



Directorate for Education

Centre for Educational Research and Innovation (CERI), OECD

## Innovative Learning Environments (ILE)

### INVENTORY CASE STUDY

### **Makor Chaim Yeshiva High School**

Kibbutz Kfar Etzion, Israel

*This boys-only boarding high school (grades 9-12, age 15-19) combines full-day secular and religious studies, and focuses at students' meta-cognitive, personal, and interpersonal development. Lessons are designed to encourage students to take responsibility for their own learning, by choosing subjects and conducting research for a better understanding of the subject. By studying complex, non-linear Jewish texts in small groups, the students are challenged to develop their thinking abilities by interacting with each other and learning from their classmates. Each student has a homeroom teacher throughout the four years at school, who is a rabbi-teacher who functions as mentor and studies together with the students. In addition to a diploma, students receive a detailed personal assessment from their homeroom teacher every year. Admission to the school is selective and based on criteria such as students' self-awareness and autonomy as learners.*

This Innovative Learning Environment case study has been prepared specifically for the OECD/ILE project. Research has been undertaken by Dorit Tubin, Chaja Sanders and Liat Cohen from Ben-Gurion University of Negev under the supervision of Dorit Tubin, following the research guidelines of the ILE project.

© OECD, 2012.

© Dorit Tubin, Ph.D. Department of Education, Ben Gurion University of the Negev, Israel, 2012.

אוניברסיטת בן-גוריון בנגב  
הפקולטה למדעי הרוח והחברה  
המחלקה לחינוך



Ben-Gurion University of the Negev  
FACULTY OF HUMANITIES AND SOCIAL STUDIES  
DEPARTMENT OF EDUCATION



**THE OECD/CERI INTERNATIONAL STUDY  
Innovative Learning Environments (ILE)**



**Makor Chaim Yeshiva High School  
Kibbutz Kfar Etzion, Israel**

**Case Report**

**Research Team**

**Principal researcher:**

Dorit Tubin, Ph.D.

**Researchers:**

Chaja Sanders

Liat Cohen

Orna Heaysman

**April 2012**

## TABLE OF CONTENT

TABLE OF CONTENT .....	3
INTRODUCTION .....	4
RESEARCH METHOD .....	4
1. BACKGROUND AND RATIONALE OF THE INNOVATIVE LEARNING ENVIRONMENT .....	5
Israeli Context .....	5
“Makor Chaim” Yeshiva school.....	7
ILE Rationale.....	8
2. CHARACTERISTICS OF THE LEARNING ENVIRONMENT.....	10
Daily Routine .....	10
Teacher Roles.....	12
Student Roles.....	13
3. LEARNING ACTIVITIES .....	13
The Hevruta.....	13
Studying for the Matriculation Exam .....	17
Achievements and Evaluation .....	17
4. THE EFFECTS OF ILE .....	17
5. LESSONS LEARNED .....	19
The whole school as a learning environment.....	20
Hevruta as a specific learning method .....	20

## INTRODUCTION

The global society has been changing in recent years from industrial systems to information based systems, whose key requirements are lifelong learning and regenerative capacities. These societies require their members to transform and become self-targeted learners, to be capable of searching for special knowhow in a variety of areas, to change careers in life and to develop meaningfulness and creativity. Such capabilities are important not only for promoting economic prosperity, but also for furthering social participation, democracy and egalitarian communication. Yet, despite these challenges on the threshold of the twenty-first century, the majority of schools still operate as they did in the beginning of the twentieth century and do not promote deep learning and the skills that creativity and innovation require.

“Makor Chaim” – the school presented in this report, succeeded in developing an unique learning environment that develops learners who are responsible for their studies, and promotes the skills necessary for the citizens of tomorrow, while it operates at the same time within the constraints of the educational system in Israel. The object of this study is, therefore, to examine the learning environment in “Makor Chaim” and study its contributions in preparing its graduates to the twenty-first century.

## RESEARCH METHOD

In order to investigate a complex and multi-dimensional learning environment, we chose the case study method, which follows a uniform research protocol in all countries participating in the OECD ILE study. This method enables a comparison among cases and at the same time present the uniqueness of each separate case. The leading research questions focus on the aims of the learning environment, on characterizing patterns, on the nature of the learning and its effects. The effectiveness of the learning environment was examined in relation to the learning principles necessary for the 21<sup>st</sup> century skills, including: placing the learning process at center stage; encouraging acts of cooperation; orientation towards learner’s motivation; sensitivity to the variance among the learners and their previous knowledge; creating engagement, providing suitable and modified assessment, and encouraging an integration of the taught contents within the school and extramurally, through distance learning and extracurricular programs (Dumont, Istance & Benavides, 2010).

*Choice of School* – this was done based on international research criteria (OECD/CERI ILE Project, 2010), which require choosing schools using innovative learning environments whose characteristics are: an intentional change from the traditional approach; a distinctive approach to the ways that learners, teaching resources and different ‘technologies’ and facilities inter-relate; and explicitly aim at address the range of cognitive, meta-cognitive and socio-emotional learner needs. In addition, the innovative learning environment is grounded in an extensive

organizational infrastructure; it is not dependent on tuition fees or on the charisma of the entrepreneur, and displays the characteristics of a learning organization that evaluates itself in order to improve constantly.

