

Dubai, United Arab Emirates

GEMS Legacy School

Why teachers should be environmental ambassadors



WORLD'S
BEST SCHOOL
Environmental
Action

accenture



WORLD'S
BEST SCHOOL
PRIZES

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Introduction

GEMS Legacy School (GLS) in Dubai, United Arab Emirates, provides a unique learning environment for their students. The school first began weaving sustainability into the fibre of their school when principal Asha Alexander completed a United Nations Climate Change (UNCC) Teacher Training Course, which was then completed by more than 360 staff members and over 6000 students. This made GLS the first school in the world with a 100% climate change teacher ambassador to student ratio in every classroom. Teachers focused on carefully reconstructing the school curriculum to align with the Sustainable Development Goals (SDGs), integrating Problem Based Learning where possible and then, action-based learning. This led to projects such as the Plant a Legacy campaign or #PAL, a worldwide planting drive helping to restore and green a desert with over 40,000 trees planted through PAL across 42 countries. Other projects included Action Research, E-waste collection bins, school vegetable gardening, Project Malawi and The Climate Diaries. These have been featured in GLS's student-led version of COP25, called "The Student Conference of the Parties Exposition" or SCOPE which went virtual due to the pandemic. Today, this platform works as a liaison for schools in over 50 different countries seeking to make students the protagonists of change. Their hope is to see their learners take charge of their future and provide a platform where they can learn, share, and grow towards a sustainable future.



School Profile



Country:

United Arab Emirates



Region:

Dubai



School type:

Private school



Location area:

Urban



Student population:

5000+



Prize Category:

Environmental Action

“I currently see schools being in competition instead of collaboration. We want everyone to benefit, and everyone to take action together because there is actually no time. It isn't enough if one or ten schools are great, we need hundreds of schools to be great at the same time, and create ripples through their own actions”.

-Asha Alexander, Principal of GEMS Legacy School



In-depth look

CONTEXT AND CHALLENGE

GEMS Legacy School (GLS), previously known as The Kindergarten Starters was established in 1990 catering to kindergartners and primary students in Dubai, UAE. It is a private, co-education school which falls under the GEMS Education banner. From 2021, the school extended its span into middle school and has planned to add a grade level every academic year. The school is composed of over 6000 students and over 300 staff members belonging to diverse cultures. The student population at GLS is largely Indian (94%) and includes more than 25 nationalities: Canada, Pakistan, Kenya, Bangladesh, Sri Lanka and the Philippines, among others. This diversity, along with the 18% of these students who have

disabilities, speak to the inclusive ethos of the school. Over the last three decades, the school's values have been reflected through its mission to leave a legacy of empathy, resilience, leadership, and sustainable living.

Sustainable action at the school began back in 2019 when school Principal and now Executive Leader in Climate Change for GEMS Education, Asha Alexander, first came across the UNCC Climate Change Teachers accreditation programme. When Alexander discovered the course, she took the training herself to see if it would be useful for her teachers. She found that she had little understanding of what climate science is, as an educator she didn't know much of the terminology used or the themes being discussed.



So after completing the courses, Alexander pushed them out to the teachers over the holidays, curious to see how many would show interest. To her surprise, she eventually saw hundreds of teachers signing up. Her initiative and motivation meant that today the 300-plus staff members at the school have attended the course and are active participants in the weaving of sustainable thinking into the initiatives students carry out. They now define themselves as an environmentally conscious organisation, striving to work towards the Sustainable Development Goals through myriad practices and initiatives, carefully weaving them, and Climate Literacy more broadly, into their curriculum. The school focuses on global dimensions while aiming to prepare students with cross-cultural competencies in an ever-changing global economy. Being part of the wider GEMS Education Group, learners at GLS are exposed to a global classroom.

Students are also provided ample opportunities in learning about innovative digital and technological themes such as AI and robotics. GLS pioneers' sustainability-driven initiatives which are not only carried out within the school but with over 50 other schools around the world through the creation of their Twinning partnerships: A GEMS Legacy School initiative where they collaborate with other schools around the world.

The links GLS have with several countries through their twinning projects form a large portion of the opportunities they wish to provide students so they experience the changes firsthand. The achievement of their students also works through a triangulated partnership between children, staff, and the wider community.



Through quality teaching and a profound focus on student agency, they are creating building blocks which will help their students address the SDGs, working towards 2030 and 2050.

Today, the school is at the forefront of building innovative learning environments and a vibrant professional learning community committed to success for all learners.



EXPERTISE AND APPROACH

When Alexander embarked on the UNCC Climate Teacher Training accreditation programme, the school pivoted its path, seeking to inculcate sustainability into its students' thinking. Once the vast majority of her staff had completed the course, there was a paradigm shift among the teachers; their new-found curiosity and concern over the world's issues meant the school's ethos, teaching and projects needed deep re-thinking.

