

International Day of Education 2024



Graduate Women International (GWI)

Discussion Network Publication

2024 International Day of Education GWI Discussion Network Topic: Green Education



To mark **International Day of Education**, celebrated annually on 24 January, GWI held an open member's Discussions Network dialogue within its global community of graduate women during 22 December 2023 to 19 January 2024. The initiative **fostered exchange of ideas and insights among GWI members** about green education, an approach to education that focuses on teaching and learning practices that aim to develop environmental awareness, sustainability standards, and ecological literacy.

Below, you will find a compilation of the valuable contributions posted by GWI Board of Officers, members, and interns. The collective wisdom and passionate youth visions underscore the importance of education in empowering women worldwide while aiming for sustainable societies and education.

The discussion aimed to provide more information about about the integration of sustainable practices, teachings, or any related initiatives within educational systems in GWI national federation and association countries and cultures.

Given how crucial this is for the future, the question was posed:

• What further proactive, action-based solutions do you envision in tackling interconnected global challenges including climate change in education?

Considering the disproportionate negative impact of the climate crisis on women, especially in the context of agriculture as the primary employment sector for women in low and middle-income countries, they already face increased vulnerabilities and burdens:

- How can educational programs actively ensure that green education efforts. contribute to supporting and empowering women rather than placing additional burdens on them?
- Are these adverse effects already observable in your country? Alternatively, is there evidence of positive effects?

Patrice Wellesley-Cole GWI, President

In England the Government has set a target for all education settings to have a sustainability lead and climate action plan in place by 2025.

The seven areas outlined in the National Climate change action plan include, Disaster risk management, Food and Nutrition security, Water, the blue economy and Forestry, Wildlife and Tourism, Health Sanitation and Human Settlements and Manufacturing, Energy and Transport.

This year, 2024, schools and colleges will be able to access a new support service to help develop these plans.

The National curriculum requires students to learn about the potential effects of human generated greenhouse gases and the Earth's climate.

The Government has set an ambitious target. By 2050 the Climate Change Act commits the government to reduce greenhouse gas emissions by at least 100% of 1990 levels (i.e. net zero by 2050)



see page 19-20

Rachel Marsh (Scotland) highlighted the vulnerability of climate refugees and green education in the online education syllabus. How would a quality, affordable green education be rolled out in remote areas and how would that be accessible? Tech is not always green friendly. This is one of the challenges of Sustainable Development Goal (SDG) 4 - quality, inclusive education. see page 13-14

Shirley Gillett GWI, VP Education

New Zealand's natural and social environment is unique and as New Zealanders, we value our environment for recreational, aesthetic, economic, cultural, and spiritual reasons.

A key factor in achieving this environmental vision is education. A major outcome of the 1992 Earth Summit in Rio de Janeiro was to advocate for environmental education to be available to people of all ages. Education, training, and public awareness were identified as key factors in responding to global concern about the state of the environment.

Environmental education is a lifelong process. The focus is on planning and implementing environmental education programmes as part of the New Zealand Curriculum in primary and secondary schools. The New Zealand Curriculum details the essential learning areas, skills, and attitudes and values that will enable students to develop the qualities needed to successfully create, contribute to, and participate in a sustainable future. Together with consistent policies and practices, the framework provides a means of meeting the aims of environmental education.

Aim 1:

awareness and sensitivity to the environment and related issues

Aim 2:

knowledge and understanding of the environment and the impact of people on it

The Government's educational goals require programmes that enable students to respect for the diverse ethnic and cultural heritage of New Zealand people, with acknowledgment of the special place of Māori and of New Zealand's role in the Pacific and as a member of the international community of nations. The aims of Environmental education are for students to develop:

Aim 5: a sense of responsibility through participation and action as individuals, or members of groups, whānau, or iwi, in addressing environmental issues

Aim 3: attitudes and values that reflect feelings of concern for the environment

Aim 4: skills involved in identifying, investigating, and problem solving associated with environmental issues

Shaila Rao Mistry GWI, VP Advocacy

I recently witnessed the launch of the space shuttle at the Kennedy Space Center, Orlando, Florida. I also viewed in awe the Atlantis Spaceship, 1985-2011 which made 33 manned missions into space. It was inspiring to see the women astronauts who pioneered in the space program. I am proud also to state that my Aerospace company innovates for aerospace and our innovations have been part of the program.