*Research tools* – these include: interviews with the leaders and movers of the innovativeness at the school; observations on the learning processes and the use of resources; focus groups and interviews with learners; and analyzing school records. All in all, in “Makor Chaim” we conducted two interviews with the principal, interviews with three teachers and pedagogical mentors, two focus groups each with three twelfth graders, two tours at the school and the residential school, and two observations of the learning processes in the innovative environment also took place. In addition, school documents, publications and books were collected and analyzed, including the school internet site <http://www.makor-c.org>.

Data collection took place in 2010-2011 by the research team and consisted of some thirty hours. Data analysis was conducted following the research questions and the data organization was being analyzed into appropriate categories. The following sections present the rationale of the innovation, the nature of the activities and their results, as they emerge from the data collected and analyzed in the study.

The report is organized around the four following issues, which are designed to present the uniqueness of the innovative learning environment in “Makor Chaim”: 1. Background and rationale of the innovative environment – vision, context, history and background; 2. Patterns and characteristics of the learning environment; 3. Learning activities at the study hall (Beth Midrash), in the classes, workshops, laboratories or non-formal environment; 4. The effects of the innovative environment – the outcomes and their implications with respect of the 21<sup>st</sup> century skills.

## **1. BACKGROUND AND RATIONALE OF THE INNOVATIVE LEARNING ENVIRONMENT**

The innovative learning environment was developed at the “Makor Chaim” school (“Yeshiva” in Hebrew). In order to understand it in all its contexts, this chapter presents the Israeli context where the school is operated and the school context, where the innovative learning environment and its rationale were developed.

### ***Israeli Context***

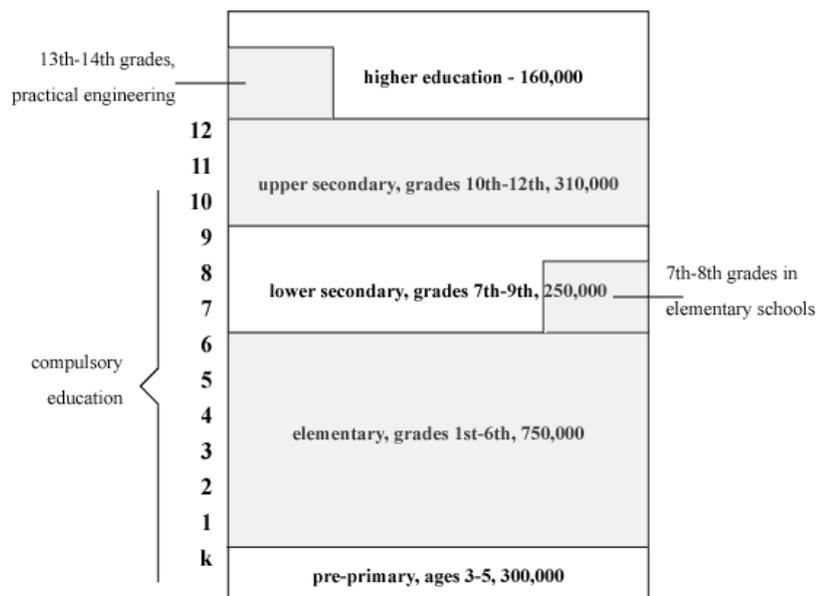
There are about seven and half million citizens living in Israel at present (80% Jews and 20% Arabs), 1.500.000 students and some 4,200 schools that are divided into the state schools sector (58%), religious state schools sector (19%) - “Makor Chaim” among them, and the independent orthodox schools (23%). Compulsory free education begins in kindergarten at age 5 and continues to the tenth grade (including the tenth); free (non compulsory) education continues to

the twelfth grade, age 18, when 93% of the students finish 12 years of education (Central Bureau of Statistics, 2008). The Israeli education system is highly centralized and controlled by the Ministry of Education. Although there are no private schools in Israel and all schools are supervised and funded by the public state budget, the orthodox sector and 4% of the schools, which are defined as recognized but non-official schools, are authorized to raise additional funds and change parts of the national core curriculum.

Primary education in Israel usually lasts six years, from grades 1 to 6 (ages 6 to 12). Secondary education has goes from grades 7-12 and is mainly divided into: Junior High school (grades 7-9) and High school (grades 9-12). For Practical Engineering studies two additional years are required (Figure 1).

Most elementary schools are neighborhood local schools with registration areas and most High schools are comprehensive schools. There are generally very few vocational schools and vocational departments would be offered as part of the comprehensive schools. Parental choice in Israel is limited and controlled and is prevalent mostly in the large cities.

Figure 1 – Israeli Education System



The High Schools are comprehensive, they include a wide range of departments, levels and theoretical studies, all leading to the national matriculation exams, which constitute a major entry ticket for many jobs and higher education institutions. In 2010 the entitlement percentage for the matriculation exam among twelfth graders who took the exam was 66% (CBS, 2011).

Israel’s education system assesses school achievements by means of national exams in the fourth and eighth grades, and the matriculation exam at the end of high school. An ongoing decline in Israeli students’ achievements in international exams has brought about, in recent

years, a growing focus on learning achievements, yet without neglecting the higher order thinking skills and education for social values.

The school presented in this report, “Makor Chaim”, is a particularly successful example of a public, national, religious, residential school that has succeeded in developing a unique and challenging learning environment within the frame of the Israel educational system regular conditions.