The story of Sustainability at GLS was first envisioned by taking small, actionable steps, and instilling ecological consciousness among learners. Before they knew it, passion turned into a purpose. The impact on learners grew each day through the school. Teachers began to pivot towards Problem and Action Based Learning so that today the curriculum of all subjects is carefully mapped while planning for the new academic year, to integrate the SDGs. Each and every lesson plan of the school leads to making connections through the mapped SDGs. Through the regular Professional Development courses teachers attended, they learned to allow leaders of the school, students elected by the school population, to educate the staff in improving the pedagogy and relating it to the SDGs so that the impact is tangible in each and every classroom. Their first significant project, Plant A Legacy or #PAL, saw this merge together. The initiative is a planting drive which started in the school campus and community and now works globally, seeking to restore green deserts.

The initiatives the school created, worked under the umbrella of UNCC and gathered mass interest among global stakeholders. As such, they had a climate conference which they called the Head of Knowledge.



Following this, Alexander was asked to speak at COP25 where she realised that many important individuals spoke, but children were absent: “they were at the periphery, they are the ones who will inherit the earth, but they don't have a voice there”. Alexander brought this learning back to the school, keeping in mind that for any project to move forward, the student voice must be at the forefront. GLS expanded on the idea of student agency and decided to formulate its own style of COP25 in 2020, but this time with students as the protagonists. And thus, The School-Conference of Parties Exposition or SCOPE was born. This works as an inter-school forum and was scaled across the world to include over 50 countries. The pandemic had proven to be a challenge during this time, given that the scheduled time for the conference coincided with times of quarantine, isolation, and the closing of schools. However, Alexander expresses how the switch towards a virtual platform ended up being arguably more of a success. The tools and access to online communications allowed more schools to collaborate with GLS. The platform hosts conferences and expos, where the projects the school works on are shared.

The initiatives quickly began taking off towards the global landscape, leading to collaborations such as Action Research or ‘Take in Goodness’, a research study in partnership with Food and Behavior (FAB), UK guided by Dr. Alex Richardson of Oxford University. The study aimed to find the impact of a balanced diet on student achievement in Mathematics, Spelling and Reading. This opportunity meant students were also able to measure their carbon footprint and went on to demonstrate visible shifts in diet patterns, a trend which expanded to their local communities. Alexander felt it pertinent to scale projects and begin generating



mass impact through collaborations with other schools and stakeholders.

These types of projects began forming the core of the initiatives GLS was working on. An interesting example is their Project Malawi or Donate a Brick initiative: where GLS students took up aid helping to build a two-classroom school with furniture for all 150 students and gender-specific latrines in Malawi. The school sought to link this project and raise awareness of SDG 1: No Poverty. Another, and likely one of their most profound projects, the Climate Diaries is a collaboration of young minds from the UAE, India, Australia, and the UK. These learners worked together to create and publish a compilation of climate stories written by children for children around the world. The Climate Diaries reflect student illustrations and thoughts on the importance of climate literacy and climate actions as we strive to achieve the goal of a sustainable future.



OUTCOMES AND RESULTS

Staff Growth

In the Personal Development sessions teachers attend, the leaders of the school introduce and educate the staff on improving the pedagogy and relating it to the SDGs so that the impact is tangible in every classroom. The staff are self-motivated to be reflective practitioners and focus on Action Research, constantly improving instructions and increasing student achievement. Many Action Research projects are themed around gauging the impact of Environmental Sustainability in relation to the teaching and learning taking place at the school and the lives of students. It has been essential to include parent perspectives to undertake developmental alterations and provide the best of their services. Parents have been involved in various ways to inculcate the same philosophies of sustainable living at home.

Initiatives such as SCOPE and The GEMS Global Ambassadors' Society or GGA (explained below) have aided GLS to get more insight into the best practices that are followed in schools across the world. Aside from the percentage certification of teachers, around 1,000 people (teachers, students, and parents of GEMS Legacy) have already been trained under this programme, focusing on sustainable food systems currently.

Project Achievements

All projects showed tremendous success, particularly after the pandemic when collaboration became globally accessible through virtual tools. E-Waste Collection was focused on, where students learnt about the massive waste produced by electronics.



This included an E-Waste Collection drive inviting staff, parents, and students to dispose of their E-waste for recycling. So, E-waste bins were positioned around campus and are regularly collected by dismantling and recycling the waste brought in by students and staff.

