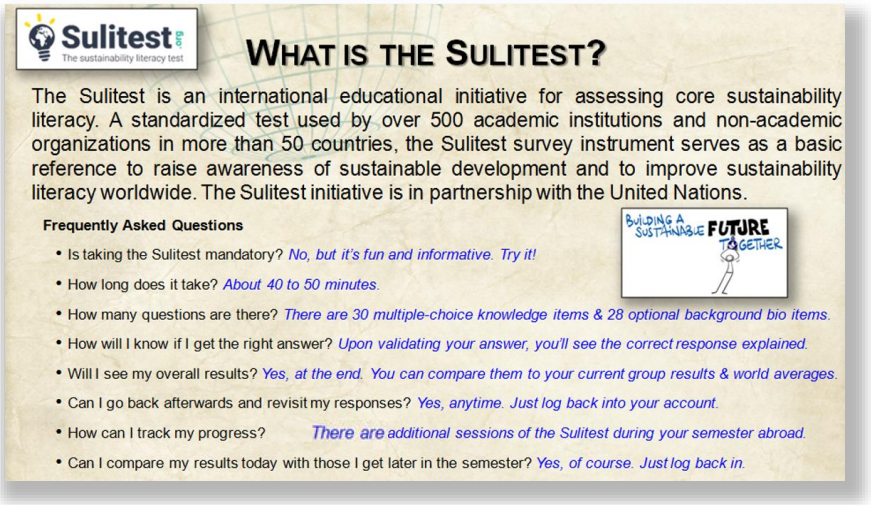


We could also ask ourselves if we are assessing learning that really matters in a closed-system environment of limited resources such as planet Earth. Is the business-as-usual model of learning for personal upward and affluent mobility still an ethical pursuit in our world today? Are we assessing up the wrong tree? Shouldn't 21st century learning focus more on effecting significant behavioral change in the producer and consumer habits of Homo sapiens (such as US students abroad) than on creating evermore upwardly mobile and affluent consumers?



Here are what some suggested principles of good practice in "sustainable assessment" might look like.

Assessing Sustainability Literacy Intentionally
The Sulitest

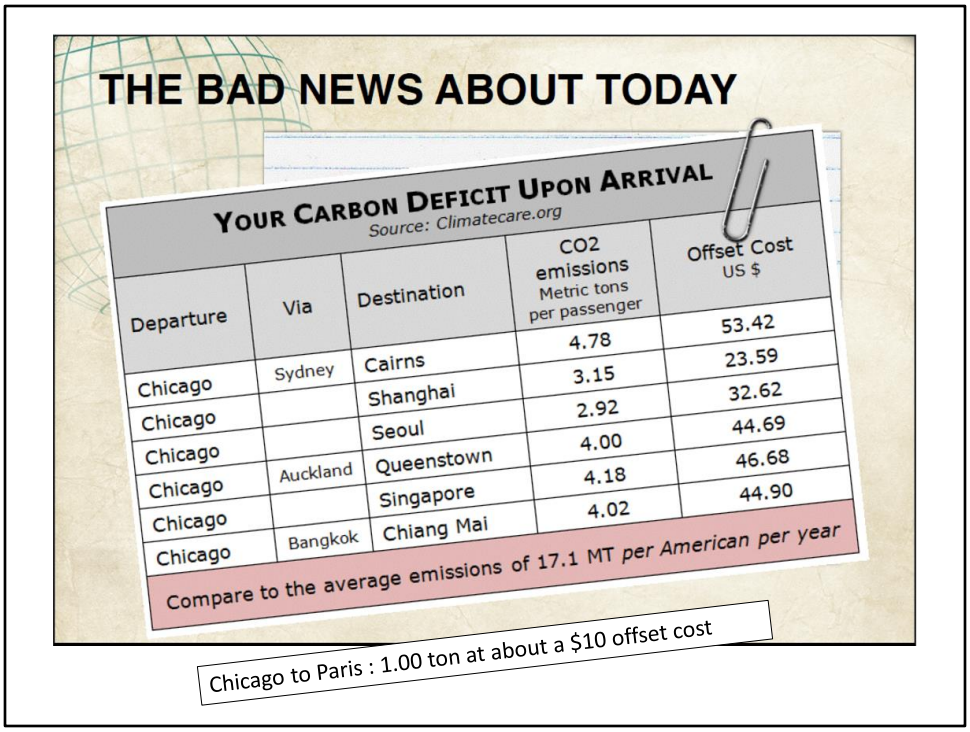


Or we can use altogether new and innovative assessment tools such as the Sulitest that have a specific focus on the SDG's, on sustainability literacy, and on sustainable development.


The EDUCATION ABROAD Network
Encompassing Silenced Voices: Intercultural Competence for a Sustainable Planet
Cultural humility, perspective-taking, cultural adaptation, reciprocity, mindfulness, empathy, solidarity across difference and diversity, effective and appropriate behavior—these are the concepts that inspire and guide us as intercultural educators. Yet how committed are we to upholding such values vis-à-vis other culturally distinct life forms and vibrant living habitats? This poster argues that no creature on Earth would ever consider Homo sapiens interculturally competent, so why do we!
Scott G. Blair, Ph.D., Director, Assessment & Sustainability, The EDUCATION ABROAD Network, Paris, France (scott.blair@teanabroad.org)
BIOSPHERE
HYDROSPHERE
LITHOSPHERE
CRYOSPHERE
ATMOSPHERE
ENDANGERED SPECIES
ENDANGERED SPECIES
GMO
The human limits of celebrating diversity
HEY! I'M INTERCULTURALLY COMPETENT!
Ethnicity
Culture
Nationality
Religion
Class
Sexual Orientation
Gender
Age
Political Party
Accent
Language Group
Race
Homo Sapiens...
I am curious and seek out cultural interactions.
I show global self-awareness.
I understand and take into account cultural diversity.
I move in and out of different cultural worldviews.
I view the world from other culture's point of view.
I experience other cultures as equally complex but different constructions of reality.
I value a variety of cultures.
I make an empathetic shift in my bicultural interactions.
I seek understanding across cultural boundaries.
I facilitate constructive contact between different cultures.
I understand global systems.
I take personal and social responsibility.
I respect other cultures.
I show empathy towards other cultural beings.
I am open-minded and responsible.
I have an ethno-relative viewpoint.
I am culturally self-aware.
I show effective & appropriate behavior.
I have deep cultural knowledge.
I show empathy for the perspective of others.
I show openness and withheld judgment.
I can adapt to other environments.
VALUE Global Learning Rubric
Through Global Learning students should:
Intercultural Development Continuum
VALUE

We can also start to view student mobility through the lens of sustainable development. We do this by beginning to count carbon and by including estimated individual carbon costs in our programs so that students shopping for education abroad program have additional (and more meaningful) criteria beyond dollar cost to help decide which program is right for them.