Our recently launched GWI Advocacy Influencers Global and Advocacy Without Borders AIG-AWB aims to address these and other critical issues. Please watch for details on how to join AIG.



This is the context of the early pioneering of green education and opportunity for women. In the US Green education refers to an educational approach focusing on environmental sustainability, conservation, and addressing climate change. The aim is to equip students with knowledge, skills, and values necessary to address environmental challenges. Green education contributes to facilitating better education for women and girls as follows.

Green education provides women and girls with the knowledge and tools to actively participate in sustainability efforts, particularly in science and artificial intelligence. By understanding environmental issues and solutions and contributing to leadership and decision-making roles in addressing climate change.

Green education opens up diverse career opportunities in fields such as renewable energy, environmental science, conservation, and sustainable development. By recognizing the gender bias and barriers, we can provide women and girls opportunity to education and careers in these fields and contribute a more sustainable future.

Green education addresses embedded gender bias and inequalities by promoting equal access to education, resources, and opportunities and challenge gender stereotypes bias in artificial intelligence, exposing male dominated coding- 93 % coding by males.

Green education emphasizes the intersectionality of economics, education, and environment to health both physical and mental well-being. Promoting sustainable practices, improves access to clean air, water, and food, benefiting women and girls.

"Ultimately, green education is crucial for building a sustainable and resilient future for all. Climate change affects every aspect of our lives, including food security, water availability, health, and economic stability. By integrating green education into the curriculum, educational institutions and in the workplace, can equip students with the knowledge and skills needed to understand and address climate change with ownership and responsibility.

As GWI leadership and members we can encourage green education at all schools and education institutions, universities and workplaces in the private and government sector. Our role is to influence the decision makers. Let us encourage sustainable practices to promote development of innovative solutions to mitigate the impacts of climate change."

-Shaila Rao Mistry



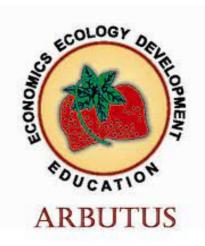
Meera Bondre GWI, VP Membership

The United Nations, for the last fifty years, has been consistently bringing to the notice of the world, the dire need of making development projects and practices more and more sustainable. The 1972 Conference on Human Environment was the first world event to do so, followed by another important Conference popularly called the Earth Summit in Rio in 1992 (the UNCED). This Conference brought out the first action plan in the form of Agenda 21, for different stakeholders, to systematically think globally and act locally. And then, 10 years later in the Johannesburg Conference of Rio+10 the crucial importance of Education for Sustainable Development was given its due place. Today, what we call Green Education, in essence, is Education for Sustainable Development made more elaborative.

The Ministry of Environment and Forests, Government of India launched the Environment Education, Awareness and Training Scheme in 1983-84. In 2003, as per the orders of the Supreme Court of India, the subject of Environmental Studies was introduced as a compulsory subject not only in schools, but also at the college level in all streams. Today there are many schools which can be called green Schools in India.

But here I take this opportunity to share with our Discussion group members what I have been doing for the past so many years in the area of Green Education.

Meera's own NGO Arbutus, has been actively working in Green Education since 1976. It is my conviction that the greening of education should not just be an add-on but should always be an integral part of the educational process. Equally importantly it should not be one way traffic - the teachers teaching and the children listing- but should be a process of learning and exploring together.



The main thrust of the NGO Arbutus is on Education, Culture, Research, Training and Networking for Sustainable Development. Registered as a non-profit public charitable trust, Arbutus is listed on page 8 in the Directory of NGOs in Environment, published by the Government of India in 1984.

Additionally, it should be an enjoyable process with a stress on hands-on learning. Then alone Green Education will be a part of the personality of the students when they grow up into socially aware and environmentally responsible citizens of the world. Incidentally, for us in India the sacred Mantra Vasudhaiva Kutumbakam meaning the whole Earth is my home- my family, and it is my duty to take care of it.

Arbutus works with school children, graduate and post-graduate students, parents, teachers, lecturers, teacher-trainers, management trainees, budding corporators, traders, shopkeepers, hoteliers etc.

