

Israel

Neta'im Environmental School

This elementary school (grades 1-8) has an extensive programme on environmental issues, which has three main features. First, students experience controlled consumption of school resources such as paper, water, and electricity and are introduced to recycling activities. Second, classes visit external organizations like zoos, museums, parks, etc. in weekly outdoor activities and make several additional larger field trips each year. Third, the school initiates activities with the community to make the students “environmental ambassadors” during festivals, shows and marches dealing with green subjects. The school is located in a low SES neighbourhood, but has a waiting list and draws students from affluent neighbourhoods because of its high reputation. Parents pay a monthly fee to finance the outdoor activities, for low SES students these costs are covered by the municipality.

Main focus of Innovation: CONTENT, ORGANISATION

Other keywords: blended/non-formal, equity

General Information

Name of the ILE: Neta'im Environmental School

Location/Address: 26 Azriel Street, Ramat Gan, Israel

Website: www.akatar.com/17_cvivati.htm

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Rationale

Why do you suggest that it should be included in the project? How does it respond to 21st century learning challenges?

Neta'im (Hebrew: seedling) is an elementary school (1st-8th grades) which demonstrates a learning environment that enables the students to engage in a variety of everyday activities regarding environmental issues aiming to develop students' knowledge, responsibility and influence. In order to create a learning setting that contributes to the major goal of schooling – to prepare students for flexible adaptation to new problems and settings, and to develop the transfer ability between the school context and everyday life, The environmental issues appear in three main areas of the school's life: conservation and recycling, outdoor activities, and leading the school's community towards a green agenda.

Conservation and recycling – Students experience controlled consumption of school resources such as paper, water, and electricity. In addition, there is a great deal of recycling activity such as refuse recycling, composting, and using recycled material such as billboards made of used cans. In addition, each year the school integrates all the subject matter into a theme subject, such as 60 years of water in Israel, or health-promoting behaviour.

Outdoor activities – A large part of the environmental studies take place in external organizations like the city zoo, a nature museum, a national park, and a farm. About once a week, as part of the environmental curriculum, the students visit these sites and experience issues they study beforehand in class.

Green agenda with the community - The school initiates activities with the community like 'green days', festivals, shows and marches dealing with green subjects, which make the students environmental ambassadors in their families. In addition, the students volunteer in kindergartens and senior citizens clubs in the community.

All such activities not only develop deep knowledge by enabling the students to integrate practice with theory and encountering the same issues over diverse settings, but they also enable them to open up to different settings and diverse teaching staff.

Although we saw and heard about this learning process in our initial study of the school, in the next phase of the ILE, a deeper inquiry will be conducted on the multiple contexts of environmental learning, to better understand the conditions promoting learning¹, such as:

1. How teachers manage to connect the new knowledge to the students' previous knowledge, and connect the new situation with familiar ones?
2. What drives students' interest and curiosity? How does the new knowledge become relevant for them?
3. How the curriculum is arranged so it will present multiple contexts on the one hand, and emphasize the common elements and direct children's attention to critical aspects, on the other?

Learning Aims / Intended Learning Outcomes of the ILE

What are the core learning aims and which knowledge, skills or attitudes are to be acquired? (These may include outcomes related to learners' social, interpersonal, or meta-cognitive development)

Learning aims are based on the school motto: "I know, I am responsible, and I am effective". On the social and interpersonal level, the students should develop care for and empathy towards others and the environment, and change their behaviour accordingly. As for the meta-cognitive level, the blend of school and non-school environments, and practical experience along with formal knowledge should develop a deep understanding of environmental issues.

¹ Bransford, J.D., Brown, A.L., & Cocking, R.R. (Eds.). (1999). *How People Learn*. Washington, DC: National Academy Press.

Learners

Which group(s) of learners is it aiming at? Who is eligible to take part? How many learners are there? What are their ages?

Neta'im is an elementary school (1st-8th grade) serving students aged 6-13. The school serves all the children in its low SES neighbourhood, and additional students from a nearby affluent neighbourhood that chose this kind of education. In 2009, 5 of the 16 classes (about 30 students per class) are in the environmental education program, and each year two additional first grade classes join the environmental education project, until full transformation of the school will be achieved.

