GOOD PRACTICES MENTORING FOR ESD-LEADERSHIP 2017-2021











































Mentoring for ESD-Leadership 2017–2021

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Mentoring for ESD-Leadership Programme – Origins and the implementation of the Mentoring Programme

ESD Background: Key Concepts & Approaches

→ MAIN CONTENT OF ONLINE PHASES

ESD-Leadership

→ MAIN CONTENT OF ATTENDANCE PHASES

Project Management

→ ATTENDANCE AND ONLINE PHASES

One's Own Project Development & Competencies

→ CONTINOUS THROUGHOUT THE PROGRAMME

from the international Mentoring for ESD-Leadership Programme, which started in 2017. It provides a glimpse into the experiences of selected mentees in developing and implementing their projects with the support of the ESD Expert Net. This programme has been a resounding success, running three times until 2021. Due to the conclusion of funding from the German Federal Ministry for Economic Cooperation and Development (BMZ), the work of ESD Expert Net will now continue to be implemented by partner institutions at their respective national levels. As part of this shift, the Mentoring programme has also been implemented at national scale through the network partners.

This brochure features 17 examples of Good Practice

The Mentoring for ESD-Leadership was a part-time English-speaking programme for young professionals and interested individuals from Germany, India, Mexico and South Africa who work or aim to work in the field of Education for Sustainable Development (ESD). The programme offered a unique blend of professional development and personalized support to help participants bring their own ESD project idea to life. With the guidance of an experienced ESD Expert Net mentor from their own country, participants received invaluable assistance throughout the programme. The main goal of the programme was to empower young people to become enthusiastic promoters of ESD. Alongside central concepts and approaches of ESD, the programme also equipped participants with vital skills in project management and ESD-Leadership.

The program aimed to help participants develop essential skills in Education for Sustainable Development (ESD), based on the core competencies outlined in the Curriculum Framework. The main competencies were divided into three areas: Recognizing (Erkennen), Assessing (Bewerten), and Acting (Handeln), with a special emphasis on invoking agency and self-efficacy in their application. (See graphic for reference).

In addition to three attendance phases, the ten-month blended learning programme included three online phases with modules on the topics mentioned above. Continuous exchange between participants was HISTORY OF THE ESD EXPERT NET

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encouraged throughout the online phases. Apart from their own mentor, other contacts from the entire ESD Expert Net were available to advise the mentees. A total of twenty mentees (five each from Germany, India, Mexico and South Africa) could participate in the programme each year.

The Mentoring programme was also implemented at a national level in South Africa and India respectively. The contents of the programme were adapted to the local context and to the requirements of the participating institutions and individuals.

LEARNING OBJECTIVES OF THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

- → Analyse and process multiple perspectives on sustainable development as well as approaches within ESD
- → Critically reflect and collaborate on global challenges (processes of globalisation) and global frameworks to address them
- → Plan and implement an innovative project in the area of ESD by applying participatory approaches and diverse perspectives
- → Take the lead on using successful ESD practices as a tool to promote knowledge and competencies for sustainable developmen

The students are able to (...)

Recognising

ACQUISITION AND PROCESSING OF INFORMATION

→ (...) acquire information on topics of globalisation and development and process it topic-relatedly.

RECOGNISING DIVERSITY

- \rightarrow (...) recognise the socio-cultural and natural diversity in the One World. **ANALYSIS OF GLOBAL CHANGE**
- → (...) analyse processes of globalisation and development by using the concept of sustainable development.

ANALYSIS OF GLOBAL CHANGE

→ (...) recognise levels of action—from the individual to the global level
 – and their respective function for development processes.

Assessing

CHANGE OF PERSPECTIVES AND EMPATHY

→ (...) realise, appreciate and reflect upon own and others' values and their significance for life.

CRITICAL REFLECTION AND COMMENT

→ (...) comment on issues of globalisation and development by critically reflecting and orienting at the international consensus, at the principle of sustainable development and at human rights.

EVALUATION OF DEVELOPMENT PROJECTS

→ (...) work out approaches to evaluate development projects (here and in other parts of the world), taking into account diverse interests and general conditions, and come to self-reliant conclusions.

Acting

SOLIDARITY AND SHARED RESPONSIBILITY

 \rightarrow (...) realise areas of personal responsibility for humans and the environment, and accept the respective challenge.

UNDERSTANDING AND CONFLICT RESOLUTION

→ (...) contribute to overcoming socio-cultural barriers and self-interest by communicating and cooperating, and contribute to conflict resolutions.

ABILITY TO ACT IN TIMES OF GLOBAL CHANGE

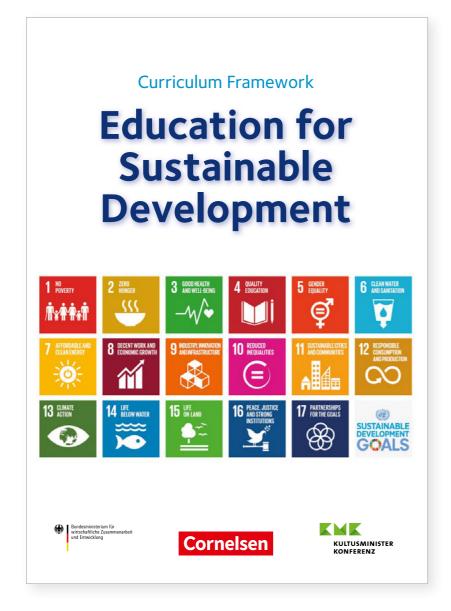
→ (...) ensure the ability to act socially in times of global change, most of all in personal and professional fields, by openness and readiness to innovate as well as by an appropriate reduction of complexity, and to bear open situations.

PARTICIPATION UND ACTIVE INVOLVEMENT

→ Students are able and willing, based on their autonomous decision, to pursue objectives of sustainable development in private, school and professional fields and to participate in their implementation in society and politics.

1 https://www.gene.eu/

Formal Education Programme at Engagement Global



CURRICULUM FRAMEWORK

- EDUCATION FOR SUSTAINABLE DEVELOPMENT

In order to be able to implement the guiding principle of sustainable development, people must acquire competences that enable them to orient themselves in a globalised world and to participate in shaping it. The programme "Global Development in German Education Systems," which consists of three components, is managed by the Department of Formal Education at Engagement Global. It specifically aims to embed "Global Development" within structures and increase the competences of children, young people and adults to participate in shaping sustainable development.

Germany is pursuing the approach of embedding Education for Sustainable Development in every subject via the Curriculum Framework: Education for Sustainable Development. The programme embeds the learning area "Global Development" into German education systems and thus education for sustainable development. The Curriculum Framework plays a special role here and is seen as a handbook for implementing ESD. To date, this process is unique in the world. It corresponds to UNESCO recommendations and has inspired a collaboration with the Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP). In order to embed the approach of the Curriculum Framework in the sixteen federal states (Länder) and to adapt it to the school situation there, Engagement Global accompanies and finances projects or initiatives to implement the Curriculum Framework in the federal states (Länderinitiativen). In addition to supporting projects financially at the federal state level, Engagement Global supports the nomination of a country coordinator to anchor ESD structurally in schools, curricula, teacher training and capacity building. The department of formal education at Engagement Global coordinates the programme and supports the country coordinators through training, advice and opportunities for transnational networking.

The second component is the Multi-Stakeholder Initiatives on Education for Sustainable Development, specifically Engagement Global's ESD Expert Net, which consists of experts from Germany, India, Mexico and South Africa and thus pursues a multi-perspective approach in its work. Findings from European countries are integrated into German development education

work via the Global Education Network (GENE → 1). Engagement Global is simultaneously supporting the German Federal Ministry for Economic Cooperation and Development (BMZ) in policy making at a European level to strengthen the global dimension of Education for Sustainable Development.

The third component is the development of the skills of children, young people and adults, particularly in the context of competitions carried out by Engagement Global, such as the School Competition on Development Policy with the accompanying measure in the form of a Song Contest.

The three components mentioned above are interlinked through cooperation with the (federal) states, the development of materials and teacher training, etc., and thus work as a whole.

As already mentioned the programme aims to embed ESD at a structural level in education policy, curricula, teacher training, teaching and learning materials, and disseminator training throughout the entire education system in Germany. The programme therefore contributes to the achievement of the United Nations Sustainable Development Goals (SDGs), specifically Education Goal 4 and Target 4.7 as well as Partnership Goal 17, and the follow-up programme to UNESCO's World Programme of Action on ESD "ESD for 2030."



Stories of

ESD-Leadership

MENTORING EVENT IN MEXICO © ENGAGEMENT GLOBAL

This booklet contains 17 unique stories of 17 unique people from the participating countries, India, Germany, South Africa and Mexico. Each mentee brought his or her own starting point and vision to the programme, which is why it was conducted using a constructivist approach. Particularly noteworthy is the close cooperation between mentors and mentees and also the peerto-peer exchange, which could always provide new food for thought.

Every mentee applied for the mentoring programme with a project idea or a project which was already in progress. The core idea of the programme was to enable the mentees to conceptualise and implement their project with the help of a seasoned mentor with the required skills and experience. As a result, the mentees were mentored throughout the programme on their project and on their own competence development.

The mentees were not only mentored during the implementation of their projects, they were also guided on how best to share their work and to talk about the achievements and results of their work. As part of the programme the mentees learnt how to develop a narrative on their own project work and developed a poster which can help them talk about their story during public events. As part of this promotional activity, the idea of developing a brochure on solution-oriented storytelling arose and all mentees were invited to contribute to this booklet of ESD-Leadership stories.





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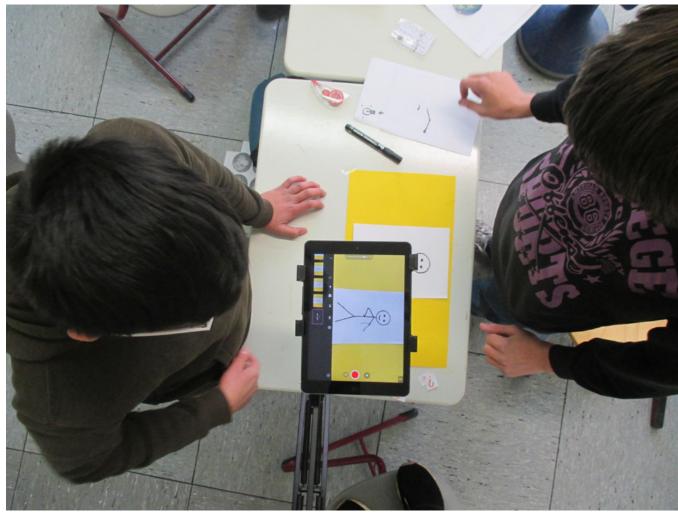
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An Inclusive ESD



© SUSANNE LEIN

"It's crucial for children with special needs to discover their self-worth, and the fact that they too can do something and contribute to this world-wide movement of sustainability. They need to be given some agency in their own learning projects which in turn will hugely impact their self-efficacy."

SUSANNE LEIN

SHORT FACTS

PROJECT TITLE
ESD Inclusive (2nd iteration
of ESD Mentorship Programme)

CONTRIBUTOR
Susanne Lein

INSTITUTIONAL AFFILIATIONS
Erich Kästner Schule Ladenburg

GEOGRAPHICAL LOCATION
Baden-Württemberg, Germany

CURRICULUM AREAS COVERED
Promoting ESD among students with
learning difficulties

PROJECT TIMEFRAME February 2019 onwards

PARTICIPANTS Students at Erich Kästner Schule, Ladenburg

STAKEHOLDERS INVOLVED

Teachers, principal, students, school
management, local ESD organisations

RESOURCES NEEDED TO
COMPLETE THE ACTIVITY/PROJECT
Teaching staff, training material and
manuals

BACKGROUND

Is the world-wide movement for education for sustainable development truly inclusive? Is there enough focus on students with special needs, who are often marginalised on multiple fronts as equal stakeholders in the quest for sustainability? How can students with special needs make meaningful contributions towards sustainability? These were questions that Susanne Lein, a special educator from the southern state of Baden Württemberg in Germany, grappled with on a regular basis. In addition to these questions, Susanne was also confronted by a severe lack of ESD teaching material for children with special needs. This led her to take the first steps in making ESD a viable curricular addition for her students and expanding the reach of this idea to other special educators.

Susanne works with students with learning difficulties in the age group of 12 to 15 years at a special statesupported school in Heidelberg, Germany. In her class of around 13 students, there are students with moderate to severe learning difficulties, who are on an average two years behind a typical academic track. All students have specific learning needs and levels and lessons therefore need to be carefully tailored to each individual. Learning difficulties are not the only challenging aspects in meeting their educational goals. Studies indicate nearly 95 per cent of these students come from socially and economically marginalised backgrounds and often suffer from low self-esteem. This poses additional challenges for students who feel constantly disempowered and dependent on others for assistance. Under these circumstances, Susanne wished to not only improve their self-efficacy but to do so with actions that were grounded in the principles of ESD. With learning that offers them more responsibility and confidence, she tries to embed values of sustainability in their curriculum and has made her students feel that their voice also counts.

PROJECT ACTIVITIES

Susanne has taken a multi-pronged approach to promoting ESD among students with special needs. She tries to incorporate ESD in the curriculum as her primary task as a teacher, conducts workshops in collaboration with other educational organisations,

and has also begun including these concepts in her teacher training material. She is also developing ESD workshops for students with learning disabilities in collaboration with Globales Klassenzimmer (Global Classroom), an ESD organisation based in Heidelberg.

POSITIVE ACTIONS FOR ESD

- Promoting ESD among students with learning difficulties
- Developing a Whole School Approach to ESD curriculum
- Teacher training on ESD for students with learning difficulties
- Collaborating with organisations and the community as part of these efforts

ESD IS THE CLASSROOM

Susanne wanted to create waves of opportunities for her students to learn about ESD concepts and give them room to be able to act on what they had learnt. This meant that in her classes, students were not only being introduced to problems but also being given a chance to address them in their own way in the classroom. Given the students' socially marginalised backgrounds, Susanne wanted to make doubly sure that she did not overwhelm the students with sustainability linked problems without an adequate space for them to be able to act to counter them.

One of the ways through which students were able to channel their actions for ESD was extended social engagement with the community. For instance, a collaboration with a local care home for the elderly provided a space for the students to engage in meaningful and reflective dialogue and play with members of the community.

In another instance, Susanne's students took part in a protest for the global human right of access to clean water. Collaborating with Globales Klassenzimmer, this was an extension of lessons on sustainable water use and concepts such as the virtual water trade \rightarrow 2 involved in products they used regularly. Also as part of their lessons on sustainable fashion, her students

decided to sew and create new products from used clothes for sale at the school bazaar. Most importantly, Susanne made sure these actions were decided upon in a collaborative way, where students felt free to choose the kind of action they wanted to take for ESD.

INSPIRING OTHER EDUCATORS

As part of the second stage in her project, Susanne wanted to make sure these learning outcomes were not just limited to her classrooms. She has been creating teacher training programmes based on her experiences of ESD implementation in school. With the help of the ESD mentoring programme, she has been able to streamline the content further by aligning her training material to existing frameworks on ESD competencies. Now, along with her school leader and three other special education teachers, she is working on formalising and developing an ESD curriculum for her school. In addition to the training on ESD frameworks, the mentoring programme has also helped her develop networks with a community with whom she regularly shares challenges and successes.

PRIORITY ACTION AREAS FOR ESD

- Building capacities of educators
- Empowering and mobilising youth

However, these endeavours come with their share of difficulties. Schools in general have several competing agendas to consider but Susanne is determined to make sure her cause for ESD does not suffer. The pandemic has brought additional challenges in the implementation of these lessons. Susanne and her colleagues continue to tackle them with sincerity and care in the form of home-visits and regular phone calls with both parents and students.