In order to supplement and complement formal education, it organizes special orientation and participatory programmes like group discussions, workshops, actual hands-on-projects, essay, elocution and drawing competitions, visits to environment sensitive areas in and around Pune. Round-Tables are organised from time to time, which offer a forum for exchange of ideas and collective action, and handbills are produced to disseminate correct scientific information in simple language. Production of educational support material in the form of booklets, work-books, worksheets, plays and games is yet another activity Arbutus is engaged in. I myself have designed several games and creative activities to explain difficult ecological concepts.

Really, as a result of all these efforts, if 'Education' and 'Green Education' stop being two independent words, but become completely synonymous with each other in the near future, Arbutus will consider its contribution successful in its own way.

- Meera Bondre

Sudha Srivastava GWI, Treasurer &

Young Member Network, President

Creating an environment from an early age where we are able to connect to nature is essential for self-enforcement in protecting and valuing nature. Education is the key!

Climate change is the heart of education in the UK. There are multiple policies and projects running across the country and efforts by the Department Education (DfE) to integrate climate education at all levels pre-school, primary, secondary, sixth form, colleges and universities. Multiple ways encourage learning through competitions and celebrations for example National Education Nature Park and Climate Leaders Award.

From 2022, to assess the impact of action, the government introduced an annual climate literacy survey to benchmark progress in improving the climate knowledge of school leavers.

Children should be exposed to sustainable food choices, recycling, adaptation projects or weather and energy monitoring. One of the successful programmes to explore opportunities to increase access to outdoor learning is DfE's – Holiday Activities and Food (HAF) programme. Children participate in activities that improve their knowledge and awareness of affordable, healthy eating and sustainable practice – for example, through taking part in activities such as food preparation, cooking, discussing food and food sources, growing their own fruit and vegetables.

As **SDGs Ambassador**, I have been directly working with local schools, conducting workshops and helping schools to move towards green education for sustainable development. Many of them are certified Eco Schools.

Green Skills for Green Careers/Jobs:

A real progress is in reducing carbon footprint and most importantly incorporating green skills into education provision to assist students to enter jobs that improve the environment. Green education prepares for the future jobs that do not exist. Green jobs increased by 8% from 2021- 2022 compared to total UK employment which increased by 0.5%. Sustainability is not a department rather it is a fundamentally a cultural change.

There are various ways to engage in green learning:



In one my schools, we have **Eco Warriors** with specific duties: communicating eco messages to the school, litter picking, monitoring water and energy usage, promoting reusing and recycling across school, encouraging others to walk to school, promoting local shopping and growing our own food.

Picture books: engaging children in discussions about issues such as climate change, ocean pollution, poverty and gender equality through stories told in beautiful picture books.

There are weekly gardening and ecoclubs

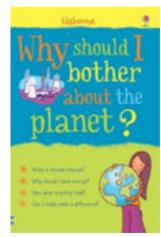
Another initiative is **Junior Journalists** – producing climate editions 'by students for students'.

Green Education and Gender Equality:

In the race to net zero, green jobs struggle with the gender gap! That lack of female talent could even hold back our progress to net zero. It has long been recognised that diversity of perspective is essential for innovation, which the energy transition will certainly need. Women have a different approach it's not better or worse than men! The way that are socialised, we are taught accommodate, to facilitate in a more equal way, to have a lot more dialogue... therefore, we have different solutions. Creating a green talent pipeline: Many companies now have gender-based targets in place but may struggle to attract qualified applicants. That has roots that begin long before the workplace. Women are underrepresented in many university courses related to engineering and science, while trade apprentices are overwhelmingly male. Fewer women enroll in environment and energy related courses! STEM Women estimates the UK will not see equal gender representation in STEM careers until 2070.

One of the powerful mediums is books from early years education. I have been working on this project for a few years.





Addressing climate and environmental change and delivering girls' education are essential to poverty reduction and building prosperous, resilient economies and peaceful, stable societies. Too often these issues are viewed in isolation, when in fact they are inextricably linked. Young women play a crucial role in achieving gender sensitive education for sustainable development.

- Sudha Srivastava

Patricia Mathabe

Lecturer

I'm grateful to Dr. Patricia Mathabe, Senior Lecturer at the Royal Agriculture college and former Fulbright scholar, referred to me by Professor Carrie de Silva, former BFWG Vice - President and Trustee of BFWG Scholarships for her documented responses below to this Discussion Network.