### **“Makor Chaim” Yeshiva school**

“Makor Chaim” School was established in 1985 in Jerusalem by the Israel Prize<sup>1</sup> Winner, Rabbi and educator, Adin Even-Israel Steinsaltz, for the purpose of creating an education that is different, one that produces students who do not merely obey, carry out orders and observe the “Mitzvot” – the precepts - but also develops human beings who search for the meaning of life and the Jewish faith. Within few years the school became known among the religious population in Israel as one of the most singular and renowned Yeshiva High Schools in the country, and attracted the best religious students of that community to its establishment.

After several years the school moved to Kibbutz Kfar Etzion, south of Jerusalem, and is one of the four high schools in the rural area of Gush Etzion Council, which serves twenty communities where the population is mostly of Jewish religion. The school is a high school Yeshiva<sup>2</sup> for boys, including a residential school, and in 2011 comprised about 300 students in ten classes, two classes in each grade, from grade 9 to grade 12 (ages 15-18), including two special education classes. Students who choose studying in this Yeshiva over other options come from the surrounding region and from all over the country. Only one applicant out of four is found suitable for the orientation of the school and is accepted. Rabbi Dov Zinger is the school principal and has now been for 27 years in this office.

The Yeshiva is part of an educational center operating in three circles: at the heart of the inner circle there`s the school; the intermediate circle comprises the Teacher Education and the Rabbi-Teacher Education Program, with about 30 novice teachers, in collaboration with Herzog College and a group of overseas (USA, South Africa) Jewish students; the Beth Midrash<sup>3</sup> – study hall – for the general public constitutes the outer circle.

---

<sup>1</sup> The Israel Prize is an award handed out by the State of Israel and is largely regarded as the state's highest honor. It is presented annually, on Israeli Independence Day, to those who have displayed excellence in their fields, or have contributed strongly to Israeli culture or the State.

<sup>2</sup> Yeshiva is a high school (usually 9-12 grade, ages 15-18) that combines religious studies and secondary education (secular studies) for the matriculation exam.

<sup>3</sup> Beth Midrash refers to a study hall of Torah study (including Talmud, Mishnah, Torah, prayer books, etc.). It is distinct from a synagogue, although many synagogues are also used as Batei Midrash and vice versa.

Evidence of the school's success comes from various directions: the high demand of students; academic achievement in the matriculation exams (91% of entitled students compared to a 66% rate nationwide); stability of the teaching staff; choice of school by the Ministry of Education as a demonstration school; integration of school alumni in key positions in later religious studies and in the IDF (Israel Defense Force); continuous relations with the graduates. In addition to the above the school enlists the involvement of educators and public representatives on a national level, who come and meet the students and the teaching staff.



School Principal (to the left) and the Vice Premier-minister and MK – Silvan Shalom

The school is funded from the budget of the Ministry of Education, from parental fees (about \$4000 a year), and additional contributions for student grants and for promoting this unique study program, which includes religious studies, small classes, quality teachers and specially tailored study programs.

### ***ILE Rationale***

The main purpose of “Makor Chaim” is to build an environment where students undertake responsibility for learning, develop curiosity and cope with the fundamental questions at the infrastructure of the knowledge search. The main idea of this rationale conceives the school as an organism, or an energy field, whose parts are all connected and affecting each other. Knowledge transfer – as it is done in ordinary schools – is meaningless in such a format. Just as food is digested in order to contribute to the totality of the human body, so must learning be ‘digested’, or integrated, in the overall totality of relations if it is to contribute to the student. School is not a garage to which a student is entered for repairs or improvements; it is a community where the law of connected vessels operates, creating mutual responsibility that affects both students and the teaching staff. The school developed a learning community characterized by the following three components: 1. Everybody learns; 2. Teaching engenders learning; 3. The educator is educated.

*Everybody learns* – learning in “Makor Chaim” is not just a matter of students waiting for their teachers to teach them, it is a place where teachers learn too and the students acquire learning habits through imitation. Compared to eating habits, figuratively speaking, this is not about spoon feeding, but about placing food on a plate for the student's choice, together with the personal example of adults eating beside the children. Thus, personal example is provided when the teachers themselves are in a state of learning, when they forage the library, participate in shared courses, when school office is closed because the secretary is busy learning, and when parents and grandparents join and share learning with their children.

When success in exams becomes the major criterion for students' success, when the responsibility for preparing students for the tests falls on the teacher, students are in fact released from their duty and the meaning of learning is flattened. But when the teachers come to

school to study, when they act like Torah Scholars<sup>4</sup> who study by themselves and with their students, diffusing around them the desire for learning, the students join in and the process of learning becomes a joint life condition of unbound learning with a place for everyone. From taking up space the teachers clear up space and enable students to fulfil their right for growth and spiritual development.

Teaching engenders learning – the pedagogy of imparting knowledge, where the teacher transfers knowledge and the student receives it, where the teacher is standing and the student is sitting, the teacher is asking and the student is replying, encourages passivity and lack of responsibility. At “Makor Chaim” school the conditions enabling the student to approach knowledge by himself are emphasized, so that a student may express his opinion, convince his



environment and scrutinize his inner ideas and insights. An environment that facilitates such learning called, in the world of Yeshivas, “Order”, albeit to an outside observer it might seem as a total disorder. In the large study hall of the Beth Midrash one sees students sitting and standing, they are of different ages, are part of diverse study groups, while the teachers in the hall are doing their own studying and assist students who are having difficulties.