Despite all of these challenges, Susanne keeps herself motivated with the crucial cause of social and environmental justice for all. On the flipside, she does not need to go too far to experience the rewards of her efforts. Her students, with their improved self-efficacy and confidence give her both satisfaction and hope that the future may be bright after all.

MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"With the ESD programme, I gained several new perspectives. I was able to understand a new, more collaborative mode of being a leader who can appreciate different individuals for their different strengths. It has given me a space to reflect on how I can work and engage with people who might oppose my ideas. In addition, it was very inspiring to be among people who were taking such positive actions for ESD."

SDG AND RELATED SUCCESSES



By incorporating concepts of sustainable development in her curriculum, Susanne contributes to SDG 4 (Quality Education, Target 4.7). In addition,

by creating more effective learning environments for students with special needs, she helps improve educational facilities for them (Target 4.a).



With a focus on ESD for students with learning difficulties, Susanne contributes to the SDG 10 (Reduced Inequalities, Target 10.2) by empow-

ering and promoting social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

Training for Triple-Bottom-Line



© PIXELS - AKIL MAZUMDER

"By playing a central role in development, resource utilisation, and job creation, businesses have the potential to channel growth in several Sustainable Development Goals' parameters."

DEEPIKA GANESH

SHORT FACTS

PROJECT TITLE

Strategy and the Sustainable Enterprise (SSE) for teachers: A blended learning project (2nd iteration of the ESD Mentorship Programme)

CONTRIBUTOR Deepika Ganesh

INSTITUTIONAL AFFILIATIONS Indian Institute of Management, Bengaluru

GEOGRAPHICAL LOCATION Bengaluru, Karnataka, India

CURRICULUM AREAS COVERED Sustainability education for business school teachers

PROJECT TIMEFRAME March 2019 to January 2021

AGE GROUP Adult learners from across India

STAKEHOLDERS INVOLVED 3 core team members (faculty, researcher, instructional designer), 3 guest lecturers, 2 support team members, sponsors

RESOURCES NEEDED TO COMPLETE THE ACTIVITY/PROJECT Online resources: MOOC, simulations, webinars, digital infrastructure. Offline resources: Logistics and classroom support for 1-day workshop

BACKGROUND

When considering the contributions of businesses to solving environmental and social problems in India, the typical terms that spring to mind are philanthropy and corporate social responsibility (CSR). But in recent times these concepts are being challenged and actively reconceptualised \rightarrow 3. Businesses are being called upon to focus not only on CSR activities using surplus profits but instead to reconsider the social and environmental costs of their work. This includes thinking about how the business is generating profits in the first place. It was a similar intention to make the idea of sustainability a core element of business school instruction that led Bengaluru-based educator and researcher Deepika Ganesh to work on an ESD project for business school lecturers. Deepika, along with her colleagues and mentor at the Indian Institute of Management in Bengaluru, set out to make early contributions to sustainability education in management schools in 2019. They did so by supporting lecturers as they learned how concepts of sustainability can be interwoven into their management curriculum.

The ESD project, that began in March 2019, set its sights on creating a national community of practice for lecturers who are passionate about sustainability in business education. As part of this project, Deepika sought to develop a vast repository of knowledge, resources, activities, and case studies that could be used to teach sustainability to students of business and entrepreneurship. While the range of these activities was fairly diverse, their goals always remained the same: design an environment in business schools that fosters project-based learning in areas concerning the Triple-Bottom-Line: Society, Environment, and the Economy.

The outcome of the ESD project, an online teacher training programme, now enables lecturers from anywhere in the country to teach business, management, and entrepreneurship in their own classes with a focus on sustainability. The community of practice created through the course has also opened up possibilities for educators to discuss and exchange ideas on themes of sustainable development in the Indian business space.

STORY 2 · DEEPIKA GANESH 24 25

PRIORITY ACTION AREAS FOR ESD

- Building capacities of educators
- Empowering and mobilising youth

PROJECT ACTIVITIES

The teacher training project was designed to be a blended learning course, combining both offline and online learning modes. After having one structured face-to-face interaction, Deepika and her colleagues moved to facilitating the sessions online. They ran several case studies, activities and exploratory simulations linked to sustainability in their class and painstakingly documented their own and their participants' learning.

POSITIVE ACTIONS FOR ESD

- A blended learning course
- Consolidated learner feedback
- Work-in-progress paper

PROFIT, PEOPLE AND PLANET

Presenting learning objectives early played an important role in the design of their blended learning environment. These objectives helped guide the design team in outlining what the participant should be able to do at the end of each segment. To further achieve this end, each assessment task, teaching and learning activity along with the participant's workload was carefully aligned to the learning objectives. To inspire the participating faculty to create their own teaching material on sustainability, the program harnessed aspects of online collaboration and a joint mapping of outcomes. They worked together on concepts of sustainability that are particularly relevant to the business world such as risk assessment, innovation, building and transitioning into sustainable business models. These activities were subsequently graded by their peers.

Deepika and her team conducted exploratory simulations to support the learning goals of curriculum design evaluation. The role play simulation on climate change policy was received particularly well by those on the

course. In this activity, educators and participants put their heads together to come up with innovative ways to achieve their regional targets for limiting the global temperature rise to 2 oC. The simulations included presentations on the climate crisis followed by discussions and negotiations on the subject. These discussions became a galvanising force in helping focus on sustainable planning and strategic thinking for businesses without losing sight of the current climate crisis.

The project team also made sure they conducted all activities in the spirit of acting sustainably. On the day of the in-person workshop, all activities used mainly sustainable materials. Case studies were printed on recycled paper, participants were offered water in steel bottles instead of plastic disposables, and were provided with pens made out of recycled material that contained plant seeds that could be sown in soil after use.

PROJECT CHALLENGES

The COVID-19 pandemic compelled the design team to shift and adapt the training course towards a more online format. However, with this shift, the project was able to reach an even wider number of lecturers from across the country. All future iterations of the course will remain in the online format and this has in turn further helped bring down project costs.

Deepika and her colleagues had to work specifically on overcoming the challenges that a completely digital space brought. The online format allowed them to reach a wider audience geographically but also brought with it the challenge of some business educators not having the requisite digital access and literacy. As they adapted their course to the online format, they also needed to orient their participants to communication and collaboration behaviours when using the online format. With future cohorts, they hope to incorporate ideas on digital onboarding of participants along with helping build greater accountability in digital collaborations.

SUSTAINING MOMENTUM

Currently, Deepika and her colleagues are working together to document their learning outcomes from the first cohort of participants in the form of an aca-

demic paper for further dissemination. They are also in the process of incorporating feedback from their participants to reach out for ideas on reviewing and redesigning the course content. In a bid to make the research and design process truly participatory and practice-oriented, they continue to stay in touch with course participants to capture experiences of how the curriculum is actually faring in their management classrooms.

The mentoring programme allowed Deepika to receive constructive feedback from her peers and mentors on designing objectives, content and, most importantly, creatively embedding Sustainable Development in each element of the curriculum.

In designing of this course, Deepika has not just made new inroads into digital learning in ESD for future business professionals and entrepreneurs but is also helping to start crucial conversations on how businesses need to think beyond profit, and act for the planet and its people.



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"Personally, my perspective has broadened by getting to be a part of everyone's projects. I find dialogue and collaboration easier and can bring in more empathy to my context. I am really grateful for the network of friends I have gained and I find myself culturally and politically richer."

SDG AND RELATED SUCCESSES



Through this initiative towards Education for Sustainable Development, Deepika's teacher training project contributes to SDG 4 (Quality Education, Tar-

get 4.c) of substantially increasing qualified lecturers who can further promote sustainable development in the global south by 2030.



Deepika is contributing to SDG 8 (Decent Work and Economic Growth, Target 8.3) through promotion of sustainable entrepreneurial activities.

Good News for Climate Action



© CINDY-LEE CLOETE

"We want students to cover global issues with local impact. Climate change will remain abstract unless local issues and contexts are highlighted. For students, relating these local issues to global environmental discourse is an important step in learning for sustainable development."

CINDY-LEE CLOETE

SHORT FACTS

PROJECT TITLE
Young Reporters for the Environment
(YRE)

CONTRIBUTOR
Cindy-Lee Cloete (1st iteration of the ESD mentoring programme)

INSTITUTIONAL AFFILIATIONS
The Wildlife and Environment Society of
South Africa

GEOGRAPHICAL LOCATION

Johannesburg, South Africa

CURRICULUM AREAS COVERED
Citizen journalism for school students

PROJECT TIMEFRAME
Ongoing project (started in February 2018)

PARTICIPANTS
15 schools in South Africa

STAKEHOLDERS INVOLVED
Youth reporters, schools, local municipal authorities

RESOURCES NEEDED TO COMPLETE THE ACTIVITY/PROJECT

Expect facilitators, training material, links

Expert facilitators, training material, links with local news organisations, workshop locations, media and IT equipment

BACKGROUND

Nearly one-third of the population in South Africa is below the age of $19 \rightarrow 4$.

Therefore, how this population of close to 22 million relates to SDGs is a pivotal factor in achieving sustainable futures in South Africa. With this primary motivation, Johannesburg-based ESD professional Cindy-Lee Cloete wanted to contribute to helping the South African youth learn about, confront and give voice to a variety of social and environmental injustices in the country. To achieve this, she initiated the "Young Reporters for the Environment Programme" under the aegis of the Wildlife and Environment Society of South Africa (WESSA) in 2017. The objective of the project is to equip students in the age group from 11 to 25 years with the basic journalistic skills to allow them to document and highlight instances of environmental injustice in their natural and social environment. As part of the project, students investigated and reported on issues that they face along with their communities.

While having roots in an international programme started by the Foundation for Environment Education based in Denmark, Cindy made sure her project had its roots in South African issues and contexts, a transition that was further made possible through ESD frameworks. Students' reports are published as photo stories, articles and videos and are often featured in local news outlets and have become an authentic source of information for municipalities and local governments. At the same time, the process of learning how to report on a variety of sustainable development issues facilitates wide-ranging skills acquisition. This includes not only the ability to gather news, but also high-order life skills such as critical thinking, media literacy and communication along with socio-ecological research.

PROJECT ACTIVITIES

Leveraging the strength of WESSA in school outreach programmes, Cindy began her project activities by setting up "Young Reporters for the Environment" clubs in schools. This was with a view to upskill students on media literacy and production skills which they could use to highlight issues at the intersection

STORY 3 · CINDY-LEE CLOETE 28 29

of the environment and social injustices. Workshops were aimed at participants acquiring practical skills such as writing, editing, videography, and photography along with ESD competencies that included critical thinking, social responsibility and leadership and an ability to work cooperatively in teams. The YRE team then helped disseminate these journalistic pieces through various media platforms that included local radio and newspapers, the internet and community events. For the youth reporters, who often themselves come from disadvantaged communities, the focus remained on covering environmental and social injustices within their own lived realities. Disadvantaged communities continue to be located in geographies that are subject to greater land and water pollution and the young reporters focused on highlighting some of the resulting inequities.

POSITIVE ACTIONS FOR ESD

- Provide mentorship to students through workshops and expert-led discussion of key issues in sustainable development
- Enhancing critical thinking skills that can encourage students to act for sustainable development
- Building capacities of students in the field of media literacy and production
- Providing international exposure and networking opportunities to the "Youth Reporters" with participation in debates and conferences
- Contribute to highlighting and proposing relevant solutions to counter social and environmental injustices in local communities

HIGHLIGHTING LOCAL ISSUES

The YRE programme framework guides the youth reporters through the process of identifying and investigating a local problem, conducting research and interviews with local community stakeholders, and subsequently proposing solutions using one or more of the journalistic media. The reporters' journalistic capabilities are then disseminated on a variety of platforms.

This framework is implemented using the following typical workshop activities: field trips around the young reporters' local communities, workshops with experts in the fields of investigative journalism, social and environmental justice and community development, along with sessions on understanding sustainable development goals. The young reporters also get together in regional discussion groups to share experiences and motivate and inspire each other to take action for ESD. The reporters also take part in a national competition for the best reports, and the winning story represents South Africa and WESSA in the prestigious international Young Reporters competition. This international platform for recognition also remains a source of motivation for these young reporters.

PRIORITY ACTION AREAS FOR ESD

- Empowering and mobilising youth
- Accelerating local level action
- Transforming learning environments

DISCOVERING LINKS BETWEEN THE SOCIAL AND THE ENVIRONMENTAL

Through the activities and reflections facilitated by the YRE workshops, students are encouraged to reflect on environmental and social issues and to find links between them. This dialogue between mentors and the workshop participants has helped raise awareness of issues such as health, water, sanitation, waste management and food security. These interactions have further helped students understand that most of these problems are often simultaneous and interrelated. In one such workshop, a young girl from an urban slum in Johannesburg came to realise how the problem of waste management in her community was linked to a larger social injustice. As one of the linked problems, she identified a lack of adequate and accessible health facilities in her community as a contributing factor to land pollution in her community. Long and exhausting queues outside the weekly mobile clinic along with a lack of waste disposal facilities was often the real reason for increased littering in the area. She was therefore able to observe the issue of pollution at the intersection of social and economic injustices. Another

student's report on illegal dumping, published in the local newspaper, was taken note of by the municipality in charge. The student was later invited by the municipality to help them resolve the issue.

At present, 15 schools are enrolled with the YRE programme and Cindy is working towards standardising a programme that links activities from the programme with their school curriculum. The YRE programme works both with schools based in rural communities and schools that are privately owned and located in urban centres. Cluster workshops bring together students from a variety of backgrounds and their shared learning outcomes are often perspective-shifting for them. Overall, one of the most gratifying and motivating factors for these young journalists is the potential to cover a wide range of topics and make a difference with their reports.



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"To be an ESD leader is to be as inclusive as possible—to try our best to account for the environment and everyone in society as we strive for a more sustainable world. We must all together leave a much better environment than we found, and make sure that no one is left behind in these endeavours. That for me is true ESD-Leadership."

SDG AND RELATED SUCCESSES



By helping students acquire knowledge and skills on themes of sustainability, climate change and media literacy, Cindy is contributing to SDG 4

(Quality Education, Target 4.7) in enhancing the abilities of learners to promote values of sustainable development.



By highlighting the issue of climate change and sustainability among the youth, Cindy is contributing to improving education and awareness on

climate change mitigation (SDG 13, Climate Action, Target 3.3)

Fashion for the Future



© SEZ/FUTURE FASHION

"The everyday product 'clothing' is just an example, but an exceptional one, of how an individual's consumer behaviour is related to working and living conditions in other places of the world."

MIRJAM HITZELBERGER

SHORT FACTS

PROJECT TITLE
Future Fashion Academy

CONTRIBUTOR Mirjam Hitzelberger

INSTITUTIONAL AFFILIATIONS
Stiftung Entwicklungszusammenarbeit
(SEZ) (Foundation for Collaborative Development), Baden-Württemberg

GEOGRAPHICAL LOCATION
Baden-Württemberg, Germany

CURRICULUM AREAS COVERED
Sustainable fashion, textile supply chains

PROJECT TIMEFRAME Initial project phase September 2019 to February 2021, second project phase March 2021 to February 2022

PARTICIPANTS
Youth from schools and universities

STAKEHOLDERS INVOLVED
State ministry, schools, students and youth group organisations

RESOURCES NEEDED TO COMPLETE
THE ACTIVITY/PROJECT
Financial support from the state government, facilitators, and workshop material and resources

BACKGROUND

"Weniger ist mehr" or "Less is more," is a rallying cry for ESD professionals to slow down the accelerated pace with which fast fashion has taken over both our imagination and consumption patterns. "Fast Fashion," a business model in the fashion industry, prides itself on producing clothes at break-neck speed and bringing them to the market at very low prices. The real cost of this business model is often borne by less-advantaged economies that are home to the production units of these companies which offer poor wages and working conditions to their workers. These "fast" production and consumption cycles also have an environmental cost. Rapidly changing fashion trends are marketed to make these clothes more desirable, but at the same time quickly obsolete, creating colossal waste with close to 85% of textiles around the world being dumped in landfill.

