Empowering the Future: Integrating Youth Activism and Service-Learning in K-12 Geography and Climate Change Education

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# **Abstract:**

 This paper investigates the potential for K-12 teachers to inspire their students to learn about world geography and climate change by studying youth activists and participating in related service-learning projects. Through analyzing a range of case studies, this paper demonstrates that by engaging students with youth activists and service-learning projects, educators can not only enhance students' understanding of these critical subjects but also empower them to become agents of change in their own communities.

# Introduction:

"You don't have to be a grown up to do something. Children are allowed to help the environment. If they don't, they won't have a future. They won't have anything to go to school for." <u>Lilly Platt</u> Age 9 The Netherlands

The accelerated pace of climate change has engendered a growing recognition of the significance of educating young people about global geography and the impact of human activities on the planet. Consequently, K-12 instructors are increasingly seeking inventive pedagogical strategies to engage students in these vital topics. A promising approach that has garnered substantial attention is the inclusion of youth activism and service-learning projects in the curriculum. By acquainting students with the remarkable accomplishments of young climate activists and encouraging participation in relevant service-learning initiatives, teachers can cultivate a profound comprehension of global geography and climate change while empowering students to function as agents of transformation within their respective communities.

Alpha youth are dedicating their time to stop human made climate change e are taking over the movement to protect the environmentThese inspiring people have all made an ironmental change before turning 30.

# North America



#### Isra Hirsi, 18, Minnesota

Isra Hirsi, a fervent advocate for climate solutions and racial justice, co-founded and leads the US Youth Climate Strike. This organization orchestrates biannual nationwide youth strikes to promote awareness of these crucial issues. Beginning her activism as a high school freshman, Hirsi encouraged peers to join an environmental club and remains dedicated to diversifying the climate justice movement by incorporating her unique perspective as a Black Muslim woman.

#### Mari Copeny: 13, Flint, Michigan

Mari Copeny, dubbed "Little Miss Flint," rose to prominence after penning a letter to President Obama regarding her city's water crisis, which subsequently led to his visit and a \$100 million relief package. Currently 13 years old, Mari perseveres in combating environmental injustice, partaking in the National Climate March and addressing national groups about the Flint water crisis. Furthermore, she has developed a reusable water filter to render unclean water potable.



#### Autumn Peltier: Canada

This Canadian advocate champions clean drinking water for First Nations communities. Hailing from Wikwemikong First Nation on Manitoulin Island, she has witnessed the struggles arising from inadequate clean water access. In 2018, she delivered a speech at the United Nations General Assembly for World Water Day, and in 2019, the Anishinabek Nation honored her efforts by appointing Peltier as their Chief Water Commissioner.

# CENTRAL & SOUTH AMERICA CARIBBEAN



#### Txai Suruí, 24, Brazil

Born among the Suruí people in Rondônia, Txai holds the distinction of being the sole Brazilian and Indigenous individual to address the UN Climate Summit Conference's official opening. As the daughter of Almir Suruí, 47, a renowned Indigenous leader combating Amazon deforestation, Txai Suruí's poignant speech drew global attention to those spearheading the battle against the climate crisis and emphasized the pressing necessity to protect the Amazon from deforestation.



#### Eyal Weintraub, 18 Buenos Aires

Eyal, an 18-year-old activist, recently coordinated a demonstration alongside fellow activist Bruno Rodriguez outside the national congress in Buenos Aires. Recognizing his generation's capacity to address this issue, Eyal emphasizes the need for collaboration and activism. He is an active member of Jóvenes Por El Clima Argentina, an organization consisting of Argentine youth climate activists.



#### Siobhan Faith Bowens, 15 Turks and Caicos

Upon conversing with secondary-school students, it became evident that young individuals are highly attuned to the environmental issues we face. Siobhan Faith Bowens, a 15-year-old member of her school's climate change group, shared her profound appreciation for our planet's wonders and mysteries. Her eloquent expression of concerns regarding pollution, global warming, and deforestation resonated deeply, surpassing the impact of scientists or officials. Siobhan symbolizes countless passionate children who, lacking a platform or resources, are unable to effect large-scale change.

# EUROPE



#### Greta Thunberg, now 18, Stockholm, Sweden

Greta Thunberg has emerged as a prominent figure in environmental activism. As a high school freshman, she won a Swedish newspaper's climate change essay contest. Thunberg boldly vowed to abstain from attending school until the Swedish government addressed her carbon emission reduction demands. Social media took notice, and fellow activists rallied behind her. Thunberg's impassioned speech at the 2018 United Nations Climate Change Conference became a viral sensation, solidifying her status as a symbol of youth-driven advocacy for change.



