The Mind Lab Program

Join Us on a Journey to the Future of Education

Mind Lab is an innovative in-school methodology for the development of thinking abilities and life skills through strategy games. We are happy to present you with this proposal and invite you to implement the Mind Lab Method in your school.
Welcome!

I would like to thank you for your interest and encourage you to further explore Mind Lab. My name is Tzvika Enrique Feldfogel, and I serve as the President of Mind Group – our International Community for Cooperation in Education.

The world is changing fast. Experts believe it will change even faster in the future. We will need to change along with it – faster and faster every day. Being a parent and educator, I constantly search for ways to better prepare my children and students (and myself too…) for the world of tomorrow. It is not an easy task. There’s so much to be done, and so many difficulties and barriers to overcome!

True, education has been an important and challenging mission throughout human history – but today, so it would seem, educators face unprecedented challenges, mostly due to the growing complexity of human civilization. While the challenges facing us as educators have grown significantly, our mission has become more important than ever before. Today, education is the key to individuals’ and societies’ well-being.

Since 1994, we at Mind Lab have been collaborating with thousands of schools around the world – working with teachers, students, and their families. We know how demanding (and at times seemingly unappreciated) the work of an educator can be. Violence in schools is growing at a terrifying rate. Looking at society as a whole, this should come as no surprise. Surrounded by an abundance of information and overloaded with stimuli, children today are not easily impressed. They often feel that their lessons are slow and boring. We educators often find it difficult to get our message across, not to mention nurturing cognitive, emotional, and social skills.

But we also know that it can be done! Working together, we can make significant contributions: empower teachers with innovative educational tools, assist in bringing parents closer to schools, improve educational quality, and prepare our children for tomorrow. For me and for all of our partners around the world, Mind Lab is much more than a cutting-edge educational method – it is a way of living. We would like to invite you to join us on our journey to the future of education.

T. Enrique Feldfogel

President, Mind Group
The Mind Lab Mission

Our mission is to prepare the next generation for the complex challenges of the 21st century: by strengthening a broad range of cognitive, emotional, and social skills; by teaching children how to think reflectively; and by encouraging students to “learn how to learn.”

Most important, Mind Lab helps our children to become fulfilled, contributing, and happy human beings. In order to accomplish this, we empower teachers and schools with innovative educational tools that work.
The Mind Lab Group was founded in 1994. Our activities are all centered on the Mind Lab Method, a unique and innovative approach for the development and training of thinking abilities and life skills through strategy games. Our programs are being integrated into schools’ curricula – from kindergartens to high schools – with lessons delivered once a week throughout the school year. Training seminars, teacher workshops, exciting parent-child events, and various other special activities, complement the Mind Lab project at your school.

Mind Lab’s unique concept is established upon the notion that strategy games serve as a high-powered educational tool. Strategy games contribute to the improvement of cognitive skills and to creating an awareness of thinking processes. They also help the learner to better cope with emotional and social situations. The game-playing experience, which stands at the heart of our program, is at once enjoyable, captivating, and exciting – thus kindling great motivation and enthusiasm among children and serving as the foundation for a deep learning process.
On the academic front, we have conducted joint educational research projects with several leading research institutes and universities, including Yale University in the USA and Northumbria in England. Mind Lab’s cumulative experience, backed by extensive research conducted by Professor Donald Green of Yale University, endorses that the Mind Lab Method significantly improves math and verbal test scores along with other important thinking abilities and life skills.

During 16 years of intensive growth and widespread activity, the Mind Lab Group has become a world leader in the field of thinking and life skills development. The Mind Lab Method has been adopted by thousands of kindergartens and schools in over 25 countries. More than 10,000 teachers have been trained and certified, and over 2,000,000 students have used the Mind Lab Method to improve their thinking skills.
The Method's Rationale

At the heart of the Mind Lab Method is the notion that the most effective way to learn is through an immediate and authentic experience that leaves one wanting more. Game-playing is the perfect example of such an experience – it is entertaining, engaging, and exciting, and therefore stimulates eager involvement. Game-playing also provides fertile ground for the training and application of thinking abilities and life skills.

