How can we stop global warming? This is a question the grade 9 students at the International School of Estonia (ISE) asked in the spring 2009. Inspired to make a change they developed a service learning project. The project started in social studies class during an environmental studies unit. The English teacher soon joined when the students started to read *A Silent Spring*. The art and technology teacher collaborated as well. The students' mission was to educate students and family members about global warming and encourage environmentally friendly lifestyle changes through a week long intensive campaign during Earth week (April 20th - 24th). The purpose of this article is to inform teachers about this environmental service learning project and offer advice on how and why it would be worth doing similar projects.

The grade 9 class at ISE stumbled upon the idea of global warming whilst learning about globalization in social studies class. The idea first came through when Shauna Fitzmahan, the social studies teacher, introduced the environmental aspects of globalization. She introduced the topic with Al Gore’s *The Inconvenient Truth*. The grade 9 class researched more thoroughly about climate change and looked at the world’s actions to prevent it. They also looked into different views countries had about the Kyoto Protocol and climate change by having in-class debates. These debates and research inspired the students to get more involved in this topic. Looking around at other schools that dedicated a week to the Earth, the grade 9 students found the motivation to start working with their own school and making their own environmentally friendly movement.

After further research, each grade 9 students wrote essays exploring one of the following issues: dirty energy, water waste, transportation, recycling, paper waste and deforestation. The students wrote these essays in order to further educate themselves about the global environmental problems. One of the students Aleksandr Belugin reflected on this assignment, “We were able to improve our essay writing skills. More specifically, we learned to make good paragraphs and quote transitions.” By improving essay-writing skills, students gave themselves a higher chance to receive a better grade in future written tasks. This skill is also very valuable outside of school, as it will help them express their ideas on paper with increased clarity. Also through the essay research, the students found out many interesting facts about the environment, which contributed to their general knowledge.

From writing an essay, the students moved on to writing fables, so they could spread their ideas to a younger audience. The students wrote the fables in English class and illustrated the
fable and made books in art class. The grade 9 students read the completed books to the elementary school students, teaching the children about environmental issues, which is important because students can never start early enough with learning about protecting the environment. While writing their scripts, the students not only developed important writing skills, by learning how to create a piece of literature which could be presented to a younger audience, but they also developed the skill of teamwork and cooperation. The PYP students enjoyed listening to the fables and answered all the questions willingly that the grade 9 asked them afterwards. The 9th graders interviewed the PYP students a week later to see what the children learned from the fables. “I learned to recycle,” said Jonas Kjellberg a first grade student. Through the fables, the elementary students learned how to recycle, thus proving that grade 9 students were not the only ones learning from this project, the PYP students have also gained knowledge of environmental destruction.

The fable books were a good learning source for the younger kids. Michal Langer, a grade 9 student, decided to create an animation to educate the older students at ISE. This animation provided three key steps on how to aid the environment by shortening showers, unplugging appliances, and limiting car use. To make this presentation Langer needed to have information to present. “The research itself wasn’t that hard, I have already learned most of the information I have used in this animation earlier in the project. We were well prepared, but the hard part for this project was to find the actual time to write the script, plan the animation and animate the movie itself. If I could change anything about the way I did this project, I would plan my time better,” said Langer. To overcome his struggle with planning, Langer created a calendar with deadlines, which helped Langer advance his time management skills. Langer reflected on the process, “It took me around an hour and half to record five minutes of dialogue since I kept on stuttering, coughing and misreading words. This experience taught me that I have to count on things taking more time than expected.” Once the animation was completed, Langer presented in front of the middle school classes. This animation improved many of Langer’s skills but also taught the MSP students about the environment.

Following Langar’s animation to teach students about environmentally friendly lifestyle changes, Aleksandr Belugin created a presentation on different types of electricity. Belugin said, “Thanks to my new software I was able to use new cool-looking and effective features I never used before and this made my presentation more advanced and interesting.” Some of the skills Belugin learned during the presentation were to be clear and concise so that the audience would not be bored, using effective transitions between the slides, and speaking clearly and loudly. His presentation skills improves so dramatically that his social studies teacher Shauna
Fitzmahan praised him. “That was impressive Belugin!” she said, “It’s like I am seeing a completely new student!”

Belugin’s was proud of his achievements, but not all students felt as successful. The grade 9 student, Nigel Bates, struggled throughout the service learning project. He aimed to craft poetry and strategically placing each piece around the school so that when people read the poetry they would think about what actions they have done which have harmed the environment. Throughout his project and creating his poetry, he had found it more difficult to meet each deadline and as result he never completed his part of the project. He found it a great learning experience nonetheless. “To be honest my project wasn’t nearly as successful as the others around me, but it might have been much more of a learning experience for me,” said Bates. “Though it wasn’t a total success I’ve learned from this project that it is important to think through things at the beginning more thoroughly and to choose things that will work effectively. I’ve learned a lot from the consequences if you don’t do certain things.”

Three students made great accomplishments with their vision of having a second hand fashion show. Frederike Dornieden, Elouise Kjellstad, and Elise Sesemann had this idea to create a second hand fashion show that would make people aware of the impact clothes have on the environment. Ultimately, they wanted people to be aware that they can reuse their old clothing and in turn help the environment. Already knowing where second-hand clothing stores in Tallinn, they quickly organized a bake sale so they could raise money to buy the used clothes. They made enough money for the clothes and they began to design their clothing for the show. Designing was one of the most important parts of the show, but they also researched and made a PowerPoint presentation to teach about the environmental impact of new clothes. On the last day of Earth Week the students stood before the school and presented their slides. These students had to face their own fears of dealing with larger audiences which is important for when they may have to present to even larger numbers. “We overcame our fear about standing in front of an audience and by doing it, and see how the project turned out we got more confidence about what we can do,” said Sesemann. Throughout their fashion show project the student learned about different steps in organization that was necessary and how to learn from the mistakes they have made to make it successful. The students struggled with time management and ultimately they learned how much time it takes to complete the work needed and meet the deadline. One of the models, Kelly Li said, “The Fashion show was something the school had never done before and it was a cool idea and helpful and some people enjoyed it.” At the end of the day the students were able to walk away knowing that they have accomplished their goal and with this be able to deal with even larger projects.
Service-learning projects raise students’ chances to succeed by developing important skills. Throughout the Earth Week project, the grade 9 students at ISE improved their skills by learning from their failures that had set them back and victories that brought them forward. Sperry discussed the effectiveness of service learning projects stating, “As an IBO school offering the PYP and DP, we must promote the education of the whole person. It is imperative that our teachers teach in a way that emphasizes our student's intellectual, personal, emotional and social growth. In a project like this students have the opportunity to focus on those skills that they will use in their later years when they go out in the world. The students used skills such as technology skills, presentations skills and group interaction skills. In a project like this students must cooperate and often work through difficult problems or situations just as they will one day have to do in the workplace.”

In addition to improving students’ academic skills, projects like these also empower students. Sperry reflected on the project, “I hope that we have sparked a belief in our students that one student is powerful and two working together in a team are more powerful. Students feel empowered when they have ownership of the material they are learning and this project and their teachers ensured that they had ownership of this important project. We have given them the tools they need, their teachers have laid the foundation and it is up to them to build the house.”