

Detailed research and analysis by JPCF and partners on the current state of chess in education in the V4 countries

Introduction:

The teaching of chess is gaining increasing attention around the world, with more and more countries recognising its benefits for children's development. Through a combination of play and learning, chess develops strategic thinking, problem-solving, creativity and analytical skills. Chess is also gaining ground in education in the V4 countries (Czech Republic, Poland, Slovakia and Hungary) and a number of initiatives have been launched to promote and introduce chess into education systems.

In this paper, we examine in detail the current situation of chess in education in the V4 countries. The research is initiated by the Judit Polgár Chess Foundation, which aims to promote the teaching and practice of chess by providing methods and tools that contribute to the effective integration of chess into educational processes.

Nearly 2500 institutions responded to the survey, including kindergartens, schools, chess clubs, academies and leisure centres. Out of these, 1375 institutions and organisations confirmed that they are involved in some form of chess education. This wide participation allowed us to get a comprehensive picture of the situation of chess in education in the V4 countries. We also invited experts who provided a detailed analysis and assessment of chess education processes, trends and future opportunities.

The study highlights the positive changes that have taken place in chess education in the V4 countries over the last five years. Based on the information shared by partners and experts, we show the extent to which chess has become popular among children, how many online platforms currently support education, and how many new chess events and programmes have been created in recent years.

The results and conclusions of the study will help education professionals and policy makers to plan further developments and promote chess education in the V4 countries. Our aim is to raise awareness of the potential of chess education and to encourage measures that will help to spread chess and strengthen its place in education systems.

V4 Educational Chess Summit



Research participants:

The research is initiated by the Judit Polgár Chess Foundation, founded by Judit Polgár, Olympic champion, international chess grandmaster, world ranking leader for 26 years, member of the Immortal Hungarian Athletes Association, appointed Hungarian Talent Ambassador by the National Talent Council.

The JPCF is a pioneer in the development of programmes and tools to develop children's cognitive skills using chess as an educational tool, and its research-based initiatives support the development of school curricula. The JPCF organises large-scale social events to promote chess and education, and supports the development of innovative educational tools for schools and the wider digital world. The JPCF also supports the development of state-of-the-art educational programmes for socially and mentally disadvantaged children, with a focus on equal opportunities.

Other partners from the V4 countries are: the Czech Chess Federation, the Bratislava Chess Academy "BCA" and Wasko Hetman GKS Katowice Chess Club

Target groups

During the research, different target groups were identified to get a broad and representative picture. These target groups are detailed below:

Experts in chess education: 1 expert from each country participated in the research, selected in consultation with the collaborating partners. They helped to send out the questionnaire to additional target groups and to summarise the results received. They kept in contact with the JPCF representative and participated in the discussion of national challenges, problems and results. This ensures professional diversity and the inclusion of local knowledge in the research.

Kindergartens are the first step in childcare and education. Chess education programmes in kindergartens in each country were also taken into account in the research. The number of kindergartens offering chess education programmes, the number of children participating in kindergarten programmes and the number of trained kindergarten teachers were combined.

Schools play a key role in children's education and development. We also mapped the chess education programmes in schools in each country. We have taken into account the number of schools offering chess education programmes, the number of students participating in school programmes and the number of trained teachers.

Chess education organisations (clubs, academies) and national associations are key players in the field of chess education. During the consultations, we selected and involved these organisations to share their experience, perspectives and expertise. They also help identify best practices, challenges and opportunities in chess education and provide access to local networks and resources.

Education authorities play a key role in the design and management of education policies. Each participant gave an overview of the education situation in their own country, providing insights into education legislation, policies and funding. We also gained an insight into the views of education authorities on chess education.

Together, these participants and experts will help to take an in-depth look at chess education programmes in the V4 countries, share best practices, identify challenges and opportunities, and promote the development and spread of chess education in the region.

The research method and data collection:

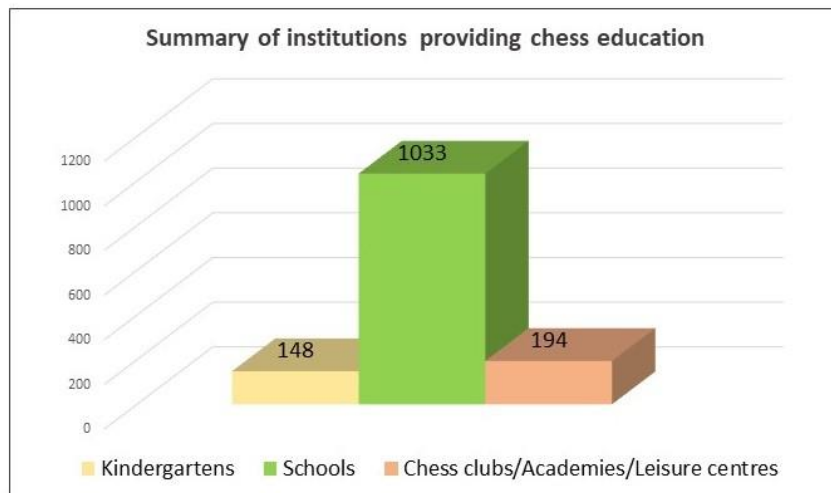
1. Collecting quantitative data on chess education programmes in each country. This section focuses on data collection and analysis. Questionnaires were administered to stakeholders (kindergartens, schools, chess clubs/academies) to collect data on chess education programmes in each country. We recorded the number of institutions/organisations offering such programmes, the number of children currently participating, the number of trained teachers and other relevant information. The data collected was analysed in detail to map the current situation and understand the characteristics of chess education in the V4 countries. The analysis will help us to measure progress and development over time and identify any gaps or areas for improvement.
2. Research and analysis of the characteristics of chess education programmes in the V4 countries is of paramount importance in order to provide detailed information and identify best practices. This research includes a detailed study of the chess education programmes in each country. We have mapped the teaching methods used in the programmes, the teacher qualifications and training, the tools and materials, and the funding of the programmes. We also took into account the challenges and difficulties raised by stakeholders. The analysis provides a comprehensive picture of kindergarten/school/club chess programmes in the V4 countries, their strengths and weaknesses, and potential areas for improvement. This will help to make comparisons between countries, identify best practices and support further development.

The questions and research topics for the survey were identified in consultation with the partners and with the active participation of education experts. The JPCF was the developer of the procedures and questions for the survey. Each partner managed the research in its own country, led by a designated expert, and was thus involved in the research tasks. This included surveying stakeholders, sending out questionnaires, conducting interviews with selected stakeholders, and analysing the data and providing further information on chess education programmes. The JPCF undertook to produce a final report summarising the findings and conclusions of the research. This will ensure that the results of this professional and comprehensive research are coordinated and presented to the V4 countries.

Research results:

In this section we present and analyse in detail the results of research on the current state of chess education in the V4 countries. The results on teaching methods, resources, infrastructure, support measures and the effectiveness of chess education are discussed. Based on the data and results, suggestions are made for improvement and for enhancing chess education.

In the detailed survey of the V4 countries, a total of 2,405 institutions and organisations responded to the questions, of which 1,375 said they had some form of chess education. Respondents included kindergartens, schools and chess clubs/academies. The exact breakdown was as follows: 148 out of 394 kindergartens and 1,033 out of 1,783 primary schools have chess classes. Of the 228 chess clubs/academies that responded to the questionnaire, 194 organisations provide facilities for children under 15. This diversity of institutional and organisational participation ensured the comprehensive nature of the survey, allowing a wide range of information to be collected on the current situation of chess in education in the V4 countries.



We asked our partners to answer general questions about the current state of chess education, and we asked them to indicate the statement that is valid in their country:

- Chess has become increasingly popular with children over the past five years.
- The government supports a greater role for chess in education.
- More financial support is available for the institutional introduction and promotion of chess available than in the last five years.
- Over the past five years, the number of chess activities in kindergartens and schools has increased.
- The number of children learning chess has increased over the past five years.
- The number of chess teachers has increased over the last five years.
- There are now more online platforms supporting chess in education than in the last five years.
- There are now more chess clubs and academies than in the last five years.
- There are more youth competitions now than in the last five years.
- There are more chess events/programmes now than in the last five years.
- No change

Based on the partners' views, the following three observations can be made, which apply to **all four partners**:

1. ***Chess has become increasingly popular among children over the past five years:*** in general, the partners can say that over the past five years, chess has steadily increased in popularity among children. The increase in interest in chess as a sport is due to a number of factors, including the recognition of the importance of chess in students' cognitive development and in developing their strategic thinking.
2. ***More online platforms now support chess in education than in the last five years:*** partners agree that there are more online platforms now supporting chess in education than in the last five years. The Internet and advances in digital technology are enabling children to easily access online chess resources, learn and play with other players around the world. Online chess platforms offer a wide range of interactive learning opportunities that help students develop and motivate them to learn chess.
3. ***More chess events and programmes now than in the past five years:*** partners confirmed that there are more chess events and programmes now than in the past five years. Educational institutions and chess communities alike have become more active in

organising events, providing opportunities for students to compete, exchange experiences and build community links. Such events and programmes contribute to further increasing the popularity of chess and maintaining enthusiasm for the game.

The Czech, Polish and Hungarian partners marked the following four answers. It is important to note that the Slovak partner did not feel that these points were specific to their situation.