# Ella and Caitlin McEwan, England

Ella and Caitlin McEwan, sisters from Southampton, initiated a petition urging fast food chains to cease including plastic toys in children's meals. The McEwan sisters amassed over 400,000 signatures, prompting McDonald's to offer customers a choice between a toy or fruit, while Burger King announced the removal of plastic toys altogether.



### Lilly Platt, 9, The Netherlands

At merely 9 years old, Lilly Platt initiated a battle against plastic pollution. Upon relocating to Holland, her grandfather taught her Dutch by counting plastic waste they collected together. While Lilly has since mastered the language, her plastic-picking endeavors persist. Currently, she serves as a Youth Ambassador for the Plastic Pollution Coalition and a Child Ambassador for HOW Global and World Cleanup Day. Remarkably, this young activist has collected over 100,000 pieces of plastic.



**David Wicker** | 14, Italy *"We will not stop until politicians and leaders decide to take action"* At the age of 14, David Wicker, an Italian resident, has taken the initiative to assemble cohorts of scholars, utilizing Fridays for Future as a platform for demonstrations in Turin and beyond. Their objective is to urge global governments to prioritize climate change and adhere to international accords and protocols.

### Africa



### Lesein Mutunkei, 16, Nairobi, Kenya

Lesein Mutunkei, a Kenyan national, unveiled How You Can Save the Planet in March 2021, a literary work designed to motivate youths towards sustainable daily practices. Additionally, he launched Trees for Goals, an educational initiative linking football achievements to tree planting. Impressively, he participated in the inaugural UN Youth Climate Summit in New York at merely 15 years old.

During her senior year, Raeesah orchestrated a school boycott, urging the nation's environmental department to

Johannesburg-based intersectional activist, I strive to decolonize Africa by collaborating with fellow activists and

declare a climate crisis. Remarkably, a year later, she was invited to COP26 in Glasgow as an observer. As a

promoting inclusivity and accessibility through organizations such as Stage For Change and 65 Years.

#### Raeesah Noor-Mahomed, South Africa (18)





# Oluwaseyi Moejoh, 19, Lagos

Oluwaseyi Moejoh, founder of U-Recycle Initiative, is dedicated to promoting a circular economy in Sub-Saharan Africa through a youth-led social enterprise. This 19-year-old law student at the University of Lagos organized a two-day Litterathon in October 2020, engaging over 95 young Africans from 18 cities in seven countries, such as Nigeria, Namibia, Rwanda, Uganda, Gambia, Kenya, and Cameroon, in collecting litter using the Litterati app.

### Gabriel Klaasen, 23, South Africa



Gabriel, operating from Cape Town, serves as the communications officer and youth coordinator for the African Climate Alliance. Their influential insights compel the climate movement to recognize the intersectionality of social injustice and climate degradation, particularly concerning Most Affected People and Areas (MAPA), including BIPOC and LGBTQ+ communities, while emphasizing their crucial contribution to a brighter future for everyone.

# Asia & South Asia



#### Licypriya Kangujam, 10, India

Licypriya Kangujam, one of the youngest climate activists globally, began her advocacy for climate action at just six years old, protesting outside the Indian Parliament with specific demands, including air pollution legislation and mandatory climate education. Since then, Kangujam has spoken at the 2019 United Nations Climate Change Conference in Madrid, delivered six TEDx talks, established 'The Child Movement,' a youth-centered climate justice organization, and visited 32 countries for speeches and support, all before reaching the age of 10.



#### Vinisha Umashankar, 14. Tamil Nadu, India

At merely 14, Vinisha Umashankar exemplifies that age is no barrier to environmental innovation. Intrigued by an ironing vendor discarding charcoal, Vinisha investigated its ecological impact, uncovering links to lung disease and deforestation. In response, she developed a solar-powered cart, substituting charcoal with clean solar energy. Five hours of sunlight provides six hours of ironing power, resulting in a dual victory for both the environment and vendors.

### Howey Ou, 14, Guilin, China



Howey Ou, China's pioneer climate striker, enjoyed a childhood surrounded by natural beauty on a university campus, fostering her affinity for nature. By the 8th grade, she embraced veganism, understanding its impact on health, animal welfare, and climate. Subsequently, she successfully encouraged her parents and friends to adopt flexitarian and vegetarian lifestyles, an impressive accomplishment given the absence of vegetarians in her social circles.