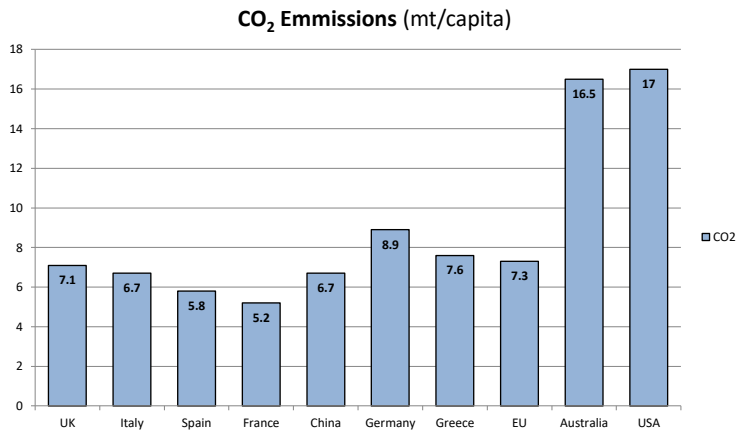
For example, we could show this orientation slide to outbound students to highlight their carbon footprint compared to that of their chosen host destination. With this information in hand, students can begin to reflect on what local consumer practice and behaviors might account for a higher or lower footprint at the host location. Then, students can begin to learn and adopt local behaviors that are less carbon-intensive and more environmentally sustainable. They can bring such new behaviors back home with them and integrate it into home campus culture. In this way, they gain intercultural insight and deepen civic engagement, two important components of global citizenship.



At TEAN, we then show this slide to better make the point of the carbon costs of student mobility. The data shows the carbon emissions of traveling to the host destination, and then compares this to one's average annual emissions. With extrapolation, it also suggests the additional carbon debt one owes. Carbon offset costs are also included to help students appreciate the many strategies they might choose to employ (purchasing an offset, planting trees, supporting carbon sequestration projects, etc.) to fulfill their social responsibility of tracking and minimizing their individual carbon footprint.

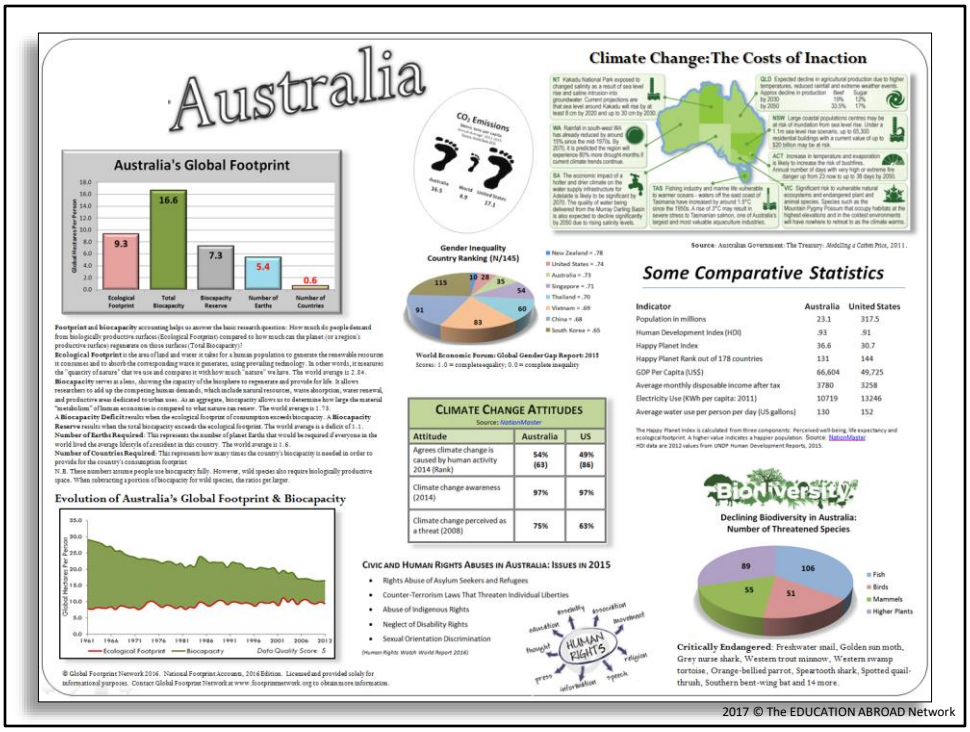
Of course, if our business model includes facilitating student mobility, then both our incoming international students as well as our outbound students will certainly add to our own institutional carbon footprint. What should such institutions do about this? What social responsibility does an educational structure have in terms of counting, offsetting, and minimizing its own carbon footprint? Shouldn't "environmental impact" become the new standard by which we rank colleges and universities?

LESSONS FROM ABROAD



World Bank, 2016. Carbon Dioxide Information Analysis Center, Environmental Sciences Division, Oak Ridge National Laboratory, Tennessee, United States.

A chart such as this supports all sorts of interesting discussions among study abroad students on the different cultural practices around Europe that lead to different levels of CO2 emissions. This provides a framework for both intercultural learning and comparative analysis--again key competencies ostensibly valued in education abroad.



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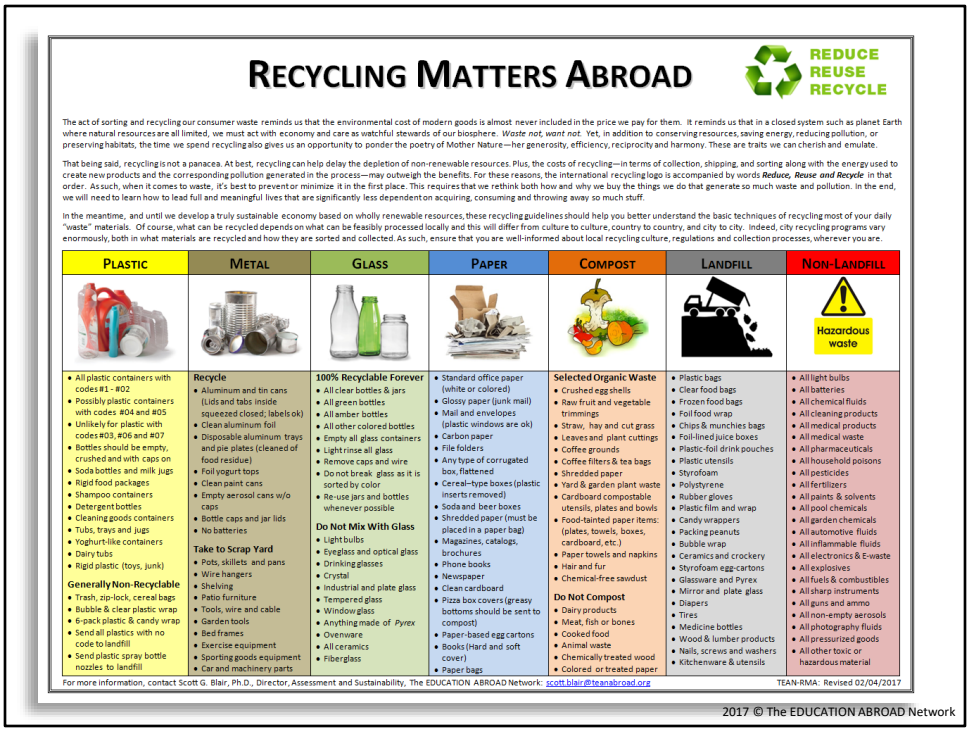
Student housing postings #1. When we lodge incoming international students on campus or in the community, why not provide them with pertinent information about the environmental profile of their host country? Creating and posting information such as this in student housing, in our administrative offices, or as online resources conveys to students our values, concerns and priorities as international educators. As such, we can display information to describe one way of redefining quality education for the 21st century, i.e., articulating a new set of learning outcomes and creating learning environments and activities focused on the core issues of sustainable development.