- Patrice Wellesley-Cole , GWI President



What further proactive, action-based solutions do you envision in tackling interconnected global challenges including climate change in education?

- Institutions of learning need to integrate climate education which is aligned to their surroundings, environment. It should be backed by action. This should happen from elementary school all the way to university.
- There should be an increase in hands on climate education projects for learners. This should form part of the curriculum.
- Educators should also be trained.
- Governments need to increase funding to invest in green infrastructure.
- Communities need to educated on issues of climate change. Women specific training need to be designed and offered by local and national governments.

How can educational programs actively ensure that green education efforts contribute to supporting and empowering women rather than placing additional burdens on them?

It is clear that without women, there would be no future generations. The direct link between sustainability and womanhood holds more impact that it does with men.

Education programs need to include:

- Family planning and birth control in both rural areas and urban cities. This is necessary because they will be able to control and limit the number of children they can have. This will have the potential to slow down the population rate and lessens the pressure on ecosystems and overuse of natural resources.
- Sexual and women rights education need to be heightened. Women need to have control of their bodies and have a voice to speak out against cultural practices where men control the size of the family.
- Women should be encouraged to study Agriculture.
- More women need to be encouraged to follow careers in Agriculture.

Are these adverse effects already observable in your country? Alternatively, is there evidence of positive effects?

The effects in the UK are not dire. The UK Foreign, Commonwealth and Development Office published a new policy paper, with the aim of bringing the relationship between girls' education and climate and environmental change. We are increasingly seeing incorporation of Climate change and its effect in the curricula at universities, colleges and schools. For years, the UK has recognized that Girls' education is a human right and a game changer for driving the reduction of poverty, build resilient economies and stable and healthy societies.



Alison Hobbs

Canadian Federation of University Women (CFUW)

There are 328 dedicated sustainability and climate-focused programs of study at 51 universities in Canada. There are a total of 70 Climate Research Centres and Institutes in Canada. Finally, 76% of Universities Canada members have dedicated sustainability strategies.

- Pat Reavy, CFL

What proactive, action-based solutions do you envision in tackling interconnected global challenges including climate change in education?

In future elections, informed young people are more likely to vote for representatives who take climate change seriously. Education at all levels is crucial to climate change adaptation and mitigation. Teachers need professional training and better resources — up-to-date information on climate science, national/provincial curricula, and a better grasp of the economics and politics of climate change. Educators need to engage their students in specific environmental action, so they feel less helpless or hopeless; action can give them a sense of empowerment. Adults of all ages also need further education and encouragement to involve themselves in local action.

Most teachers show support for climate change education that focuses on behavioural change. However, only 32% -55% of teachers feel they have the relevant knowledge and skills to do this. According to the feedback, the top barriers for integrating climate change education into classrooms are a lack of time during class, a lack of classroom resources and a lack of professional knowledge.

- Universities Canada Survey of Members on Climate Strategies, 2023



How can educational programs actively ensure that green education efforts contribute to supporting and empowering women rather than placing additional burdens on them?

Nagging and fear-mongering are counterproductive — people then feel overwhelmed and will give up trying rather than comply. It is important to take a solutions-oriented approach, giving recommendations for specific actions. Hands-on demonstrations and information about access to eco-friendly products / resources / tools are the best ways forward. Men and boys must also be engaged and kept informed. Young boys need male role models as well as motherly educators!

Climate change education is uneven from province to province, mostly found in Grade 11 and 12 elective courses. Some provinces include climate change in mandatory science or social studies courses, but it is not well integrated in various subjects or in the different grades. The focus tends to be on understanding the science, rather than on climate solutions or on taking climate actions.

- Pat Reavy, CFUW

Are these adverse effects already observable in your country? Alternatively, is there evidence of positive effects?

If not taught carefully, lessons about climate change can instill confusion and "eco-anxiety" in children. Young people are often traumatized by talk of global warming, and their parents and teachers have to deal with this. Individual action is key (e.g. by planting "tiny forests," vegetable- or pollinator-gardens on school premises). In Canada, the For Our Kids organization deliberately involves children in their actions and Fridays For Future groups in Canadian universities participate in rallies, which gives them a sense of purpose, resilience and solidarity.