1. ***Increase in the number of chess activities in kindergartens and schools over the last five years:*** In their own countries, they have seen an increase in the number of chess activities in kindergartens and schools over the past five years. Educational institutions have recognised the benefits of chess pedagogy and have integrated chess into the daily life or curricula of their institutions. This positive change has enabled more and more children to participate in chess activities where they can develop their skills and strategic thinking.
2. ***The number of children learning chess has increased over the past five years:*** according to the experience of the partner institutions, the number of children learning chess has increased steadily over the last five years. From kindergarten to the end of school, more and more children are interested in chess. This increase in interest is partly due to a general rise in the popularity of chess and active support from educational institutions and organisations.
3. ***The number of chess teachers has increased in the past five years:*** partners reported that the number of chess teachers has increased in the past five years. The importance of chess instructors in the educational process is recognised by educational institutions and clubs. As a result, more training and opportunities have been provided for teachers specialising in chess education. The involvement of new instructors helps to improve the quality and effectiveness of chess education and to support the personal development of students.
4. ***There are more youth tournaments now than in the past five years:*** these three partners find that there are more youth chess tournaments now than in the past five years. This means that the number and importance of youth chess tournaments is growing, creating opportunities for talented young chess players to compete and develop. Such competitions encourage young people to become more engaged and motivated in chess and contribute to the popularity and spread of chess among young people.

The survey results show that **only the Polish and Hungarian** partners perceive support in their countries:

1. ***The government supports that chess have a greater role in education:*** the Polish and Hungarian partners say their governments will provide more support to give chess a greater role in education systems. The Polish and European governments are encouraging more support for chess pedagogy in their countries. Government support can have a positive impact on the development and popularity of chess in education systems.
2. ***There is more financial support for the institutional introduction and dissemination of chess than in the past five years:*** the experience of the Polish and Hungarian partners shows that there is more financial support for the institutional introduction and dissemination of chess than in the past five years. This means that governments are providing financial resources to promote the education and development of chess. Increased financial support allows educational institutions and organisations to devote more resources to chess programmes, training and equipment purchases.

Data from the Polish partner also shows that the number of chess clubs and academies in Poland has increased over the past five years. This is another positive sign that chess is becoming more

important and popular in education systems. At the same time, it is important to note that in the other V4 countries (Czech Republic, Slovakia and Hungary), partners agreed that there have been positive shifts in the way chess is taught, although the intensity and extent of these changes may have varied from country to country. This means that there have been varying degrees of progress in chess education in each country over the past five years.

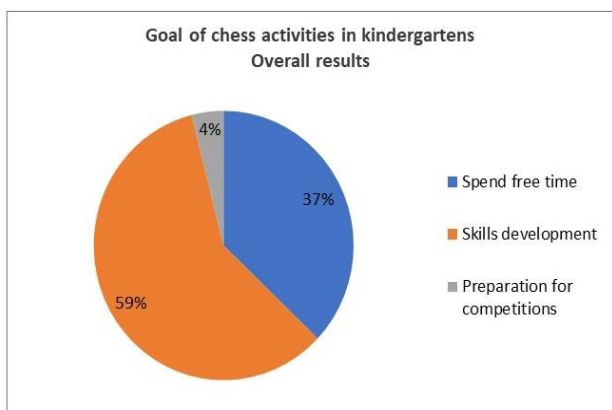
Detailed results:

The reason for the strong Hungarian participation in the results is that the JPCF has been in close contact with the institutions for the past 10 years through the Judit Polgár Method (the "Chess Playground Skills Development" programmes for kindergarten children and the "Chess Palace Skills Development" and "ChessPE Movement Development" programmes for lower grades of schools). These programmes have enabled Hungarian institutions to actively participate in chess education, which has had a significant impact on the results and the number of chess activities in educational institutions.

Kindergartens:

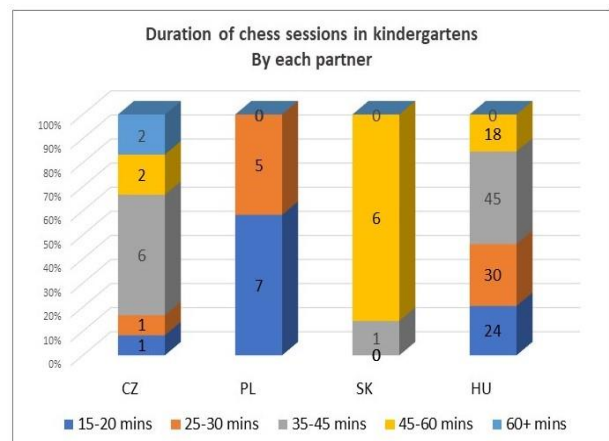
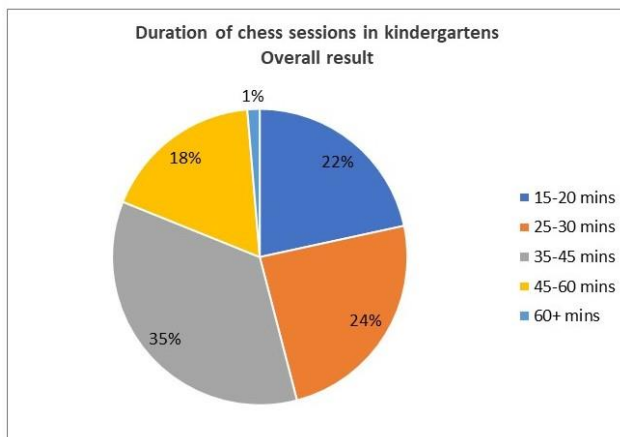
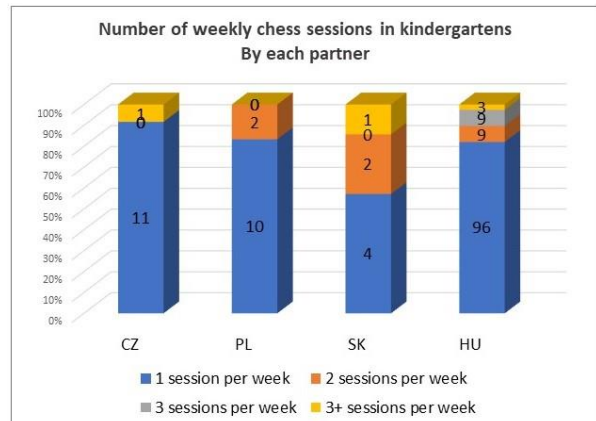
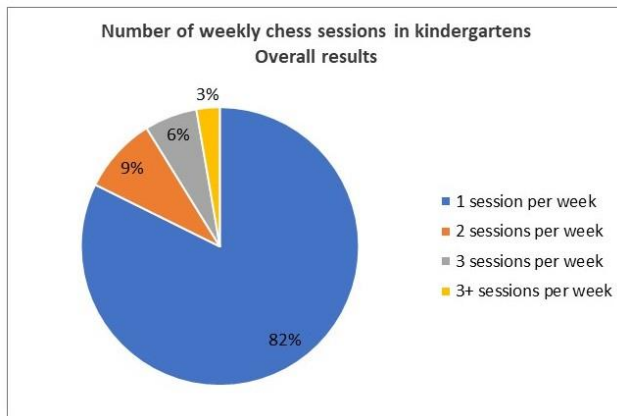
The survey received responses from 394 kindergartens, of which 7 Slovak, 12 Czech, 12 Polish and 117 Hungarian, i.e. a total of 148 kindergartens are involved in a form of chess education. According to the data they sent, there are about 1745 children involved in chess education in the institutions concerned. According to the unanimous answers of the partners, there are no formal programmes in any of the countries that are recommended for kindergartens. On the Hungarian side, however, an increasing number of kindergartens are introducing the "Chess Playground for Skill Development" programme or are working on the basis of other chess methodological booklets.

The two graphs below show the purpose of chess education in kindergartens:



In this age group, the main aim of chess activities is to develop individual skills and spend leisure time in a useful way. Preparation for competition is less emphasised during this period. The teaching of chess helps to develop the cognitive, logical and strategic thinking of pre-school children, as well as concentration and problem-solving skills. Such sessions aim to introduce children to the world of chess in an enjoyable and interactive way, while developing critical thinking and social skills. The importance of competitions and competition preparation usually increases later in the school years.