<u>New learning outcome examples:</u>

- Comparative carbon footprints and biocapacity by destination (see Carbon Footprint Network website)
- Declining biodiversity at host locations
- Gender equality issues and rankings by destination
- Local issues in climate change policies and actions
- Human rights situation at each location



RECYCLING MATTERS ABROAD

REDUCE
REUSE
RECYCLE

The act of sorting and recycling our consumer waste reminds us that the environmental cost of modern goods is almost never included in the price we pay for them. It reminds us that in a closed system such as planet Earth where natural resources are all limited, we must act with economy and care as watchful stewards of our biosphere. *Waste not, want not.* Yet, in addition to conserving resources, saving energy, reducing pollution, or preserving habitats, the time we spend recycling also gives us an opportunity to ponder the poetry of Mother Nature—her generosity, efficiency, reciprocity and harmony. These are traits we can cherish and emulate.

That being said, recycling is not a panacea. At best, recycling can help delay the depletion of non-renewable resources. Plus, the costs of recycling—in terms of collection, shipping, and sorting along with the energy used to create new products and the corresponding pollution generated in the process—may outweigh the benefits. For these reasons, the international recycling logo is accompanied by words ***Reduce, Reuse and Recycle*** in that order. As such, when it comes to waste, it's best to prevent or minimize it in the first place. This requires that we rethink both how and why we buy the things we do that generate so much waste and pollution. In the end, we will need to learn how to lead full and meaningful lives that are significantly less dependent on acquiring, consuming and throwing away so much stuff.

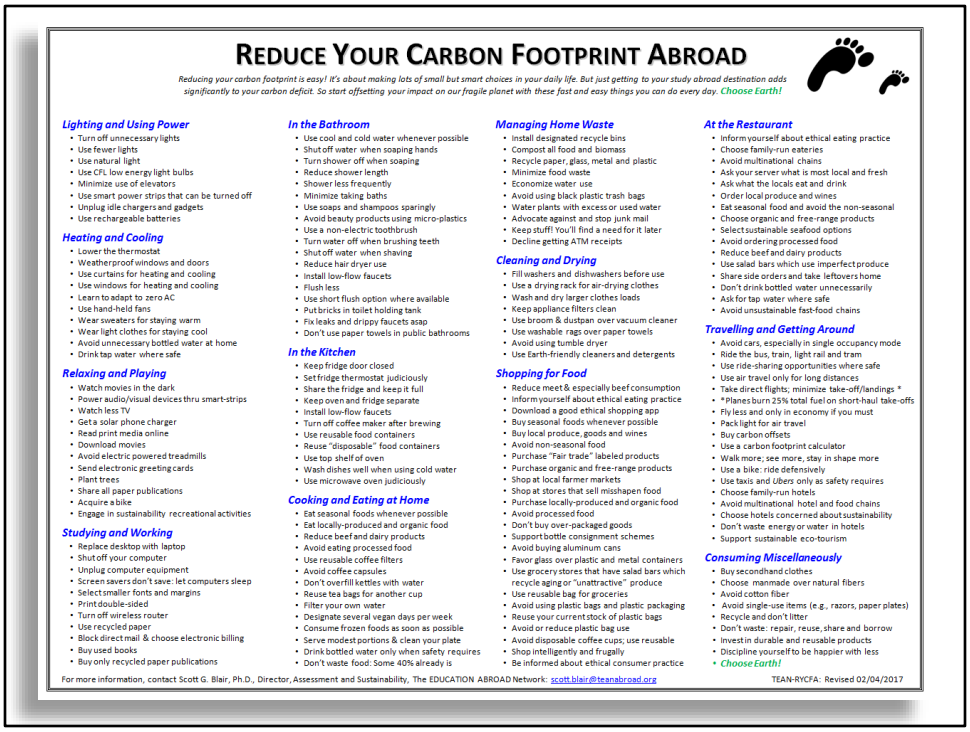
In the meantime, and until we develop a truly sustainable economy based on wholly renewable resources, these recycling guidelines should help you better understand the basic techniques of recycling most of your daily "waste" materials. Of course, what can be recycled depends on what can be feasibly processed locally and this will differ from culture to culture, country to country, and city to city. Indeed, city recycling programs vary enormously, both in what materials are recycled and how they are sorted and collected. As such, ensure that you are well-informed about local recycling culture, regulations and collection processes, wherever you are.

PLASTIC	METAL	GLASS	PAPER	COMPOST	LANDFILL	NON-LANDFILL
• All plastic containers with codes #1 - #02 • Possibly plastic containers with codes #04 and #05 • Unlikely for plastic with codes #03, #06 and #07 • Bottles should be empty, crushed and with caps on • Soda bottles and milk jugs • Rigid food packages • Shampoo containers • Detergent bottles • Cleaning goods containers • Tubs, trays and jugs • Yoghurt-like containers • Dairy tubs • Rigid plastic (toys, junk) **Generally Non-Recyclable** • Trash, zip-lock, cereal bags • Bubble & clear plastic wrap • 6-pack plastic & candy wrap • Send all plastics with no code to landfill • Send plastic spray bottle nozzles to landfill	**Recycle** • Aluminum and tin cans (Lids and tabs inside squeezed closed; labels ok) • Clean aluminum foil • Disposable aluminum trays and pie plates (cleaned of food residue) • Foil yogurt tops • Clean paint cans • Empty aerosol cans w/o caps • Bottle caps and jar lids • No batteries **Take to Scrap Yard** • Pots, skillets and pans • Wire hangers • Shelving • Patio furniture • Tools, wire and cable • Garden tools • Bed frames • Exercise equipment • Sporting goods equipment • Car and machinery parts	**100% Recyclable Forever** • All clear bottles & jars • All green bottles • All amber bottles • All other colored bottles • Empty all glass containers • Light rinse all glass • Remove caps and wire • Do not break glass as it is sorted by color • Re-use jars and bottles whenever possible **Do Not Mix With Glass** • Light bulbs • Eyeglass and optical glass • Drinking glasses • Crystal • Industrial and plate glass • Tempered glass • Window glass • Anything made of *Pyrex* • Ovenware • All ceramics • Fiberglass	• Standard office paper (white or colored) • Glossy paper (junk mail) • Mail and envelopes (plastic windows are ok) • Carbon paper • File folders • Any type of corrugated box, flattened • Cereal–type boxes (plastic inserts removed) • Soda and beer boxes • Shredded paper (must be placed in a paper bag) • Magazines, catalogs, brochures • Phone books • Newspaper • Clean cardboard • Pizza box covers (greasy bottoms should be sent to compost) • Paper-based egg cartons • Books (Hard and soft cover) • Paper bags	**Selected Organic Waste** • Crushed egg shells • Raw fruit and vegetable trimmings • Straw, hay and cut grass • Leaves and plant cuttings • Coffee grounds • Coffee filters & tea bags • Shredded paper • Yard & garden plant waste • Cardboard compostable utensils, plates and bowls • Food-tainted paper items: (plates, towels, boxes, cardboard, etc.) • Paper towels and napkins • Hair and fur • Chemical-free sawdust **Do Not Compost** • Dairy products • Meat, fish or bones • Cooked food • Animal waste • Chemically treated wood • Colored or treated paper	• Plastic bags • Clear food bags • Frozen food bags • Foil food wrap • Chips & munchies bags • Foil-lined juice boxes • Plastic-foil drink pouches • Plastic utensils • Styrofoam • Polystyrene • Rubber gloves • Plastic film and wrap • Candy wrappers • Packing peanuts • Bubble wrap • Ceramics and crockery • Styrofoam egg-cartons • Glassware and Pyrex • Mirror and plate glass • Diapers • Tires • Medicine bottles • Wood & lumber products • Nails, screws and washers • Kitchenware & utensils	• All light bulbs • All batteries • All chemical fluids • All cleaning products • All medical products • All medical waste • All pharmaceuticals • All household poisons • All pesticides • All fertilizers • All paints & solvents • All pool chemicals • All garden chemicals • All automotive fluids • All inflammable fluids • All electronics & E-waste • All explosives • All fuels & combustibles • All sharp instruments • All guns and ammo • All non-empty aerosols • All photography fluids • All pressurized goods • All other toxic or hazardous material