The educator is educated – following the idea of the spiritually connected vessels, it would mean that when students make a mistake the teachers are also part of the process. For instance, if the students copy in tests, that would be caused, at least in part, by staff attitudes, the testing methods, and the supervision against copying. Managing this issue of trust and lying be discussed by the teachers, including where they make their mistakes about this. A similar discussion should be held among the students, with the staff members participating. Or, in another case when a teacher complained of being bored by the students, a discussion was held to discuss the meaning of boredom for the teacher.

“Makor Chaim” deals with these issues by second order change which modify the entire traditional system. Thus, for example, school entrance exams are sent to the students` homes, to be done at their own free time, that being a full expression of trust in the student and his intentions. Concurrently, the team of Rabbinical homeroom teachers open the week with a Tai Chi movement workshop, which has no connection at all to the subjects they teach, but as they begin the week in a mood of learning something new, this would diffuse and affect what is happening at the school. Another example is the time management system: instead of controlling the student`s time by using a full and accurate daily program (at the same time becoming involved with checking attendance and tardiness), the school staff allow students much choice

<sup>4</sup> Torah Scholars is an honorific title given to one well versed in Jewish law.

both as regards their fields of study as well as how they spend their leisure time and develop hobbies.

To sum up, "Makor Chaim", as an educational institution, offers an alternative to ordinary educational institutions, which trudge along in a passé type of routine, where although everybody knows the rules of the game the spark of curiosity is destroyed by boredom and the joy of learning is snuffed out. This school lays stress on listening and not on teaching, it is based on teachers who are constantly in a state of self-learning and who serve as mentors and guides having faith in the students as in learners that would strive and excel, proceeding from the understanding that school is a place of learning for everyone, that learning is basically a self-teaching process and that the school is a area where everyone radiates and affects each other.

## 2. CHARACTERISTICS OF THE LEARNING ENVIRONMENT.

### *Daily Routine*

As a high school Yeshiva, "Makor Chaim" is a residential school integrating religious studies, secular studies, and additional activities throughout the waking hours of the students. Students are divided into classes by ages. Each class comprises about 30 students and is administered by a Rabbi-homeroom teacher, who is assisted by a secondary Rabbi-teacher plus two instructors – all of whom accompany the students in their activities and the various tasks on their agenda. The following table shows the Yeshiva daily routine:

#### "Makor Chaim" Daily Routine

Activity	Hour
Morning Prayer	07:00
Breakfast	08:10
Morning Studies Division	09:00
Lunch	12:30
General Studies Division	13:30-18:30
"Mincha" Prayer and afternoon studies	16:20-17:10
Supper	18:30
Evening Prayer and Evening Studies	19:15
Free time for homework, courses, hobbies	20:30

*Seder Boker (morning studies)* – this is the morning time period. It unfolds without the hourly bell and is facilitated by the Rabbi-homeroom teacher. This period is organized with an opening phase where the Rabbi-teacher presents the daily topic, then self learning in Beth Hamidrash, and finally summary and enrichment by the Rabbi-teacher. "Gemara", "Halacha" (ancient Jewish books - detailed below) and the Bible ("Tanach") are studied in the morning. The Gemara and Halacha studies are divided into Proficiency Studies and In-depth studies. Proficiency Studies are for the students to achieve religious knowledge; they finish hundreds of Gemara pages in four years, and if interested they can also join a voluntary study group (comprising a high percentage

of the students) doing an extra hour every day. In-depth Studies emphasize reading in depth and understanding the wider connection of things. Writing papers is required. Outstanding In-depth Studies students join the (multi-age) Cluster Group and participate at an exceptionally high level program.

The Bible studies is also divided into Proficiency and In-depth. Proficiency Studies is done “in Hevruta” – “study with friends” (of which more will be written in the section on Learning Activities). The aim of this program is for each student to learn the entire Bible in one year. The In-Depth Studies program focuses on the relevance of the material to the present times. Internalization and personal work is highly emphasized in almost all subjects. A “coming together” gathering takes place once a month. In this gathering the emotional world of students and staff is expressed. On occasion students are offered different ways to study the Torah and they may choose and participate in the learning activity that most interests them.

General Studies Division – these studies take place in the afternoon with an emphasis on expanding horizons, diligence and self-learning. Studies are according to the Ministry of Education curriculum and the requirements of the matriculation exam, including subjects such as: biology, physics, Israel History, general History and Literature. The school encourages students to do personal research and write a graduation thesis (on a required subject) as a substitute for a required normative matriculation exam.

Afternoon studies and courses – in these periods students investigate in depth the areas they are interested in, they complete their assignments and participate in various courses. For instance, a student reports he is learning kung-fu, he lets the teachers know, leaves for an hour for the course and then returns to continue afternoon activities. Others learn to play and practice musical instruments. Volunteer projects also take place at this time. These projects constitute a significant element in building the personality of the students at the school.



Most students in the volunteer projects come from grades 9-10. They volunteer for “older sibling” roles, help younger children in afternoon community care classes with their homework, spend a weekly hour with the elderly, cook, hike, play with challenged children, help catalog and sort historical documents at the Kfar Etzion archives, perform Hevruta studies with kids from the surrounding area (who are not pupils at the school). In general, the school offers the students a wide variety of courses and opportunities to develop hobbies, assuming that the desire for learning, for self discovery and responsibility can find their expression in many forms. List of courses includes drama, sketching, art, music (including ensembles, learning to play privately, etc`), wrestling, creative writing, judo and martial arts, carving, and others.