As a response to the trend of fast fashion and to counter injustices in global trade and consumer patterns, Mirjam Hitzelberger, an ESD educator in the southern state of Baden-Württemberg, Germany, wove together her "Future Fashion" project. Becoming part of the "Future Fashion" movement means stepping out of passive consumptive modes to make an active contribution towards sustainability in fashion. Mirjam's project, the "Future Fashion Academy" aims to inform youth about social and ecological challenges in the global fashion industry, encouraging them to reflect on their own textile consumption and develop alternatives for a socially and ecologically sustainable consumption of textiles. Future Fashion is about learning about various creative ways to be part of the change and finding out about the opportunities to take action toward global justice.

Originally initiated by the Stiftung Entwicklungszusammenarbeit Baden-Württemberg (SEZ, a state foundation), the Future Fashion Campaign soon approached the Dachverband Entwicklungspolitik Baden-Württemberg e.V. (DEAB) (Baden-Württemberg Development Policy Confederation) to partner them in an ESD project within the wider project framework. Other project stakeholders included the State Ministry as the main donor agency, schools, and youth group organisations which took part in the project and provided valuable feedback.

STORY 4 · MIRJAM

HITZELBERGER

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PROJECT ACTIVITIES

A recent study by the environmental ministry of Baden-Württemberg showed that young people recognise the importance of sustainable lifestyles. However, the report also reflected that the youth does not actively view sustainable textile consumption as a means of contributing to sustainability. Therefore, the primary aim of the project was to raise awareness of the options young people have to become agents of change by transforming how they relate to the fashion industry and thus contribute to the sustainable development goals of sustainable consumption and production (SDG 12) and climate action (SDG 13).

POSITIVE ACTIONS FOR ESD

- Developing educational material on sustainable fashion in line with local and national sustainability strategies
- Informing young people on responsible and sustainable consumption, production and lifestyles and encouraging them to take action for ESD

TRACING TEXTILE SUPPLY CHAINS

One of the themes brought to light by the project was the textile supply chain. What seemed like a distant topic, on which individual consumers have little or no impact, was discussed and challenged in these workshops to alter this perspective. The idea was to make local connections to large global supply chains visible. The workshops often started by asking participants to reflect on the piece of clothing they were wearing and where it came from. The labels of origin led the facilitators directly on to the topic of the global textile supply chain, followed by an activity of tracing the life cycle of a T-Shirt.

EXPANDING THE REACH

One of the biggest achievements of the project was to adapt to the new circumstances that the world was confronted with during the COVID-19 pandemic. While at first, events were cancelled in quick succession, the project team responded by coming up with newer ideas that could adapt better to digital formats. With

this renewed content, Mirjam and her team conducted an online workshop with international reach, with youth from Tajikistan, Uzbekistan and Ukraine that would have not originally have been possible with offline workshops.

To ensure the values of sustainability are maintained in every aspect of the project, Mirjam and her team has made sure the materials and resources developed remain accessible to everyone involved, even after the project ends. Schools and other groups participating in their workshops were given materials, ideas and resources to continue working on the topic beyond the project.

In terms of the resources used and materials procured, they paid particular attention to the use of resources and made sure to they bought sustainably and, wherever possible, sourced locally produced goods (e.g. recycled paper, regional and organic food, fairtrade products).

The project will continue for another phase of 12 months. During this period, the team will move the focus of the workshop target groups to university students while continuing the project activities from the previous phase.

- https://www.ethicalconsumer.org/fashion-clothing/ what-fast-fashion-why-it-problem
- https://publications.parliament.uk/pa/cm201719/ cmselect/cmenyaud/1952/1952.pdf

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https://www.weforum.org/agenda/2020/01/ fashion-industry-carbon-unsustainable-environment-pollution/

SDG AND RELATED SUCCESSES



Mirjam's project on creating awareness among young people of sustainable development and sustainable lifestyles contributes to SDG 4 (Quality Education, Target 4.7).



By creating awareness sessions on fast fashion with young people, Mirjam's project contributes to SDG 12 (Responsible Consumption and

Production, Target 12.8). This target aims to disseminate information on sustainable development and lifestyles in harmony with nature.



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"The personal exchange with my mentor and her professional insights and feedback helped me gain new perspectives and allowed me to adapt my project in a way that still preserved the original ideas but included some new approaches. Both the very practical feedback on my project activities and workshop concepts, as well as personal advice and support were really valuable to me and will continue to have an impact on my future work."

Bringing the World into the Classroom: ESD and Teacher Training



© PEXELS

"When teachers are convinced and empowered to address global themes in their teaching, we will have more competent young people actively contributing to finding solutions to our current climate crisis."

MARA KAYSER

SHORT FACTS

PROJECT TITLE Strengthening global learning and ESD in teacher training in Saxony

CONTRIBUTOR Mara Kayser

INSTITUTIONAL AFFILIATIONS arche noVa e.V., Ministry for Education and Cultural Affairs in Saxony, Stiftung Nord Süd Brücken

GEOGRAPHICAL LOCATION Dresden, Saxony, Germany

CURRICULUM AREAS COVERED Individual action for global change, connecting the global with local themes, introducing ESD into the formal school curriculum

PROJECT TIMEFRAME April 2019 to December 2020

AGE GROUP School teachers in Saxony, Germany

STAKEHOLDERS INVOLVED Regional ESD Ministry, non-governmental ESD organisations, schools, teachers, trainers and book publishers

RESOURCES NEEDED TO COMPLETE THE ACTIVITY/PROJECT 20h/week by the project coordinator employed at arche noVa e.V. in Dresden, co-trainers from two ESD organisations, online tools: Bigblue button, Slido, Concept board

BACKGROUND

The imperative to act to create a sustainable world is now everywhere and on everyone. However, there are some enduring questions that ESD professionals across the world are grappling with. How should individuals act to positively impact the global movement for sustainability? Or how do global themes of sustainability connect with the daily lives of students, educators and teacher trainers? What are the types of actions that are locally possible and globally sustainable? These were key considerations for Mara Kayser as she designed her ESD teacher training project around themes of "individual action" for "global change."

Mara was convinced that if teachers were offered the time and space to discuss interconnections between global themes and local action, they would be empowered to further inspire their students to act for sustainability as well. Accomplishing ESD goals means action needs to be taken at the micro level (at the individual level), at the meso level (action at the political level) and at the macro level (policy level changes at the world and transnational level) and it is critical to see the links and inherence of impact between levels.

Political will too was not far behind. Following Germany's national plan for ESD, Saxony, a German Federal state, adopted a regional ESD strategy in January 2019. This regional strategy recommended mainstreaming ESD into educational areas such as primary, secondary and further education, professional education, higher education, non-formal/ informal learning and programmes offered by various municipal stakeholders. Mara's 20 month-long project was accepted and financially supported by several organisations rallying around this regional ESD agenda.

With years of organisational and personal experience in offering workshops and training material to students in school, Mara and her project team addressed teachers as potential disseminators while also focusing on them as learners. The project activities consisted of ESD orientation lectures—to raise awareness of the concept and its contextual factors.

36 STORY 5 · MARA KAYSER

POSITIVE ACTIONS FOR ESD

- Orientation sessions for teachers on ESD themes to raise awareness of the concept, history and context
- Conducting workshops on ESD practices and methods with an aim of empowering teachers to include ESD themes and approaches in their teaching
- Workshops for education publishers on **ESD**
- Virtual ESD material for teachers, bringing together ESD practitioners and their offerings for schools and teachers
- Expanding the network of stakeholders and generating interest around mainstreaming ESD into schools

These workshops also included ESD practices as well as methods to empower the teachers to include ESD themes and approaches in their teaching. Within the project, Mara and her team also organised workshops for education publishers on ESD as well as a virtual ESD fair bringing together ESD practitioners and their offerings for schools and teachers.

POSITIVE ACTIONS FOR ESD

Through these training workshops, teachers were encouraged to use ESD as a concept to enrich their formal curriculum. The stress was laid on ways in which participatory, interactive and solution-oriented methods could be generated in a school classroom to understand, value and address our economic, ecological and social challenges. Overall, the project also benefited greatly from the project team's perseverance in garnering interest for the ESD agenda, with additional events such as a virtual book fair and stakeholder discussions.

METHODS AND TOOLS FOR ESD TEACHING

The workshops began with basic lectures on what ESD is and its main goals. Conversations were also introduced on why this mainstreaming was critical to global sustainability goals. Once this theoretical base was formed, the workshop participants started

in their formal lesson plans. For instance, if the teachers had to discuss the topic of Globalisation, they had to include discussions on the related themes of consumption and supply chains as well as talking about economic and political interconnections between parts of the world.

As part of these methods, teachers were introduced to various tools to make teaching ESD topics interactive and engaging. For example, the curriculum topic of nutrition in primary school teaching was linked to topics of consumption and fair trade. Using a digital city tour as a tool, the topic of nutrition was connected to locations in the city of Dresden where fairly produced and procured products were available. The idea was to connect the textbook topics to tangible and relatable themes for students.

GENERATING INTEREST, GARNERING SUPPORT While the project was centred around teacher training, one of its other important objectives was to garner support and willingness to work on ESD from all stakeholders within the local educational landscape. Local education authorities as well as teachers, school text book publishers and civil society organisations all came together as stakeholders in the project. A virtual event that hosted ESD educational book publishers from across Germany covered the last mile in the journey to teachers and school administrators. With these networking events, the project gained momentum by bringing ESD themes to the attention of schools, teachers, trainers, publishers and even local government.

More recently, these engagements have given Mara and her team more opportunities for cooperation with a variety of stakeholders on ESD related workshops and the project has established a good network as a foundation for future ESD-related activities. A strong learning outcome from her project implementation is that, while a transformation based on values of ESD seems daunting and slow, it can be accelerated by aligning with diverse interests and garnering support from different quarters.

working together on methods to include ESD themes

SDG AND RELATED SUCCESSES



By taking initiative towards Education for Sustainable Development, Mara's teacher training project contributes to the target of substantially, in-

creasing the number of teachers qualified to further promote sustainable development by 2030.



By highlighting the issue of climate change and sustainability among young people, Mara is contributing to improving education and awareness toward

climate change mitigation (SDG 13, Climate Action, Target 3.3)



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

Schreiber, Jörg-Robert. Curriculum Framework: Education for Sustainable Development: a contri-

aGmbH. Bonn. 2016.

bution to the global action programme Education for Sustainable Development. Engagement Global

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"For ESD action we need people who are ready to act. Programmes like the mentoring for ESD-Leadership connect people globally in a professional network with a very personal approach, which allows the participants to not only broaden their perspectives and gain additional knowledge but also to grow personally. Being ready to act for a world with solidarity requires us to carry the world in our hearts."

Escuelas Ya'ax, Primates and Nature: Nurturing Coexistence



© MONTSERRAT FRANQUESA-SOLER

"We need to focus on local communities and study their specific contexts to generate sustainable solutions. Working at this very local level means less alienation and more autonomy for them. Experiences from these community-based solutions can serve as blueprints for confronting challenges in other communities."

MONTSERRAT FRANQUESA-SOLER

SHORT FACTS

PROJECT TITLE

Escuelas Ya'ax: Strengthening schools for the conservation of primates and their habitat

CONTRIBUTOR

Montserrat Franquesa-Soler

INSTITUTIONAL AFFILIATIONS Miku Conservación

GEOGRAPHICAL LOCATION Yucatán peninsula, Mexico

CURRICULUM AREAS COVERED
Sustainability education, conversation of primates

PROJECT TIMEFRAME
January 2018 to December 2018

PARTICIPANTS
Primary school children

STAKEHOLDERS INVOLVED
Primary school students, teachers, community members

RESOURCES NEEDED TO COMPLETE
THE ACTIVITY/PROJECT
Workshop material and venues, facilitators

BACKGROUND

Wide scale-habitat destruction is pushing many species in the wild to the brink of extinction on a global scale \rightarrow 6. And primates, the closest living relatives to humans, are no exception. More than half of the over 700 primate species are endangered, in particular due to destruction of tropical forests, poaching and human-wildlife conflict. Spurred by her love of primates, ESD researcher Montserrat Franquesa-Soler from Mexico was determined to generate more awareness of this issue through school education. But what began as an enthusiasm for the conservation of primates soon transformed into a deeper exploration of how the ecological and the social were connected.

As part of her PhD project, Montserrat began with conservation education in 12 schools through art, theatre, storytelling and shadow puppets. With this artsbased approach, she wanted to implement strategies to enhance the learning experiences of students within environmental education. However, through being immersed in these community schools, she became deeply aware of the inextricable links between primate conservation and local livelihood issues. Therefore, as part of her ESD project, she expanded her environmental education initiative to a community-driven participatory project. The project's aim was to preserve the local bio-cultural diversity of the Escuelas Ya'ax community, its immediate natural environment and also the endangered primates.

PROJECT ACTIVITIES

The revelation that the threats to the primates were linked to the experiences of the local communities was a crucial one for Montserrat. With the support of various stakeholders in the community, she began to focus on a bottom-up approach. Here, environmental concerns and the needs of the community did not flow from the top or from outside but from the direct engagement of the Escuelas Ya'ax community with the issues facing them.

CENTRING THE COMMUNITY'S VOICE

Escuelas Ya'ax, a rural community in the Mayan region in the Yucatán peninsula, is living at the crossroads

- 7 Photovoice is an established method developed initially by health promotion researchers (Wang and Burris, 1997). By utilising photographs taken and selected by participants, respondents can reflect upon and explore the reasons, emotions and experiences that have guided their chosen images.
- 8 Good living

of the demands of the modern market and a desire to maintain ancient indigenous traditions. To stay true to her participatory approach, Montserrat began to interact closely with the students and their parents, teachers and other related stakeholders in the community. As part of the first step of diagnosing the environmental concerns and needs of the community, she used photovoice methods \rightarrow 7 together with the community members to arrive at deforestation as the primary issue of concern in the local area. These trees became a leitmotif for an interconnected environmental issue for both the community (a large number of community members were wood-workers and artisans) and for the primates (their natural habitat) in the area. The next step was work with inputs from the community to co-design a solution that could help counter this challenge. After the community had carefully considered the possible solutions, they decided to implement extensive reforestation activities around where they lived. Hence, from the diagnosis of the problem to the process of co-designing a solution, the community played a central role in the local conservation efforts.

POSITIVE ACTIONS FOR ESD

- Creating a network of schools with ESD teaching based on traditional knowledge of the Mayan communities
- Learning to diagnose environmental problems (at school level and then community level) in order to find smart solutions to mitigate and improve the environmental conditions for primates

The visual participatory methods (photovoice) used provided the community members with agency and a space to observe, reflect, discuss and act on the environmental issues they were experiencing. This space also helped the students and other participants to build their creative communication and media skills and to develop a confident expression of their experiences.

With the introduction to the school of a newer, participatory mode of problem-solving, the community was able to take action and share their learning outcomes

with other schools and communities in the region.

Through the project, the community has taken charge of their lives as experts and are now able to sustainably enhance their livelihood and environmental conditions.

