Israel

Mevo'ot Hanegev High School

This public middle/high school for grades 7 to 12 (age 13-18) is a model school of the Israeli Ministry of Education. It has a shorter school week (5 days) and longer lessons (60min) than is customary in Israel, to allow deeper engagement of the students during the lessons. There is emphasis on project-based learning, for which students work on a self-chosen question in the frame of an extensive study unit on a basic theme. Students then show their results in a form of their choice in 'performances of understanding'. Most of the subjects are united in two central clusters, Humanities and Science, which are coordinated by a homeroom teacher and one other teacher respectively. All teachers have personal and team preparation hours in the schedule, and school teachers and external specialists serve as pedagogical mentors. To create close teacher-student relationships, the number of learners that a teacher meets each week was reduced from 120 to 60. There is also extensive use of ICT, with an online learning management system ('virtual campus') where teachers and learners communicate and store learning products and content. All learners and teachers were equipped with a laptop. The school emphasizes environmental education and aims to familiarize its students with democratic values and a range of cultures and identities.

Main Focus of Innovation: TEACHERS, CONTENT, RESOURCES, ORGANISATION
Other keywords: technology-rich

General Information

Name of the ILE: Mevo'ot Hanegev High School

Location/Address: Kibutz Shuval, Israel

Website: www.mevoot.co.il

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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?

The development of ILE in Mevo`ot Hanegev began as a response to a number of educational weaknesses in traditional teaching – i.e., frontal teaching, teaching for the tests, few opportunities for thinking and being in a rush to finish the material. The school principal and the teaching staff felt that a major change was required, in order to fulfil the great potential of learners and teachers. The goal of the innovative learning environment - ILE, which was developed gradually, is to increase the engagement of the teachers and learners in the educational practice and focus on learning rather than teaching.

The developed ILE meets all three learning components required at the 21st century: ***developing thinking and knowledge*** - by working with complex and interdisciplinary subjects in the fields of environmental literacy, sustainable development, and sensitivity to environmental and social justice; ***deepen meta-cognitive understanding of learning processes***– by means of project based learning (PBL), in the course of which the learners set out to investigate various subjects while they uncover basic assumptions, challenge them, formulate insights and illustrate learning with performance of understanding – i.e., the ability to connect ideas to others and apply them to a new context and to present these products to peers and to the community; ***and social and emotional development*** - by: 1. Practicing choice – where the learners are provided only a small choice of subjects and a large choice within the subjects, in order to create motivation, cooperation and responsibility for the learning. 2. Connecting to the learner`s previous knowledge by directing the learner to ask questions and search for information. 3. Create close teacher-students relationship by increasing the number of hours with each teacher, receiving significant support during the learning processes and expanding the use of online learning sites.

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)

By environmental education and technology-based innovative teaching methods, the school aims to educate learners for social and environmental sensitivity and active citizenship for social justice and solidarity. For achieving these goals the school encourages:

- Critical thinking and the development of reasoned worldview.
- Excellence and maximization of capacities.
- Fostering a sense of belonging to the state and country and an in-depth familiarity with democratic values.
- Openness to and familiarity with a range of cultures and identities.
- Low rate of violence and vandalism

The school operates within the guidelines of the Israel Public Schools system, serving the population of its registry area and working to enable all learners to successfully complete their matriculation exams. At the same time, within these constraints, the school allows each learner and teacher a high involvement in learning, teaching and social life, and taking responsibility for the learning processes, their products and the conditions for creativity and maximum personal development.

The core teaching\learning process is projects-based learning, wherein learners carry out projects in the frame of an extensive study unit around a specific problem\question dealing with basic subjects in which learners choose topics for research; learners gather information, find answers to questions and present their conclusions. A project can be theoretical, practical or both. The learners divide into workgroups of 3-4 and then examine, according to their choice, a topic or a sub-topic from the wider subject.

During the project and in its conclusion they submit "performances of understanding", i.e. public presentations of the subject learned, intended to illustrate insights and understanding they have reached and which constitute the basis for the teacher`s evaluation.