*Evening Prayer and Evening Studies (Seder Erev)* – this is the time devoted to Gemara studies in the evening. It is usually done in couples (pairs) of an older student with a younger one. Though the students advance in the Gemara by themselves, they do so in the frame of a general program and are tested on their proficiency every two weeks.

To sum up, the general structure of activities at the school becomes an assembly of components where each student can find the directions that interest him and learn in the depth and scope suitable for him in the spirit of the school. This structure is created and directed by the school staff, together with the school students, when the teachers' and students' roles are different from those in traditional schools.

### ***Teacher Roles***

“Makor Chaim” teachers are Rabbi-Teachers, i.e., they have in-depth knowledge of Limudei Kodesh (Judaism) and are also committed to the education and development of their students. The Rabbi-Teacher and his team spend long hours with their students throughout each day, creating deep and meaningful relationships with them while concurrently they place great emphasis on respecting the students and their needs.

To fulfill their role of Torah Scholars the teachers follow the rule: “Do not teach what you know, teach what you wish to learn”. They study many subjects together with their students, eliminating thus the dichotomy between the teacher who knows and the student who does not know, turning both of them into those who do not know and therefore wish to study together. In addition, at a certain time of the school year, teachers teach what they love; they do not teach what they must teach, but what they choose to teach. This strengthens the teachers bond with the school and turns it into a place where their life is, not just their job.

The school principal encourages the teachers to look for each student's strength areas. If someone says, “I didn't understand anything”, he will ask him, “what did you understand”. In this manner he encourages the student, instead of reprimanding him and immobilizing him. “No kindly word or an expression of love and closeness ever get lost”, (Zinger, 2000:42). At the same time working with the class is divided among the teachers; The Rabbi-Teacher teaches the main group while the secondary Rabbi-Teacher focuses on students who are having difficulties and works with them in small groups or individually, while he adjusts the pace and content to their capabilities.

In addition to working in class, the school teachers also work as a team; twice a week in the afternoons they learn together the Gemara lessons they are preparing for their students. At times they work on different subjects and sometimes on a topic for the entire school. Thus, when they get to their classes, the debate is still fresh and the disputations are still resonating. In this manner the entire Yeshiva, of all ages, study certain subjects together, which fortifies the sense of a learning community.

### **Student Roles**

Students who elect to study in “Makor Chaim” soon realize that things depend on them. No one wakes them for school or demands that they perform their duties, but they understand that if they cannot cope with the requirements this is not the place for them. If a student finds it difficult to wake up in the morning he asks his friends to help him. One student tells us:

*I, for instance, am waking up somebody every day for the past half year. A friend of mine asked me, he said: listen, I can't by myself, and so I wake him up every day ... sometimes there are such cases, people are helped by their friends ... I, for example, wouldn't want anyone to wake me and tell me to get up ...*

The students know that they are monitored, but it is hardly necessary to tell them anything. The “spaces” in between, as they are called by the Principal, i.e., the places left for the students to undertake responsibility, do their thing. The students learn that they are required to have responsibility, initiative and inner direction and they state that these demands and expectations, together with the place to experience this, to make mistakes and also to succeed, build up their character.

## **3. LEARNING ACTIVITIES**

In “Makor Chaim” they do not believe in the rigid 45 minute lesson structure. “It is not convenient for everyone,” says the Principal, “it's like some big babysitter, getting them all into class, as if there's a teaching process that is going on there, but it is not true. Waste time percentage in a given lesson is huge.” It is not a matter of how many words the teacher said or the students said, but whether learning took place. To make that happen one must induce processes similar to those that exist in the real world, where in addition to situations where grown-ups teach the young ones, there are also situations where people investigate, test and study in collaboration with colleagues. These methods take place in “Makor Chaim”, where the central one is the Hevruta method.

### **The Hevruta**

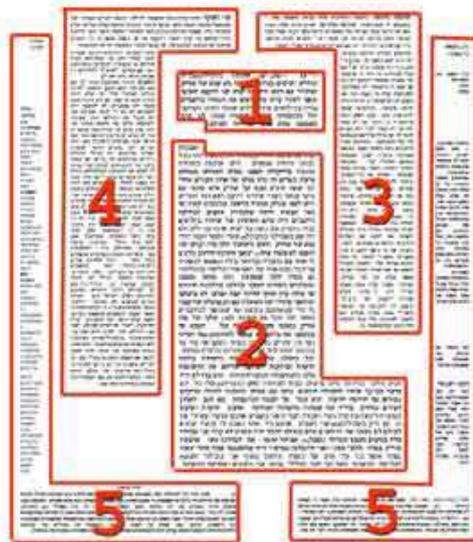
*Hevruta*, derived from the Hebrew word “Chaver” – friend – means “studying together”. This is an ancient Jewish learning technique for interactive textual introspection, used by Torah scholars to study the Talmud (the Gemara – compilation of Jewish laws) and Halacha (Jewish religious law). Hevruta practice is based on the concept that every person has access to a piece of the truth, but in order to come closer to the whole truth one must learn with others, thus reaching deeper and gaining a greater understanding of the text, himself and himself in the world. Hevruta is based on a unique text (below) and on a matching practice.