PRIORITY ACTION AREAS FOR ESD

- Transforming learning environments
- Building capacity of educators
- Empowering and mobilising youth

ENHANCING THE QUALITY OF ESD

In Mexico, ESD is yet to find its rightful place in mainstream school curricula. Even where the topics appear, they are taught using the lexicon of science and technology. Through Montserrat's project, the students learnt to build a closer connection with environmental issues in their communities and were also able to apply worldviews such as buen vivir \rightarrow 8 and education for peace that resonate with indigenous knowledge systems. In the process, the teachers have also begun to include this content in their classroom, trying to forge links between formal, standardised curricula and local topics of concern.

SDG AND RELATED SUCCESSES



Monserrat's ESD participatory project on primate conservation to create awareness among primary school students and their communities contribu-

tes to SDG 4 (Quality Education, Target 4.7).



By highlighting issues of primate conservation and local livelihood issues, Montserrat's project contributes to SDG 15 (Life on Land, Target 15.7). The aim

of this target is to take urgent action to end poaching and trafficking of protected flora and fauna.



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"Not only do we have the power to make things happen, but it is now our responsibility to address sustainability issues. With the ESD programme, we have now been trained and have resources and networks with relevant institutional support. Doing nothing is no longer an option."

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A Sustainable Career Path



© MANSI SHARMA

"Framing career choices in terms of choosing problems to work on allows young people to explore the skill sets and resources they have at several levels of action."

MANSI SHARMA

SHORT FACTS

PROJECT TITLE
Embedding ESD in career planning
workshops

CONTRIBUTOR Mansi Sharma

INSTITUTIONAL AFFILIATIONS
InVaarta Communications

GEOGRAPHICAL LOCATION New Delhi, India

CURRICULUM AREAS COVERED

Career guidance and counselling, media
literacy skills

PROJECT TIMEFRAME
October 2018 to October 2019

PARTICIPANTS 15 to 17 year-olds

STAKEHOLDERS INVOLVED Students, career advisers, teachers, schools, InVaarta Communications, One Step Up Education

RESOURCES NEEDED TO COMPLETE
THE ACTIVITY/PROJECT
Student volunteers, supportive teachers
and head of school

BACKGROUND

The question of vocation is central to all our lives. The work we do on a daily basis not only sustains us and gives our days meaning, it also allows us to build particular relationships with the world around us. It was this quintessential idea that helped germinate ESD mentee Mansi's innovation project. A career education practitioner, Mansi, along with her colleagues, researcher Aditi Arur and filmmaker Saransh Sugandh, worked on a project that centred around integrating goals of career planning and SDGs.

So far career guidance practice is valued primarily for the economic function it serves, from feeding the labour market with ready and trained "resources," to advancing an individual's personal career trajectory. The collaborators in the project reassessed this dominant approach to instead consider career counselling as a vehicle for social justice and advancing ESD goals. One of the central questions that was both posed and dealt with in the project was: what are the ways in which our individual choices can help prevent social inequalities occurring and contribute to community-centred, sustainable development goals? The project took shape in the form of a research enquiry, ESD-inspired career counselling sessions, and a film documenting career aspirations of first generation learners in a school in Delhi.

Mansi volunteered at the research site, a government-run school in New Delhi, for a total of three months. Government schooling in India is provided free-of-charge and is mostly attended by students from economically weaker sections of society. Therefore, participating students were also first generation learners who lacked the social and cultural capital required to make empowered career choices. During this time, Mansi interacted with students and the teaching staff to develop a deeper experiential understanding of the context through her role as a volunteer teacher. This helped the research team develop a more situated understanding of the students' career aspirations.

POSITIVE ACTIONS FOR ESD

The project consisted of three parts—a research project, career counselling sessions, and a film. Using qualitative methods, the research first sought to un-

STORY 7 · MANSI SHARMA 44 45

derstand the career aspirations of these first generation learners and their understanding of the sustainability issues in their environment while exploring any shared competencies they had in both career aspirations and sustainability. This exploration was captured in the following research questions:

POSITIVE ACTIONS FOR ESD

- In what ways do students characterise issues of sustainability as it relates to their own lives, both now and in the future?
- Do the competencies needed for career planning and sustainable development converge or not?

The interviews and their results were assessed using the ESD competency framework that builds on not just the progress of individual choices but also their respective contributions to community-linked goals. In addition, going beyond a deficit approach which assumes that students "lack" knowledge about the world of work, they sought to explore the "funds of knowledge" students already have. The research protocol itself took on a pedagogical value as it served as a trigger for conversations with the students on their aspirations, choices and sustainability issues relevant to them. In the interviews, students expressed their desire to use their future career choices to tackle a range of issues including poverty, gender biases, environmental protection, education, sanitation, and corrupt practices. This protocol can serve as a future tool for practitioners to capture and assess students' ESD competencies for career planning in more quantifiable and comparable ways.

CAREER COUNSELLING SESSIONS BASED ON THE RESEARCH

To optimise the students' existing funds of knowledge, the team designed a collaborative counselling session for students to discuss career options and potential degree programmes. In one of the classroom activities, students mapped the experience and knowledge of people they knew in various careers and then shared it with their classmates to reveal a much larger network of professions.

The students also carefully examined various sources of information they use for collating career information through a critical media lens to assess their possible advantages and disadvantages. Rather than the students receiving information passively on various careers, these activities helped the career guidance counsellor to combine career and college information by placing the students at the centre of these discussions. The counselling sessions signalled a shift from a person-centred, individualistic, and competition-oriented approach to a more collective and cooperative approach to career planning.

DOCUMENTARY FILM

Some students in the same year group also responded to the research team's request for volunteers to capture on video their experiences with respect to key sustainability issues within their neighbourhood. In this exercise, they went out into their communities to highlight issues that mattered most to them. These key themes within their neighbourhood generated a great deal of enthusiasm among them as a collective. These contributions and interviews were then edited into a documentary—"ESD ki Gully" (The path of ESD)framing their personal aspirations relating to their future and the problems they would like to solve in their immediate locality. The film focused on the voice of youth, their aspirations and their grounded understanding of sustainability. It also offered everyone an opportunity to learn from each other.

IMPACT AND CONTRIBUTIONS TO SDGS OUTPUTS

- Research tool that can help engage with ESD competencies in students while career planning
- Collaborative career planning sessions with a class of 30 students
- Documentary film capturing young people's career aspirations along with their situated understanding of sustainability



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"The ESD Mentoring Programme opened several doors for me. It helped me engage with ESD professionals and gave me a renewed sense of purpose, a network and a community. In addition to this, I learnt how to orient and articulate my goals and ideas using the sustainability frameworks."

SDG AND RELATED SUCCESSES



The project advanced the promotion of knowledge and skills within the ESD domain (Target 4.7) and triggered conversations on sustainable lifestyles,

human rights, gender equality, culture of peace and non-violence. By addressing the students' direct career counselling needs it helped advance the goal of increasing "relevant skills for their financial success." The media literacy skills worked on also support the students with better employability outcomes (Target 4.4)



By directly tackling the career counselling needs of first generation learners, the project sought to support young people by improving their

chances in higher education, training and employment (Target 8.6)



The activities brought into focus the environmental issues faced by the students' communities and neighbourhoods. Increasing awareness of these is-

sues would help trigger actions that would in turn reduce adverse environmental impacts and help build more sustainable communities (Target 11.6)

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Climate Education as ESD Action



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"We are at a historic moment in time when taking urgent climate action is the only way forward. And this restoration of balance and curbing accelerations in temperatures cannot happen without climate education."

SHEETAL ANTIL

SHORT FACTS

PROJECT TITLE

Teacher training programme on climate change and sustainable development goals

CONTRIBUTOR Sheetal Antil

INSTITUTIONAL AFFILIATIONS Al Gore's Climate Reality Project

GEOGRAPHICAL LOCATION

Maharashtra, north eastern regions of India

CURRICULUM AREAS COVERED Climate crisis and the SDGs

PROJECT TIMEFRAME July 2020 onwards

PARTICIPANTS

School teachers in rural and semi-urban centres in Maharashtra and Orissa

STAKEHOLDERS INVOLVED

Teachers, principals, school management, education societies, local experts

BACKGROUND

India is home to one-fifth of the world's youth, with close to half its population of 1.3 billion being younger than 25. Given the growing concerns around lack of climate action, Sheetal Anil, a New-Delhi based development professional, joined the ranks of the Climate Reality Project, an international organisation mobilising action around climate change. With an academic background in biodiversity, conservation and management, she wanted to engage with young people in a systematic and sustained way and this resulted in her leading a teacher training project to embed climate and sustainability education in schools across India.

Reasons for taking climate action are now evident for all to see. As Sheetal visited schools in drought-stricken regions of Maharashtra in western India, it was clear to her that extreme weather events and the global climate crisis were not a distant concept for these schools and teachers, but an immediate, everyday reality. Therefore, her teacher training efforts in these semi-urban and rural areas was centred around starting conversations on links to the global climate crisis and possibilities of transformation and change with everyday actions.

Since 2015, Sheetal's ongoing project has trained 7900 teachers and administrators in schools in rural and semi-urban parts of Maharashtra and north-east India. During her half-day training sessions, she covers topics around climate change, its impact and threats, as well as sustainable development goals and targets. In these interactive workshops, she uses presentations, workbooks, teaching guides for SDGs and opportunities for reflection. The aim is to fully equip teachers to be able to handle and embed themes of climate change and SDGs and use them in their everyday lessons.

While initially the training targeted teachers of science subjects, in her more recent workshops, teachers from all backgrounds and subjects have attended these climate education workshops.

POSITIVE ACTIONS OF ESD

One of the challenges of this teacher training programme was to make this global subject matter,

STORY 8 · SHEETAL ANTIL 48 49

locally relevant and meaningful. To make sure both the global and local elements were addressed, Sheetal and her team adopted a two-pronged strategy. On the one hand, they provided the teachers with exhaustive resource material on climate change and SDGs that could be easily modified and adapted to the local context. This was in addition to self-paced online training modules on Moodle where teachers had the time and space to absorb the training material at their own pace. On the other hand, Sheetal enlisted the support of local experts on sustainability to address the teachers regarding local sustainability themes in their regional language. These discussions helped to further connect issues of climate change with the teachers' familiar everyday experiences.

POSITIVE ACTIONS FOR ESD

- Introduce and explain the basics of science, impacts of and solutions to climate change to create awareness and build capacity for climate education in schools
- Introduce the concept of Sustainable
 Development Goals with special focus
 on environmental goals
- Introduce various teaching resources and tools on climate change and education for sustainable development available online
- Co-creation of action based learning and approaches in areas of energy efficiency, water management, waste management, biodiversity and clean air.

These efforts were supported on the ground by two other affiliate programmes. First, a "Green Campus programme" introduced sustainability concepts into the everyday running of the schools. Sheetal and her team offered solutions such as rainwater harvesting or solar panels for clean energy, trying to impact overall school policy and helping them transition to more sustainable energy solutions. In addition to their efforts within the teacher training programme, further momentum was generated to adopt "critical" green

measures around the school campus. These included action towards improving air, water, waste, biodiversity and energy conditions. For example, a target was set to make sure that schools that were part of this campaign would transition to solar panels to provide at least 5 percent of their annual electricity consumption. Another mode was to encourage the implementation of the 3Rs—Reduce, Reuse, Recycle—in the waste management processes around the school campus.

To expand the range of climate action beyond the schools, some of these teachers also progressed onto the Climate Reality Leadership programme. This affiliate programme helped them connect to a consortium of over a 1000 changemakers whose aim is to mobilise people to take climate action within their local communities.

PRIORITY ACTION AREAS FOR ESD

- Building capacities of educators
- Empowering and mobilising youth
- Transforming learning environments
- Accelerating local level action

BUILDING DEEP CONNECTIONS WITH PARTNER SCHOOLS

Helping to green school campuses has allowed Sheetal and her team to build an enduring relationship with the schools they work in. Working in close proximity with school administrators, Sheetal and her team always took the feedback they were offered by the schools into consideration. Further, to make sure schools stay up-to-date with new developments, they were sent newsletters with updated sources of information on climate education. An activity book replete with ideas for sustainability-related action allowed the participating teachers to track their efforts over six months.

Sheetal's project, which initially started with only five to ten teachers, now reaches nearly 1500 teachers every year. This expansion has not only been in numeric terms but also in qualitative terms. While it is difficult to report on the efficacy of climate education in the

short term, Sheetal studies workshop feedback closely to see if teachers are able to implement their learning outcomes in classroom teaching. Recently, when a participating teacher sent a video of a flood in her local region, explaining it as an effect of climate change, she knew that the workshops were helping teachers gain awareness of climate issues and their interconnection with their personal and local experiences.

SDG AND RELATED SUCCESSES



Sheetal's project on climate education for teachers contributes to SDG 4 (Quality Education, Target 4.c) by increasing the number of qualified teachers.

Her project also helps enhance the abilities of learners to promote values of sustainable development (Quality Education, Target 4.7).



By highlighting the issue of climate change and sustainability among young people, Sheetal's project is contributing to improving education and

awareness toward climate change mitigation (SDG 13, Climate Action, Target 3.3)



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"Education for Sustainable Development (ESD) is not only for sustainability professionals, educators or not for profits, it is a lifelong learning process for each and everyone, to make more informed and inclusive decisions and for a just and sustainable society."

Changing Mindsets, one School at a Time



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"It is important not to view students from small towns with a deficit perspective. They should be able to appreciate their backgrounds and become changemakers where they are by transforming their mindsets and taking up sustainable career choices."

PRAJNA CAUVERY KOTERA POOVIAH

SHORT FACTS

PROJECT TITLE

Anaadi Sustainability Awareness for the
Young

CONTRIBUTOR
Prajna Cauvery Kotera Pooviah

INSTITUTIONAL AFFILIATIONS
Anaadi Foundation

GEOGRAPHICAL LOCATION Coimbatore, India

CURRICULUM AREAS COVERED SDGs and local climate action

PROJECT TIMEFRAME 2017 – ongoing

AGE GROUP 30,000 school students in south India

STAKEHOLDERS INVOLVED Students, teachers, school administration, volunteers, Anaadi Foundation team members

RESOURCES NEEDED TO COMPLETE
THE ACTIVITY/PROJECT
Workshop facilitator, presentations,
workbooks, teaching guides for SDGs
and reflection sheets

BACKGROUND

Education for sustainable development in India remains largely limited to environmental education. With this focus on the environment, the social and economic aspects of sustainability remain relatively unexplored in classrooms and it was this gap that Coimbatore-based development professional Prajna Cauvery sought to bridge with her ESD project with schools in her region. The aim of the Anaadi Sustainability Awareness Project was to generate a momentum among school students using global frameworks such as the ESD competencies while inspiring them to take action in their local and situated contexts.

The project was conducted with school and university students, with an objective of introducing and exposing them to sustainable development goals. Conducted as workshops and training, the project aimed to introduce the social and economic dimensions of sustainability to the students while inspiring them to take on leadership within local sustainability initiatives. The workshops centred around themes of responsible consumption and production, along with best practices in water and energy conservation. Through the workshops and related activities, the students collectively discussed and reflected on how consumption patterns affect the environment while taking on capacity building actions such as waste management or recycling in their own environments.

In addition to conducting workshops with students, the project's aim was also to train university students as facilitators and to create opportunities for intragenerational learning. Closer to the age of workshop participants, these young facilitators also found these interactions equally transformative.