One of the benefits of the innovative environment is the successful response to learners` diversity. The performances of understanding – i.e., projects designed to show and demonstrate the understanding of the learners, are open to the choice of each learner. Each learner can display his \her `performances` in the way he understands them, in his own language, his own way and his own pace. In addition, learners become more active and independent as they learn about the projects. They have to deal with problems, think how to solve them and be active. The outcomes are learners that are curious and enthusiastic, who are involved and having fun.

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?

The ILE is designed for the entire learners` population and is applied to all age groups, grades 7-12, though the innovative approach is practiced more intensely in Middle high school (grades 7-9) than in the higher school, where the pressures of the matriculation exams are stronger. As a rule, each class is administered by a homeroom teacher who spends 6 weekly hours with his learners on the central theme being learned in one of the two clusters (Humanities and Science), while another teacher coordinates the subject matter learned in the other cluster. These core teachers work in coordination with the other teachers of math, languages, art and physical education.

The clusters are grounded around the disciplinary anchor of the teachers` professional specialization, and they expand those subject to other interdisciplinary areas. For instance, the organizing theme of the 7th grade is Bible and Familial Stories (such as the story of Hagar and Ishmael); in the 8th grade the central disciplinary theme is Literature, revolving around social issues (such as environmental protection); and in the 9th grade learners work on various subjects in the spheres of History and Democracy (such as social revolutions).

Teachers work 4-5 days a week. In addition, teachers are also available to learners in online learning sites. Learners feel that the teachers are interested in them, that teachers undertake responsibility and at the same time do not give up easily. Some of the teachers are also invited by the learners to become their Facebook friends. This too creates willingness and involvement among the learners.

Facilitators

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

The innovative environment is developed by a number of core teams, who continuously develop the curricula within a structured time plan of the lesson schedule. School teachers, in addition to external specialists, also serve as pedagogical mentors who work with their colleagues within a scope of 3 hours a week. The main role of the teacher is an overall planning of the learning process, directing and guiding the learners, and accompanying the learning process by personal conversations, in small groups and with the entire class. All teachers have personal and team preparation hours in the schedule and all receive personal and team guidance.

The challenges of working with ICT, curriculum development, instruction and colleague coaching have created a sense of renewal and empowerment among the teachers. They have changed from being information channels into being knowledge producers. Lowering the number of learners a teachers meets a week from 120 to 60 allows them to develop meaningful processes with the learners, develop curricula, create knowledge and encourage learners` engagement with that knowledge. However, teachers sometimes attest to loneliness and a large burden.

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?

In order to enable a more meaningful learner-teacher-knowledge encounter and support searching, thinking and creative processes, Mevo`ot HaNegev school changed the structure of the weekly and hourly schedule and of the curricula arrangement. School week was shortened from a 6 day week (the usual custom in Israel) to a 5 day week, from 08:00 to 14:00. Lesson duration also changed from the usual 45 minute lessons to five 60 minute lessons a day. This facilitated focusing and depth together with maintaining a total of learning time and even maximizing it.

In addition, instead of learning10-12 subjects matters, as is customary in Israel, Mevo`ot HaNegev reduced the number of subjects by uniting them in two central clusters: the Humanities – Bible, Judaism, literature, history, philosophy, citizenship, history of art; and the Sciences – natural sciences, exact sciences and environmental sciences. Concurrent to these two clusters learners also learn: languages (English and Arabic), Mathematics, art and physical education. Thus, relationship between teachers and learners becomes more personal, learning is conducted towards summarizing "performances of understanding", and at the same time learning becomes more autonomous and personal, with the teachers staff always accompanying, supporting and guiding. All learners and teachers were equipped with laptops, enabling thus ongoing activities in the LMS (Learning Management System) environment developed at the school, where they are busy promoting and carrying out various projects.

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 school is located near a kibbutz in the south of Israel, and its one-floor classrooms are spread among spacious lawns, trees and blooming bushes. The fifty year old buildings are unsuitable for their pedagogical uses, but the ICT system assists in coping with this shortcoming.

Learners and teachers were provided each with laptops allowing ongoing communication in school and without. All classes were equipped with whiteboard projectors and loudspeakers allowing the teachers to perform the frontal teaching by using presentations and the internet. The "virtual campus" LMS school system enables every teacher to develop an online course website. Consequently there are 500 virtual learning environments being used to store learning products and learning contents; they are available for use from any place at any time, and provide an ongoing communication between teachers and learners on the various courses and classes.