In other words – the Mind Lab Method both stimulates learning and simulates real-life.

The philosopher Plato best articulated this with his sayings:

"Not by force shall the children learn, but through play."

"You can discover more about a person in an hour of play than in a year of conversation."

The Method’s Goals

» Developing Awareness – Awareness of thinking processes is essential for personal enhancement in every walk of life. The Mind Lab Method enhances students’ capacity for reflective thinking and enables students to be more aware of internal and external processes.

» Imparting Thinking Skills – In our information-rich age, an ever-increasing emphasis is being placed on the importance of basic thinking skills. The Mind Lab Method provides a broad range of these skills: problem-solving strategies, decision-making models, logical and mathematical thinking, verbal and communication skills, and more.

» Strengthening Life Skills – The game-playing experience is an extraordinary simulator of emotional and social processes. It obliges us to deal with situations involving cooperation and competition, winning and losing, success and failure, and it reinforces our ability to effectively manage and control our emotions, to defer gratification, and to enhance our determination, perseverance and self-discipline.

» Interdisciplinary Transfer – The application of content and skills learned in one setting to another is considered by many researchers to be one of the most important learning abilities. The Mind Lab Method establishes an organizing base for many aspects of our lives. Through this method, children develop the ability to identify links between different fields of human thinking and activity, and this consequently enables them to transfer knowledge and apply it to other fields.
Methodology

Mind Lab’s learning process is simple, yet extremely powerful. The process begins with children engaging in game-playing, which ultimately empowers them with skills and knowledge relevant to real-life situations. The Mind Lab Method is the bridge that connects the World of Games with the Real World.

The educational process consists of 3 powerful and research-proven stages:

1. **Engage**
   - Children Engage in Game-Playing

2. **Learn**
   - They Learn the Mind Lab Thinking Tools

3. **Transfer**
   - Children Transfer to Real Life

In the first stage, the children learn one of the many strategy games in the program, and then go on to play in small groups. The facilitator provides them with a game kit and explains the game strategies and underlying thinking concepts, which help the children, develop their game-playing skills.

In the second stage, the facilitator and the children summarize the game-playing session with the help of a thinking model. This model relates to cognitive processes triggered by game-playing (for example, identifying and dealing with a problem, or having to make a difficult decision), or to emotional or social processes (for example, recognizing having made a mistake or the need to cooperate as part of a group.)

Below are few examples of cognitive, emotional and social skills strengthened by the Mind Lab Method:

**Social**
- Teamwork & Cooperation
- Dealing with Competition
- Communicating Efficiently
- Respecting the Rules
- Accepting Others

**Emotional**
- Managing Emotions
- Deferring Gratification
- Patience, Perseverance
- Learning from Failures
- Self Discipline

**Cognitive**
- Problem Solving
- Decision Making
- Forward Planning
- Logical Thinking
- Language Arts

In the third stage, the facilitator and children examine the game patterns and then initiate a discussion, which relates to relevant real-life situations. In so doing, the pupils succeed in applying the knowledge derived from the game experience to other aspects of life – from their studies (and later on, their occupation) to their emotional and spiritual life, as well as social and familial relationships.
Comparative Research Projects

The efficacy of the Mind Lab Method has been put to the test in a number of comparative research projects carried out in conjunction with senior researchers, most notably with Professor Donald Green of Yale University. The research verifies that the Mind Lab Method significantly improves pupils’ thinking abilities and life skills.

In one of these research projects, the following hypothesis was tested: Children can be taught abstract strategic thinking by learning meta-cognitive models and by being exposed to the applications of these models in thinking games and in real-life situations. In order to test this assumption, a field study was conducted in which children ages 8-12, from diverse socio-economic backgrounds, took part.

- In the first stage, all the children were presented with the computerized version of the game “Rush Hour.” This advanced version monitors children’s performance and progress and then collates it all into a database.