Opinions about the value of green education differ across Canada. According to a recent survey Quebec (69%) and British Columbia (66%) have the highest percentage of people who see this as a high priority, while in Saskatchewan only about one-third of respondents agree that it is a high priority.

- EdCan Network

In every province, more than two thirds (2/3) of Canadian educators are women.



Rachel Marsh Graduate Women Scotland

What further proactive, action-based solutions do you envision in tackling interconnected global challenges including climate change in education?

With more people (including women) migrating due to climate change, but visa restrictions tightening around the world (including the UK), more people will use international study as a vehicle for migration. While this is in no way an issue in itself, there are entities which abuse the desperate by enticing people into human slavery in return for a student visa. As to not waste word count in this survey, here's a Guardian article on the topic. Yet, more substantial information can be found elsewhere. I worry that as climate refuges increase, this issue will only become exacerbated.



Human traffickers 'using UK universities as cover'



☐ Indian students enrolled at Greenwich University were later found working in the Welsh care

Indian students were [...] found living in squalid conditions with up to 12 people to a three-bed flat, and were working "up to 80 hours a week, sometimes double-shifting", for "way below" minimum wage. - The Guardian

How can educational programs actively ensure that green education efforts contribute to supporting and empowering women rather than placing additional burdens on them?

One of the biggest conundrums is online education. This allows educational access to those with caring responsibilities and those in areas where education is limited. However, appropriate tech is required, which in itself is a limitation. Additionally, tech is not green friendly, as server farms take greenspace and energy, and the parts and labour used to make computers is less than environmentally friendly. Adding to the issue, those who would often most benefit from online education, live in areas that are being poisoned by the production of the very equipment they need to access education.

Therefore, the question arises, how can governments provide further online access to those who need education, without further destroying their environment?

- Rachel Marsh

Ursula Bolli-Schaffner Association Suisse des Femmes Diplômées des Universités

Despite the news of neverending violence in the areas of war overshadowing any discourse on the future, the issue of the survival of our earth from the ecological point of view must be kept up.

What further proactive, action-based solutions do you envision in tackling interconnected global challenges including climate change in education?

Contents and methods of bringing it into school and education generally may vary depending on the level and place it is being discussed, underlying all efforts and theoretical exemplification, in my opinion, it is first and foremost important to develop the esteem and appreciation for all creation - not in a narrow religiously anthropocentric understanding but in secularly holistic view.

This is especially important for education in Europe and North America, where people often live far apart from nature. For areas where nature is often experienced as hostile, the discussion is of course different.

Keeping this in mind it is still necessary that students, particularly in Europe and the USA have the experience of nature, i.e. have the opportunity of experiencing the cycle of life, be it in the simple example of observing how a whole plant grows out of one seed.



There are many other possibilities (one particularly spectacular one is to watch the movie "Frankenstein") in order to see/feel/learn that "the whole is more than the sum of its parts" the goal being not less than perhaps a reconceptualization of what life means - it is not only humans and animals, it is plants, it is all of the geological world, it is humans together with all that surrounds us ("Mitwelt").

Breaking this down to contents for students of different levels is quite a challenge, but then there is plenty of didactic material to illustrate what our ecological footprint is and what this means for survival (films of glaciers melting / "how many worlds do we need with our lifestyle", etc., etc.).



The goal being not less than perhaps a reconceptualization of what life means.

For the sake of the survival of future generations of/with our world the effort is worth it!



It is also important that despite the importance of our message we do not tactlessly criticize the lifestyle of the students and their families (although of course we at least partly do so and this intentionally).

- Ursula Bolli-Schaffner

Sophia Schaaper, Intern Graduate Women International

As the new spring intern at the GWI Office in Geneva, having followed this discussion, I wanted to take the time to address the points that have been brought up so far. So here is my contribution as a means of response to the previous inputs.



