

# **‘MATTIKA’ CHESS & LOGIC COMPLEX EDUCATION PROGRAM**

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‘MATTIKA’ is a Chess & Logic Complex Education Program developed by our school and approved by the Hungarian state. The system was introduced in classroom education for the first 4 classes of the primary school in 2011. Our main objective was to develop the cognitive and emotional skills of children and we expected chess and logical tasks to trigger considerable development in these areas. During the past three years we have been monitoring the effects, conducted independent psychological surveys, monitored children’s activity during lessons and their achievements at the school and national competitions. The data unequivocally confirmed that sudden increase can be experienced in each area and we may base our talent development program on this system with confidence. That is why MATTIKA is already used in several schools in Hungary.

## **MATTIKA – Components**

The program is built up in conformity with the pedagogical principles of classroom education, spanning all its elements in a complex manner and including also the task of ‘teach the teachers’, as well as the extracurricular activities. Components:

*chess & logic framework curriculum*

*syllabus, course book, teacher’s book*

*teaching related study methodology*

*input-output surveys*

*approved teacher’s training*

*Talent identification, high ability education based on teaching chess logic*

*Home and extracurricular activities (LearningChess.net online chess tutor)*

The chess & logic framework curriculum is adapted to the sensitive periods of the child’s development and the requirements set by the mathematical curriculum. All our materials

contain the chess and logic details separately, so either subject may even be taught independently. Teachers use complex aids based on modern pedagogical means, just like in the case of other theoretical subjects. One part of our textbook concerns itself with chess and in addition to its mathematical projection, it also teaches planning, tactical and strategic thinking in a playful manner. The logic subject aims at basing and developing logical and critical thinking, for which we use logical and memory games, as well as textual and graphical tasks. Children may also engage themselves in home or extracurricular supplementary learning by means of the LearningChess.net online chess tutor, made available free of charge for our school. The essence of our approved, 60-hour teacher's training system is to use chess and logic as a means, so even teachers who were not engaged in these fields intensively earlier may be involved in it. An interesting return of our system is that it is also suitable to develop the pedagogical knowledge of chess coaches.

### **MATTIKA – Results**

We constantly monitor children in the program and we perform talent identification at the end of class four: in the fields of mathematics-logics, complex sciences, linguistic abilities and creativity. The psychological surveys conducted by an independent expert show that logical thinking in correlations and creativity developed to the most considerable extent. In addition to improving activity during lessons and the study achievement average, our school has also become prominently successful at the national study competitions, too. However, what we find most important is that we have managed to achieve considerable development with each child, even with children with learning difficulties and partial skill deficits.

Let's see some milestones:

*1<sup>st</sup> place at the national competition in the subjects of mathematics, logics and English.*

*1<sup>st</sup> – 2<sup>nd</sup> – 3<sup>rd</sup> places at the national individual and team chess tournaments*

*1<sup>st</sup> – 2<sup>nd</sup> – 3<sup>rd</sup> places at the EU Chess Championship*

### **MATTIKA - Summary**

Based on all this we may state that MATTIKA Chess & Logic Complex Education System works extremely successfully in our school. Its role fulfilled in development and high ability education is already unquestionable – after 3 years. Several schools have already implemented our system in Hungary with an experimental character and there is serious interest in our teacher's training, as well.

We are convinced that the recipe for MATTIKA is as simple as that: all you need is children in one third, a suitable education program in another third and competent, devoted teachers in the last third. These criteria given, it may be ‘cooked’ anywhere in the world.

That is why we would gladly present our program in Yerevan and share our experiences, measurements and results with the audience. Our presentation will take max 25-30 minutes, including the Prezi introduction and charts, the interactive lesson part, questions and discussions.