The following graphs show the number of weekly chess sessions and the duration of these sessions:

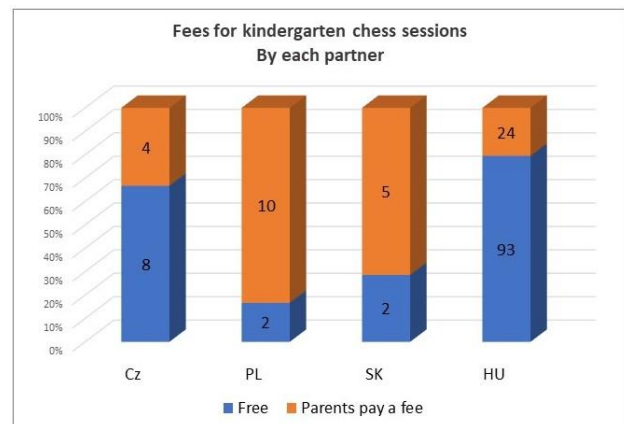
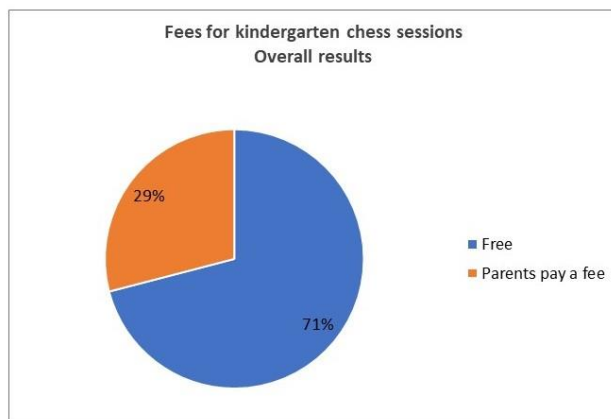


These data show that the majority of kindergartens prefer 1 session per week, with 2-3 or more sessions per week being less common, but still occurring. However, the duration of sessions varies between kindergartens and countries. 25-30 minute sessions are typical for Poles, 35-45 minute sessions for Czech and Hungarian partners, and 45-60 minute sessions for Slovaks.

The survey also asked whether the partners had training for pre-school teachers. Only the Slovak partner stated that there is no possibility for teachers to receive training on chess, while in the other countries there is. The training courses in question are local courses for the Polish partner and different levels (10/30 hours) of the Chess Playground Skills Development Programme for the Hungarian partner.

Chess classes for this age group are typically taught by kindergarten teachers, and there are also kindergartens with chess teachers. Very few kindergartens use surveys on the developmental effects of chess. Where they do, they prefer to use only observation and playful action.

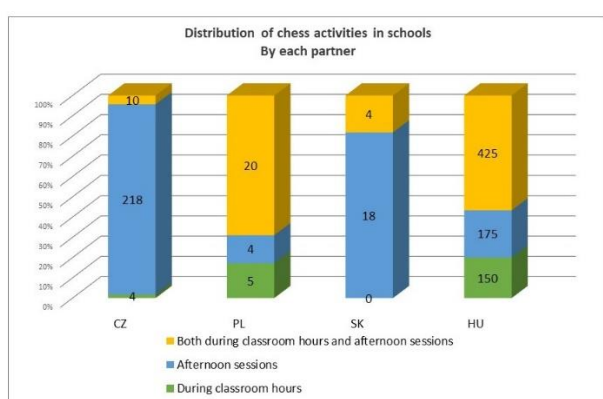
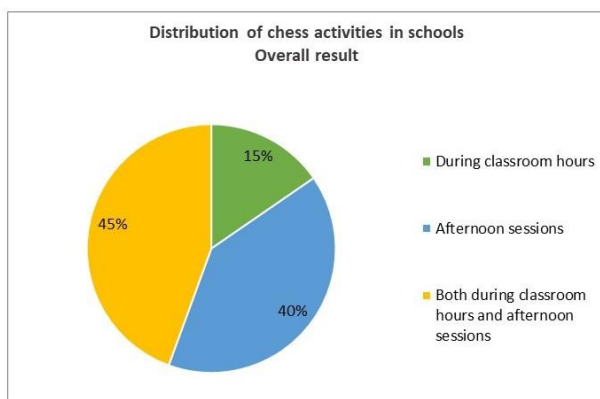
The survey also asked whether parents have to pay for chess sessions in kindergartens.



The availability of free or paid chess sessions may vary from country to country and from institution to institution. Whether it is free or fee-based may influence the willingness of parents and children to participate and the spread of chess education in kindergartens. In case of the Polish and Slovakian partners, there is typically a fee for these sessions. In the Czech Republic and Hungary, on the other hand, most of these sessions are free of charge, i.e. parents do not have to pay for their children to attend. However, it is worth noting that even in these areas, there may be paid services that offer higher levels of training, special programmes or additional services for which a fee is charged.

Schools:

A total of 1783 responses were received from schools in the four countries. Of the respondents, 1 033 schools (22 Slovak, 29 Polish, 232 Czech and 750 Hungarian) offer some form of chess. Based on the data they sent, approximately 34,680 children were involved in chess education in the institutions concerned. There are schools where they can integrate chess sessions into the regular morning timetable, and others where they can only provide chess sessions in the afternoons. There are several schools where both forms (morning and afternoon) are implemented.

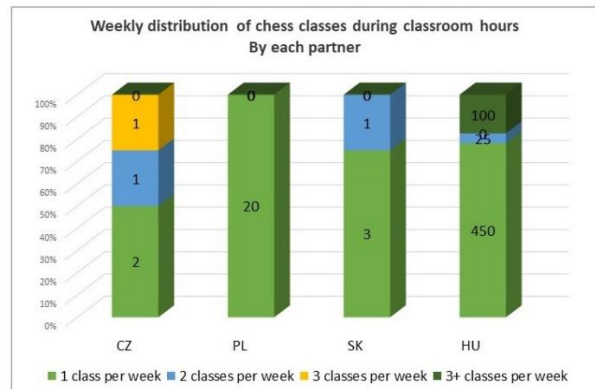
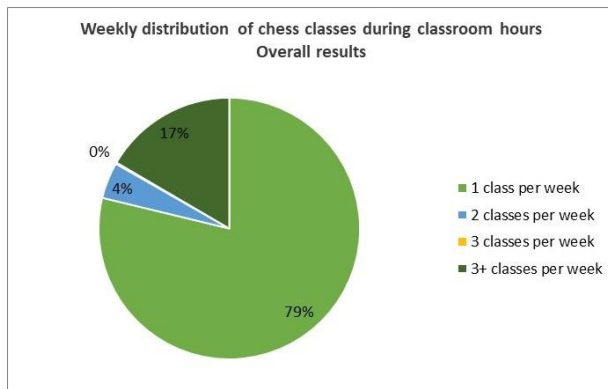


The Czech and Slovak schools mainly integrate these sessions into their afternoon working hours. The Polish and Hungarian institutions run a mix of morning and afternoon sessions. In the majority of Hungarian schools, chess tools and rules are integrated into children's everyday life in a subject-integrated way, where they cannot provide a specific timeframe for chess sessions.

In schools, all partners indicated that they have a chess education programme in their country. The Czechs use www.my-chess.com and LearningChess.net. This is the official site provided free of charge to Czech schools participating in the "Chess in Schools" project. They also provide free licences for chess clubs. the Poles the Chessgrow.com programme "Chess at school", the Slovaks

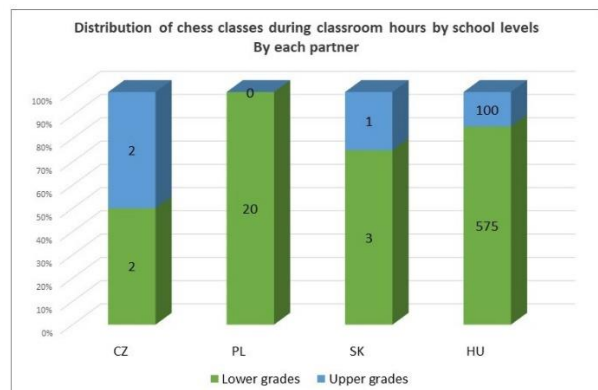
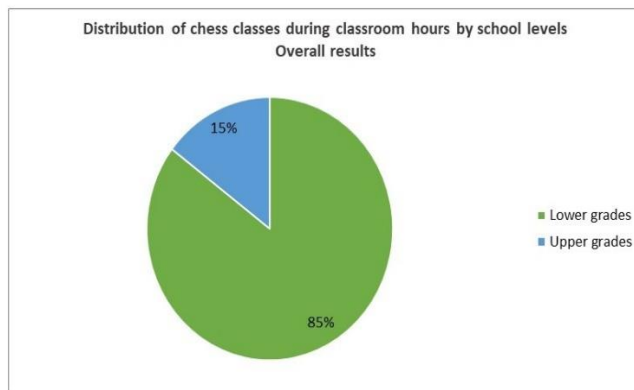
the Figúrkova školička - special chess programme: <https://www.martinus.sk/?ultem=122667> , the Hungarians "Chess as a teaching tool for developing skills" as part of the National Curriculum for schools for grades 1-4. It means that institutions can integrate it as an optional subject in their local curricula. In addition, they can choose the curriculum "Chess Logic" in the national core curriculum. According to the data received, 447 schools in the four countries have a specific chess programme/methodology.

For those institutions that offer chess lessons in the **mornings**, the number of lessons per week is as follows.