- In the second stage, children in the research group were taught abstract models for problem-solving, and their analogies to real-life situations. Subsequently they were shown how these models could be applied directly in the games. The children in the control group simply participated freely in game-playing sessions.

- In the third stage, all the children were taught a new game, “Lunar Lockout.” Both groups received identical instruction.

The results show that the children in the research group significantly improved their performance levels in relation to their counterparts in the control group, even though the latter were allocated more time in their game-playing sessions. The remarkable fact is that even in Stage Three, the research group achieved notably higher results. In fact, the disparity between the two groups actually increased between Stages Two and Three.

The conclusions drawn from these results are:

1. The learning of Mind Lab problem-solving models significantly improves children’s strategic thinking skills.

2. The children who learned Mind Lab abstract models succeeded in transferring the knowledge acquired to new fields, and the improvement in these new fields was even greater than in the original game.
As part of the research project carried out by Professor Donald Green of Yale University, the following hypothesis was tested: **The study of Mind Lab strategies and thinking concepts improves children’s “language of thinking.”**

At the start of the process, the children’s language of thinking was measured by using a list of “thinking-concepts.” The children were required to choose the most suitable definition for concepts such as: decision, goal, planning, problem, process. The research group – deliberately composed of children whose scholastic abilities had been assessed as weak – took part in a weekly lesson of the Mind Lab Method for a three-month period. For an identical period, the control group was exposed to the same thinking games but did not participate in a reflective post-game discussion, which is an essential part of the Mind Lab Method.

At the end of the three-month period, the thinking language of the children in both groups was measured again using the list of thinking concepts employed in the first test. The results astounded the principal of one of the schools in which the research was conducted. **“As a result of these findings, I have decided to include the Mind Lab lessons in the curriculum of all the classes in my school.”**

The three main conclusions of this research project are:

1. The learning of Mind Lab strategic and thinking concepts enriches and elaborates children’s language of thinking and considerably enhances their language skills.

2. The control-group children, whose participation was limited to the playing of thinking games, tended to improve their language of thinking, although to a lesser extent than those children who took part in the Mind Lab post-game reflective discussion.

3. The Mind Lab Method is especially effective among children with weak scholastic achievements. Professor Donald Green of Yale University metaphorically referred to the Mind Lab Method as one that uncovers “diamonds in the rough” and then polishes them.

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**Professor Donald Green, Yale University, USA**

“On the basis of these results, I strongly urge the continuation and development of this line of experiments. The question of how to improve strategic reasoning abilities has all but escaped rigorous scientific attention, and this research project promises to make important and useful contributions to knowledge.”

Findings of the studies to date demonstrate a strong positive influence exerted by the Mind Lab Method on children’s scholastic achievements in general, and particularly in the fields of mathematical and language skills. Additional research projects are planned for the coming years in an effort to further evaluate and augment the Mind Lab Method.
In order to learn in the most effective manner, children must be part of a challenging, captivating, and exciting experience. In order to inspire genuine motivation, children must simply like what they are doing – and for their teachers to engage children over time and impart the educational message proficiently, they need top educational tools.

Mind Lab delivers all this, and more. It actually provides your school with a complete solution to your curricular requirements associated with thinking and life skills, and includes all the materials and know-how required to successfully implement the Mind Lab Method in your school:

» Onsite training and support; online courses for educators

» An extensive series of textbooks and lesson plans for teachers

» Scores of exciting strategy games perfectly suited to the curriculum

» Demonstration accessories for building a complete learning environment

» Assessment and research tools for teachers and educational institutions

» Student and family kits to continue the Mind Lab learning at home

» Internet learning communities for teachers, parents, and children

The implementation plan consists of four main elements:

1. Installing the School Laboratory

2. Training and Supporting Teachers

3. Working with personal Student Kits

4. Launching special School Projects

Once the School Lab is installed, we provide all the school’s teachers with Mind Lab’s Initial Training. Utilizing their newly acquired knowledge, teachers start working with the methodology in the classrooms – using the School Lab materials and personal Student Kits.