The ICT system supports the school in its position as regional school to which students travel daily, from few minutes to half an hour in each direction. Most of the parents believe in the school and have faith in it and appreciate the school and the innovative processes that take place there.

History of ILE

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

Mevo`oth HaNegev is a six year (ages 13-18) public middle\high school. It is situated at the south of Israel and serves middle to high socio economic population. The pupils come from the rural municipality communities (45%), from the Bedouin population in the area (10%) and from urban communities (45%). In 2009-2010 the school served 560 pupils and 60 teaching staff. It is headed by the Principal Ido Argaman, who has been running it now for thirteen years.

In the early 2000s, following the low number of pupils and the problem of the school ownership, the question of the school sustainability arose. It then became clear to the principal that in order to go on, continue and expand the school, the ownership issue had to be resolved, a direction for an educational innovation had to be found, and educational excellence had to be made manifest. After several years of search and learning, beginning in 2008, the implementation of the innovative program took place. The new ILE emphasizes Environmental education, active citizenship and integration of ICT technology, problem\ project-based learning (PBL) methods and education to understanding.

Funding of the ILE

How is it funded?

The school is funded, like any other public school in Israel, by the Israel Ministry of Education. The ICT system (laptop for each student and teacher) is jointly funded by the parents (20%), and the local authority (80%), which issued a tender that cut down the initial costs. The development of the innovative program is supported jointly by the municipality, which invests an annual supplement of $150.000, and by the school, which allocates budgets for external pedagogical support.

Learning Outcomes

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

The innovative learning environment led to a number of significant outcomes. Percentage of Mevo`ot HaNegev graduates who earned the Matriculation Examinations is about 80%, which is significantly higher than the national average of 48%. While the Innovative pedagogy did not contribute directly to this increase in percentage, it had led to other important achievements, as detailed in evaluation reports conducted on the school (Bar-On and Ofir Hershkovitz, 2010; Bar-On and Lozky, 2011): Learners perceive the school in a highly positive light, they report it is fun to learn there, that the teaching methods are different and unique, that teaching contents are interesting and there are good relations between teachers and learners. Moreover, the assignments and projects are challenging, improve learning and promote skills such as; presentation before an audience, investigation, team work, giving fair feedback and encouraging curiosity.

Mevo`ot HaNegev is used as a model school in the Department of Experimental Schools, Ministry of Education. Over the years it has achieved many more awards, including winning the National Education Award (2009); four beauty star awards from the Council for a Beautiful Israel (2008); achieved a very low learner dropout level (decile 2); attained “Excellence” on school climate subject-matter in the Efficiency and Growth School Indices biennial national exams, was certified an Environmental School; received an Environmental Education Award from the Minister of Education and Minister of the Environment (Exp.Schools Division, 2011).

Documentation describing or evaluating the ILE

Is there documentation on this learning environment? Is there a website? Films? Research reports or evaluations? Other forms of documentation? (please supply references or links)

The school ordered a professional evaluation, which lasted for three years and monitored the implementation and assimilation of the innovative methods throughout the school as was noted and published in the following reports:

- Bar on, N. and Ofir Hershkovitz, D. (2010). Evaluation of the educational innovation program in Mevoot Hanegev high school. Mishtanim: Tel Aviv, Israel (Hebrew)
- Bar on, N. and Lozky, A. (2011).). Evaluation of the educational innovation program in Mevoot Hanegev high school - The first three years 2009-2011 Summery report. Mishtanim: Tel Aviv, Israel (Hebrew)
- School achievements are also presented in the Division for Experimental Schools, Experimental Institutions Catalogue – Innovators in Education ["Portzey Derech"] 2011, November 2011, from: http://cms.education.gov.il/EducationCMS/Units/Nisuyim/PeiluyotHagaf/pirsomim/katalog.htm

Additional papers and studies on the school are:

- Learning from Success - Kerem Institute, 2011
- Tali Lerner, 2011, Experiences and perceptions of teachers who design curricula by themselves – Mevo`ot HaNegev Middle/High School