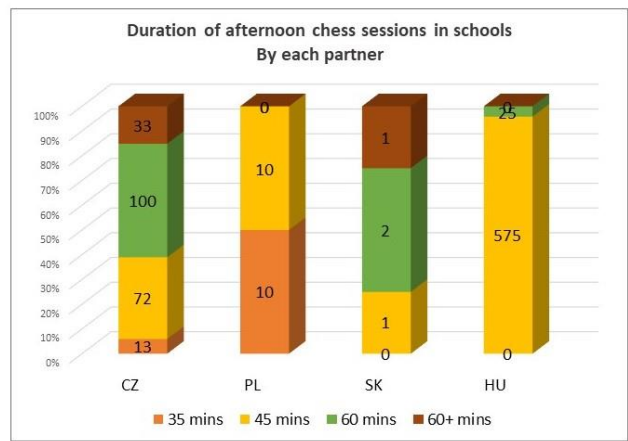
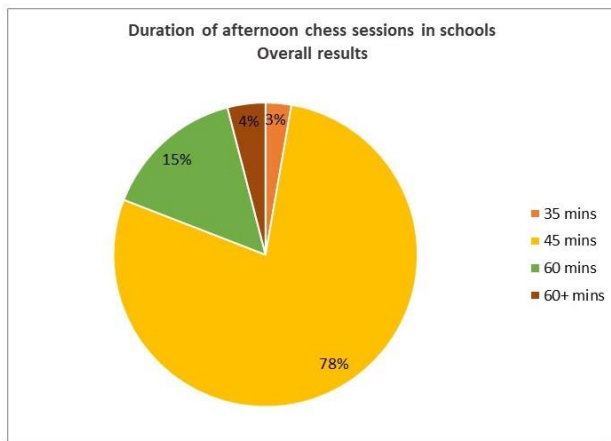
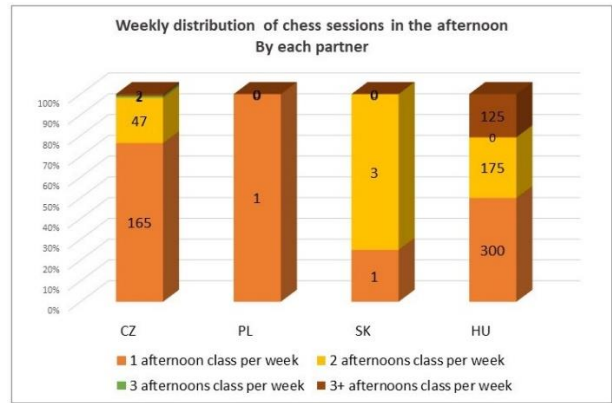
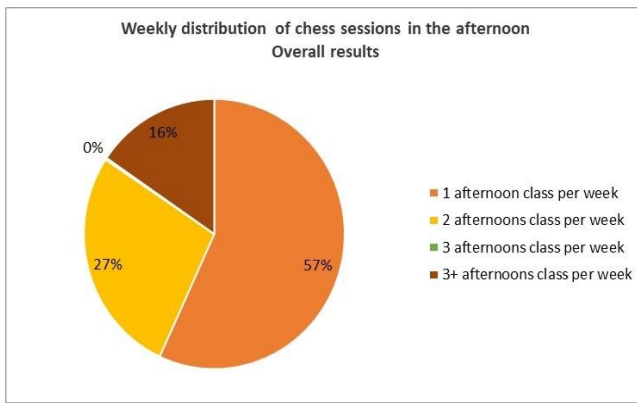
Most institutions offer 1 class per week regarding all partners. It is interesting to note that several schools in Hungary have indicated that they have the possibility to offer more than 3 classes per week. We are sure - given the possibilities offered by National Curriculum - that in this case it is a matter of subject integration. Lessons are 35 minutes, except in 1 Slovak and 1 Czech school.

We looked at which age groups within schools are most affected by these chess activities.



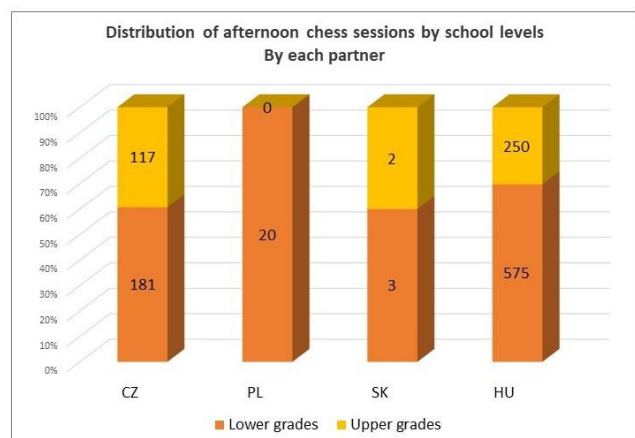
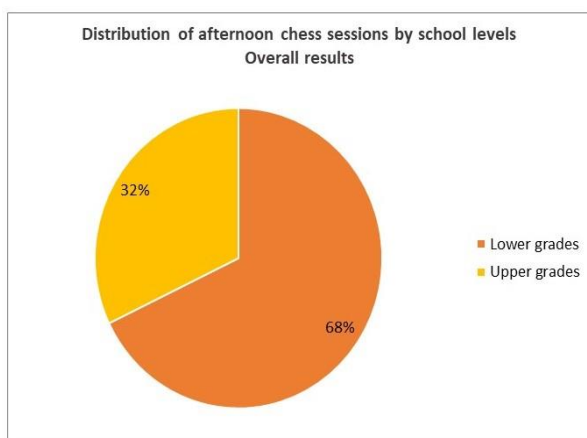
According to the data sent by the Czechs, chess education involves the lower and the upper level of school children equally. In other countries, it is more the lower school children who are involved.

For the afternoon sessions, the picture is more colourful in terms the number of weekly classes. The majority of chess sessions are held in schools with 1 session per week, but 2 or more than 3 sessions per week are not uncommon. Overall, around 12 325 children from the schools surveyed attend afternoon sessions.

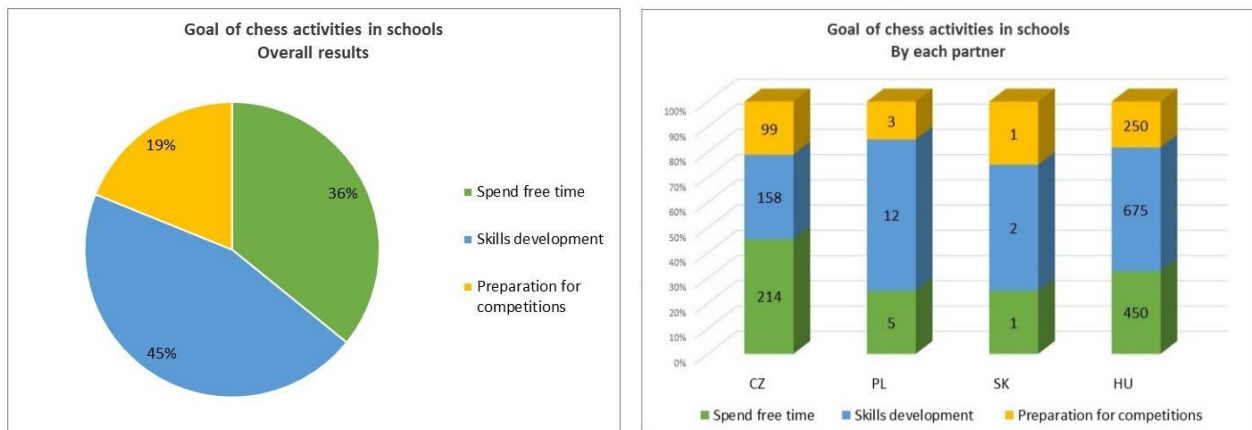


As the number of afternoon sessions changed, so did their duration, although not significantly. In addition to the 45-minute sessions, there are also sessions lasting 60 minutes and, occasionally, sessions lasting 35 minutes or longer than 60 minutes.

There has also been a shift in the breakdown by category. In the afternoons, there are more opportunities for senior pupils to participate in chess workshops and talent development.

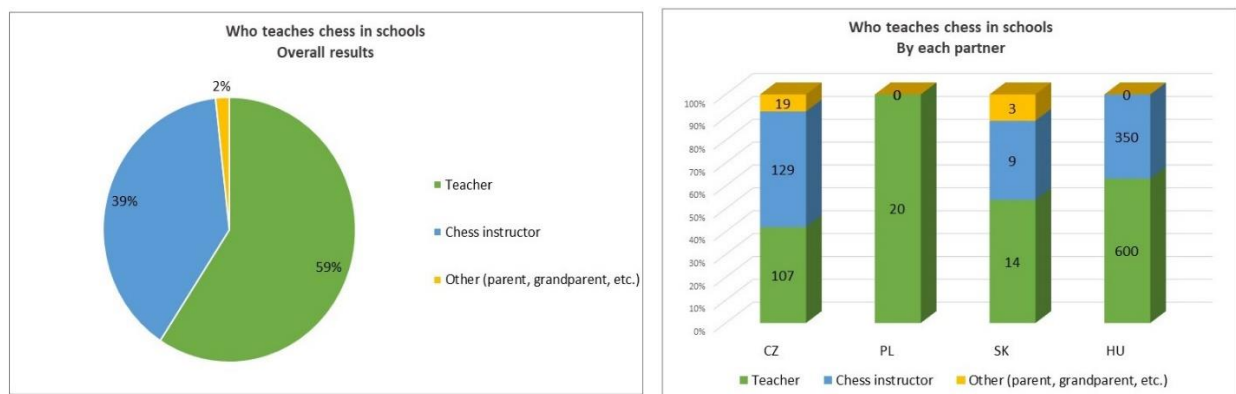


The purpose of chess sessions has also changed, as shown in the following graph.



Skills development and leisure activities are also a priority for school-age children, but a fifth of the institutions surveyed also offer competitive preparation.

For schools, we have a more accurate record of who holds chess classes and afternoon sessions.



In the case of the institutions involved, lessons are given by teachers and qualified chess instructors working in the schools. Occasionally parents or grandparents give the sessions, but the number of such occasions is very small. A total of 1 818 teachers from these institutions have received training in chess education.