#### Ridhima Pandey, 11, India



In 2017, Ridhima Pandey, then 11, lodged a petition with India's National Green Tribunal, alleging insufficient action to combat climate change. Reflecting on her experience in New York, Pandey passionately addressed critics who deemed her too young for activism, asserting her stance was valid as other children worldwide echoed similar demands.

# Service-Learning Projects

- Learning to Give: Take Action Using Youth Voice: The undertakings outlined below foster community engagement while empowering young individuals to enact meaningful change. These experiences encompass the service-learning process, various service modalities, and reflective practices. The Service Sparks serve as catalysts for diverse initiatives.
- Humans and the Environment Toolkit: The K-12 demographic frequently gains their initial exposure to environmental
  stewardship through outdoor activities involving plant and animal care, and conservation of natural resources. To prepare for
  a sustainable future, young individuals must develop an awareness of diverse environmental issues, such as water pipeline
  degradation, pollution, plastic waste in oceans, overconsumption of resources, and air contamination. This toolkit offers
  resources to learn, engage, and enact eco-conscious measures, ensuring a harmonious and sustainable future in tandem with
  the natural world..
- Environment: Sustaining Our World: Within the K-5 demographic, children engage in trash clean-ups and examine the environmental impact of pollution caused by litter, particularly plastics. They evaluate the responsibility of preventing and mitigating pollution, considering the roles of government, businesses, non-profits, and individuals. Through these experiences, they become cognizant of the repercussions of plastic waste on the ecosystem, including the impact on animal life.
- Environment: Sustaining Our World 6-8: This instructional session aims to heighten learners' comprehension of water quality, treatment, and responsible administration of global water resources. They compose persuasive compositions, disseminating their knowledge of safe drinking water concerns. Environment: Sustaining Our World 6-12: Young people identify environmental issues and ways to use their time, talent, or treasure to make a difference. They compare the mission statements of different environmental organizations and write their own personal mission statement.
- Roots and Shoots: Jane Goodall Institute: Our mission is to empower young people to affect positive change in their communities. You can help build a better tomorrow. It starts right here. Right now.

# Project Ideas

- Complete a biography of one of the "Youth Activists" in the region under study and present results to the class. Students should be incentivized to investigate the personal motivations and inspirations driving activists to undertake actions against climate change. Moreover, students should be prompted to connect with these activists via social media platforms.
- **Community Gardening and Urban Greening**: Participation in community gardening and urban greening ventures offers students practical exposure to sustainable agriculture and environmental stewardship, concomitantly tackling food security and community development challenges [8]. These projects facilitate an enhanced understanding of the interrelationship between land utilization, food systems, and climate change, while fostering a deeper appreciation of the local geography.
- Citizen Science and Climate Monitoring: Citizen science initiatives, encompassing local weather monitoring and contribution to worldwide climate change databases, provide students with a platform for scientific inquiry and contribution to the larger climate change knowledge base [9]. By participating in such projects, students can gain an enriched comprehension of climate change processes and their ramifications on local and global scales, simultaneously enhancing their data collection and analytical skills.
- Coastal Cleanup and Habitat Restoration: Coastal cleanup and habitat restoration projects afford students the opportunity to comprehend the intricate interplay between human behavior, ecosystems, and climate change while engaging in environmental conservation and preservation endeavors [10]. Such initiatives culminate in an augmented comprehension of the global geography and climate change interdependence, instilling a greater sense of environmental accountability.

#### HOW TO BECOME AN ENVIRONMENTAL ACTIVIST

If the endeavors of these young individuals have sparked motivation within you, you too can initiate change. The initiation of environmental activism need not commence with a speech in front of the United Nations. As exemplified by Leah Namugerwa, it could begin with planting a tree or effecting changes in local schools akin to Jackson Hinkle. Gradually, these actions accumulate into community meetings and consequential changes, which may extend to city-wide, state, and regional levels, eventually drawing attention from national and international leaders. However, even if the ambition is not to attain global recognition, the aggregation of small-scale changes yields a significant impact over time. If everyone partakes in environmental activism within their localities, these changes will rapidly disseminate worldwide.

# Conclusion

Incorporating youth activism and service-learning initiatives into K-12 geography and climate change instruction presents a tremendous prospect to amplify students' comprehension of these crucial topics. By familiarizing students with the laudable actions of youthful climate activists and providing opportunities to participate in service-learning projects, educators not only augment their students' understanding of global geography and climate change but also enable them to function as catalysts of change within their respective communities.