Hazardous waste

For more information, contact Scott G. Blair, Ph.D., Director, Assessment and Sustainability, The EDUCATION ABROAD Network: scott.blair@teanabroad.org TEAN-RMA: Revised 02/04/2017

Student housing postings #2. Here is an example of what we can post in student housing to alert students about what cross-cultural and local learning they can acquire vis-à-vis product design, packaging, aggregate municipal solid waste, recycling technology, resource use, and consumer behavior. These are all topics and issues closely related to many subjects taught in business and management programs abroad today. Forward-looking study abroad programs with a focus on sustainable development should miss no opportunity to alert students, faculty, staff, corporate partners, and the larger community that they take sustainable development seriously, both as a societal problem to address, and as an integral component of the curricular and co-curricular learning program.



REDUCE YOUR CARBON FOOTPRINT ABROAD

Reducing your carbon footprint is easy! It's about making lots of small but smart choices in your daily life. But just getting to your study abroad destination adds significantly to your carbon deficit. So start offsetting your impact on our fragile planet with these fast and easy things you can do every day. ***Choose Earth!***

Lighting and Using Power
- Turn off unnecessary lights
- Use fewer lights
- Use natural light
- Use CFL low energy light bulbs
- Minimize use of elevators
- Use smart power strips that can be turned off
- Unplug idle chargers and gadgets
- Use rechargeable batteries

Heating and Cooling
- Lower the thermostat
- Weatherproof windows and doors
- Use curtains for heating and cooling
- Use windows for heating and cooling
- Learn to adapt to zero AC
- Use hand-held fans
- Wear sweaters for staying warm
- Wear light clothes for staying cool
- Avoid unnecessary bottled water at home
- Drink tap water where safe

Relaxing and Playing
- Watch movies in the dark
- Power audio/visual devices thru smart-strips
- Watch less TV
- Get a solar phone charger
- Read print media online
- Download movies
- Avoid electric powered treadmills
- Send electronic greeting cards
- Plant trees
- Share all paper publications
- Acquire a bike
- Engage in sustainability recreational activities

Studying and Working
- Replace desktop with laptop
- Shut off your computer
- Unplug computer equipment
- Screen savers don't save: let computers sleep
- Select smaller fonts and margins
- Print double-sided
- Turn off wireless router
- Use recycled paper
- Block direct mail & choose electronic billing
- Buy used books
- Buy only recycled paper publications

In the Bathroom
- Use cool and cold water whenever possible
- Shut off water when soaping hands
- Turn shower off when soaping
- Reduce shower length
- Shower less frequently
- Minimize taking baths
- Use soaps and shampoos sparingly
- Avoid beauty products using micro-plastics
- Use a non-electric toothbrush
- Turn water off when brushing teeth
- Shut off water when shaving
- Reduce hair dryer use
- Install low-flow faucets
- Flush less
- Use short flush option where available
- Put bricks in toilet holding tank
- Fix leaks and drippy faucets asap
- Don't use paper towels in public bathrooms

In the Kitchen
- Keep fridge door closed
- Set fridge thermostat judiciously
- Share the fridge and keep it full
- Keep oven and fridge separate
- Install low-flow faucets
- Turn off coffee maker after brewing
- Use reusable food containers
- Reuse "disposable" food containers
- Use top shelf of oven
- Wash dishes well when using cold water
- Use microwave oven judiciously

Cooking and Eating at Home
- Eat seasonal foods whenever possible
- Eat locally-produced and organic food
- Reduce beef and dairy products
- Avoid eating processed food
- Use reusable coffee filters
- Avoid coffee capsules
- Don't overfill kettles with water
- Reuse tea bags for another cup
- Filter your own water
- Designate several vegan days per week
- Consume frozen foods as soon as possible
- Serve modest portions & clean your plate
- Drink bottled water only when safety requires
- Don't waste food: Some 40% already is

Managing Home Waste
- Install designated recycle bins
- Compost all food and biomass
- Recycle paper, glass, metal and plastic
- Minimize food waste
- Economize water use
- Avoid using black plastic trash bags
- Water plants with excess or used water
- Advocate against and stop junk mail
- Keep stuff! You'll find a need for it later
- Decline getting ATM receipts

Cleaning and Drying
- Fill washers and dishwashers before use
- Use a drying rack for air-drying clothes
- Wash and dry larger clothes loads
- Keep appliance filters clean
- Use broom & dustpan over vacuum cleaner
- Use washable rags over paper towels
- Avoid using tumble dryer
- Use Earth-friendly cleaners and detergents

Shopping for Food
- Reduce meat & especially beef consumption
- Inform yourself about ethical eating practice
- Download a good ethical shopping app
- Buy seasonal foods whenever possible
- Buy local produce, goods and wines
- Avoid non-seasonal food
- Purchase "Fair trade" labeled products
- Purchase organic and free-range products
- Shop at local farmer markets
- Shop at stores that sell misshapen food
- Purchase locally-produced and organic food
- Avoid processed food
- Don't buy over-packaged goods
- Support bottle consignment schemes
- Avoid buying aluminum cans
- Favor glass over plastic and metal containers
- Use grocery stores that have salad bars which recycle aging or "unattractive" produce
- Use reusable bag for groceries
- Avoid using plastic bags and plastic packaging
- Reuse your current stock of plastic bags
- Avoid or reduce plastic bag use
- Avoid disposable coffee cups; use reusable
- Shop intelligently and frugally
- Be informed about ethical consumer practice

At the Restaurant
- Inform yourself about ethical eating practice
- Choose family-run eateries
- Avoid multinational chains
- Ask your server what is most local and fresh
- Ask what the locals eat and drink
- Order local produce and wines
- Eat seasonal food and avoid the non-seasonal
- Choose organic and free-range products
- Select sustainable seafood options
- Avoid ordering processed food
- Reduce beef and dairy products
- Use salad bars which use imperfect produce
- Share side orders and take leftovers home
- Don't drink bottled water unnecessarily
- Ask for tap water where safe
- Avoid unsustainable fast-food chains

Travelling and Getting Around
- Avoid cars, especially in single occupancy mode
- Ride the bus, train, light rail and tram
- Use ride-sharing opportunities where safe
- Use air travel only for long distances
- Take direct flights; minimize take-off/landings *
- *Planes burn 25% total fuel on short-haul take-offs
- Fly less and only in economy if you must
- Pack light for air travel
- Buy carbon offsets
- Use a carbon footprint calculator
- Walk more; see more, stay in shape more
- Use a bike: ride defensively
- Use taxis and *Ubers* only as safety requires
- Choose family-run hotels
- Avoid multinational hotel and food chains
- Choose hotels concerned about sustainability
- Don't waste energy or water in hotels
- Support sustainable eco-tourism