Training in the Czech Republic:

- Training - T4 (official training course of CCF, present or online), T2, T3,
- Training for teachers - Tomas Bata University (project for equal opportunities in education).
- Methodology of teaching chess - course at Technical University of Liberec

Training in Poland:

- Local federation certificate / chessgrow.com

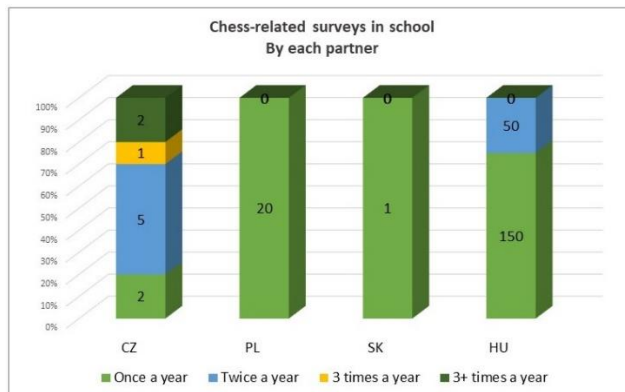
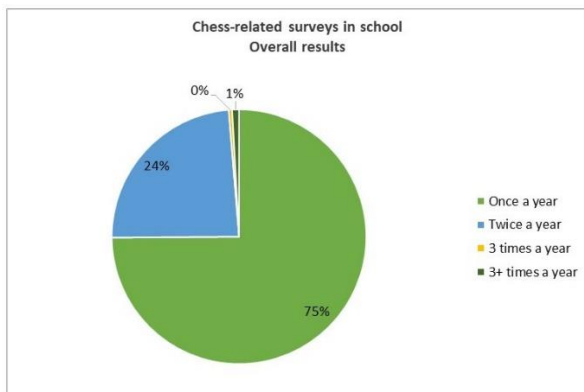
Training in Slovakia:

- No data

Trainings in Hungary:

- The accredited training courses of the Judit Polgár Method are the most popular.
- Some people graduated as chess teachers at the Apáczai Faculty of Széchenyi University,
- Some people attended a training course organised by the County Chess Federation,
- A state-recognised, vocational training course at the University of Physical Education.

Schools often measure the impact of chess on children. The teaching of chess can bring many benefits to the learning process, and these benefits are being measured and evaluated scientifically.



Surveying the impact of chess education in schools is an important task that allows education systems to ascertain the benefits and effectiveness of chess education. The results of this research can be used to further develop methods of teaching chess, integrate it into curricula and support the further expansion of chess education in schools. In general, institutions have the possibility to carry out 1 survey per year, but a quarter of schools have the possibility to carry out two surveys per school year.

Methods used:

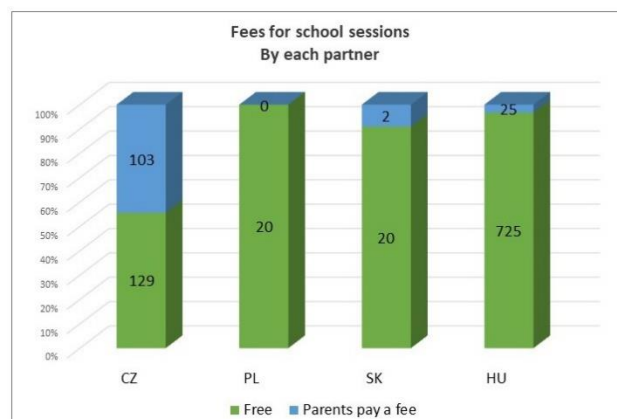
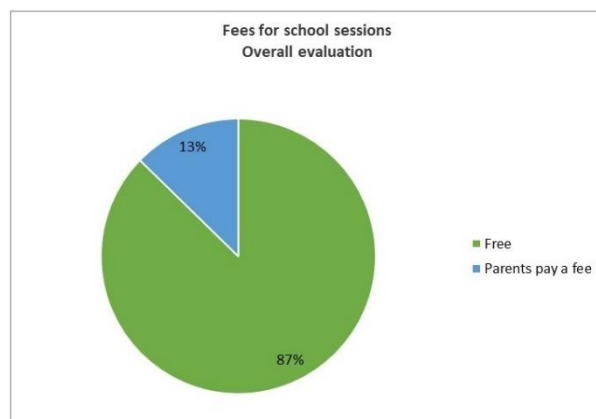
Slovakia: 1 questionnaire

Czech Republic: feedback questionnaire; interview with pupils or parents; competition results; observation and analysis of games

Poland: chessgrow.com

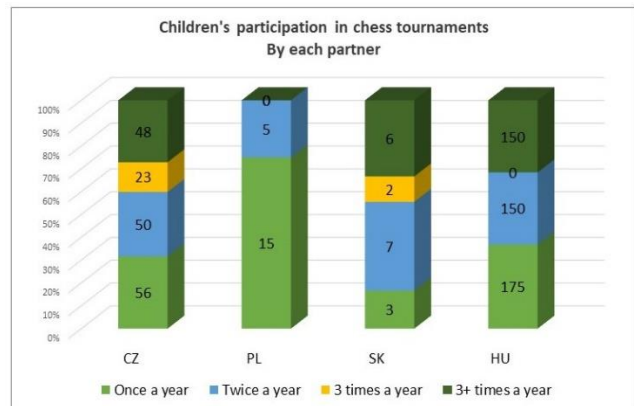
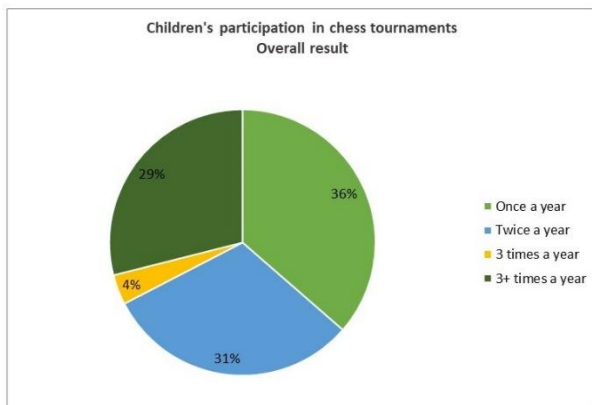
Hungary: Cognitive Profile Test by Éva Gyarmathy; DIFFER measurement

We also looked at whether school chess activities place a financial burden on parents.



We are delighted that very few parents have to pay a percentage of their children's chess tuition fees. Free or low-cost chess programs allow more children to have access to chess, regardless of family or financial background.

We mentioned earlier that the desire to compete is already emerging in the school age group.

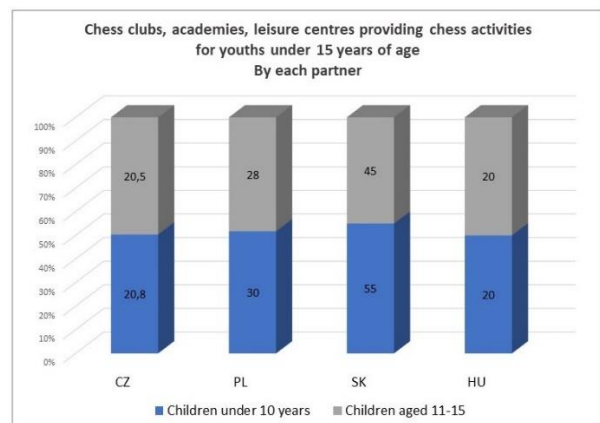
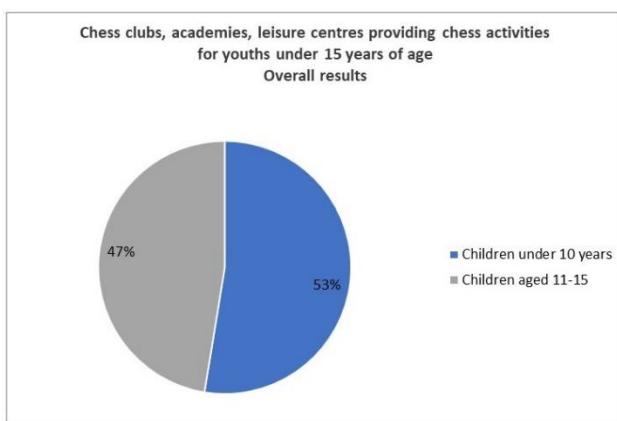


Chess competitions are often organised for pupils in schools. These competitions can be at school-level, where children of the same school compete among themselves, or regional or national, where students from several schools participate. It is important that chess competitions should not be only open to talented students, but all students should have the opportunity to participate. This would help to promote chess and equal opportunities in the game.