PROJECT ACTIVITIES

As part of the project activities, the Anaadi team began reaching out to schools and conducting workshops through small-scale video screenings. These video screenings were followed by discussions on local solutions for sustainable consumption and production. Although the content was flexible, the facilitators kept the focus of the workshop on instructive elements that included information on SDGs,

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while the remaining 40 percent of the workshop time was used for discussions of a case study. The facilitators made sure that irrespective of the background of the participants, rural, or urban, they did not view the students with a deficit perspective. Instead, they tried to help participants appreciate their roots while encouraging them to take up sustainable careers. All workshop elements had the objective of helping them identify, strengthen and act based on ESD competencies. So far, the project has been able to reach out to nearly 30,000 students across southern India.

POSITIVE ACTIONS FOR ESD

- To create an awareness of UN Sustainable Development Goals (SDGs) and sustainability among young people and help them gain a perspective on global environmental issues and their role in solving them
- Give them exposure to real-world sustainability problems and encourage them to design solutions
- Work on real-world consumption problems through simulated learning and explore and evolve relevant solutions to specific problems.
- Help young people understand sustainability both in a global and local context and take on the role of active global citizens.

ANALYSING PROBLEMS, PROPOSING SOLUTIONS
The workshops were discussed through roleplay allowing the participants to reflect and compare notes on the problems faced by a village administration. Once being assigned a problem faced by the villages, the students then analysed related issues and how these issues affected all aspects of social life. This problem map analysis was an attempt by the facilitators to convey the multi-dimensionality of issues as well as the relational aspects of sustainability. As an example, the problem of the spread of a disease could be related to multiple factors including school enrolment issues,

PRIORITY ACTION AREAS FOR ESD

- Transforming learning environments
- Empowering and mobilising youth

poverty, sanitation etc. As part of the second phase of the workshop facilitation, participants were led into discussions around proposing solutions to the problem. For this discussion of solutions, students were offered an introduction to an ancient Indian framework including concepts such as dharma (an individual's ethical duty), artha (generating finances) and kama (elements of motivation and satisfaction). Using this rubric, students would evaluate their solutions using the parameters of ethics, law, financial feasibility, and whether their solutions satisfied stakeholders' interests.

GLOBAL FRAMEWORKS, LOCAL SOLUTIONS

Prajna's project focused on incorporating global SDG frameworks and promoting local best practices. Combining these two aspects also presented a challenge for her as the local context was not always available but needed to be researched and integrated into the workshops on a case-by-case basis.

Working on a low-budget, volunteer model has allowed Prajna's team to take the workshops to a vast number of students. While tracking the effects of the workshops on the students, pre-and post-evaluation has revealed that there was a noticeable difference in choices students claimed they would make vis-a-vis their lifestyles and careers. Prajna believes her team's biggest achievement in the project is this specific transformation in the attitudes of the students as well as the volunteers conducting the workshops.

MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"The ESD leadership program was a very rich learning experience for me. The opportunity to learn from peers working on impactful projects across the world broadened my perspective and understanding of how sustainability is translated in diverse contexts. I greatly appreciate my mentor's valuable insights as I worked on my project, which prompted me to think both critically and creatively. As a sustainability professional, I am constantly putting into practice the knowledge, frameworks and concepts I learned through the program."

SDG AND RELATED SUCCESSES



Prajna's project on sustainability education for school and university students contributes to SDG 4 (Quality Education, Target 4.7) enhancing the abilities

of learners to absorb and further promote values of sustainable development.



By highlighting the issue of climate change and sustainability among the young people, Prajna's project is contributing to improving education and

awareness toward climate change mitigation (SDG 13, Climate Action, Target 3.3)

Hiking for Peace



© ETIENNE JACQUES BASSON

"Most of the kids we work with come from communities with high incidences of gang violence. The idea of these hikes is to take the kids out into nature to allow them a space to reflect, discuss, and reimagine what their communities can do. Exposing them to natural and safe outdoor areas offers them a sense of freedom where they can rethink their own communities and spaces."

ETIENNE JACQUES BASSON

SHORT FACTS

PROJECT TITLE
Earthchild Project Lavender Hill
eco-explorers

CONTRIBUTOR Etienne Jacques Basson

INSTITUTIONAL AFFILIATIONS
NGO Envirolove

GEOGRAPHICAL LOCATION Stellenbosch, South Africa

CURRICULUM AREAS COVERED Outdoor education, sustainable development goals

PROJECT TIMEFRAME February 2019 to November 2019

PARTICIPANTS
High-school students

STAKEHOLDERS INVOLVED
Students, schools and Envirolove
members

RESOURCES NEEDED TO COMPLETE THE ACTIVITY/PROJECT Facilitators, workshop plans, activity sheets

BACKGROUND

For residents of Lavender Hill, a suburb in Cape Town, coping with and surviving gang violence and shootings has become a part of their daily struggle. In July 2021, close to 900 gang related killings were reported in Lavender Hill and the surrounding area of Cape Flats since the beginning of the year \rightarrow 9. These numbers have risen steadily in recent years and exacerbated feelings of precarity and mistrust in the daily lives of community members, especially of children. Realising the dire need to create safe spaces for school-age students in Lavender Hill, Etienne Jacques Basson, a Cape Town-based environment educator, formulated the idea of outdoor education activities away from the violence, including nature hikes, to help them rejuvenate and reaffirm their community bonds.

He conceived the project while working as an environmental project manager at Earthchild, an NGO working on sustainability education. He held a firm belief that these safe spaces are critical in advancing learning based on ESD, especially against the backdrop of the widespread terror the community and its children were experiencing

PROJECT ACTIVITIES

Etienne began by simply incorporating information on SDGs into his school's hiking club sessions as part of the initial outdoor education initiatives. As he moved on from Earthchild to working with the University of Stellenbosch, Etienne continued to work on school outreach programmes focusing on scientific and environmental education. The initial phase of this project grew organically and ran for nearly three years during which time most of the students enrolled in the hiking group stayed in touch with Etienne and helped form the core of his recently set up NGO Envirolove. He now takes a group of 28–30 students, in an age range of 8 to 11, for monthly outdoor activities. As part of the activities, students go hiking as well as taking up community outreach activities, including clean-ups and eco-tourism.

AN OUTDOOR CLASSROOM

The main project activities include two strands of outdoor education: first, non-formal after-school activities that link the nature hikes with their formal

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school curriculum and second, community-centric eco projects, including cleaning up trails and eco-tourism. The first set of learning activities focus on bringing home a formal curriculum linked topic that is then related to the sights and sounds of the hike itself. These topics are also introduced in a broad, interdisciplinary format while taking into consideration the opportunities provided by an outdoor learning context. An example of such an activity would be a lesson on geological features. A typical hike that is 5 hours long could begin with a 30 minute lesson on geological features. This lesson is followed up by the tour where students use worksheets with adjectival prompts to identify these features and note down their observations. As part of this field guide and worksheet, students are also offered definitions and infographics on plants, animals and biomes of the region.

POSITIVE ACTIONS FOR ESD

- Exposing children from disadvantaged communities to exploration of natural spaces in their city through outdoor activities
- Creating awareness around important sustainability issues
- Sharing information and resources about the social, economic and environmental value of natural spaces in their community and city

The second aspect of the project involves the community becoming involved in sustainable development in the area. By giving them a feeling of ownership, these projects involve locals in cleaning up trails, eco-tourism initiatives, and community activism for saving wetlands in the area. For instance, in a project focusing on identifying environmental risks in nearby wetlands, volunteers offered to carry out clean-ups and to monitor water quality and provide reports to landowners.

Since its inception, students have remained consistently committed to attending Etienne's nature hikes. Etienne ascribes this interest and involvement to

the positive and constructive interactions within the group. A departure from the violent and dangerous environment of the localities where the students live, the hikes provide a safe haven for them. Away from their daily experiences, students enjoy the non-violent and self-affirming communication on the hikes. The students are motivated to explore their surroundings freely and without strict enforcement of behaviour. Therefore, the environment encourages learning and a free flow of conversation and exploration.

To monitor and evaluate the project, Etienne made sure he collected impressions of the students though both formal and informal modes. He had certain markers such as communication, critical thinking, teamwork and empathy to evaluate competency development in the hike participants. Informally, he made sure the communication channels between him and the students remained open and free, allowing him to connect with students in an authentic and personal way.

PRIORITY ACTION AREAS FOR ESD

- Transformative learning environment
- Empowering and mobilising youth
- Accelerating local level action

WINS AND CHALLENGES

The logistical aspects of leading a large group of students on an outdoor hike safely remain the biggest challenge and responsibility for the project leader. To make sure the project scales to other communities and locations, Etienne needs to identify highly motivated project leaders who can take on these activities responsibly. Once these barriers are overcome, outdoor hikes themselves hold immense potential for developing a broad spectrum of ESD competencies and incorporating social and economic aspects into environmental education. During the hikes, participants learn about and relate to their natural environment in a deeper way and also learn to relate to each other better, developing friendlier and less suspicious attitudes towards one another. By experiencing the hikes them-

selves, students also gained nature guiding skills that they can further utilise in employment opportunities within the field of eco-tourism.

For Etienne, the mentoring programme has exposed him to academic frameworks that allow him to frame his project within the purview of ESD and apply for further funding. He was able to relate activities on the hiking trails to formal learning objectives and establish nature hikes as a powerful mode of education for children who have experienced violence in their communities. The feedback and support from the mentors and mentees as part of the programme has helped him reflect upon and further articulate the pedagogic value of the outdoor hikes.



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"ESD-Leadership for me is about translating a concept on paper into reality. It can be a variety of projects that all of us mentees have developed to help create more sustainable cities and communities. In this kind of leadership one goes about implementing these ideas actively, understanding and establishing their links to the goals of education for sustainable development. One could also say, it is working on the ground toward sustainability, simply and effectively."

SDG AND RELATED SUCCESSES



Etienne's project on outdoor education contributes to enhancing the abilities of learners to promote values of sustainable development (Quality Education, Target 4.7).



By working with young people from violent neighbourhoods, Etienne's project of promoting peace through outdoor education contributes

to indirectly reducing forms of violence and related death rates (SDG 16, Peace, Justice and Strong Institutions, Target 16.1).

All in a Day's Play



© ANHAI MARTÍNEZ ENCINAS

"I love all forms of nature and I believe it is absolutely essential to create didactic materials for schools that will inspire more people to do the same. We have to do all that it takes for us to become more aware of the human potential to create and not destroy this beautiful planet that we inhabit."

ANHAI MARTÍNEZ ENCINAS

SHORT FACTS

PROJECT TITLE
Education for Life and Peace Network

CONTRIBUTOR Anhai Martínez Encinas

INSTITUTIONAL AFFILIATIONS Education for Life and Peace Network (2010 – 2021)

GEOGRAPHICAL LOCATION Chapalas, Mexico

CURRICULUM AREAS COVERED Interactive games for ESD instruction, creating networks for ESD

PROJECT TIMEFRAME December 2018 onwards

PARTICIPANTS
Primary school students

STAKEHOLDERS INVOLVED Students, various civil society organisations, schools

RESOURCES NEEDED TO COMPLETE THE ACTIVITY/PROJECT Workshop material—board games, facilitators, instructional manuals

BACKGROUND

Networks strengthen our collective abilities to work towards the goals of ESD. It was this firm belief that led Anhai Martínez Encinas, an educator based in Mexico, to work towards building stronger links between institutions, academia, individuals and communities for knowledge sharing and programme implementation within the field of ESD. Focusing on the values of deep ecology, nature rights and peace education, she facilitated national level meetings of the "Education for Life and Peace Network" (EVP). The overall aim of the network is to promote alternative games, narratives, and art-based educational perspectives. Grounded in these ideals, EVP conducts training sessions and workshops for educators as part of its activities.

A more recent impetus to develop educational material through this network led Anhai to design board games that helped students learn about ESD concepts in a fun, interactive and accessible way. She designed, and created board games for schools in the Chapala region in Mexico and believes these educational games will improve the quality of instruction in schools, especially when introducing sustainability concepts.

PROJECT ACTIVITIES

The project began with a broad analysis of the gaps that existed in sustainability education in the region. Taking inspiration from concepts in ESD and EVP, Anhai created two games to help bridge some of these gaps. Both these games drew on concepts outlined in EVP and ESD and were therefore interlinked.

One of the games was based on the concept of a lottery or "Bingo" where students drew cards with illustrated concepts such as Good Living, Composting, Styrofoam etc. Drawing on the philosophical ideal of "deep ecology," the game helped students build links between ostensibly unconnected ideas. Anhai found the game was received differently in different schools. In one of the schools that had a greater exposure to nature and the principles of sustainability, she found it reinforced concepts the students were already familiar with. On the other hand, the other schools required a further catalyst in the form of storytelling for the concepts to

be better understood by the students. These stories or narratives helped bridge the gap between theoretical concepts in ESD and the day-to-day lives of the students. These stories were not imposed but co-constructed with the participating students.

POSITIVE ACTIONS FOR ESD

- Create a network that supports educational projects related to Education for Life and Peace (EVP) and ESD in Mexico
- Create and design learning processes for all ages and build a community of practice to strengthen the network
- Design educational materials such as manuals, board games and videos for facilitators and schools
- Carry out EVP and ESD training for public and private schools
- Share learning to design training on different network platforms

For example, by using the analogy of the human body, Anhai developed narratives that helped students understand the concept of climate change. Pollution was related to junk food and the subsequent health issues to changes in the environment. Anhai now hopes that she will be able to develop an in-depth instruction manual in addition to presenting this game-based teaching methodology as a toolbox to motivate and empower more educators.

The second game called Vines and Pipes took inspiration from the popular snakes and ladders board game. Here, the vines represent nature and purity, while the pipes represent contamination. This second game was also life-size and students could step on the board and take their turns by walking on the game board in a tactile manner.

PRIORITY ACTION AREAS FOR ESD

- Transforming learning environments.
- Building capacities of educators
- Accelerating local level action.

So far the schools have found these interventions fairly useful as they find it difficult to teach concepts of sustainability against the competing pressures of completing their planned syllabi. However, there are certain logistical challenges that have made delivering the board game workshops difficult. The games are heavy and need to be transported from school to school. Secondly, the games can be mainly played by secondary school students or when they have reached a certain understanding of their natural and social environment. Other challenges also include the use of ecologically friendly material and reducing waste in the production of these board games. Anhai wanted to make sure the games were manufactured in the most ecological way possible, creating minimal waste. She is also looking for ways in which she could subsidise these games so they could be given out free to state schools.

For Anhai, the ESD mentoring programme has helped her explore the educational potential of the SDGs and delve more deeply into the concepts of environmental education and the socio-political history of Mexico. Her exchange with colleagues and mentors from different countries and contexts has helped her further understand the practical implications of implementing the ESD projects. The experience that Anhai gained during the mentoring programme has now helped her gain confidence in developing ESD workshops with other networks.



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"Being a leader is a delicate and honourable task. A leader has to strengthen herself in all areas in life. For instance, consistent self-improvement and ways in which to relate to other people. ESD-Leadership requires exemplary behaviour in both words and actions to help lead people with commitment and empathy."

SDG AND RELATED SUCCESSES



Anhai's project on board games for ESD instruction contributes to SDG 4 (Quality Education, Target 4.7) by enhancing the abilities of learners to promote

values of sustainable development.



By setting up and facilitating networks for ESD, Anhai is contributing to creating multi-stakeholder partnerships to mobilise and share knowledge,

expertise, technology and financial resources towards greater sustainability. (SDG 17, Partnerships for the goals, Target 17.16)

Championing Clean Water Action



© AYANDA TSEPO LEPHEANA

"The ESD concept also includes education in informal settings. Having a certain knowledge base immediately gives one the responsibility of empowering others in the room. Ultimately, taking on any citizen science project is about listening and developing confidence in oneself and others."