Facilitators

Who are the teachers/facilitators? Who are the leaders? What are their professional backgrounds? What are their roles?

The five teachers of the environmental school are regular teachers chosen based on their willingness and interest in the subject. These teachers, like the rest of the school staff, underwent special training on environmental subjects.

The leader of the environmental school is the school principal, who knows how to attract the parents, and how to enlist the municipality, ministry of education and other interested organizations to join the project and help her to develop the school.

Organization of the ILE

How is learning organised? How do learners and facilitators interact? What kind of pedagogy do they follow? What curriculum is used?

The learning takes place mainly in the class group and follows environmental pedagogy, i.e., numerous activities in the schoolyard, a once a week outdoor activity, and six field trips a year. For example, when studying the subject of water, the students learn in class about the hydrological cycle, searching the beach in one of the trip, and inquiry into the life in the puddle in the schoolyard, while the teachers explain the common element regarding water, and the differences in each setting.

Along with teaching, the teachers fill the roles of curriculum coordinators and of mentoring each child's well-being. In this way, they manage to integrate the different elements of effective teaching which focus on the learner, the knowledge, and the community (Bransford et al., 2000).

Learning Context

In which context does learning take place? What does the physical learning environment look like? Are community resources used to facilitate learning and how?

The 50 year-old school building was renovated for adjustment to the environmental curriculum: windows were opened to the outside allowing more sunlight, other windows were opened between the classrooms and corridors, allowing full transparency of the learning environment, and the schoolyard was redesigned to enable outdoor activities. In addition, intensive relationships were established with some surrounding organizations (the city zoo, a nature museum, national park, and a farm), which became partners in the environmental curriculum.

History of ILE

Who initiated it? For what reasons was it started and with what purpose? Have these changed since?

Since the principal's arrival in 2000, she has a dream of transforming the school into an environmental school and enhancing its reputation. After several barren efforts, in 2005 an opportune moment occurred as four conditions came together concurrently.

First, the number of the students decreased due to population aging, and this put the school's survival into question; second, a group of educated and motivated parents external to the school's neighbourhood looked for a place to establish their 'dream school' for their young children. They launched a website to market their vision, enlisted a former principal of a magnet school as an advisor, and organized a founders group that met regularly to establish the educational vision and develop the innovative curriculum; third, the city's policy of reinforcing small urban schools (like this one) by allowing parental-school choice, and supporting emergence of educational innovation; and finally, the neighbourhood representatives' initiatives to find a solution for the future of their school. Over the past four years the environmental school is on track for success, attracting many new students every year.

Funding of the ILE

How is it funded?

The municipality helps in restructuring, funding academic counselling for curriculum development, and extra teaching hours. The parents pay for the field trips, outdoor activities, and extending the school day at a cost of about \$200 a month, and the municipality covers the cost for low SES students.

Learning Outcomes

What are the learning outcomes achieved by the ILE, including academic, social, interpersonal and meta-cognitive outcomes? How is learning assessed?

The school earned Ministry of Education recognition as green school, and has a long waiting list of students. In addition, parents and students display satisfaction, and the school has a very good reputation in the community and municipality. For example, several articles have been published on the school in local newspapers, and the school advertises its unique learning environment on its website: http://www.akatar.com/17_cvivati.htm.

In addition, the first year of establishing this school was studied for an MA thesis, and summarized in the following papers:

1. Tubin D. & Regev-Ofek, N. (2010). Can a school change its spots? The first year of transforming to an innovative school. *The Journal of Educational Change*, 11(2), 95-109.
2. Regev-Ofek, N. & Tubin, D. (2009), Establishing an environmental school within a school - theory and practices in educational innovation. *Iyonim Bechinuch* (Studies in Educational Management and Organization), 30, 101-124. (Hebrew)
3. Ofek Noa, (2007). From a Regular School to an Environmental School: An Institutional Perspective. MA thesis submitted to the Department of Education, Ben-Gurion University of the Negev, Israel (Hebrew).