On Interconnected Global Challenges: Climate Refugees Vulnerability and Exploitation (brought up by Rachel Marsh):

I want to address the point on entities exploiting climate refugees entering countries on student visas made by Rachel Marsh. Thank you so much for bringing this point up, this is the first I am hearing of it. Indeed universities should be on high alert for this phenomenon, such schemes and abuses are possible due to the vulnerability of these students. This vulnerability means heightened protective measures should be implemented, such as monitoring and check ups to ensure these students are not being targeted. Raising awareness to these issues is crucial as it opens communication channels for these students and can help prevent the exacerbation of this problem, so, again, thank you for addressing this point. I wonder if this issue is more mainstream in some other countries, and whether 'solutions' have been put forth already?

According to the Guardian article: "Despite the increased risks, it said there was limited recognition of vulnerable students, with only 7.7% of universities it examined providing specific training to staff in pastoral roles", this imperatively needs to change as increased awareness and monitoring from universities could already protect these students much more.





On Online Education (question by Rachel Marsh): How can governments provide further online access to those who need education, without further destroying their environment?

This question is very interesting, , and, as setup by her, incredibly tricky and complex. Better access to eco-friendly products, whether digital technology or not is a very prominent problem everywhere. In the context of women's education, the gender digital divide is a huge obstacle. As women hold a disproportionate amount of the caring responsibilities, they would benefit the most from online education. Yet, those in developing countries not only face restrictions due to climate vulnerabilities but also lack access to computers, internet and all other sorts of digital technologies.

With increasing genderdisaggregated analyses and the gender gap being addressed, these insights must be incorporated into governments' priorityrole setting. The and impact of NGOs such as GWI and others in their needs network to be assessed to understand to what extent they can influence the government's priorities.





On that note I would like to add onto this question: how can NGOs pressure governments to increase access of digital technologies for those who have such obstacles (climate and care burdens) to education? How can this be done while still emphasizing clean and green practices?

Teachers are role models, when they do not engage with their student's passion for saving the environment it can lead to defiance

an emphasis should be put on positive climate news to avoid 'eco-anxiety' On Teacher's Education and Young People (brought up by Alison Hobbs):

I agree with this point, I think there is even a generational gap arising more and more, making teacher education crucial! It is quite demoralizing when students are more aware and passionate about issues than their teachers. Teachers are role models, when they do not engage with their student's passion for saving the environment it can lead to defiance from these students and them undermining their own education which would be a shame! I also think in the context of this, an emphasis should be put on positive news (especially in the context of the climate to avoid this 'eco-anxiety') as that is more inspiring rather than demoralizing, and is a perspective that teachers, such an authoritative figure, should help bring to the table in these discussions.

Creating 'green' areas in school courtyards where children are enticed to plant vegetables, flowers, plants, creates a sense of responsibility from a young age to look after our environment and care for nature.

On Our relationship to Nature (brought up by Ursula Bolli-Schaffner):

I grew up in Canada and near Geneva, both places I had nature very nearby, I was a scout when I was younger and then later transitioned to simply taking a lot of walks in the forest. I think this definitely nurtured a very specific and personal relationship with nature, making me feel more connected, but especially responsible for its 'fate'. My childhood being so closely related to nature is definitely what made this passion and emphasis on nature in my life now possible.

Climate education is not just learning about the devastation of nature, nor is it simply teaching what to do to prevent further devastation or attempt to mend these damages, it is also nurturing a healthy connection with nature allowing everybody to learn to be responsible for it, to want to change the way we have treated it.

- Sophia Schaaper



Shirley Randell Australian Graduate Women Inc.

Green Education in Australia, the Green-Star-Rating tool:

"Green education" in Australia is the same concept being used worldwide to bring together formal and non-formal education, awareness raising and communication tools in areas such as environmental protection, conservation of biodiversity, and climate change. Green learning offers energy-efficient solutions that can be used as an alternative paradigm to address these areas and is characterised by low carbon footprints, low computational complexity, and logical transparency.

The Green Building Council of Australia has outlined the benefits of green schools and its report shares the practical experiences of of Education and Education Ministers Departments, principals and teachers across all states and territories in embracing a 'Green-Star-Rating' tool. In Australia, some schools have already received Green-Star ratings, and others are currently going through the process. However, GBCA is calling all governments to embrace the concept of green schools, and commit to achieving Green-Star ratings for all new schools, as well as for new buildings and refurbishments at existing schools.

At Williamstown
High School in
Victoria, the
school's green
design and
principles create a
unique learning
setting and help
students to develop
a greater
appreciation for
their environment.