AYANDA TSEPO LEPHEANA

SHORT FACTS

PROJECT TITLE

Mobilising communities and building skills in sustainable development

CONTRIBUTOR Ayanda Tsepo Lepheana

INSTITUTIONAL AFFILIATIONS
GroundTruth

GEOGRAPHICAL LOCATION Mpophomeni, South Africa

CURRICULUM AREAS COVERED
Clean water action, citizen science tools

PROJECT TIMEFRAME
June 2020 to February 2021

PARTICIPANTS

24 Palmiet Enviro-Champs, 7 volunteer facilitators from Mpophomeni Enviro-Champs, 2 WESSA Enviro-Champs and 3 GroundTruth staff

STAKEHOLDERS INVOLVED

Community members, municipal authorities and GroundTruth members

RESOURCES NEEDED TO COMPLETE THE ACTIVITY/PROJECT 24 Palmiet Enviro-Champs, 7 volunteer facilitators from Mpophomeni Enviro-Champs, 2 WESSA Enviro-Champs and 3 GroundTruth staff

BACKGROUND

The connection between fresh water sources and the communities living around them runs deep and is reflected in several everyday aspects of life in South Africa. For example, this reverence can be seen in the use of the Zulu term Amanzi Amnandi, or sweet water, or in the culturally coded practices of not dumping pollutants into fresh water sources. However, the pressures of urban living and changing lifestyle patterns have weakened this understanding, resulting in an increase in water pollution and related health and ecological malaises. To address environmental concerns surrounding illegal dumping and water leaks in his area, and subsequently help renew this fledgling relationship, South African ESD educator Ayanda Tsepo Lepheana galvanised his community to form the group "Enviro-Champs." In 2011, while working with the environmental NGO GroundTruth, Ayanda got together community volunteers in Mpophomeni to help lead clean water action in the region.

Initially, the group's activities involved helping to tackle sewage and water pipe leaks as well as illegal dumping of pollutants in water sources. The group conducted door-to-door educational campaigns and became the eyes and ears of the otherwise short-staffed municipal authority. As the involvement of the community members grew, they were able to create healthier accountability relationships with the municipality around issues of water pollution and conservation.

PROJECT ACTIVITIES

One of the key starting points of Ayanda's project was to identify grassroots issues linked to water within the community. Sewage overflows, water leaks and illegal dumping of pollutants were some of the major problems that his project volunteers managed to identify. While in the initial stages of the project, the community members were entrusted with the responsibility of effectively reporting these incidents to their contacts in the municipality, and over time, they decided to investigate these issues more thoroughly. They found that most of the problems arose due to inadequate or failing infrastructure. The cause of this problem had been earlier attributed to usage patterns in the community. The

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municipality, being understaffed and poorly resourced, could not address these issues head on. This elaborate and on-the-ground assessment of the water issues helped the project formulate a range of conservation and community education programmes.

POSITIVE ACTIONS FOR ESD

- Mobilise communities to make them understand and take action on water quality, quantity and access (equity)
- Address pressing township issues such as solid waste, sanitation, environmental management, and air pollution
- Contribute to the implementation of the National Environmental Education and Training Strategy and Action Plan (2018) of the Department of Environmental Affairs

ENLISTING COMMUNITY MEMBERS

While the volunteers in the programme were motivated to join and improve the water pollution in their cities, Ayanda and his team also organised funding for Enviro-Champs members to earn honorariums for their time and efforts. These payments, for what was termed "ecosystem services," helped enrol even more participants and increased water conservation activity in their respective areas. Some of these included activities such as door-to-door education, identifying leaks and spillages in their areas, and monitoring the health of rivers.

PRIORITY ACTION AREAS FOR ESD

- Empowering and mobilising youth
- Accelerating local level action

The door-to-door campaign took awareness and Enviro-Champ's educational activities through their last mile. The connections that the volunteers made with their community members initiated a chain of co-engaged learning where they constructively identified, shared, and discussed the issues they faced as well as their probable solutions. The second activity undertak-

en by the Enviro-Champs was identifying water leaks in the area. It had been estimated that almost 50 % of all potable water was lost due to leakages in the piping system. These leakages were first identified and then repaired by the volunteers. If these leaks were difficult to fix, the volunteers contacted the relevant authorities. This was also the case for manhole overflows which were located, and the geographical coordinates communicated to local agencies who would then deal with the issue. The volunteers also monitored river health by using citizen science and audit tools. These tools were further employed to check effluents in the water being treated at wastewater plants in the area. As a central pivot for these activities, Ayanda conducted both offline and online learning exchange programmes for the volunteers.

In addition to improving the water pollution conditions in the area, the volunteers, who are from a wide range of age-groups and occupations, found a meaningful way to engage within the community. The participants have not only enjoyed this renewed connection to their communities but also have remarked on how useful the educational elements of the project have been (e.g. water action and citizen science tools). During the COVID-19 pandemic, the Enviro-Champs continued this learning and engagement on easily accessible social-networking tools such as Whatsapp.



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"Being involved in this ESD programme has opened my eyes to the possibilities of engaging with people. I believe that it is important to break all hierarchies in learning, and make sure that we learn together. It is only when learners and teachers make efforts to learn together that genuine learning can happen and topics at hand can be addressed. It has also helped me become a better manager of my work, improving my writing ability and presentation skills."

SDG AND RELATED SUCCESSES



Ayanda's ESD project on clean water action is helping enhance the abilities of learners and community members to promote values of sustainable

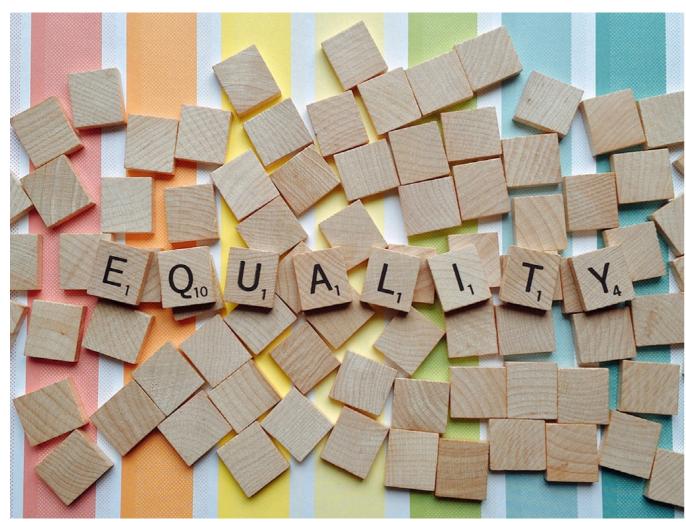
development (Quality Education, Target 4.7).



By carrying out consistent educational activities around clean water action, Ayanda is contributing to the SDG 14. The project is expected to prevent

and reduce marine pollution of all kinds, in particular from land-based activities (SDG 14, Life Below Water, Target 14.1)

Decolonising Education



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"It's urgent that we are able to go deeper into what we see and read in textbooks. Sometimes the texts promote racism and discriminatory thinking through hidden expressions and images. We need to be able to deconstruct this curricular material to tackle the roots of inequality in our education systems and society."

DR. BERTRAND TOUMI NJEUGUE

SHORT FACTS

PROJECT TITLE "Different, but not differently!"

CONTRIBUTOR
In association with Landesinstitut,
Hamburg

INSTITUTIONAL AFFILIATIONS
Dr. Bertrand Toumi Njeugue

GEOGRAPHICAL LOCATION Hamburg, Germany

CURRICULUM AREAS COVERED Teacher training on SDGs, countering racism and discrimination in learning material

PROJECT TIMEFRAME February 2019 to June 2019

PARTICIPANTS
Students and teachers at schools in Hamburg

STAKEHOLDERS INVOLVED Teachers, teacher associations, students and schools

RESOURCES NEEDED TO COMPLETE THE ACTIVITY/PROJECT Workshop venue and material, activity sheets, facilitators

BACKGROUND

We live in an increasingly globalised world and our environments are changing along with the social composition of our worlds. Increasing migration from nations ravaged by war or poverty to western, industrialised nations has brought questions of identity, integration and social attitudes rooted in the colonial past into sharp focus. It was some of these themes that motivated Dr. Bertrand Toumi Njeugue, a Cameroonian educator, to initiate educational programmes for teachers and students that confronted social inequality by reflecting on curricular material that perpetuates racism and discrimination. As an ESD practitioner in Germany, it was important for Bertrand to broaden the purview of discussions around sustainability and climate change to include social differences that are rooted in colonial history. As part of his project "Different, but not differently!," Bertrand designed workshops for student teachers and high school students to facilitate a collective reflection on what these injustices were and how they could be tackled within educational spaces. The process of decolonisation in education seeks to provide an opportunity for reflection on colonising practices that persist in our educational environments. The project sought to make efforts towards a sustainable society, especially by means of addressing instances of racism and discrimination in textbooks and thereby achieving SDG 11 (Reducing Inequalities).

The project was designed to embed some of these values in Hamburg schools and at the Hamburg State Institute. Examples of racism and discrimination embedded in curricular material were reflected on in the workshop sessions and alternatives were sought. Inspired by the action-research tradition, Bertrand wanted to introduce anti-colonial thought into real and lived pedagogical experiences.

PROJECT ACTIVITIES

Bertrand's 22 years of experience as a German language teacher, visits to Germany, and deeply engaging with language teaching material helped this idea form in his mind. He realised it was important for teachers to be exposed to anti-discriminatory thinking so they could deconstruct teaching material that invariably perpetuated racist thinking. He believed this thinking

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POSITIVE ACTIONS FOR ESD

- Contributing to decolonising teaching and learning (contents, processes, teaching and learning materials)
- Contributing to reducing instances of racism and discrimination in the daily teaching of school subjects
- Promoting social inclusion

persisted, irrespective of the subject. While he worked primarily with teachers of geography, the workshop template could be replicated for any subject. There is a strong drive to design pedagogical programmes toward sustainability at the national policy level in Germany, but in his view, the school environment lacked discussions on the subject of racism and discrimination and how it links back to the larger sustainability goals.

PRIORITY ACTION AREAS FOR ESD

- Transforming learning environments
- Building capacities of educators

The three day workshop, conducted in February 2019, was divided into three blocks. In the first block, Bertrand clarified concepts of Education for Sustainable Development (ESD) and Sustainable Development Goals (SDGs) for the workshop participants. Using interactive activities and mind-maps, this block focused on learning about competencies for ESD and what it would mean to adopt an anti-racist and anti-discriminatory approach towards education. The next block focused on SDG 10 (Reducing Inequalities) and SDG 13 (Climate Action) and how their targets were linked to the everyday lives of the participants. Using group work and mind-maps, the participants also discussed their personal experiences of climate change. The third block was centred around implementation of anti-racist and anti-discriminatory climate action. Working in groups and using examples, participants gave presentations on how an anti-racism and anti-discriminatory stance can be pursued vis-a-vis the curricular material. For example, Africa is often referred to in textbooks as a country as opposed to being showcased as a diverse and multicultural continent.

In addition, given the students' interest in the Fridays for Future movement, they attended a climate action rally. As part of their reflections, they tried to link the workshop activities to the larger climate movement. As a final outcome of the project, students presented their ideas and photographs of the striking students as part of an exhibition. This exhibition was made available to schools and seminars at the Landesinstitut. In the following meeting, Bertrand also recorded feedback from the participating students.

While Bertrand had the idea of working on an anti-racism and anti-discriminatory education, he was able to connect this pedagogical perspective to the larger goal of sustainability through the training provided in the mentoring programme. Being a language teacher, his perspectives on the social dimensions of education also expanded to include climate change and the various interconnections between them. The view that sustainable development is linked to the environment but equally to the social injustices was reinforced through interactions with his peer group of mentees and mentors. He now hopes that his pilot workshops can be used as a template to create further training material.



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"To be an ESD leader is to strive to lead the way in helping domain experts consider and incorporate ESD values and competencies into their work. An ESD leader is someone who can use sustainability as a foundation for their individual projects in varying fields."

SDG AND RELATED SUCCESSES



Bertrand's ESD project on introducing antiracist and anti-discriminatory thinking into the mainstream curriculum contributes to more qualified

teachers pursuing values of sustainable development in their classrooms (Quality Education, SDG 4, Target 4.c)



By empowering and promoting social, economic and political inclusion of all, irrespective of race, ethnicity and other origins, Betrand's pro-

ject is contributing to the SDG 10 of Reduced Inequalities (Target 10.2)



© ROSA ELENA TORRES OLASCOAGA

"Of every 100 women in poverty in Mexico, only 25 are able to transform their current living conditions. For those women whose mothers are not in work, their opportunity to join the labour force are even worse. That is why I wanted to show them inspiring and affirming women role models in STEM careers."

ROSA ELENA TORRES OLASCOAGA

SHORT FACTS

PROJECT TITLE
WILL—Women Investing in their Lives

CONTRIBUTOR Rosa Elena Torres Olascoaga

INSTITUTIONAL AFFILIATIONS
The Olascoaga Foundation, University of
Monterrey

GEOGRAPHICAL LOCATION Monterrey, Mexico

CURRICULUM AREAS COVERED Leadership training, career possibilities in STEM, mentorship from women working in STEM

PROJECT TIMEFRAME August 2019 to November 2019

PARTICIPANTS
30 women mentors working in STEM, 80 female participants

STAKEHOLDERS INVOLVED
Technical schools and their staff, women
mentors working in STEM, participants,
implementation partners

RESOURCES NEEDED TO COMPLETE THE ACTIVITY/PROJECT Workshop material and venues, partnerships with universities and industry, enlisted mentors

BACKGROUND

The gender gap within careers linked to fields of Science, Technology, Engineering and Mathematics, or what is popularly termed as STEM careers, remains abysmally wide. Globally, figures suggest only one quarter of the total STEM workforce is female. While this chasm is recognised across the world, these figures vary from country to country and reflect even poorer trends in some. In Mexico, the gender representation in the broader fields of education, employment and training remains incredibly skewed. Here, less than half the population of women of working age are engaged in employment where they face a 50 per cent chance of experiencing pay disparity. With a lack of a nurturing and motivating environment to make emancipated career decisions, women continue to make choices that hinder their full participation in the labour force.

To counter these social conditions, Rosa Elena Torres Olascoaga, a Monterrey-based ESD professional wanted to create opportunities and spaces for women to be able to make more empowered career decisions. Toward this goal, Elena developed a mentoring programme entitled "WILL—Women Investing in their Lives" for students from low-income households studying at local technical schools in Monterrey. These technical schools deliver a curriculum which is relevant to local industrial skill needs. However, given their disadvantaged backgrounds and a general apathy towards education for women, these women often drop out and discontinue their studies.

The project sought to identify and strengthen ESD competencies with the participating women. The other aspect was to help support these women by enlisting female mentors who worked within the field of STEM. Both the training and the mentoring was to inspire participants to reflect upon and overcome barriers at the social and personal level that they experienced in their career journeys.

PROJECT ACTIVITIES

Elena's experience of running large scale adult education programmes for women helped the project gain further traction. It was important for her to make sure that the workshop material appealed to the sensibilities

- https://www.oecd.org/about/secretary-general/ gender-equality-and-empowerment-of-womenfor-inclusive-growth-mexico-january-2020.htm
- https://www.statista.com/statistics/803886/mexico-gender-gap-labor-market-category/

POSITIVE ACTIONS FOR ESD

- To build an environment that motivates women to select a STEM career
- Exchange of knowledge and experiences between students and mentors working in the field of STEM
- Visits universities and industrial sites to provide women with practical exposure
- Developing and strengthening the key competences of Education for Sustainable Development (ESD) in young low-income women between the ages of 15 and 18, who are in their last year of study at the public and technical high school CECYTENL, in Garcia and Escobedo (Nuevo Leon, Mexico).

of the participants. She focused on training the women by using concrete examples that related to their daily lives, by experiencing the world of work through a direct exchange with mentors, and by visiting universities and local factories.