GLS also established an organic vegetable garden, an in-house garden patch exposing learners to the benefits of having their own green space, to give them the opportunity to feel the joy that comes with planting seeds, nurturing them, and watching them grow. This has meant that GLS now grows what they eat and eat what they grow, using compost they make on the school campus. The school began promoting an ecological food revolution. They merged theory with action by creating an Action Research project named 'Take in Goodness' in partnership with Food and Behavior (FAB), UK.

Overcoming the Pandemic

SCOPE was launched in 2020, amidst the global pandemic. GLS was initially concerned this would dampen their chances of working with other schools and organisations. However, the opposite became true. GLS launched their virtual SCOPE platform and managed to collaborate with 50 schools on all their projects and ideas. Thus, providing a platform for students not just within the UAE but across the world to spread awareness and brainstorm solutions for some of the most pressing global challenges. This means over 50 other countries now learn from and add to all the projects GLS is carrying out, often aiding in the design and implementation, as well as mimicking the projects in their own contexts.



Working on this, The Climate Diaries (expanded on below) was born, a compilation of children's stories around the world and is now a book available on Amazon, amplifying the stories of GLS students on a global platform. The stories are about Climate Change and form part of the curriculum. The project fosters the students' motivation and builds on their capacity in grammar, vocabulary and creative writing skills. The student submissions from around the world for SCOPE surprised teachers, who were particularly amazed at the thoughts and creativity expressed by students of different age groups for the writing events 'Story of Us' and 'It All Started When'. These events were a part of the SCOPE 2020 and SCOPE 2021 and invited students of different age groups to share their creative stories on the impact of climate change based on various SDG themes. The stories were then published as the first-ever collaborative e-book on the theme of climate change by students from different

corners of the world: "The Climate Diaries". This project was further enhanced when passionate students at GEMS Legacy School were given a wonderful opportunity to collaborate with world-renowned authors like Alan Hesse, and Michael Ross, to co-create stories on climate change.

These stories have been published as a part of The Climate Diaries Project 2.0.



Key Steps



STAFF TRAINING

The success of integrating sustainability not only into their projects but into the very core of the school began through the training of staff members. The UNCC Teacher Training programme provided a wonderful opportunity to spark interest in principal Alexander and her staff and help them see where they were lacking. Teachers and non-teaching faculty members at GLS regularly attended courses in Professional Development, reinforcing their commitments and growth. As such, the school emphasises the need for teachers to continue educating themselves in matters linked to environmental protection and the SDGs.





DEVELOPING ACTION AND PROBLEM-BASED LEARNING

Teachers had to rethink how the school worked. GLS staff decided they would begin by integrating small initiatives which would spark interest in learners. They thought it was critical to do this while also deeply reformulating their curriculum. The two work together to form action-based research projects. Moreover, the school has been able to not just map its curriculum across all subjects with the SDGs but to build the key skills among the students and ensure the lesson plan and instruction are delivered with the highest degree of specificity and meaningful connections.



STARTING STEPS

The Plant a Legacy Initiative #PAL was developed as a starting point for any projects which GLS has produced. Students, teachers, and community members took part in planting 1,400 trees. It started as a small campaign to educate and advocate for climate action, and at the same time, they began inviting other organisations to join in. Before long, they noted the response was more than anticipated, and with this overwhelming support,



the original projected timeline of a year was reduced to 65 days. The idea was to begin incentivising collaboration.



EXPANDING ON CURRICULUM

From the planning stages onwards, GLS began constructing their curriculum to interweave sustainability and the SDGs into everything they learn. Each lesson plan now follows the mapped curriculum by including two major aspects: 1) encouraging students to think beyond in relation to the SDGs, and 2), relating to local and global perspectives ensures students link their experiences with respect to the SDGs and come up with the best possible solutions to local and global problems thereby encouraging metacognitive reasoning.

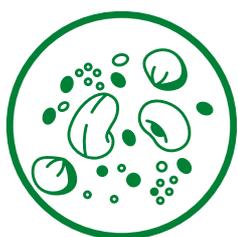


BRINGING STUDENTS NEW OPPORTUNITIES

Students across all grades have been given opportunities such as taking part in a virtual exhibition. Based on the EXPO 2020 theme of sustainability, the students brainstorm innovative solutions for some of the most pressing local



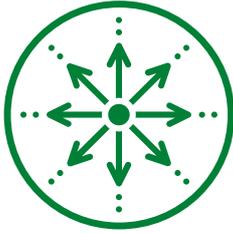
and global issues using the Design Thinking Process. The students are introduced to different problem scenarios and asked to empathise with the presented scenario, define the problem, ideate solutions, and create and test their prototypes.