Australia's first Green Star-Education Design school, Peregian Springs State School on Oueensland's Sunshine Coast. is attracting students from neighbouring schools. who visit to gain a handson lesson in sustainability.



A green school provides a daily lesson in the importance of environmental sustainability to Australia's future; the building itself can be the best learning resource of all.

The Bond University Mirvac School of Sustainable Development is one of six education facilities in Australia that pilot the Green Star-Education rating tool. A 'living laboratory' and self-guided building tour that has 13 different stations describing an environmental initiative or feature included in the design has been created to teach students, staff and the community about the environmental attributes of the facility, such as the building's solar passive design and orientation, building services, cycling amenities, water treatment systems, and energy regeneration.

Other schools around Australia are recognising the learning opportunities that green schools present for students., such as learning about renewable energy, emphasising water conservation, taking responsibility for their school's carbon footprint, growing organic vegetables, understanding biodiversity and their local ecosystems, and taking responsibility for reducing, reusing, and recycling waste.

- Shirley Randell

Marie Mihalcea, Intern Graduate Women International

What further proactive, action-based solutions do you envision in tackling interconnected global challenges including climate change in education?

A recent statistics published by UNESCO states 70% of young people cannot explain climate change. For the years to come it is crucial that governments, inter-governmental organisations, civil society and even academia support teachers and policy makers by integrating climate into the curriculum and teachers' training. It is with such knowledge and through acquiring the necessary skills that learners can gain insight into the fact that challenges we face nowadays are interconnected: climate change does and will go hand in hand with inequality and only then will younger generations be able to contribute to finding solutions in daily contexts.

I think we need to bear in mind that to address the complexity of the climate crises, green education can serve as a global project but actions will ultimately remain local and thereby different societies will contribute in different ways depending on context and culture.

- Marie Mihalcea

Sahar Gamal Independent Member, Egypt

The integration of sustainable practices, teachings, or any related initiatives within educational systems in my country or culture:

The Egyptian Ministry of Education has a strategic plan to raise the awareness of students and teachers of climate change issues, and to integrate the climate change factor and the environmental dimension in all its projects and curricula. This takes place through implementing training and awareness programs (ToT) for teachers and school managers.

This training package includes a discussion of environmental concepts and key climate issues, such as climate changes, biodiversity, and environmental sustainability. It also aims at developing the skills of teachers and managers in building group activities associated with the curricular topics they teach or supervise. The end result is to provide students with positive attitudes towards environmental issues and its protection. Students are encouraged to discover innovative ways to achieve this through means that are appropriate to their academic stages, abilities, skills, and ages, while applying them on the ground, and spreading awareness among peers, the family, and the surrounding community.

For example, there is an entire chapter in the curriculum of the third grade of primary school on the effects of environmental changes where such changes are described and compared to the natural environment. Another example is the social studies curriculum where there are many lessons that deal with pollution and the most important environmental problems facing Egypt's natural resources, such as air, soil and water pollution, the causes and consequences of its occurrence, of which climate change is one of its consequences.

Language classes, initiatives and campaigns are also utilized by the Egyptian Ministry of Education to raise awareness and help change the mindset of future generations. For example, the Arabic language curriculum for the first grade of primary school urges students to plant trees as part of the "Be Green" campaign. This project introduces the concept of a sustainable healthy environment and raises the students' awareness of how planting trees preserves the environment and helps face climate change.

- Sahar Gamal



What further proactive, action-based solutions do you envision in tackling interconnected global challenges including climate change in education?

To tackle interconnected global challenges including climate change in education, the proactive and action-based solutions should be the result of integration and comprehensiveness on different levels; nationally, regionally and internationally; and among various entities; social, governmental, non-governmental and legislative. Yet individual actions can make a difference that could extend far and beyond. To achieve that, targets should be set and they should be smart (Specific, Measurable, Achievable, Relevant and Time-Bound). The first target needs to be the globalization of climate related vocabulary and terminology. The second target should be the training of educators to integrate climate issues in their classes even if they don't have them as part of their official curricula. The third target could be partnerships with investors and non-governmental organizations to face local challenges. Believing that targets and solutions are achievable, having a positive optimistic perspective and taking the first step is a must and the only way to go.