Chess clubs/academies/leisure centres:

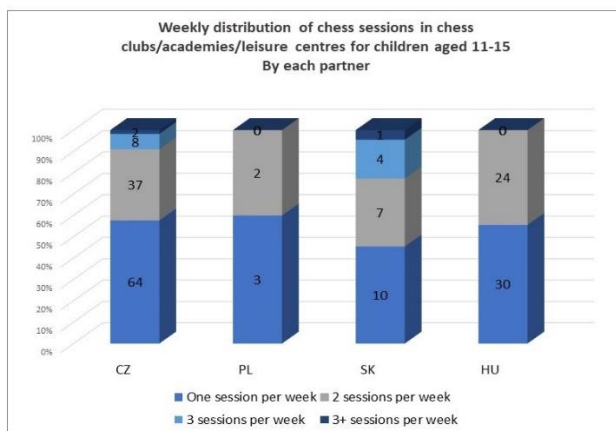
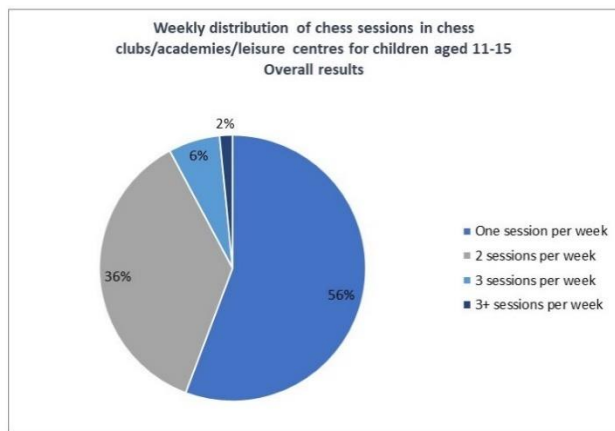
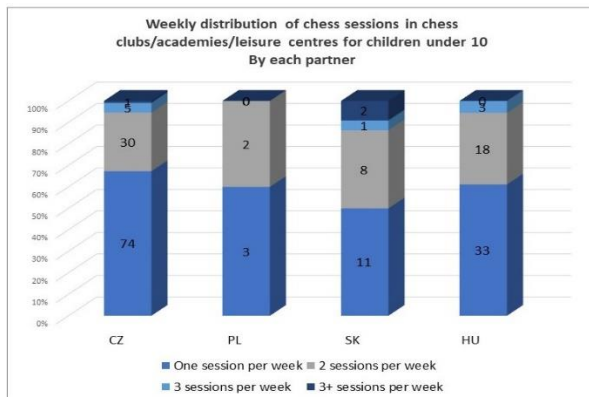
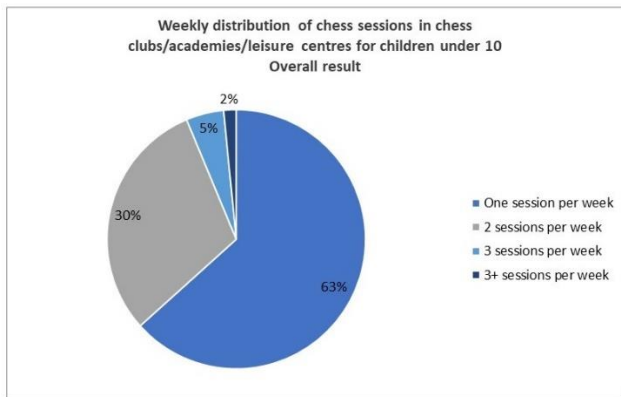
Out of the 228 responding organisations, 5 Polish, 22 Slovak, 113 Czech and 54 Hungarian chess clubs/academies/leisure centres, 194 in total, said that they had a session for children under 15. According to the data they sent, the organisations have nearly 7000 children as members.

The research looked separately at the number of chess clubs/academies/leisure centres for children under 10 and youths aged 11-15.



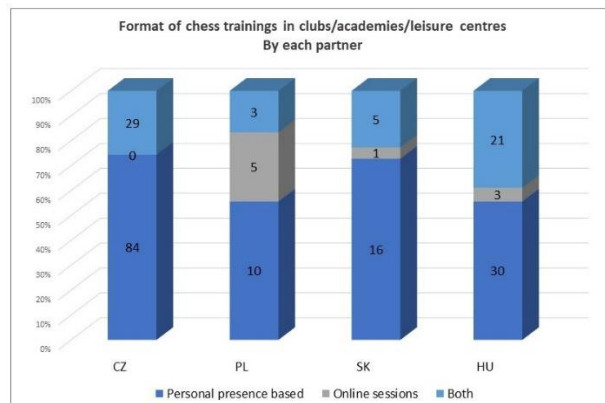
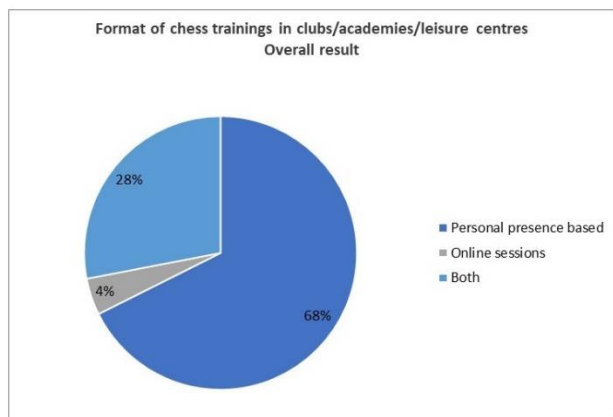
The organisations concerned were asked to give the percentage of youths aged under 10 and 11-15 years old in relation to the total number of chess players they receive. The graphs clearly show that the two age groups are represented in almost equal numbers in chess clubs/academies/leisure centres.

As in kindergartens and schools, we looked at the number of sessions per week for the under-10s and 11-15s.



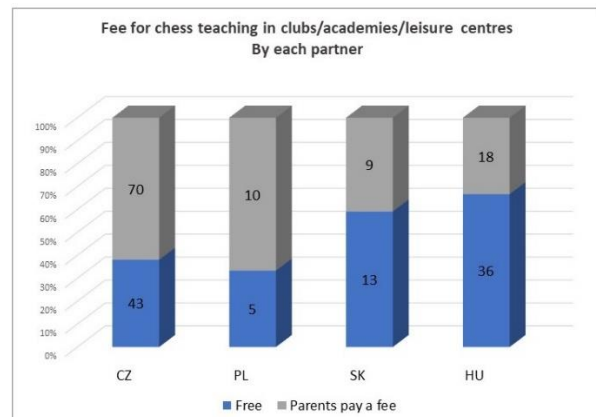
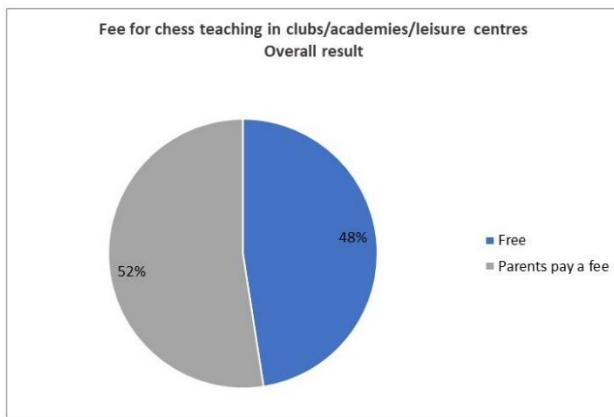
It can be seen that as children get older, they have more opportunities to play chess in a week, if not significantly more.

We have long known that chess can be played online. Our research also looked at how chess clubs/academies/leisure centres manage this.



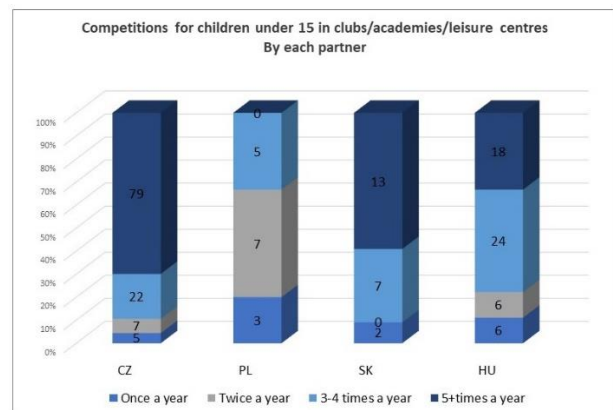
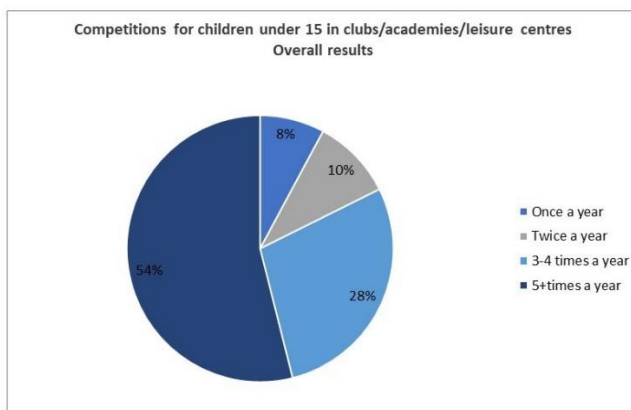
Chess clubs, academies and leisure centres generally favour attendance-based instruction for school children. Personal presence gives instructors and students the opportunity for direct interaction and personal supervision of learning and development. However, online teaching is also becoming increasingly popular in chess education. Advances in technology are enabling the widespread use of online education, and organisations are emerging in the field of chess that use a mix of face-to-face and online teaching. This provides opportunities for more flexible forms of teaching and facilitates the participation of remote students.

In these organisations, we also wanted to know how much of a financial burden it is for parents to send their children to play chess.