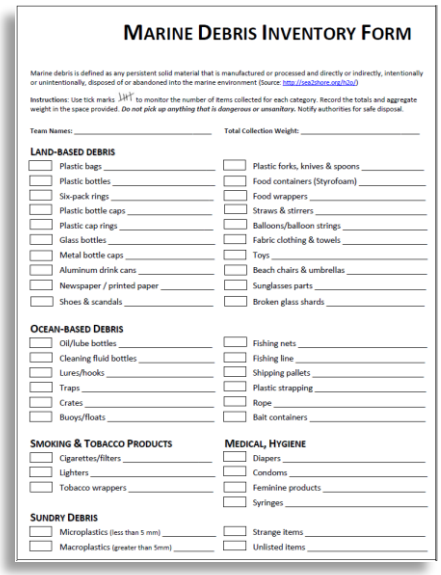
Consuming Miscellaneously
- Buy secondhand clothes
- Choose manmade over natural fibers
- Avoid cotton fiber
- Avoid single-use items (e.g., razors, paper plates)
- Recycle and don't litter
- Don't waste: repair, reuse, share and borrow
- Invest in durable and reusable products
- Discipline yourself to be happier with less
- ***Choose Earth!***

For more information, contact Scott G. Blair, Ph.D., Director, Assessment and Sustainability, The EDUCATION ABROAD Network: scott.blair@teanabroad.org

TEAN-RYCFA: Revised 02/04/2017

Student housing poster #3. Because of the problem of carbon emissions of international student mobility like education abroad, here is another example of what we might post in student housing to raise awareness, to help mitigate climate change, and to help alter the consumer behavior of our students in line with the science of climate change.

Beach Cleanup & Conservation



MARINE DEBRIS INVENTORY FORM

Marine debris is defined as any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment (Source: http://sea2shore.org/h2o/)

Instructions: Use tick marks (𝍸) to monitor the number of items collected for each category. Record the totals and aggregate weight in the space provided. ***Do not pick up anything that is dangerous or unsanitary.*** Notify authorities for safe disposal.

Team Names: _____ **Total Collection Weight:** _____

LAND-BASED DEBRIS

- ☐ Plastic bags _____
- ☐ Plastic bottles _____
- ☐ Six-pack rings _____
- ☐ Plastic bottle caps _____
- ☐ Plastic cap rings _____
- ☐ Glass bottles _____
- ☐ Metal bottle caps _____
- ☐ Aluminum drink cans _____
- ☐ Newspaper / printed paper _____
- ☐ Shoes & scandals _____
- ☐ Plastic forks, knives & spoons _____
- ☐ Food containers (Styrofoam) _____
- ☐ Food wrappers _____
- ☐ Straws & stirrers _____
- ☐ Balloons/balloon strings _____
- ☐ Fabric clothing & towels _____
- ☐ Toys _____
- ☐ Beach chairs & umbrellas _____
- ☐ Sunglasses parts _____
- ☐ Broken glass shards _____

OCEAN-BASED DEBRIS

- ☐ Oil/lube bottles _____
- ☐ Cleaning fluid bottles _____
- ☐ Lures/hooks _____
- ☐ Traps _____
- ☐ Crates _____
- ☐ Buoys/floats _____
- ☐ Fishing nets _____
- ☐ Fishing line _____
- ☐ Shipping pallets _____
- ☐ Plastic strapping _____
- ☐ Rope _____
- ☐ Bait containers _____

SMOKING & TOBACCO PRODUCTS

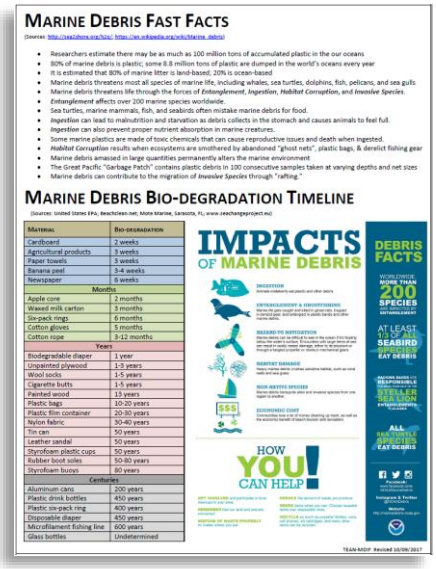
- ☐ Cigarettes/filters _____
- ☐ Lighters _____
- ☐ Tobacco wrappers _____

MEDICAL, HYGIENE

- ☐ Diapers _____
- ☐ Condoms _____
- ☐ Feminine products _____
- ☐ Syringes _____

SUNDRY DEBRIS

- ☐ Microplastics (less than 5 mm) _____
- ☐ Macroplastics (greater than 5mm) _____
- ☐ Strange Items _____
- ☐ Unlisted Items _____



MARINE DEBRIS FAST FACTS

(Sources: http://sea2shore.org/h2o/ https://en.wikipedia.org/wiki/Marine_debris)

- Researchers estimate there may be as much as 100 million tons of accumulated plastic in the our oceans
- 80% of marine debris is plastic; some 8.8 million tons of plastic are dumped in the world's oceans every year
- It is estimated that 80% of marine litter is land-based; 20% is ocean-based
- Marine debris threatens most all species of marine life, including whales, sea turtles, dolphins, fish, pelicans, and sea gulls
- Marine debris threatens life through the forces of ***Entanglement***, ***Ingestion***, ***Habitat Corruption***, and ***Invasive Species***.
- ***Entanglement*** affects over 200 marine species worldwide.
- Sea turtles, marine mammals, fish, and seabirds often mistake marine debris for food.
- ***Ingestion*** can lead to malnutrition and starvation as debris collects in the stomach and causes animals to feel full.
- ***Ingestion*** can also prevent proper nutrient absorption in marine creatures.
- Some marine plastics are made of toxic chemicals that can cause reproductive issues and death when ingested.
- ***Habitat Corruption*** results when ecosystems are smothered by abandoned "ghost nets", plastic bags, & derelict fishing gear
- Marine debris amassed in large quantities permanently alters the marine environment
- The Great Pacific "Garbage Patch" contains plastic debris in 100 consecutive samples taken at varying depths and net sizes
- Marine debris can contribute to the migration of ***Invasive Species*** through "rafting."

MARINE DEBRIS BIO-DEGRADATION TIMELINE

(Sources: United States EPA; Beachclean.net; Mote Marine, Sarasota, FL; www.seachangeproject.eu)

Material	Bio-degradation
Cardboard	2 weeks
Agricultural products	3 weeks
Paper towels	3 weeks
Banana peel	3-4 weeks
Newspaper	6 weeks
Months	
Apple core	2 months
Waxed milk carton	3 months
Six-pack rings	6 months
Cotton gloves	5 months
Cotton rope	3-12 months
Years	
Biodegradable diaper	1 year
Unpainted plywood	1-3 years
Wool socks	1-5 years
Cigarette butts	1-5 years
Painted wood	13 years
Plastic bags	10-20 years
Plastic film container	20-30 years
Nylon fabric	30-40 years
Tin can	50 years
Leather sandal	50 years
Styrofoam plastic cups	50 years
Rubber boot soles	50-80 years
Styrofoam buoys	80 years
Centuries	
Aluminum cans	200 years
Plastic drink bottles	450 years
Plastic six-pack ring	400 years
Disposable diaper	450 years
Microfilament fishing line	600 years
Glass bottles	Undetermined