**The Text** – The Talmud is one of the most important books in Judaism. Its text structure is complex, non-linear, and includes religious laws with layers of notes and commentaries collected over the centuries. The Talmud was written in Hebrew and Aramaic and its text is considered difficult because of its old language, conciseness, succinctness, the use of terminologies and the Aramaic embedded in it. Talmud is considered as the main study object in all Yeshivas in Israel and the world; it requires a high level of proficiency and expertise for its understanding and occupies most learning hours. Image 1 illustrates the text structure.

**Image 1: Sample Gemara Page and Talmud Bavli Page**



Talmud Bavli Page



**Gemara Page Structure**

1. Mishna –edited 2<sup>nd</sup> century Israel, presenting situations of disagreement or conflict
2. Talmud – Mishna commentaries put together in Babylon 3<sup>rd</sup>-8<sup>th</sup> centuries C.E.
3. Rashi- Rabbi Shlomo Yitzchaki's commentary, who wrote the most important and comprehensive Talmud Commentary (1040-1105 C.E.)
4. Tosafot- added commentaries by European Medieval Rabbis, begun after Rashi.
5. Rishonim Acharonim – further commentaries of Jewish Rabbis, 11<sup>th</sup>-16<sup>th</sup> centuries.

**The Practice** – in the Hevruta system

it aloud and the other follows the text. If the text is long they switch and read other in turn. After reading the text they answer given questions, discuss answers and write short notes. Later on the class discusses their work. There are a few ways to study Talmud in Hevruta, depending on the order of subjects during the day, the week and the years, with an emphasis laid on different commentaries, division of subject among the studying pairs and in class and so on. Some researchers have found that these differences continue after school graduation in further higher studies (Kanarek, 2010).

The Hevruta method is an important way of learning in addition to the traditional individual, passive way of learning that measured by exams (Kent, 2006). In the modern world where “the medium is the message”, in which a text is presented in many ways and changes meaning

depending on context, the Hevruta method brings back the text to center stage, offering an innovative (and ancient) approach to human learning.

All students in “Makor Chaim” do Hevruta learning, usually in pairs, about two to three hours a day. In the mornings they learn with their peers, following the teacher’s guidance and preparation for class; in the evenings young and old study together without class reinforcement. Every two weeks students are tested on the daily Gemara pages, which each pair studies at its own pace, including those in the program for high-ability students.

As a rule, 11<sup>th</sup> grade students are paired with 10<sup>th</sup> graders and 12<sup>th</sup> grade students with 9<sup>th</sup> graders. This is an excellent opportunity for the younger students for direct immersion of how to learn the Gemara. A young student who has just joined the Yeshiva and does not know how to learn the Gemara is paired with a 12<sup>th</sup> grader, sees him in action, follows the process, understands the difficulties and thus learns what should be done when he does not understand, when to stop and when to move on. In this way the young student gains a one on one direct model.

The senior student too gains much, since he grasps when he explains what he really understands and what he doesn’t during process and that deepens his knowledge. This already is an important gain from the Hevruta. Consequently, though these studies are considered difficult, many students find them challenging and developing learning skills. The most severe punishment from their respect would be if a 12<sup>th</sup> grader does not receive a 9<sup>th</sup> grader for pair studies. For the senior student that would mean he cannot be trusted and has nothing to give. A 12<sup>th</sup> grader reports his experience as a younger student in the Hevruta system:



*“Yes, I would attest of myself that I gained much of this proficiency thanks to the Hevruta ... He (a 12th grader) did not force it into me but let me cope with it... translated the missing word ... I hope this is also what I do today (as a senior student) ... In the beginning of the year he (freshman) could not put periods and commas in the right places... he did not understand a single word... so slowly this year people develop the tool...*

*When your Hevruta (partner) does not understand, you explain it to him for the first time, and a second time, and a third time. You see, sometimes things become clearer when you explain, suddenly the penny drops. This has happened to me a lot with my Hevruta (the young student) whom I really did not understand, and so I told him `let`s continue, let`s go on`, and he had a problem so he would say, `no, no, something is missing for me here,` and then I would explain it to him and explain again and suddenly I`d realize I too did not understand. I had a good experience with the 9<sup>th</sup> grader this year.*

Hevruta method also serves other functions. For instance, Talmud study takes many hours, particularly in the higher religious education where it is studied most of the day. It is very difficult to do it alone and the Hevruta, the togetherness, allows cross-fertilization and intellectual challenge. "I think," jokes one of the teachers, "that only with my wife did I talk for such an amount of hours."