The project was divided into roughly three stages. The first stage was to enlist mentors. A call for applications from women working in the field of STEM willing to be part of the mentoring team was released. Following a detailed screening, 30 mentors were chosen and trained by the project team on the mentoring rubric. As part of these training sessions, the facilitators and mentors discussed themes such as "multi-dimensional poverty" and "volunteering and citizenship."

PRIORITY ACTION AREAS FOR ESD

- Empowering and mobilising youth
- Transforming learning environment

The second stage of the project was to facilitate interactions between the mentors and the participants. From introductory sessions and an overview of the mentors' working lives, the meetings also covered themes of stereotypes of STEM workers and ways

in which they could be deconstructed. Other themes included ways to instil self-awareness and resilience.

The last stage of the project included field visits. The participants visited the University of Monterrey and observed laboratories in several disciplines. These included lab-work in chemical engineering, bioengineering, augmented reality, food engineering, electronics and astronomy. The industrial visits included a wind farm and a waste management plant where participants not only learnt about the disciplines at work, but also heard inspiring accounts from women working in these areas.

Overall, the project activities helped the participants reflect on their future career paths and to draw inspiration from and build networks with their role models. This project has now flourished into a fully-fledged mentoring cycle that in its most recent iteration had enlisted close to 120 mentors. The transition to an online approach due to the pandemic has allowed them to reach a wider geography. With a mother who was a first generation learner and a woman with a STEM career, Elena has experienced the benefits of a woman's empowered position in a family. She strongly believes that these encounters between participants and mentors help to accelerate the participants' and inspire them to proactively work towards building their careers in STEM.



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"I think ESD-Leadership provides guidance in the areas one wants to work on. Using the ESD competencies as a guideline, I can focus on helping other people develop these competencies further. I love the framework: it is in itself very valuable. It is also important for all of us working in ESD to strongly focus on aspects of gender. I believe that with a greater inclusion of women in the workforce, a more balanced perspective on sustainability that strengthens its social and environmental pillars can be brought to the fore."

SDG AND RELATED SUCCESSES



Elena's ESD project on leadership training for women contributes to SDG 4 (Quality Education, Target 4.5) by helping to eliminate gender disparities in

education and vocational training.



By creating an environment conducive to women joining STEM careers, Elena's project is contributing to ensuring women's full and effective participation

and equal opportunities for leadership at all levels (SDG 5, Gender Equality, Target 5.5).

Yucatán Care Program



© MARIA KARINA OLGUIN PUCH

"Taking Mayan knowledge back into the classroom is empowering not just for students but also for teachers, most of whom have roots in the Mayan farming traditions. Bringing this indigenous knowledge base to the fore has helped them connect more deeply with the curriculum they are expected to teach and has helped centre a local and situated understanding of sustainability concepts."

MARIA KARINA OLGUIN PUCH

SHORT FACTS

PROJECT TITLE Yucatán Care Program

CONTRIBUTOR Maria Karina Olguin Puch

INSTITUTIONAL AFFILIATIONS
Ministry of Education of Yucatán State

GEOGRAPHICAL LOCATION Yucatán, Mexico

CURRICULUM AREAS COVERED Situated learning of all school subjects, indigenous Mayan "Milpa" knowledge practices

PROJECT TIMEFRAME From October 2020 onwards

AGE GROUP
Primary school teachers and students
in the state of Yucatán

STAKEHOLDERS INVOLVED
Students, teachers and parents

RESOURCES NEEDED TO COMPLETE
THE ACTIVITY/PROJECT
Material, partnerships with universities,
financial support, teachers

BACKGROUND

Indigenous agrarian practices are rarely associated with mainstream school curricula. The project—"Yucatán Care Program" seeks to change that. By introducing references to traditional Mayan agricultural techniques into the standardised school syllabi, Maria Karina Olguin, an ESD educator from Yucatán (Mexico), hopes to counter the alienation that students experience from traditional and community-based knowledge. As a primary school teacher, Maria Karina is actively reimagining the school as a fulcrum of education for sustainable development—centring an idea of sustainability that is grounded in local and situated practices.

It was Maria Karina's experiences of teaching primary school students that offered her an insight into the vast disconnect between some of the standardised and homogenous national level textbooks and their local state context. For her, Milpa, traditional Mayan agricultural practices of planting multiple crops on the same field together, became one such motif for sustainability that she now seeks to use to help bridge this gap. Adopting CARE methodology, a mode of viewing standard school curricula through situated learning concepts such as the Mayan milpa, Maria Karina introduced a view of sustainability that focuses on indigenous knowledge systems and helps build stronger bonds for students with the communities they live in.

PROJECT ACTIVITIES

The ESD project was initiated in October 2020 and continues to run in select schools in Yucatán, Mexico. The primary objectives of the project were manifold. Firstly, the project sought to affect learning outcomes in classrooms using indigenous knowledge systems. This included bringing alternative educational models to the fore as well as bringing traditional knowledge systems on healthcare, responsible food consumption, biodiversity conservation and gender issues into classroom. Secondly, the project also sought to help preserve the Yucatec Maya language.

The project was carried out as part of an educational package with training material for teachers and

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audio-visual cues for the activities themselves. While the project began in a community school, it has since aimed to add schools in cities, including those in vulnerable and marginalised settings.

POSITIVE ACTIONS FOR ESD

- Linking community socio-ecological issues with the national curriculum through project activities
- Training teachers of the Yucatán state in CARE methodology
- Provide mentoring and advice to teachers in implementing CARE methodology
- Rubric for tracking learning progress
- Design learning goals to include topics linked to traditional Mayan knowledge

MAYAN FARMING PRACTICES

The pedagogical approach itself was based on Mayan farming practices. This pool of traditional knowledge was linked to ideas such as biodiversity within the state, the inclusion of alternative medicine, beekeeping, and also drew inspiration from the language itself in propagating more sustainable food and consumption models. Employing a collaborative model of instruction, the topics of classroom discussion were also not forced on the students by the teachers but instead were generated from discussions within the classroom. As they discussed concepts associated with the Mayan Milpa practices, the expectation was that the children would relate to them and therefore learn in a more profound way.

Articulated as the CARE methodology, these activities were founded on the following four principles—C – Concern for others, A – Attentive to needs, R – Respectful to all and E – Engaged in what is best for the common good. These principles were then translated to the actual subject matter. For instance, while teaching mathematical concepts the teacher used examples of plants and trees to which the students had ready access. This was done to make sure students were able to relate to references to objects used as examples which were not too far removed from their daily lives.

Maria Karina made sure these project activities were also able to engage students, teachers and parents effectively. As a practical outcome, she is preparing teacher training and best-practice manuals for scaling the activities of the project. One of the biggest challenges posed with the pandemic was to make sure basic educational targets were still met despite sudden school closures. Changes in the political dispensation have also affected the overall chances of the project gaining state-wide momentum.

PRIORITY ACTION AREAS FOR ESD

- Transforming learning environments
- Building capacity of educators

However, the mentoring for ESD itself helped provide Maria Karina with a wider network of like-minded ESD professionals and mentors in Mexico and abroad. The network meetings helped provide further visibility for the project and helped it gain momentum in other schools in the region. But one of the most gratifying aspects of running the project has been the open reception from teachers themselves, several of them who have Mayan backgrounds.

4 QUALITY EDUCATION a

SDG AND RELATED SUCCESSES

By helping students acquire knowledge and skills on themes of sustainability using indigenous Mayan knowledge, Maria Karina is contributing to SDG 4

(Quality Education, Target 4.7) by enhancing the abilities of learners to promote values of sustainable development.



With efforts to protect and safeguard the traditional Mayan culture and language, Maria Karina is contributing to the preservation of the world's natural and

cultural heritage (SDG 11, Sustainable Cities and Communities, Target 11.4)



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"ESD-Leadership is about developing a profound understanding of how we are linked to our environments, both social and natural. This understanding must be taken further into learning and teaching processes for everyone around us in different educational contexts."

Planting Seeds of Empowerment



© NONDUMISO DUMAKUDE

"The vision of the project is to see girls and women empowered to participate in conserving their environment and biodiversity as these are linked to their sources of livelihood and development. Women must play a leadership role in decision-making in all aspects that affect their lives, such as the climate change that continues to threaten their livelihoods."

NONDUMISO DUMAKUDE

SHORT FACTS

PROJECT TITLE
Women's Leadership and Training
Programme (WLTP)

CONTRIBUTOR Nondumiso Dumakude

INSTITUTIONAL AFFILIATIONS
Women's Leadership and Training
Programme

GEOGRAPHICAL LOCATION

KwaZulu-Natal South Africa in the Centocow. Hlokozi and KwaMashu communities

CURRICULUM AREAS COVERED Gender empowerment, organic gardening, waste management, birdwatching

PROJECT TIMEFRAME 2013 to date

PARTICIPANTS
Girls and women of in the KwaZulu-Natal region

STAKEHOLDERS INVOLVED

Several civil society organisations, community members, facilitators

RESOURCES NEEDED TO COMPLETE
THE ACTIVITY/PROJECT
Facilitators from partner organisations

BACKGROUND

It is common to hear of stories of extreme disenfranchisement from women in certain communities in KwaZulu-Natal, South Africa. Here, women's life experience is often limited, even within the confines of their own homes. South Africa-based sustainability professional Nondumiso Dumakude wanted to help support a platform, away from the dominant patriarchal norms where young girls and women could learn leadership skills and tap into their latent potential. Being part of the "Women's Leadership and Training Programme," an NGO founded in 1996, provided her with just that platform to help empower women, especially those from disadvantaged communities, to gain the independence and confidence to live more fulfilling lives. The aim of the leadership programme was to offer girls from pre-teens to the age of 18 an opportunity to gain life and leadership skills as well as economic literacy, to reflect on gender roles, and to gain an understanding of health, environment and culture issues. While Nondumiso worked within a well-oiled team, her focus and expertise lay in a background of wetland management and, administratively, in fund-raising and project documentation.

Nondumiso has an undergraduate degree in Environmental management and Geography, a masters in Rural Resources Management, and extensive work experience in environmental project management. Her project seeks to blend the principles of a circular economy with gender empowerment. As part of her project, she worked with girls and women from rural areas who voluntarily signed up for the leadership programme. This leadership programme consisted of educational workshops on topics such as agroecology, biodiversity, bird watching, tree planting, water protection, waste recycling, solar energy businesses etc. Grounding itself in the Ubuntu philosophy, and using participatory methods such as Paulo Freire's methodology of problem posing, action reflection and advocacy for change, the project aims to make girls and women equal stakeholders and actors in their natural and social environment.

PROJECT ACTIVITIES

The African philosophical framework of Ubuntu can be described as a way of thinking about the self but in STORY 16 · NONDUMISO 80 81

DUMAKUDE

POSITIVE ACTIONS FOR ESD

- The overarching goals of this project are to support young women in three communities in KwaZulu-Natal
- Monthly workshops with girls and women in the area
- Publications and social media on topics such as ESD, citizen science, agroecology etc.
- Training of young women on agroecology and other environmental management techniques

relation to others, understanding and appreciating the interdependence of our being on others. In direct contrast to the western Cartesian philosophical tradition that focuses on the rational thinking capabilities of a single individual, the Ubuntu perspective lent itself very well to the workshops at the intersection of gender and environment. The participating women enlisted further members through word of mouth. The main meetings took place in the homes of older volunteers where safe spaces were created to discuss their daily challenges and exchange ideas and knowledge on how they could overcome them. In addition, experts in various fields were invited for further skills-building activities.

PRIORITY ACTION AREAS FOR ESD

- Transforming learning environments
- Building capacities of educators
- Accelerating local level action

UBUNTU IN ACTION

For example, since the burden of managing sources of water lay solely with the women in families, workshops on rainwater harvesting helped support their daily efforts to conserve water for their homes. The department of sanitation was called in to offer its expertise in the field of river and wetland health. Workshops on permaculture and organic farming instructed them in growing their own produce: this helped counter the food insecurity in their lives and gave them a renewed sense of self and purpose. Workshops were also organised

by, for example, Bioseed SA, on the importance of using indigenous seeds and, while creating these kitchen gardens in their homes, the women assisted each other during the planting sessions and built informal accountability relationships with each other for supervising the built gardens. Several women bartered their vegetables and fruits, further strengthening their community bonds.

Another popular activity within the group was bird watching. Away from the day-to-day routine, bird watching introduced the girls to a new mode of recreation, helping them build closer bonds with their natural environment. More importantly, bird watching workshops and excursions became an badge of nature, freedom and independence for the girls taking part.

With this rejuvenated sense of being, the women are now going further and are sharing their know-how on an informal basis in other settings. The project has also reported that some women are organising information sessions in their local high schools. Overall, these activities contribute to the country's sustainability goals and targets by building knowledge within communities on water and waste management and sustainable food production.

USING PARTICIPATORY METHODS

While it was important for Nondumiso to have a plan in place for these workshops, a challenge for her was to also remain open and flexible to changes in topics. To make sure the project activities were closely aligned to the lives and challenges of the participating girls and women, it was important for her not to relay information in a top-down fashion, but for the topics to be generated by the women themselves. Using participatory methods, she made sure that the topics were suggested by the women and therefore remained relevant to their lives.

Participating in the ESD mentoring programme further helped Nondumiso structure her ideas into concrete plans that could benefit the women she worked with. Exposure to a network of experts and fellow mentees gave her confidence in the knowledge that she could always tap into their know-how for support and direction as her project developed further.

SDG AND RELATED SUCCESSES



Nondumiso's ESD project on leadership training for women contributes to SDG 4 (Quality Education, Target 4.5) by helping to eliminate gender

disparities in ing and vocational training.



By creating an environment conducive to women feel empowered in their everyday life decisions, Nondumiso's project is contributing to ensuring women's

full and effective participation and equal opportunities for leadership at all levels (SDG 5, Gender Equality, Target 5.5).



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"I would describe ESD as a concept that enables both formal and informal education to take place. It facilitates greater educational possibilities that can go beyond the confines of institutional walls to take place in any environment using the resources to hand."

Citizens for Sustainability



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"We have several urban planning programmes that are advancing the country's technological ambitions. But how do programmes focusing on creating 'smart' cities consider factors of social and environmental sustainability? Several citizen initiatives were asking these questions in Pune but needed to be galvanised into a broader movement. Our project attempts to do precisely that, where citizens find a common platform to discuss issues and inspire each other towards climate action."

POURNIMA AGARKAR

SHORT FACTS

PROJECT TITLE

Developing a citizens' charter in Pune City

CONTRIBUTOR Pournima Agarkar

INSTITUTIONAL AFFILIATIONS
Samuchit Enviro Tech

GEOGRAPHICAL LOCATION
Pune, Maharashtra, India

CURRICULUM AREAS COVERED
Citizen science workshops, reducing
carbon footprint, waste management,
organic gardening

PROJECT TIMEFRAME
December 2018 to present

PARTICIPANTS

Pune citizens from all age groups, including college students, senior citizens, working professionals, NGO personnel and bureaucrats

STAKEHOLDERS INVOLVED Citizens, partner organisations, municipal authorities

RESOURCES NEEDED TO COMPLETE THE ACTIVITY/PROJECT Workshop venues and material, facilitators from partner organisations, social media platforms

BACKGROUND

More than half of the world's population lives in cities and this number is predicted to rise by over two thirds by 2050. Urbanisation, or the process of populations shifting from rural to urban areas, is one of the 21st century's demographic trends set to gain even greater momentum in the coming decades. As an economic and social phenomenon, urbanisation is posited to create unique sustainability challenges as enormous populations are concentrated in urban centres generating substantial strains on city infrastructure and resources. Pune, India's seventh largest city with close to 7.4 million inhabitants, is one such urban centre that has experienced exponential growth in population and economic activity. Policy makers and citizens alike are grappling with newer ways to address issues such as water, land and resource overuse, reducing pollution, and sustainable infrastructure. In light of the global climate crisis and the goal of building more resilient cities, Pune-based sustainability consultant Pournima Agarkar believes there is a need for greater awareness of local sustainability issues among citizens who actively seek accountability from civic bodies.