Intensive ongoing support is provided by our pedagogical team – both onsite and online – in order to accompany and assist teachers, thus assuring the continuity of the program and securing the highest possible quality standards in the implementation of the Mind Lab Method.

Depending on your school’s preferences, you may choose to launch one or more School Projects. We offer a selection of over a dozen wonderful projects, any of which can help you promote a culture of thinking among students, parents, teachers, and the entire community. The following pages contain more detailed information about each of the four elements.
Installing the School Lab

When we launch the Mind Lab project in a new school, we start by installing the School Lab. The complete School Lab includes all the substantive materials necessary for a successful implementation of our methodology:

- **Mind Lab Curricula**
  - Includes 12 yearly programs of 36 lessons each
  - Designed for students ages 4 to 15, from Pre-K through Grade 10
  - A flexible and modular structure allows students to join Mind Lab at any age, and teachers – to utilize the curriculum for a variety of pedagogical purposes.

- **Mind Lab Games**
  - More than 50 different types of games are incorporated throughout the various Mind Lab curricula.
  - The School Lab includes a sufficient quantity of games sets of each type, enabling each student a hands-on experience on every lesson.

- **Teachers Resource Centre**
  - Detailed lesson plans, covering each and every lesson
  - Textbooks, educational software, and assessment tools for teachers
  - Large game boards, activity cards, and assorted demonstration accessories
Having installed the School Lab, we begin a profound, long-term collaboration with the school’s teachers. The process starts with an initial course of 24 hours, and continues with monthly workshops, onsite support, and participation in our Teachers Academy. This academy is an international community of Mind Lab teachers and educators who wish to share experiences with their colleagues, and benefit from a wide range of cutting-edge pedagogical resources.

- **Initial Course**
  - A 24-hour course covering the pillars of the Mind Lab Method
  - Preparing teachers concretely to deliver their first Mind Lab lessons
  - Providing both theoretical and application-oriented tools

- **Ongoing Support**
  - Monthly onsite support sessions, prescheduled with the school
  - Mind Lab’s pedagogical teams work with small groups of teachers
  - Reflecting on teachers’ experiences and preparing the upcoming lessons

- **Teachers Academy**
  - Provides an online support and resource centre
  - Includes advanced training literature, software, and videos
  - Offers national and international events for all Mind Lab teachers
All Mind Lab students receive personal Student Kits that accompany them throughout each school year. There are 12 different Student Kits – one for each grade, from Pre-K to Grade 10. All Student Kits include two colorful and engaging exercise books, exciting educational software, and a unique Mind Lab game for the whole family.

» Exercise Books
  » Used by teachers as an integral part of the Mind Lab lessons
  » Provide students with an additional opportunity to practice at home

» Educational Software
  » An exciting way to play selected Mind Lab games alone or with friends
  » An instructive tool to recap the main thinking skills learned during class
  » An opportunity to join the global online community of Mind Lab students

» The Family Game
  » Provides a great way to unite the whole family for many hours of fun with huge educational added value
  » Brings parents closer to their kids, and opens a window into their children’s lives and experiences at school
Launching Exciting School Projects

One of Mind Lab’s main goals is to promote a culture of thinking among students, parents, teachers, and the entire community. Our collection of over a dozen School Projects is an excellent way to accomplish this goal. Schools that implement the Mind Lab program can choose to launch one or more School Projects, while Mind Lab’s pedagogical team accompanies and assists the school staff in the process. Several of the most popular School Projects are noted below:

» Parent-Child Evenings

A delightful event in which parents learn about the Mind Lab Method by experiencing it directly, playing selected games with their children and other families of their classmates.

» Games Library

Another excellent way to promote the culture of thinking, by making a wide range of strategy games available for students, parents, and teachers – in their homes, year-round.

» Thinking Wall

Thinking concepts, game-playing strategies, brain-teasers, stories, illustrations, and other creative works of our students are presented on this dynamic Mind Lab billboard.