Hevruta study method also reflects the character of the text. As mentioned before, Talmudic text presents conflicts and debates around a certain topic. Thus, reading and debating the subject matter and different commentaries that may also at times disagree with each other, reconstructs the manner in which the text was created and thus enables dealing with it. A teacher reported that:

*In the Gemara they hardly ever agreed all of them about the same things. The Various sages of the Talmud were always arguing. So the way you are sitting..., and then the way you read a sentence with your Hevruta ... you will read it one way and he will read it another way and then you start arguing... without getting into that place of absolute knowledge; and then you are left with what you gained from the Hevruta, as a good and sharp tool for understanding.*

Another gain from Hevruta learning is increasing the awareness of each person's strong points as a teacher and as a learner. The students themselves pick their Hevruta partner, usually making a good choice, even if it is not intentional, because they know who is most suitable for them. Sometimes the teachers have to intervene, but mostly one perceives the dynamics, where one student, who is strong at collecting information, finds another student, strong at creative thinking and together they reach a faster and deeper understanding than they would have reached separately. This system can be useful, therefore, in additional subjects, in Math, for example. A student reports:

*A friend and I were preparing together for the winter test in Math. We sat together some 20 cumulative hours, because we had to catch up with some of the material. So we sat for many hours together with books and exercises ... and so we helped each other.*

His friend adds that: *Each time it happens I am impressed again. When it is already seven fifteen in the evening, it has been a hard day, we are tired... we get to the Beth Midrash after supper and there are some 150 people there, usually in pairs, learning things that usually would be very very boring. Gemara is not watching a movie, or playing, it is not exciting...but because it is important and, in my opinion, is a door to Judaism, we put an hour or two in the evening in it ...and from this desire in the Hevruta, nobody can get lost.*

In the evening, Yeshiva students experienced in Talmud studies join the "Makor Chaim" students and help those who ask. They are not there to check presence or output, only to help and coach those who find it hard and ask for assistance. If at the tradition system fixed learning time yields varying outputs, then in the case of "Makor Chaim", flexible time produces similar outputs, when all the pairs, at their own pace, do what is required.

Learning activities do not amount only to religious studies but include as well studying for the matriculation exams.

### ***Studying for the Matriculation Exam***

Like all schools, students in “Makor Chaim” also learn general studies for the matriculation exams. The teachers teach those subjects, but many students give preference to religious studies and social activities while they set very little time to prepare for the examinations. A student explains to us that, “*if it is important to somebody, he would get excellent grades. And if somebody wants to do it offhandedly, then he would do it just so.*” They are aware that most of their efforts go to study Talmud and if they spent those hours in learning math, physics and English their matriculation test scores would be higher. However, these tests are not a priority for most of them.

All the same, in the general curriculum, most students choose to work on in-depth study units. They choose topics, both from the general curriculum as well as from the Talmud studies and develop a research project paper, instead of being examined on some of the matriculation subjects. At the same time meeting the overall requirements of the Yeshiva is much more than success in the tests and the assessment system reflects this aspect.

### ***Achievements and Evaluation***

Respecting the student is paramount in the system. This is reflected in various milestone events. The School Certificate is not just a mere list with grades, the homeroom teacher is required to give a comprehensive personal assessment in what is called “Missive to the Student”. The Yeshiva Head personally signs each school certificate and has a personal talk with each student before the certificates are given. There is a full balance between secular and religious studies and an educational effort is made to highlight the holism of life and how everything is joined and connected.

The teachers conceive their role as having to accompany the students throughout the day and keep track of them in places where help is required: difficulties with various subjects, problems with the Hevruta, performance in Talmud tests, and so on. The intention is to help support the student to internalize the language and be familiar with the program. In fact, a student who is unsuitable for coping with these requirements may probably not get to that school at all.

## **4. THE EFFECTS OF ILE**

The Innovative Learning Environment in “Makor Chaim” offers an impressive solution to all 21<sup>st</sup> century learning principles as listed in the literature (Dumont, Istance and Benavides, 2010).

- *Center Stage Learning and development of the learner`s understanding his activities* – students take responsibility for their learning and utilize educational opportunities, as evidenced by one of the students:

*So here ... if this lecture interests you, you can go. If you think it will add something to you and you won't fall asleep in front of the lecturer and won't play with your mobile under the table, then come and listen, summarize, be interested, ask questions, and if you don't, then go do better things. You should do things that you want to do because they emerge from your own interest. This way this thing too will reach you in a better, healthier way.*

The entire method in "Makor Chaim" places learning in the center, as an independent intrinsic mission of the students, who are required to deal with a variety of contents, choose areas of interest, adopt high demands and meet them.

- Shared social learning – the continuous ongoing life at the residential school all through the week, the joint activities, volunteer activities and the Hevruta method, enable students to develop peer learning capabilities and sensitivity to the needs of others.
- Connection to student motivations and key feelings – the opportunity the students are provided to initiate, create, test and investigate the social, academic and physical world around them as well as enjoy the variety of classes and opportunities to develop hobbies and skills, contributes to developing their motivation and discover the interests and capabilities of each and every student. A student reports that:

*Many times, though not always, the students here determine the curriculum and a daily agenda. For example, this year's seminar on health was set up by us. That is, we decided who the lecturers would be, we decided where it would take place, we decided what all the contents would be, from beginning to end, the subject, and so on.*

- Sensitivity to inter-personal diversity and prior background – one of the marked characteristics in "Makor Chaim" is the mixing of different religious trends and different backgrounds of students. Here the objective of faith and a common religious background, of respect for each student, the commitment of the teaching staff and the free space for self development together with mutual responsibility lead to a development of sensitivity to differences, together with the ability to act, live and learn together. This is how things are brought forward on the school site:

*Students come to us from a wide range of families. Here one can find an integrated community that does not discriminate between different colors of the skullcap (knitted, black, colorful) or hair (with wigs, without wigs, and so on). The great emphasis on internalizing the work of God is expressed in the breaking down of these artificial barriers. We consider this diversity to be of great importance and will strive to continue to preserve it.*

- High demands without a crazy load – the utmost value of the People of Israel throughout history was not only observance but also the Talmud Torah. All Jewish children from the age

of five learned Torah. That was the supreme value for which parents were willing to give all they had so that their child would learn, the father also learned, and the father learned with the son. Thus there are at present, in “Makor Chaim”, evenings when fathers and sons learn together.