In the case of chess clubs, academies and leisure centres, the financial contribution of parents has increased noticeably, with more than half of the organisations charging a fee for chess lessons. Financial contributions are a common way for these organisations to continue and develop chess education. This type of payment usually reflects the quality of the education and the services offered and contributes to the maintenance and development of the organisation. At the same time, it is important that organisations provide adequate flexibility and opportunities for students and their families so that chess education is available to all, regardless of their financial situation.

Several times a year, these organisations offer children the opportunity to go to chess tournaments.



It is a welcome fact that chess clubs, academies and leisure centres offer children the opportunity to take part in chess tournaments several times a year. In the Czech Republic and Slovakia, children have the opportunity to compete more than 5 times. In Hungary, the number of tournaments varies due to the diversity of the competitions and the level of preparation of the children, while in Poland a maximum of 4 tournaments per year is preferred. Participation in tournaments is extremely important for students as it allows them to apply and test their knowledge of chess and develop their competitive skills. According to the partners' data, around 1060 children under 10 and around 1270 children aged 11-15 participate in the tournaments each year.

In addition to collecting quantitative data, we also asked our partners for their views on a number of issues:

- What impact can chess education and development have on the overall quality of life and society?
- Are there plans and opportunities to introduce chess more widely in education in your country? If so, what are they?
- Is there any chance of chess being included in the national school curriculum and, if not, what are the obstacles?
- What improvements do you propose/would you welcome in the teaching of chess to make it more motivating and challenging for children?
- What financial resources would be needed to make chess more widely available in education?
- Other comments, questions, suggestions.

Chess education and development can have a number of positive impacts on the overall quality of life and society, some of which we would like to highlight by summarising the views of the partners:

Cognitive development: chess requires complex thinking, strategic planning, problem solving and logical reasoning. Regular chess practice can help develop cognitive skills such as concentration, memory and creative thinking.

Decision-making ability: in chess, you often have to make quick and correct decisions to find the best moves. This skill can be applied to our general lives, helping us to make more effective and informed decisions in different areas.

Problem solving and planning: chess encourages the development of problem solving skills. Chess requires the individual to plan the strategy of the game, anticipate the opponent's moves and react to situations. These skills are generally applicable in real life, helping effective problem solving and planning.

Concentration and patience: playing chess requires long-term concentration and patience. The player must be alert to the opponent's moves, anticipate possible consequences and play tactically. This focus and patience can also help us in our general lives to deal more effectively with challenges and time pressure.

Social interaction and teamwork: chess teams and tournaments give children and adults alike the opportunity to build social relationships and integrate into the community. Chess provides opportunities for teamwork and cooperation when playing or analysing games as a team. It strengthens communication skills and promotes positive social interactions.

Career opportunities and competitiveness: chess can be played competitively and can offer many career opportunities for players, for example as a chess player, chess competitor, chess writer or in the field of organisation. Chess helps to develop competitiveness and a results-oriented mindset, which can be useful in other areas.

Stress management: the game of chess can have a stress-relieving effect on people. The game keeps the player focused and immersed, which helps reduce stress and anxiety. Immersion in chess gives people the opportunity to relax and spend time on an activity that is challenging but also enjoyable.

From the parents' side: chess is often seen by parents as a tool to help their children develop logical thinking. The complexity and strategic nature of chess encourages children to approach problems with logical and critical thinking. It is therefore important for parents to get their children involved in chess from a young age, as it is believed to help develop cognitive skills and contribute to successful learning.

Generational connectivity: the widespread popularity of chess has created communities based on intergenerational interactions and relationships. Through chess clubs, events and tournaments, generations can come together, meet and play together. This kind of intergenerational interaction strengthens relationships, brings people of different ages together and promotes knowledge sharing. For older generations, chess is an activity through which they can experience the freshness of their minds and develop their cognitive skills. It gives them the opportunity to maintain intellectual activity and engage in intellectual challenges.

These benefits show that chess education and development can have a long-term impact on individuals and society. It helps develop cognitive skills, problem-solving and decision-making skills, and promotes positive social interactions and competitiveness.

Plans and opportunities for the wider introduction of chess:

Czech partner: In our country, the Chess in Schools project has been running since 2013, aiming to support extracurricular chess activities and, if interested, to support chess teaching in regular classes (with some financial support). Schools receive textbooks, methodological books, free access to Learningchess, an online competition (chess puzzles and problems on the My-Chess learning portal). Schools can also borrow chess materials from the Czech Chess Federation. Every year we organise a national competition, a championship for school teams (school, district, regional and final level). If a school wants to introduce chess into the school curriculum, we offer consultations and prepared documents. For teachers participating in the Chess in Schools project, we offer free online T4 teacher training. University students (prospective teachers) can also access this T4 online course for free. The project aims to continue to provide this support in the coming years to make it as easy as possible for schools to introduce chess.

Polish partner: Chess will be introduced in education in more and more Polish cities. From the point of view of our city, Katowice, 25 schools will have a "chess in school" class from September 2023. The project is supported by the UN and the city authorities. What is very important is that we will use a professional chess platform in Polish.

The Chess in Schools project organises events for children. Two big events are planned for the new season. An event for ~1500 children from schools and kindergartens in Katowice and an event for ~700 children in Warsaw.

Slovak partner: in the past (12 years ago) there was closer cooperation with the Ministry of Education and as a result there was closer cooperation with schools.

The actual situation in this area is rather complicated. There have been three changes of government in the last 12 months, and elections will be held on 30 September 2023. All previous contacts are more or less "dead". School chess has also not been a priority for the Slovak Chess Federation for the last 5 years.

Hungarian partner: Chess is one of the most effective skill-building tools ever, which can be used to introduce children to the world of conscious learning at the end of pre-school and the beginning of school. The Polgár Judit Method aims at a deeper integration of chess-based education in the

Hungarian public education system through subject integration and cross curricular links. The benefits of chess for the development of skills in education lie primarily in the fact that it promotes the learning of different subjects and also effectively supports the development of a successful personality and life path, i.e. it prepares for the future as a whole.

The "Chess for Skill Development", an optional subject linked to the Chess Palace Skill Development Programme, has been available to schools since 2013. In many cases, institutions do not have the possibility to use it as a stand-alone subject, so we widely emphasise the integrability of this method in the curriculum.

Thanks to the support granted by the Ministry for Home Affairs under Government Decision 1799/2021 (XI.16.), a total of 1,188 teachers were trained in the 2022 school year to teach the Method. The support, which aims to develop the logical, thinking and mathematical skills of pupils in the public education system, will last until the implementation of the Chess Olympiad in 2024.

Our vision is that the Judit Polgár Method would be a permanent part of Hungarian national education. We are open to share it with other countries as a specifically developed Hungarian educational method. That is why we would like to continue the cooperation with a complex approach and a longer-term joint development of the chess methodology networking, involving the School District Centres and the Teacher Training Centres.

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Is there any chance of chess being included in the national school curriculum and, if not, what are the obstacles?

Czech partner: At the moment, the Czech education system is in a rather turbulent situation. The most controversial issues are teacher salaries, the content of the curriculum and, this year, a partial lack of school places. In the coming years, the Czech education system is likely to undergo a number of changes, which means that there is some chance that chess will be introduced as a new element in school curricula. School principals already have a great deal of autonomy in deciding and developing the content of the school curriculum, but the obstacles to the widespread introduction of chess are the lack of funds for equipment, the shortage of qualified chess teachers and the general overload of school staff, who therefore find it difficult to introduce new things and to devote their time to learning new subjects. In general, however, teachers welcome and recognise chess as a useful activity for children when it is an afternoon leisure activity for volunteers. There is little chance of chess being introduced into mainstream lessons, but there is great potential for schools to promote chess widely through afternoon leisure activities for children in out-of-school clubs.

Polish partner: From 2017, Polish education law allows schools to use chess and programming as a tool to develop the skills needed to help children achieve the best results in other subjects.

The main problems with the introduction of chess in all schools in Poland are:

- Lack of professionally qualified teachers
- Lack of lecturers able to teach teachers
- More pressure needs to be put on the Ministry of Education and successful pilot projects are needed in many regions.

To implement such a large-scale programme at national level, there needs to be a high level of understanding among decision-makers on the issue.

Slovak partner: In general, education has been underfunded over the last decade. The country lacks a clear education strategy for both 1st and 2nd graders. There are a number of fundamental flaws in the system, which make chess as such less of a serious priority.

Hungarian partner: In 2012, the Judit Polgár Chess Foundation prepared an alternative chess frame curriculum for the lower grades of schools, which made the Chess Palace programme available from 2013 in connection with the National Curriculum. Subsequently, it can also be used as a frame curriculum for the new National Curriculum 2020, entitled "Chess for skill development (chess as an educational tool)" for school grades 1-4. Institutions can integrate it as an optional subject in their local curricula.

What improvements do you propose/would you welcome in the teaching of chess to make it more motivating and challenging for children?

Czech partner: Children like to meet new friends, they like to compete, they like to travel. I would like to propose to create some kind of online system to find partner schools from V4 countries to cooperate during the school year. For example, by organising online competitions for both schools, matches between schools, correspondence games between children, e-mailing, sharing video recordings of chess lessons, online conferences, zoom consultations for coaches and reciprocal visits (2-3 days). This kind of cooperation would contribute to learning a second language, literacy and creating a network of contacts that could be very useful for schools, even in other areas of education.