It was with this intention that Pournima sought to build citizen forums for information and resource exchange through her organisation Samuchit Enviro Tech. Using a hybrid online-offline model, Pournima has conducted face-to-face workshops since 2018 and has brought together an online citizen community on social media. On this platform, citizens discuss and share ideas on relevant themes such as waste management, rainwater harvesting, individual carbon footprint, etc.

PROJECT ACTIVITIES

In 2015, the Ministry for Urban Development released its "SMART cities" vision within which Pune was short-listed for a technological and infrastructural overhaul to improve governance and management systems. However, within this vision, several aspects needed further attention: questions linked to sustainability and climate crisis, accountability of local governments, and linking the proposed technological advancements to broader development plans. To provide an effective alternative,

Pournima's organisation, an environmental advocacy group, proposed a "Sustainably SMART city" vision that attempted to bridge some of these gaps.

POSITIVE ACTIONS FOR ESD

- Sensitising citizens of Pune to individual behaviours that contribute to sustainable cities Helping citizens articulate and absorb a vision of a sustainable, equitable and liveable city and seeking accountability from local administrations
- Building a community using social media to showcase sustainability ideals
- Incorporating citizens' perspectives on sustainable city ideals in a policy paper on SDG 11

SUSTAINABLY SMART

Part of this vision was to spread greater awareness among citizen interest groups of issues linked to sustainability and this took shape in the form of Pournima's "Citizen Charter" project. The main aim of the project was to conduct regular activities promoting sustainable development goals through public fora, and to promote discussions and debates around probable solutions to the city's sustainability challenges. Given that most of these sustainability linked educational programmes were being held with school and college students, she realised that there was severe lack of education and engagement with adult voices and concerns. She started with one social media group: this has grown organically to three fully populated networking groups of close to 1000 participants. These groups facilitate lively debates on topics around pros and cons of solar panels, vegantoward sustainability and the broad targets of SDG 11 "Sustainable Cities and Communities," along with inspiring individual action toward change.

EXPANDING TO OTHER CITIES

These group, initially comprising members from the city of Pune, grew to include citizens from nearby cities of Nashik, Bhuj. Ahmedabad, Nagpur and Thane. To create further momentum on these discussions, Pournima regularly engaged with issues in her posts through her blog series "My city My responsibility." As part of her other activities, she took some of her workshops to upcycling cafes and restaurants which created yet another space for debate and discussion toward climate action and sustainability. The tone and tenor of these workshops, which sometimes began with doom and gloom scenarios, often turned into a lively and inspiring exchange of ideas between the participants.

The mentoring programme helped Pournima to realise the importance of an exchange of ideas in an interactive mode. This led her to review her workshops to make them more discussion oriented where engaged participants found the inspiration to become trailblazers in their individual efforts toward a sustainable city living.

PRIORITY ACTION AREAS FOR ESD

- Empowering and mobilising youth
- Accelerating local level action

ism for the environment, rainwater harvesting, organic farming, etc. The focus of all these discussions is to create discursive connections between citizen efforts



MY LEARNING FROM THE MENTORING FOR ESD-LEADERSHIP PROGRAMME

"Mentoring programme was immensely useful in helping me gather various tools for conducting these educational activities. Training and education for climate change and sustainability can also be fun and interactive. These conversations and discussions that we initiate based on these interactive tools are critical in advancing the goals for ESD with citizens."

SDG AND RELATED SUCCESSES



With efforts to include citizen voices to make cities more sustainable, Pournima is helping enhance inclusive and sustainable urbanisation and

capacity for participatory, integrated and sustainable human settlement planning and management. (SDG 11, Sustainable Cities and Communities, Target 11.3)



By highlighting the issue of climate change and sustainability among the citizens, Pournima's project is contributing to improving education and

awareness toward climate change mitigation (SDG 13, Climate Action, Target 3.3)



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Appendix

Acronyms

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Background on ESD Expert Net

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Examples of ESD Expert Net and ESD-Leadership Materials

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APPENDIX 88 89

ACRONYMS

CARE

Concern (for others), Attentive (to needs), Respectful (to all) and Engaged (in what is best for the common good)

ESD

Education for Sustainable Development

MGIEP

UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development

NGO

Non-governmental organisation

SD

Sustainable Development

SDG

Sustainable Development Goals

STEM

Science, Technology, Engineering, and Mathematics

UN

United Nations

UNESC0

United Nations Educational, Scientific and Cultural Organization

UNESCO-MGIEP

UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development

WESSA

Wildlife and Environment Society of South Africa

WILL

Women Investing in their Lives

BACKGROUND ON ESD EXPERT NET

The Brundtland Report published in 1987 against the backdrop of overexploitation of natural resources, ocean acidification, deforestation and forest degradation, and the rising global hunger index made it amply clear that the development paths of the industrialised nations were unsustainable. Moreover, the report also indicated that if these paths were to be followed by the entire present and future populations it would lead to disruption of the planetary support systems. The findings of the report are the guiding principles for the sustainable development discourse today. Its finding led to the convening of the Earth Summit in Rio de Janeiro in 1992. After the world community had finally agreed in Rio de Janeiro in 1992 to align its political action with the guiding principle of sustainable development and had also introduced the connection between sustainable development and education, the UN Decade of Education for Sustainable Development was proclaimed ten years later on the recommendation of the Rio+10 World Summit in Johannesburg. In doing so, the UN member states committed themselves to anchoring the principles of sustainable development in their education systems.

Against this background, the ESD Expert Net was launched in 2010 on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ). The goal: to strengthen the international dialogue on Education for Sustainable Development (ESD) at eye level and to engage in an exchange with practitioners from India, Mexico, South Africa and Germany, on how education can support the solution of global problems. This approach also relates to SDG 17 (Partnerships for the Goals), emphasising that global partnership and cooperation is the precondition to the realisation of the SDGs.

After the end of the United Nations Decade of Education for Sustainable Development (2005–2014), the network kept up its work within the Global Action Programme (2015–2019), which was later replaced by the current programme "ESD for 2030" with its 5 priority action areas: policy, learning environments, building capacities of educators, youth and local level action. During this period a blended-learning course on ESD for young

professionals emerged and three cohorts of mentees from India, Mexico, South Africa and Germany completed the course between 2017 and 2020.

EXAMPLES OF ESD EXPERT NET AND ESD-LEADERSHIP MATERIALS

Friede, C. & Weiß, M. (2022). Studienbrief – Evaluation im Kontext von BNE-Projekten. Hochschule für nachhaltige Entwicklung Eberswalde. (CC-BY-NC 4.0: Creative Commons — Attribution-NonCommercial 4.0 International — CC BY-NC 4.0). Retrieved from Materialien – AG Nachhaltigkeit an Brandenburger Hochschulen (nachhaltigkeit-an-brandenburger-hochschulen.de). [Accessed 17th November 2022]

Henze, C., Mathar, R., Rončević K., Saikia, R., Siege, H. & Widholm, S. (ESD Expert Net). (2020). Education for Sustainable Development—Training of Trainers. Engagement Global. Bonn. Retrieved from https://esd-expert.net/training-of-trainers.html. [Accessed 17th November 2022]

Hoffmann, T. & Gorana, R. (ESD Expert Net). (2018). Die Ziele für nachhaltige Entwicklung im Unterricht. Engagement Global. Bonn. Retrieved from Die Ziele für nachhaltige Entwicklung im Unterricht (esd-expert .net). [Accessed 17th November 2022]

Hoffmann, T. & Gorana, R. (ESD Expert Net). (2018). Los Objectivos de Desarrollo Sostenible en el Aula. Engagement Global. Bonn. Retrieved from Los Objetivos de Desarrollo Sostenible en el aula (esd-expert. net). [Accessed 17th November 2022]

Hoffmann, T. & Gorana, R. (ESD Expert Net). (2017). Teaching the Sustainable Development Goals. Engagement Global. Bonn. Retrieved from Teaching Sustainable Development Goals (esd-expert.net). [Accessed 17th November 2022]

Hoffmann, T., Gorana, R. & Sugandh, S. (ESD Expert Net). (2021). Teaching the Sustainable Development Goals and SDG Katha Initiative. Bharati Vidyapeeth Deemed University, Institute of Environment Education and Research (BVIEER). Indien. Retrieved from

APPENDIX 90 91

https://dst-iget.in/esdexpertnetindia/wp-content/uploads/2022/06/Teaching-the-SDGs-English.pdf. [Accessed 17th November 2022]

Hoffmann, T., Menon, S., Morel W., Nkosi T. & Pape N. (ESD Expert Net). (2022). Diez ez pasos hacia el pensamiento sistémico. Un manual de Educación para el Desarrollo Sostenible para profesoras/res, educadoras/res y facilitadoras/res. Centre for Environment Education, India. (CC BY-SA-NC 4.0: Creative Commons — Namensnennung—Nicht-kommerziell—Weitergabe unter gleichen Bedingungen 4.0 International — CC BY-NC-SA 4.0)

Hoffmann, T. & Menon S. & Morel W. & Nkosi T. & Pape N. (ESD Expert Net). (2022). Ten Steps towards Systems Thinking. An Education for Sustainable Development Manual for teachers, educators, and facilitators. Centre for Environment Education, India. (CC BY-SA-NC 4.0: Creative Commons — Attribution-NonCommercial-ShareAlike 4.0 International — CC BY-NC-SA 4.0). Retrieved from https://www.ceeindia.org/systemsthinking/. [Accessed 17th November 2022]

Hoffmann, T., Menon S., Morel W., Nkosi T. & Pape N. (ESD Expert Net). (2022). Zehn Stufen zum systemischen Denken. Handbuch zur Bildung für nachhaltige Entwicklung für Lehrkräfte und Lehrerausbildende. Engagement Global. Bonn. (CC BY-SA-NC 4.0: Creative Commons — Namensnennung—Nicht-kommerziell—Weitergabe unter gleichen Bedingungen 4.0 International — CC BY-NC-SA 4.0)

Hoffmann, T. & Siege, H. (ESD Expert Net). (2020). Was ist Bildung für nachhaltige Entwicklung (BNE)?. Engagement Global. Bonn. Retrieved from https://esd-expert.net/lehr-und-lernmaterialien.html [Accessed 17th November 2022]

Hoffmann, T. & Siege, H. (ESD Expert Net). (2020). Was ist Bildung für nachhaltige Entwicklung (BNE)?. Education for Sustainable Development—Training of Trainers (pp. 66–71). Engagement Global. Bonn. Retrieved from www.esd-expert.net/training-of-trainers.html [Accessed 17th November 2022]

Hoffmann, T. & Siege, H. (2019). What is Education for Sustainable Development? Engagement Global. Bonn. Retrieved from What_is_Education_for_Sustainable_ Development.pdf (esd-expert.net). [Accessed 17th November 2022]

KMK, BMZ & Engagement Global. (2017). Curriculum Framework Education for Sustainable Development (2. Edition, extended version). Bonn: Cornelsen. Retrieved from Curriculum Framework: Education for Sustainable Development (globaleslernen.de). [Accessed 17th November 2022]

KMK, BMZ & Engagement Global (Hrsg.). (2016).
Orientierungsrahmen für den Lernbereich Globale
Entwicklung im Rahmen einer Bildung für nachhaltige
Entwicklung (2. aktualisierte und erweiterte Auflage).
Bonn: Cornelsen. Retrieved from Orientierungsrahmen für den Lernbereich Globale Entwicklung (globaleslernen.de). [Accessed 17th November 2022]

Sandoval, J., Zuany R., Cabrera. F., Patraca, M., Martínez, P. Pérez, M. (2021). Aprendizaje situado para la sustentabilidad a a partir de historias locales sobre preocupaciones, conocimientos y prácticas socio-ecológicas. Universidad Veracruzana, Mexico. Retrieved from LIBRO-Aprendizaje-situado-para-la-sustentabilidad-2021.pdf (uv.mx). [Accessed 17th November 2022]

Sarabhai, K., Henze, C., O'Donoghue, R., Sandoval, J. & Shimray, C. (2022). Handprints for Change – A Teacher Education Handbook: Activating Handprint Learning Actions in Primary Schools and Beyond. Centre for Environment Education, Indien. Retrieved from https://www.handprint.in/pdf/SDG-HANDPRINT-HAND%20B00K.pdf. [Accessed 17th November 2022]

Zuany, R., Sandoval, J.(2021). Conocimientos y prácticas locales para el cuidado del entorno social y ecológico a través de procesos educativos situados. Universidad Veracruzana, Mexico. Retrieved from https://www.uv.mx/personal/romendoza/files/2022/05/Conocimientos-y-pra%CC%81cticas-locales-digital.pdf. [Accessed 17th November 2022]

HINDI VERSION

Hoffmann, T., Gorana, R. & Sugandh, S. (ESD Expert Net). (2021). पढ़ाएँ सतत विकास लक्ष्य. Bharati Vidyapeeth Deemed University, Institute of Environment Education and Research (BVIEER).Indien. Retrieved from https://esd-expert.net/files/ESD-Expert/pdf/Was_wir_tun/Lehr-und-Lernmaterialien/SDG_Report_Hindi.pdf. [Accessed 17th November 2022]

Hoffmann, T. & Rončević, K. (2017). Cashew Lernen mit Kernen—Inklusives Bildungsmaterial für die 9. und 10. Klasse—Behinderung und Entwicklungszusammenarbeit (bezev). Essen.

Hoffmann, T. & Rončević, K. (ESD Expert Net). (2017). Cashew – A Global Learning Challenge—Learning Material for Inclusive Education/South Africa. Engagement Global. Bonn. Retrieved from cashew_layout_suedafrika.indd (esd-expert.net). [Accessed 17th November 2022]

Hoffmann, T. & Rončević, K. (ESD Expert Net). (2017). Conspicuous Cashew—Inclusive Learning Material for Secondary Level/India Engagement Global. Bonn. Retrieved from cashew_layout_india.indd (esd-expert. net). [Accessed 17th November 2022]

Hoffmann, T. & Rončević, K. (ESD Expert Net). (2017). Nuez de la India. Aprendiendo con semillas. Material didáctico para educación medio superior inclusiva/ México. Engagement Global. Bonn. Retrieved from cashew_layout_mexiko.indd (esd-expert.net). [Accessed 17th November 2022]

HINDI-VERSION

Hoffmann, T. & Rončević, K. (ESD Expert Net). (2017). कथा काजू की | उच्च एवं उच्च माध्यमिक स्तर के लिए समावेशी शिक्षण सामग्र. Engagement Global. Bonn. Retrieved from Cashew_hindi.pdf (esd-expert.net). [Accessed 17th November 2022]

MARATHI- VERSION

Hoffmann, T. & Rončević, K. (ESD Expert Net). (2017). काजूच्या गोष्टी | माध्यमिक वर्गांसाठी ससमाव्वशक शक्षेणिक साहत्य. Global. Bonn. Retrieved from Cashew_Marathi.pdf (esd-expert.net). [Accessed 17th November 2022]