» “Playing it Big”

A colorful playground – full of huge boards and oversized game pieces – is created by Mind Lab students, and utilized by them, during recess hours and other special Mind Lab events.

» The Mind Olympics

A wonderful event that brings together Mind Lab students from diverse countries and cultures, in pursuit of a common goal, offering them a fantastic way to imaginatively express themselves while putting into practice their cognitive, emotional, and social skills.
We believe that the best way to contribute to education is by assisting schools in their ongoing efforts to improve educational quality. One of the best ways to accomplish this is to empower the schools’ own teachers with innovative educational programs and with pedagogical tools that work.

Mind Lab’s curriculum rests on solid theoretical foundations and draws from the ideas of prominent scholars and researchers – from Piaget, Vygotsky, and Dewey’s Constructivist Theory, to Gardner’s Multiple Intelligences, and Feuerstein’s Instrumental Enrichment. Our curriculum translates these theories and widely-accepted ideas to a set of well-structured courses and powerful practical tools, which teachers can implement successfully and systematically in the classrooms.

The courses have been structured in a modular way that enables teachers and students to join Mind Lab at any stage, while the spiral structural aspects of the methodology guarantee a profound learning experience to those who “work their way up” through more rudimentary courses. All of our courses have been designed to meet the developmental stages of students of different ages, to respect the individual skills and learning styles of each child, and to flexibly respond to the curricular preferences and priorities of each school.
The Mind Lab Advantage

We believe that Mind Lab is equally appealing to all those involved and affected by the educational process – students, educators, parents, and schools.

» Students
  » Learn with pleasure
  » Improve scholastic achievements
  » Develop cognitive, emotional, and social skills
  » Strengthen their confidence and self-esteem
  » And are better prepared for life in the 21st century

» Educators
  » Benefit from an avant-garde methodology supporting UNESCO’s principles – Learn to Be, Learn to Do, Learn to Learn, and Learn to Live Together
  » Utilize Mind Lab in order to improve their students’ socialization process
  » Implement Mind Lab’s thinking strategies & tools in various other disciplines
  » And enjoy the benefits of a highly rewarding process of personal and professional growth

» Parents
  » Provide their children with better opportunities and preparation for life
  » Are more connected to their children’s activities and experiences at school
  » And have exciting opportunities to interact with their kids in a mutually enjoyable way, centered around Mind Lab’s content and games

» School
  » Raises students’ interest and motivation – leading to academic excellence, and reducing boredom and violence
  » Acts as an agent for excellence, by providing teachers – and parents too – with research-proven tools to improve educational quality
  » And adds a noted differentiating factor to strengthen its image and positioning

We would like to thank you again for your interest in Mind Lab, and invite you to join us on our journey to the future of education.
The Mind Lab Vision

Since the dawn of civilization, strategy games have played an important role in human culture. Teachers would draw lines in the sand upon which their pupils would place the game pieces, as part of an engrossing, mind-sharpening activity. Family members of all generations would sit together and enjoy the challenges inherent in strategy games.

Much knowledge has since been forgotten and lifestyles have changed. The fast pace of our lives has given rise to other types of games. Violent, action-packed computer games, intense video clips, and a plethora of television programs have replaced the traditional activity of sitting together around the game board, an activity requiring deep thought, patience, perseverance, and social cooperation.

The Mind Lab Group has reinstated the strategy game to its rightful and natural place and has transformed it once again into a powerful educational tool that appeals to children’s hearts and minds alike. Thanks to a tested and proven methodology, the Mind Lab Group is engaged in one of the greatest educational challenges of our day.

Our mission is to prepare the next generation for the complex challenges of the 21st century: by strengthening a broad range of cognitive, emotional, and social skills; by teaching children how to think reflectively; and by encouraging students to “learn how to learn.”

Most important, Mind Lab helps our children to become fulfilled, contributing, and happy human beings. In order to accomplish this, we empower teachers and schools with innovative educational tools that work.