SOWING THE SEEDS OF EMPATHY

Students are made aware of the empathy-sustainability relationship, which proposes empathy as a key phenomenon that shapes human-environment relationships. Empathy with others and a special focus on nature help students build a long-lasting relationship with the environment and intrinsically motivates them to become climate action warriors. GLS has tied up with Ed Kirwan to enrol the students in his flagship project - Empathy Week which is a global school programme that enriches students' minds and hearts as they develop the crucial skill of empathy. During the programme, the power of film and human storytellers is used to create a whole school approach to empathy development and empathy sustainability. At the end of the programme, students were encouraged to design Empathy Cloth Bags with the intention of using them instead of plastic bags.





SPREADING THE WORD GLOBALLY

The successful completion of the prior steps led to principal Alexander subsequently being invited to share GLS's story at COP25. This event placed the school on an international platform and attracted more engagement in the environmental decisions that the school promotes. GEMS Legacy was presented as the world's first to have a United Nations-certified Climate Change Teacher in every one of its 162 classrooms. The school connected with 15 other schools from nine countries, including Oman, UAE, India, Bangladesh, Costa Rica, Uganda, Kenya, the US and Australia, who will undertake the course as well.



MOVING TOWARDS ACTION RESEARCH

The staff as reflective and reflexive practitioners produced and used empirical evidence to measure the impact the activities in and around the school have on their student's growth. GLS began an ecological food revolution, with many



learners and staff committing to the UNCC actions, and also bolstering a healthy lifestyle too. This led to the aforementioned Action Research project named “Take in Goodness” in partnership with Food and Behavior (FAB), and guided by Dr Alex Richardson, from Oxford University. It was initiated aiming to find empirical evidence and the impact of a balanced diet on students' achievement in Maths, Spelling and Reading. They also partnered with the 15 schools, working with students to practice a sustainable diet by monitoring the carbon footprint of what they consume as well.



GROWING STUDENT VOICE

After successfully representing the education community of the UAE at COP 25, Alexander sought to create something which allowed student voices to take charge. GLS created the above-mentioned platform for students called SCOPE (School Conference of Parties Expo) which was the first-ever global platform for students to debate issues relating to climate change and brainstorm innovative solutions. Following SCOPE, GLS created The Climate Diaries: a collection of stories written by children aged 11 to 15 years. As mentioned above, the narratives from the different contexts and countries involved



now offer a “kaleidoscopic view” of the environment and the challenges it faces. The stories were published with the support of a renowned author: Allen Hesse. The success of this initiative brought forward a second version, to be published later this year.



FURTHER NETWORKING AND COLLABORATING

GLS went on to formulate the "GEMS Global Ambassadors' Society", established on the fundamental premise that schools play a pivotal role in addressing the compelling and complex social, economic, and environmental global challenges that impact planet Earth and its students' ability to thrive. The philosophy behind this society goes back to putting students and schools at the centre of decision-making, recognising them as key influencers in society for the present and the future. The school also began to partner with various organisations such as DULSCO and SIEMENS as well as experts from various sustainability-related backgrounds, and key figures in their fields. These have played a key role in the development of the school. Amidst these was Dr Alex Richardson from Oxford University working on the 'Take in Goodness and Sustainable Diet'.



Another was Yumiko Yokozeki, Director of UNESCO at the International Institute for Capacity Building in Africa (IICBA), Aditya Mukherjee, Young Eco-Hero, Franco Atassi, CEO of Smart Infrastructure at Siemens Middle East; David Stockton, CEO, DulSCO and Dino Varkey, Group CEO, GEMS Education.



Advice and Guidance

Principal Alexander urges schools to place sustainability at the heart of everything they do. Many schools have brought forward that they feel as though they simply do not have time to deal with topics around sustainability, but GLS now knows it doesn't have to be this way. The school has found ways in which sustainability exists at the heart of all their subjects so that the very language becomes the language of the children. She then expresses the profound need for collaboration but mentions this is not enough. Her vision is "to get these teachers, leaders, and students to move towards service, not just collaboration. If you can put others ahead of yourself, it's selfless, it's making sure you give your time and effort in the service of others, it's a step higher than collaborating. It takes adults far longer to put others ahead of themselves than younger children who respond very well to acts of service. That is: if you're going to take care of the environment, you're going to teach something, you're going to work towards a larger purpose". This type of selfless association is a key value to integrate. She urges schools to not be afraid to start small because we need to act now, "2030 and 2050 will be upon us before we know it. We are 8 billion in this world. Imagine if 8 billion people decided to change their ways, work together, and try to be in the service of the planet and of others... We have to be our own saviours and take action without asking for anything in return".



More information

 <https://www.gemslegacyschool-dubai.com>

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Read more at the GLS' ENVision Magazine: [ENVision Magazine, Issue 1](#) and [ENVision Magazine, Issue 2](#)

Learn more about their work by watching their event at 2022's T4 World Education Week: [watch here](#)