Polish partner: There is a need to promote the values that the programme brings to society. Despite all the work that has been done, there is still a huge potential for improvement. National and global campaigns, good practices, good examples - these are needed for wider success.

Recommendation:

- National and international conferences
- Platforms for the exchange of good practices
- More sponsorship for activities (equipment, skills)

Slovak partner: My experience over the last decade is that if chess is presented to children in an attractive way, they are very eager to learn and play.

Even a very simple way to make a difference is to buy, for example, 5 chess sets and place them in the school hallway. Even if there are no chess lessons in the school.

To make chess more structured, we need school teachers who are not "afraid" to teach chess.

The biggest change would be to teach school teachers how to play chess, to teach chess players how to pass on the knowledge.

Hungarian partner: Below are some suggestions on how to make chess education more motivating and challenging for children, where school chess is combined with after-school clubs and clubs, creating a system of interlocking for talented players:

School chess programme: schools should provide opportunities for chess education and chess programmes. Under the guidance of teachers or professionally trained chess instructors, children would have the opportunity to learn the basics of the game, develop their skills and participate in local competitions at a lower level.

Afternoon workshops: chess can be combined with afternoon workshops. These workshops give children the opportunity to further develop their game, strategies and tactics. Those who are more talented and committed can take part in more advanced courses where they can be challenged at a higher level.

Chess clubs and competitions: in addition to advanced courses, children should be given the opportunity to join chess clubs where they can play and train regularly. These clubs offer opportunities for competition, exchange and development. Participation in higher level tournaments and regional/national championships can encourage children to take on even greater challenges.

This three-step system allows children to progress gradually in chess, always finding new challenges. Talented players are given the opportunity to develop and improve, while maintaining a constant motivation and interest in chess. It is important that these systems are well-coordinated and support each other so that children have the opportunity to develop according to their own abilities and interests.

What financial resources would be needed to make chess more widely available in education?

Czech partner: In 2023, there will be 5 374 kindergartens and 4 261 schools in the Czech Republic. In order to reach at least 10% (963) of the schools where chess would be available for children, we need to support these schools with a minimum of 6.815.000CZK (about 284.000€). This means that we need to pay 5000CZK for the purchase of chess equipment (chess sets) for the schools and 2.000.000CZK for the training of an equivalent number of teachers.

Polish partner:

1. National
 - a. Ministry of Education
 - b. Public funds
 - c. Private sponsors and funds
2. Regional
 - a. Very often it is the headmaster/mayor of the city who decides which subjects the children will study as additional subjects. Funds are ready, transfer to chess is the deciding factor.

It is important that for teachers who are considering to obtain skills of a chess-teacher, it will look like a promising, long career and additional skill for years. Financial aspect and a guarantee that the project will last long is helping teachers to make decision to stick with chess.

Slovak partner: In 2011, when the Chess in Schools programme was a priority of the Slovak Chess Federation, one national manager, three regional managers and about 70 people were involved, who visited schools at least once a week and gave chess lessons to children.

The annual cost of the project was €100 000, including chess materials. It has indeed made huge progress in three years, so I assume that a similar cost would be involved in bringing chess back into schools on a large scale.

Hungarian partner: To make chess more widely available in education, significant financial resources would be needed. The following is a list of possible sources of funding, taking into account a grant of €200,000 per year at all levels:

School support: state or local government support would be key to school chess programmes. This could include training teachers to teach and support chess, and providing schools with the necessary chess teaching tools and materials.

Support for workshops: financial resources should allow for the creation and running of afternoon workshops. This could include the salaries of instructors or coaches who guide and help children develop. They should also be able to purchase the necessary chess equipment, travel to and participate in tournaments and organise events.

Support for chess clubs: clubs would also need financial support to maintain a competitive and high quality environment. This could include improving the clubs' infrastructure, employing qualified coaches, organising tournaments and supporting competitors, for example in the form of travel expenses or tournament prizes.

These funds would allow for a wider availability of chess in education, providing financial support to schools, clubs and clubs. The €200,000 - €200,000 per year would allow for adequate training, equipment and participation in tournaments at all levels, thus promoting the popularity and development of chess among the younger generations.

Other comments, questions, suggestions.

Czech partner: the biggest problem that our Chess in Schools project has to deal with is the lack of coaches and qualified teachers, as well as the lack of funds to buy basic equipment. I would be happy if V4 partners could inform us about how the training of chess teachers works in your country, how the cooperation between schools and chess clubs works and what level of financial support schools receive (e.g. do you donate, rent or otherwise provide chess sets?). Currently 120 schools (including kindergartens) are participating in the Chess in Schools project. Unfortunately, not all of them participated in the survey and no response was received from them. According to the survey results, there are no qualified teachers in kindergartens, but according to the project data, there are teachers who have obtained the required qualification, T4, through our online course.

Slovak partner: The financial part of any project is key, no doubt about it. On the other hand, it is very important to have a team (chess teachers, teachers, managers, tournament organisers) all over the country who are involved in a kind of programme for the long term. Once the chess environment is created, it is very easy for kids to get involved. There is also great potential in "online chess". We saw this during the pandemic years when we supported some online events locally with amazing results (huge numbers of participants). Unfortunately there is no support from e.g. the national chess federation to develop this area.

Hungarian partner: We propose to develop a general educational material for 4-8 year olds, available on the international market, combining the learning of the game of chess and skill development, as follows:

Learning the game of chess: The teaching material provides a detailed introduction to the basics and rules of the game of chess. Children could learn about the chess pieces and the movements of the pieces. The material would help children to start playing chess and gradually improve their game.

Skill development: the educational material should not only cover the game of chess, but also include skill-building activities that help children develop their cognitive and problem-solving skills. This may include logical thinking, concentration and planning. Children would have the opportunity to practise these skills through interactive tasks and exercises.

International accessibility: The book series we propose would be an internationally marketable educational material for 4-8 year olds, combining learning about the game of chess and skill development. This material would allow children to learn the basics of chess and help develop their cognitive and problem-solving skills. And its international availability would allow the book to be widely used in education around the world.

Results and conclusions:

Chess education and development has many positive effects on the overall quality of life and society. It promotes cognitive development, such as complex thinking, problem solving and the ability to reason logically. It also develops decision-making and planning skills. Practising chess increases concentration and patience, and strengthens social interactions and teamwork. The competitive practice of chess creates career opportunities and helps to manage stress. For parents, it is an important tool for developing their child's logical thinking. Chess connects generations and promotes intergenerational relationships. These benefits have long-lasting effects on individuals and society, improving cognitive skills, problem solving and competitiveness, and promoting positive social interactions.

Based on the opinions of the partners, we see the following opportunities to make chess more motivating and challenging for children:

Online partner schools: an online system could be set up to find partner schools in the V4 countries. Cooperation could include online competitions, inter-school matches, correspondence games, e-mailing, video sharing and conferences. This would not only improve chess, but could also be useful in other areas.

Promoting values: there is a need for campaigns and platforms that promote the values of chess. National and international conferences, exchange of best practices and more sponsorship can help to achieve success.

Easier access to chess: chess should be presented to children in an attractive way. Simple steps, such as placing chess sets in schools or teaching teachers to play chess, can help to promote chess.

School chess programme: chess education and programmes should be provided in schools. Under the guidance of teachers or qualified instructors, children can learn the basics of the game and participate in local competitions at a lower level.

Afternoon workshops: chess can be combined with afternoon workshops, where children can improve their game and take part in advanced workshops.

Chess clubs and tournaments: talented players should be given the opportunity to join chess clubs where they can play and train regularly. There should be opportunities for chess players to participate in tournaments and to exchange experiences, which will help them to develop and motivate them.

This three-stage system (school chess programmes-after-school clubs-chess clubs and competitions) allows children to progress gradually in chess, while always facing new challenges. It is important that these systems are coordinated and support each other to ensure children's development and motivation.

Significant financial resources are needed for the wider uptake of chess in education. Support for schools is needed, which could include training teachers, purchasing chess equipment and supporting programmes. In addition, after-school clubs and chess clubs need financial support, including salaries for instructors/coaches, travel to tournaments and the organisation of events. Support from state and local governments, private sponsors and funds, and the development of partnerships and sponsor relationships could provide the necessary financial resources. 200,000 euros per year in joint funding could help provide adequate training, equipment and competition at all levels, promoting the popularity and development of chess among the younger generations.

The main challenges of the Chess in Schools project include a lack of coaches and qualified teachers, as well as a lack of funds to buy the necessary equipment. The Czech partner is asking the V4 partners for information on the training of chess teachers in their countries, the cooperation between schools and chess clubs, and the level of financial support for schools. The Polish partner emphasizes the importance of the financial part of the project and proposes support for online chess development. The Slovak partner considers that a team of chess teachers, teachers, managers and tournament organisers is essential for the success of the project. There is also great potential in the field of "online chess", which was experienced during the pandemic. The Hungarian partner proposes to produce a general educational material combining learning about the game of chess and skill development, which would be available on the international market.

All in all, the project needs substantial financial resources, including training of teachers, purchase of equipment and support for competitions. Online chess development should be a priority and it is important to ensure international accessibility. To implement a successful project, it will need a cohesive team and comprehensive educational material to help children learn the game of chess and develop their skills.

Budapest, July 5th 2023



V4 Educational Chess Summit