Individual actions can make a difference that could extend far and beyond. To achieve that, targets should be set and they should be smart (Specific, Measurable, Achievable, Relevant and Time-Bound).



How can educational programs actively ensure that green education efforts contribute to supporting and empowering women rather than placing additional burdens on them?

Educational programs that address green education need to be gender-sensitive and realistic. They have to respect the cultural, economic and social variety of environments of women and girls around the globe. Green education can help in providing solutions to their everyday challenges and be a source of their economic empowerment.

Are these adverse effects already observable in your country? Alternatively, is there evidence of positive effects?

Positive effects are seen among younger generations. They tend to choose Ecofriendly products and care more about the environment. -Sahar Gamal

Elise Russo

Women Graduates - USA

Thank you, All, for your contributions to this timely topic - advancing green education. But what is "green education"? I am a science educator and curriculum developer by training. I have been in education long enough to realize that when we apply terms to movements - terms that seem so clear and well understood by all, they never are.

As examples, I'm thinking of "whole language", "balanced literacy", health education, sex education, civics (we don't even offer "civics" here in New York State but we do have a required course called "Participation in Government" - is that the same?)

From the previous discussions, I think we are mostly on the same page about "green education"; that is, teaching about the environment, how to protect it, how to combat climate change, maintaining biodiversity, all the while allowing humans to prosper in healthy, fulfilling ways. Addressing these areas will require much discussion, many guidelines to make the work manageable, and support for teachers and school administrators in order to provide evidence-based quality curricula and effective instructional practices that are inclusive. Quality education is never easy. We should look to SDG 15 for guidance to identify and then teach about ways to: protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.



Permit me, please, to add more components to "green education" - topics which I have not seen mentioned to a great extent in the discussions thus far. I suggest that along with the mountain of areas already listed, we ensure that this holistic approach includes increasing knowledge about the importance of the rights and practices of Indigenous Peoples around the globe as well as the geopolitical issues that drive governments (and big business) to the decisions they make. Decisions which may not always be in the best interests of our Earth. In 2022, during the UN Biodiversity Conference of the Parties (COP15) most countries agreed to "30x30" which was a pledge to preserve 30 percent of the land and water by 2030, to ensure continued biodiversity.

While there was a pledge to honor the sovereignty of Tribal nations and Indigenous communities, this has not always been the case. In fact, while Indigenous populations make up 5 percent of the world's people their practices, carried out over thousands of years, are protecting 80 percent of the remaining biodiversity.



In the Amazon basin, for example, preserving 30 percent of the rain forest allows for encroachment on Indigenous land which, currently, far exceeds the 30 percent outlined in the COP15 agreement. Clearly, an unintended consequence - or was it an intended consequence?



Back to "green education". In the US, most educational decisions are made at the state level, with only the broadest mandates and some funding coming from the Federal government. This leads to not only each state having the opportunity to create its own requirements and suggestions for education but, further, for each school district within that state to do the same.

Our charge, then, is to raise the awareness of educationalists locally, nationally, and internationally to ensure that we share an equitable and inclusive vision for nature conservation and, further, ensuring that these efforts are guided by science, appreciation and acknowledgement of successful past practices towards biodiversity, and not largely by business interests or questionable government practices.

Our charge then is to [...] ensure that we share an equitable and inclusive vision for nature conservation [...]

We owe it to future generations to provide our students with the knowledge to make broad-based, informed decisions to preserve the health of our planet.

- Elise Russo



Stacy Dry Lara GWI, Executive Director

I extend heartfelt gratitude to each GWI member who dedicated their time and expertise to contribute to our enlightening discussion on the International Day of Education, focusing on Green Education. Your active involvement in this GWI Discussion Network discussion represents the strength of our global network.

Your thoughtful and valuable contributions enriched our discussion, providing insights that resonate with the core values of environmental awareness, sustainability, and GWI mission of education for all.

With sincere thanks for your unwavering support and dedication the safe access of education for all women and girls.

-Stacy Dry Lara, GWI Executive Director



This discussion was created, moderated, designed, and published by the GWI office, consisting of: Stacy Dry Lara, Executive Director and, interns, Marie Mihalcea, and Sophia Schaaper.





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