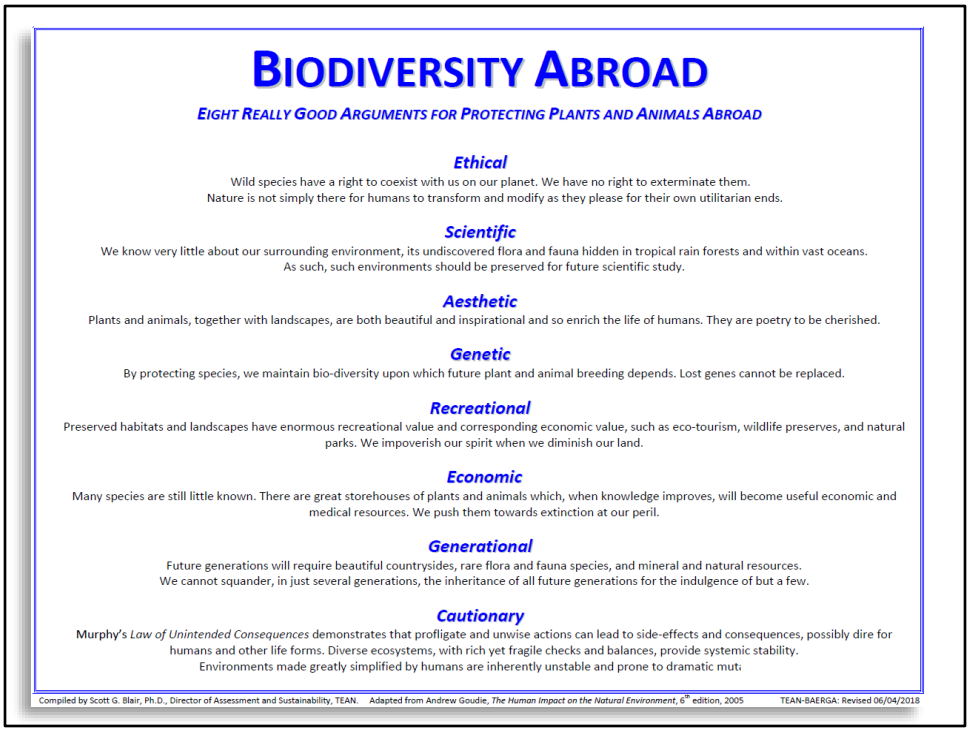
When engaging our students in community projects and volunteer activities, we can also intentionally decide to organize such events around issues of sustainable development, such as beach or park clean-ups or habitat preservation activities. By providing supporting documentation and pedagogical support, we frame such activities in ways that encourage students to meditate upon their own (unsustainable?) consumer behaviors, to reflect upon the global impact of very small individual actions (such as littering), and to commit to civic and political action around finding solutions to such problems. Co-curricular events such as these create impactful cross-cultural learning opportunities, hands-on experience in community outreach, and lessons in building sustainability literacy.

ECO-CHALLENGES INITIATIVE

Overview of Eco-Challenges

Challenge	Focus	Basic Task	Difficulty	Immediate Objective	End Game	Desired Behavioural Change:
1. Carbon Footprint	Carbon	Count your carbon	Moderate	Reduce carbon footprint	Climate change	Stewardship
2. Carbon Neutral	Carbon	Offset your carbon	Hard	Reduce carbon footprint	Climate change	Stewardship
3. Luggage	Carbon	Travel lightly	Hard	Reduce carbon footprint	Climate change	Frugality
4. A/C	Energy	Save electricity	Moderate	Reduce carbon footprint	Climate change	Frugality
5. Electrical	Energy	Save electricity	Easy	Reduce carbon footprint	Climate change	Frugality
6. Water	Water	Save water	Easy	Reduce carbon footprint	Climate change	Frugality
7. Plastics	Pollution	Refuse disposable plastics	Moderate	Waste reduction	Resource sustainability	Stewardship
8. Recycling	Pollution	Recycle your waste	Easy	Waste reduction	Resource sustainability	Stewardship
9. Litter	Pollution	Pick up litter	Easy	Waste reduction	Resource sustainability	Stewardship
10. Cupanion	Pollution	Use a reusable cup	Easy	Waste reduction	Resource sustainability	Frugality
11. Urban Mobility	Pollution	Use low-carbon transport	Moderate	Reduce carbon footprint	Climate change	Stewardship
12. 100-Mile Food	Food	Eat locally	Hard	Reduce carbon footprint	Climate change	Efficiency
13. Organic Food	Food	Eat wholesomely	Easy	Habitat preservation	Resource sustainability	Stewardship
14. Sustainable Food	Food	Eat sustainably	Moderate	Habitat preservation	Resource sustainability	Stewardship
15. Ethical Food	Food	Eat ethically	Hard	Ethical behaviour	Animal Rights	Caring
16. Endangered Species	Nature	Protect animals/plants	Moderate	Habitat preservation	Biodiversity	Caring
17. Invasive Species	Nature	Protect animals/plants	Moderate	Habitat preservation	Biodiversity	Caring
18. Nature	Nature	Value nature	Easy	Habitat preservation	Biodiversity	Humility
19. Environmental Justice	Nature	Protect nature	Easy	Habitat preservation	Biodiversity	Stewardship
20. World Heritage	Nature	Value nature	Moderate	Habitat preservation	Biodiversity	Stewardship

- Boycott Challenge
- Eco-Label Challenge
- Greenwashing Challenge
- Other ideas?



BIODIVERSITY ABROAD

EIGHT REALLY GOOD ARGUMENTS FOR PROTECTING PLANTS AND ANIMALS ABROAD

Ethical

Wild species have a right to coexist with us on our planet. We have no right to exterminate them.
Nature is not simply there for humans to transform and modify as they please for their own utilitarian ends.

Scientific

We know very little about our surrounding environment, its undiscovered flora and fauna hidden in tropical rain forests and within vast oceans.
As such, such environments should be preserved for future scientific study.

Aesthetic

Plants and animals, together with landscapes, are both beautiful and inspirational and so enrich the life of humans. They are poetry to be cherished.

Genetic

By protecting species, we maintain bio-diversity upon which future plant and animal breeding depends. Lost genes cannot be replaced.

Recreational

Preserved habitats and landscapes have enormous recreational value and corresponding economic value, such as eco-tourism, wildlife preserves, and natural parks. We impoverish our spirit when we diminish our land.

Economic

Many species are still little known. There are great storehouses of plants and animals which, when knowledge improves, will become useful economic and medical resources. We push them towards extinction at our peril.

Generational

Future generations will require beautiful countrysides, rare flora and fauna species, and mineral and natural resources.
We cannot squander, in just several generations, the inheritance of all future generations for the indulgence of but a few.

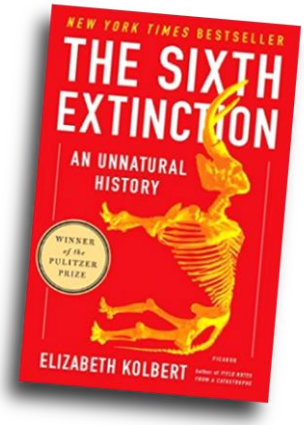
Cautionary

Murphy's *Law of Unintended Consequences* demonstrates that profligate and unwise actions can lead to side-effects and consequences, possibly dire for humans and other life forms. Diverse ecosystems, with rich yet fragile checks and balances, provide systemic stability.
Environments made greatly simplified by humans are inherently unstable and prone to dramatic mut

Compiled by Scott G. Blair, Ph.D., Director of Assessment and Sustainability, TEAN. Adapted from Andrew Goudie, *The Human Impact on the Natural Environment*, 6th edition, 2005 TEAN-BAERGA: Revised 06/04/2018

Student housing poster #4. Here is another example of what we might post in student housing to raise the alarm about declining biodiversity. We might note, in passing, that several of these arguments are closely related to concerns in economics, product development, and resource management--all important subjects taught in the growing number of study abroad business programs.