This is an example of the high demands of the institution – to learn, progress and improve out of personal motivation – that are made clear to the students already at the entrance examinations to the school. At the same time, the spacious and flexible time division, the variety of study groups plus the possibilities of progressing at one’s own personal pace and diversifying among the activities and their schedules make life at the school fun, judging from the students.

- Target base assessment, with a strong emphasis on formative feedback – clear goals, a clear set of values and strong faith constitute a platform on which the students daily experience a wide variety of challenges. Working closely with educators and teachers, together with the constant feedback of friends and school staff, provide the students with ongoing and accurate information about their situation.
- Promoting links between activities and topics within and outside the school – the totality of learning activities, courses, prayers, volunteer work and social life along with trips, knowledge contests, holidays and celebrations create a continuous and complete fabric of a challenging, meaningful and developing world for every one of the yeshiva students. These conditions also find expression in the connection with the families, as shown on the school site:

*We consider ourselves representatives of the parents and we do not think it is our role to “pull out” the student from the home atmosphere. That is one of the reasons for the few Sabbaths spent at the Yeshiva, so that parents can watch their son’s development closely and the family maintain a close relationship.*

In conclusion, the Innovative Learning Environment developed in “Makor Chaim” indeed works differently and allows a meaningful self learning to each of the participants - students and staff. Dropout rate is extremely low (5%), percentage of matriculation graduates stands at 91%, and the Yeshiva graduates are accepted at prestigious institutions for continuing education and for desirable positions in the army, while they also keep in touch for years after graduation.

## 5. LESSONS LEARNED

Some unique characteristics of Makor Chaim - a boys-only Yeshiva residential school that integrates secular with religious studies, and focuses on important Jewish texts -- do not prevent it from serving as an example for other and different contexts, whether religious or not. The lessons learned fall into two categories: the whole school as learning environment, and *Hevruta* as a specific learning method.

### ***The whole school as a learning environment***

Three important principles can be drawn from Makor Chaim School in general:

1. ***Parallelism*** - Teachers and students operate as connected vessels, thus the main values and norms that guide students' learning should also lead to teachers' learning. For example, if teamwork is the main learning strategy for students, it should also lead the teachers. If students are expected to actively search for knowledge, so are the teachers, and so on.
2. ***High expectations with high support*** - Clear and high expectations are the best platform for students' acceleration, as long as they are combined with adequate support and answers for each student's needs. Belief in students' abilities penetrates the students' mind and behaviour when it is attended by respect, attention and dissent conditions.
3. ***Constant learning from actions*** - The educational staff and the principal constantly analyze and study the school's way of life. Success is not taken for granted and failure is only another lesson to learn. Thus things that happen in the school are seen in perspective and enable further improvements.

### ***Hevruta as a specific learning method***

Two ideas can be replicated from the *Hevruta* method to other contexts:

1. ***Dual work*** – Just as there is teamwork, there is dual work - learning in pairs. In dual work the task is divided between the two partners, thus compelling them to solve their differences and harness their strengths to carry out the task. While helping each other, the partners learn about the task, and get to know their partner and themselves better, in a way that enriches and empowers them.
2. ***Text decoding*** - The *Hevruta* method focuses on a text. Any social-valued text that is worth interpretation, understanding, and decoding is a good assignment for *Hevruta*. The text may be literature, history, science, jurisprudence, and even math and logic texts - the dialogue between the partners can make it more comprehensible and interesting.

## Reference

- Central Bureau of Statistics (2008), Education in Israel – International Comparison. Downloaded March 2011, from:  
[http://www.cbs.gov.il/reader/newhodaot/hodaa\\_template.html?hodaa=200806251](http://www.cbs.gov.il/reader/newhodaot/hodaa_template.html?hodaa=200806251)
- Dumont, H., Istance, D. and Benavides, F. (2010). *The Nature of Learning, Using Research to Inspire Practice*, France: OECD Publishing
- Kanarek, J. (2010). *The Pedagogy of Slowing Down: Teaching Talmud in a Summer Kollel*. *Teaching Theology and Religion*, 13(1), 15-34.
- Kent, O. (2006). *Interactive Text Study: A Case of Hevruta Learning*. *Journal of Jewish Education*, 72(3), 205-228.
- OECD/CERI (2010). 'Innovative Learning Environments' Project (ILE) - The ILE Inventory Case Studies: Structure, Methods, Questions & Guidelines. Downloaded March 2012, from:  
<http://www.oecd.org/dataoecd/27/4/49800227.pdf>
- Zinger, D (2000). *Faith and Belief, Readings in the Teachings of Rabbi Nachman of Breslov and some practical pointers*. Guttenmacher, D (ed.) Lefanim, Jerusalem: Israel Institute for Talmud Publications Jerusalem 1999. 17-44. [Hebrew]
- CBS (Central Bureau of Statistics) *Statistical Abstract of Israel* (2011). *Examinees in Matriculation Exams*, Downloaded March 2012, from: [http://www.cbs.gov.il/shnaton62/st08\\_24.pdf](http://www.cbs.gov.il/shnaton62/st08_24.pdf)