Tackling Troubling Trends



BIRD LIFE ABROAD

Study abroad affords you the opportunity to learn about the different ways culturally distinct peoples think about and address issues in biodiversity and animal welfare. One such important issue is bird conservation because healthy bird populations correlate to a healthy planet. To this end, use the links in this document to learn more about the birdlife within your host study abroad country. You will find useful information there about the many human-generated threats to birdlife, including climate change, habitat destruction, soil and water pollution, introduction of invasive alien species, hunting-collecting, and many others. Also, use this document to learn where to travel in your host country or region to see rare or endangered birds endemic to your host destination. Learn about the issues and become an advocate for public policies that are bird-friendly and that protect natural habitats. While abroad, take up the challenge of doing your part in protecting birds from extinction and in learning about what other peoples and cultures are doing to advance animal rights and habitat conservation. ***Choose Earth!***

BirdLife International is a global partnership of conservation organizations (NGOs) that strives to conserve birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources. The Country Profiles display *BirdLife*'s data for a range of countries and territories, including dependent territories and special administrative regions and a range of other sub-national administrative and political entities. Select a country and explore the data. *BirdLife*'s Data zone presents a wealth of scientific data on the world's bird species and the sites critical to their conservation. The Country Profiles also contain relevant policy information, detailed maps and access to additional resources and publications.

BirdLife INTERNATIONAL

Vision: The *BirdLife Partnership* wishes to see a world where nature and people live in greater harmony, more equitably & sustainably.
Mission: The *BirdLife Partnership* strives to conserve birds, their habitats and global biodiversity, working with people towards sustainability in the use of natural resources.
Commitment:

- To prevent extinction in the wild
- To maintain and where possible improve the conservation status of all bird species
- To conserve the sites and habitats important for birds and other biodiversity
- To sustain the vital ecological systems that underpin human livelihoods, and enrich the quality of people's lives
- In the process, *BirdLife* will empower people and contribute to the alleviation of poverty, and strive to ensure sustainability in the use of natural resources

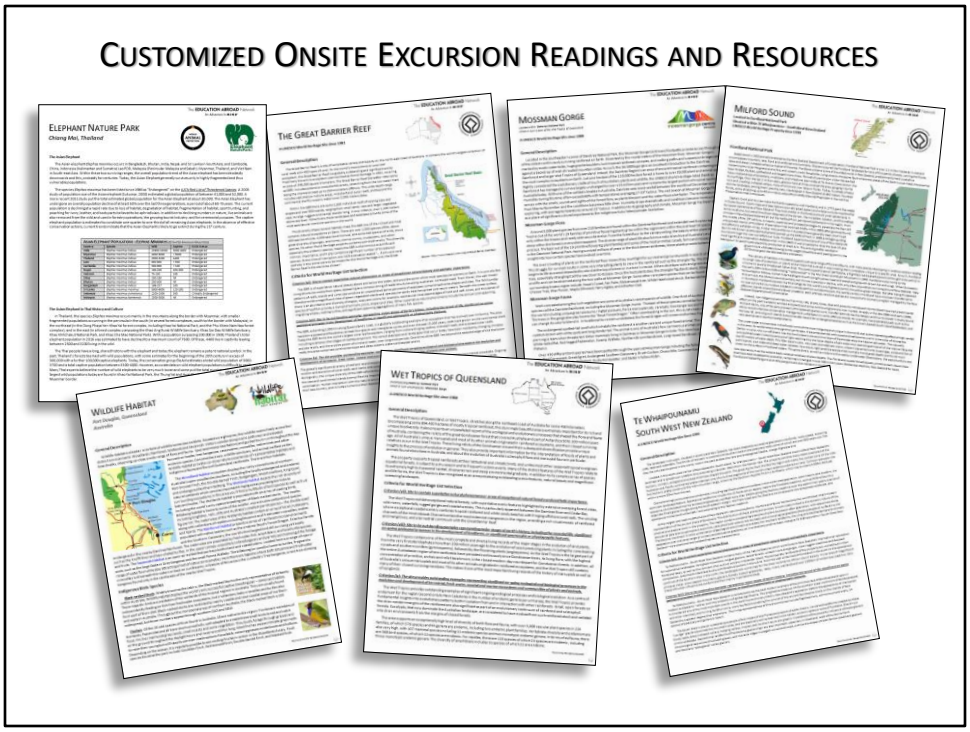
Country Profiles — Bird Health & Habitat Status

Country	Total Bird Species	Threatened Species	Total % Threatened	Country Endemics	Important Bird Areas	Endemic Bird Areas	Resources	In-Country Partner
Australia	722	52	8%	353	310	15	Read More!	BirdLife Australia
New Zealand	231	69	30%	89	144	6	Read More!	Forest & Bird
Thailand	931	54	6%	2	62	6	Read More!	Bird Conservation Society of Thailand
China	1287	93	8%	67	512	14	Read More!	BirdLife China Program-IBA
South Korea	362	32	9%	0	40	1	Read More!	None
Singapore	364	17	5%	0	3	0	Read More!	Nature Society Singapore
Cambodia	510	28	6%	2	40	4	Read More!	BirdLife Cambodia
Vietnam	833	47	6%	10	62	7	Read More!	BirdLife Vietnam
United States	858	79	10%	70	644	10	Read More!	National Audubon Society

TEAN-BLA : Revised 05/06/2018

For those who don't follow the current crisis of declining biodiversity, we should alert students to threats to plants and animals at our respective program locations. This document is about bird populations far away. But here in France, we could just as well address the same problem of declining bird populations generally, along with the attendant problem of declining bee and insect populations. The health and welfare of our society--linked as it is to food chains dependent on sustainable rural and agricultural habits--are issues closely connected to ethical practice and innovation.

Whether we appreciate it or not, and whether we take the time or not to learn about the natural world around us, the welfare of Home sapiens is intimately interconnected to the health and vitality of Earth's diverse flora and fauna. We are *of* nature, not outside it and we imperil our own welfare when we degrade the habitats that other life forms need to sustain their own lives.



We can also strive to keep students informed of the environmental reality they find at their host destinations by organizing local excursions and extra-curricular activities. These custom-made documents, drawn from a variety of sources and reports, highlight both the beauty that remains and the threats that are growing to key habitats in the Asia-Pacific region. We could just as well create similar readings focused on important habitats here in Europe or France that student should be encouraged to explore.

Yes, students should go to the Louvre and wander around Montmartre. But if students only do this, and then fail to explore and reflect upon how other peoples and cultures abroad are addressing (or not addressing!) the greatest cultural, political, social, and economic issue of our times (climate change and collapsing biodiversity), then a very great learning moment and opportunity have been missed. Worse, “business-as-usual” study abroad just becomes part of the problem.

PROVIDING EXTERNAL RESOURCES & REPORTS

We can also collect and disseminate to students full and detailed published reports related to the places and local environmental practices--both positively inspiring and horribly appalling--that students encounter while abroad.

education rebellion

Speaking Eco-Truth to Institutional Power

However concerned international educators may be *personally* to the collapse of nature and the climate crisis upon us, few of us are compelled by professional standards of conduct to change our business-as-usual pedagogical or managerial behaviors. So if we want higher educational institutions to take the climate emergency seriously, we'll need to challenge behavioral bad habits head-on. This poster highlights the Academy's change-resistant power centers and provides peaceful tactics for altering them.

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GATEWAY EUSA

U.S. Institutional Accreditation : Ecologically Deaf and Blind
- Silence of US Regional Standards on sustainability
- Absence of concept within formal standards on ethics and integrity
- Failure to end accreditation of anti-science colleges and universities
- Irrelevance of sustainability compliance to re-accreditation
- **Action:** Pressure CHEA and USDE to demand deep and urgent reform

Curriculum & Pedagogy: Allies of Capitalist and Anti-Nature Outcomes
- Teaching agenda premised on producing upwardly mobile consumers
- Absence of indigenous knowledge and critical ecopedagogy
- Lack of general education and disciplinary requirements in earth sciences
- Failure to teach the nature and limitations of closed-system dynamics
- **Action:** March for making SL a core competency in all disciplines and degrees

Faculty Ethos and Careerism: Skewed and Self-Centered
- Rewarded only when working within existing disciplinary domains
- Absence of SL within tenure, rank, and promotion decisions
- Failure of professional associations to address the climate crisis
- Lack of training in transversal & interdisciplinary teaching & learning
- **Action:** Campaign for eco-friendly professional codes of conduct

National Education Ministries : Myopically Managerial & Small-Minded
- Primary focus on workforce creation for competitive national CO_2 economy
- View world through Smithian prism of short-term productivism & extraction
- Impose no curricular standards or testing in sustainability literacy
- Absence of sustainability literacy in public administrative education
- **Action:** Vote for reform in curricular and pedagogical practice and outcomes

Education Rebellion for Sustainability Literacy (SL)

Business *(as usual)* Education: Green-Washed and Irresponsible
- Premised on pursuing unlimited production & consumption
- Lamentably poor record of teaching corporate social responsibility
- Mired in corporate finance and extractive partnerships
- Built through eco-harmful alliances with city Chambers of Commerce
- Spectacularly weak AASCB standards on sustainability
- **Action:** Boycott MBA's and schools that ignore the climate crisis

MBA MASTER OF BUSINESS ADMINISTRATION

The truth, folks, is that we need to start teaching the UN SDG's as if our life depended upon it... ...because it does! Start rebelling now!

Assessing Up the Wrong Tree: Learning Outcomes for a Dying Planet
- Assessment focused on CO_2 system-based knowledge, skills, and attitudes that degrade the biosphere
- Valued educational outcomes limited to consumerist career success, materialism, and upward mobility
- Short-term formative and summative outcomes ignore the long-term climate crisis and collapse of biodiversity
- Assessment of learning outcomes limited to the interests and worldview of a single species: *Homo sapiens*
- **Action:** Boycott and replace CO_2 based assessment tools with eco-friendly ones: e.g., *The Sailfest*

SUSTAINABLE DEVELOPMENT GOALS

The Education Rebellion Manifesto:

The professional standards, regulatory requirements, operational behaviors, financial interests, and pedagogical mindsets governing today's institutions of higher education developed long before the climate crisis began forcing educators to rethink what sort of education students might actually need for life on 21st century Earth. As such, centers of educational power remain largely committed to the fundamentally consumerist and anthropocentric ethos of traditional educational discourses and outcomes. As a systemic part of that process, *Homo sapiens* has degraded Earth's five natural systems of air (atmosphere), water (hydrosphere), land, (lithosphere), ice (cryosphere), and life (biosphere). As a result, massive and widespread extinctions continue unabated. But applying peaceful pressure for change within outdated and myopic educational centers of power provides our best hope for averting global ecological collapse. Enlightened international educators are the vanguard of the rebellion.

Our Demands:

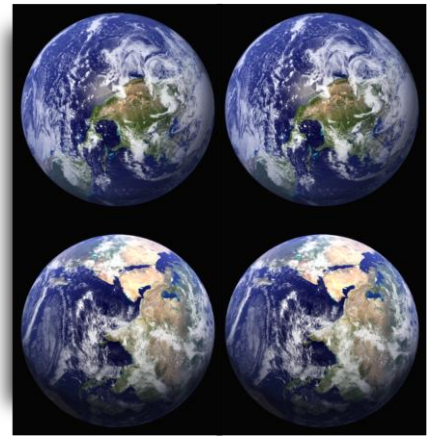
1. Teach Eco-Truth Every Day. 2. Educate for Sustainable Development. 3. Challenge Educational Power-Centers that Hinder Earth Sustainability. 4. Empower Sustainability Literate International Educators

WE CONSUME UNSUSTAINABLY

Whereas the United States constitutes only 5% of Earth's population, Americans consume 20% of world energy, 15% of world meat, and produce 40% of world waste.

Were all humans were to live as Americans, or most Western Europeans, we would need five additional Earths to supply them.

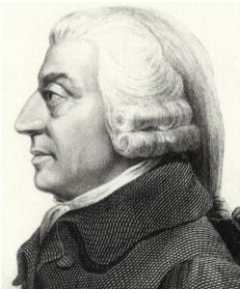
http://www.scientificamerican.com/article/american-consumption-habits/



Consumer behavior in the United States presents little hope that America will lead the struggle for global sustainable development. Many in America believe global warming is a hoax, despite a mountain of scientific evidence to the contrary. And while European consumer practice is somewhat less profligate, the planet can no better sustain a global human population of 9.7 billion (2050 estimate) living at average European standards. Even at current populations levels and living standards, Homo sapiens, as we saw above, is living beyond the capacity of Earth to regenerate basic life-giving and life-sustaining resources. There are inescapable limits to growth in a closed-system economy such as planet Earth. And if we continue to willingly ignore these limits, the consequences for us and the hard-fought civilized societies we have built will be very nasty indeed.

A Stark Reality

As such, the traditional outcome of international education — ever more graduates living productive, interculturally rich and upwardly mobile consumerist lives in a fossil-fuelled and globally capitalized economy — is now no longer possible or desirable *as practiced* since the publication in 1776 of Adam Smith's *Wealth of Nations*.



So, given all this, how should the agenda of international education and education abroad respond to these deeply troubling realities? What curricular/co-curricular and host community programming, along with a corresponding articulation of student learning outcomes, would prepare students in their respective majors for finding sustainable behavioural responses to today's environmental dangers and global social injustices highlighted here?

The teaching of the old economic order in line with Adam Smith's theory of limitless growth can not be the answer. The business-as-usual model of upward mobility and conspicuous consumption--of which student mobility in Europe is clearly a part--must be reconsidered in light of the exigencies of sustainable development. Gandhi was right when he pointed out that "The world has enough for everyone's need, but not enough for everyone's greed." Do we really teach this truth in international education, whether abroad or at home? Are there really other truths we teach that we think are more important than that of sustaining planet Earth's ability to provide us with a congenial place to live, isolated and alone as we are in the hostility of space? Shouldn't the agenda of education abroad--indeed of education in general--address this new reality, and begin changing in ways that henceforth encourages students to reflect upon and seek out possible solutions to this global predicament? In the end, the reality of the looming crisis before us really does change everything.

SOMETHING TO *IMAGINE!*

An new agenda of learning outcomes within international education is required, one articulated around immediate and committed action by all on environmental sustainability, biodiversity and global inequality. Moreover, this outcome must be achieved across the disciplines and this within a decade.

It is the responsibility of educational institutions--whatever the type, whatever the level, whatever the location--to face, to accept, and to address the reality of our current global environmental crisis. Building sustainability literacy into the ethos and outcomes of international education--especially throughout education abroad--constitutes both sound ethical practice and educational accountability at its best.

“It is not necessary to change. Survival is optional.”

Edward Deming, Management Guru

Merci Beaucoup!

Contactez-moi ici:

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