

Forest kindergartens in the Czech Republic

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Our paper catches up the movement for forest kindergartens in the Czech Republic, which was founded thanks to Emilie Strejčková. We owe a lot to Emilie Strejčková, for her friendship, wisdom and kindness and for the fact that thanks to her we have to know each other, started working together and even became friends.

In the last 20 years, there has been incredible progress. In 2003, there was no forest kindergarten in the Czech Republic; Emilie Strejčková began to spread the idea that there was a need to establish forest kindergartens. In the present day (2023), there are about 200 forest kindergartens in the Czech Republic; over 3300 children are attending them.

We are lucky to have been able to personally experience this turning point in the history of pedagogy in the Czech Republic. We would like to report abroad on this amazing change.

Our paper is based not only on the usual scientific approaches but also on the life experience of the director (Magdaléna Kapuciánová) and teacher (Karolína Kapuciánová) of one of the first forest kindergartens in the Czech Republic (and a university teacher (Kateřina Jančařiková). Together we have followed the movement out of deep interest.

Theoretical background

About the Czech Republic

The Czech Republic (also Bohemia) is a landlocked country in Central Europe. The Czech Republic (together with Slovakia) was part of the Eastern Communist bloc as the Czechoslovak Socialist Republic until 1990. Shortly after the fall of the communist regime, the Czech Republic and Slovakia were peacefully separated (from 1 January 1993). To understand Czech education, it is important to remember that the Czech Republic was part of the Habsburg and later the Austro-Hungarian monarchy until 1918, so the first "Czech" school laws were associated with Maria Theresa and Josef, and that Czech Republic was occupied between 1938 and 1945 by the Nazi regime.

The Czech Republic has a hilly landscape that covers an area of 78,871 square kilometers. The natural native mixed deciduous forests (with a predominance of oaks and beeches) have been replaced by spruce monocultures in most of the area. The population is over 10.5 million.

History of preschool childcare in Czech Republic

Traditionally, grandparents were involved in the care of pre-school children in our country as everywhere else in the world. Jan Vlastimír Svoboda founded the first public institution („opatrovna“) caring for pre-school children in our territory in 1832 (Opravilová, 2021). Since then, the purpose of pre-schools has shifted from simply looking after the children of working parents to systematic education.

The development of kindergartens is related to the trend of employed mothers that began in the 20th century and continued under the socialist regime. Children were placed in nurseries at a very early age. Many adults have unpleasant memories of the regime in the nursery. This led to the reduction the number of nurseries (associated with the socialist regime) in the early 1990s. At this time, thanks to the work of the eminent Czech psychologist Zdeněk Matějček, it was also a trend for mothers to care for their children alone up to the age of 3 or 4.

There are approximately 5 400 kindergartens in the Czech Republic Most preschoolers (over 94% attend kindergarten. There are state and private kindergartens in the Czech Republic today. In a typical state kindergarten class, there are 22 children for one teacher (MŠMT, 2021b).

According to Czech preschool curriculum (*Rámcový vzdělávací program předškolního vzdělávání*) all Czech children had to be in contact with nature. Czech curriculum uses the words "nature" or "natural" 20 times in 46 pages. Several of its goals are related to nature, i.e., visiting nature, learning about nature, the joy of nature, nature conservation, etc. (MŠMT, 2021a). The reality is unsatisfactory very often. The time that preschool children in the Czech Republic spent outdoors on average at the beginning of the 21st century was reduced enormously (many children spent less than 2 hours a day outdoors). Even from the Survey on Proportion of time spent indoors and outdoors in kindergarten, it was found that some kindergartens go out for only 45 minutes. In the rain (or risk of rain), they do not go outside at all (Rubešová, 2010).

Forest kindergartens establishment in Czech Republic

The movement for forest kindergartens began to take shape thanks to Emilie Strejčková (1939 – 2009) in Czech Republic shortly after 2000. Emilie Strejčková has significantly influenced environmental education in the Czech Republic. Among her greatest contributions are the establishment of the first research team that dealt with children's relationship to nature (The Alienation from Nature, 2003-2005), the founding of the “Toulcův dvůr environmental education centre” (1995) and focus to the preschoolers. Until then, environmental education was a topic for pupils aged 15 and over in our country.

In 2003, Emilie Strejčková founded the *Semínko* (a Little Seed) kindergarten in Prague, which fulfils many of the ideas of the forest kindergarten. Two main areas where learning of the children was taking place - a natural garden, the possibility to spend time in the garden and outside in the natural area and different trees, plants, animals and landscapes. However, the legislation of the time did not allow for more of the operation of a forest kindergarten. In

2009, the first forest kindergartens were established in the Czech Republic (still without legislative support). In 2010, *Lesníček* (a Little Forester) was founded as a first true forest kindergarten (in accordance with Czech legislation).

The process of legalizing the forest kindergarten school program was long and arduous. The first success was that the Ministry of Education, Youth and Sports of the Czech Republic allowed the experimental validation in *Lesníček* (2010). The aim of the experimental verification was to determine whether and under what conditions it is possible to integrate a forest kindergarten into the operation of a traditional kindergarten.

Pilot project *Lesníček* integrated forest pedagogy into pre-school education curriculum. The pedagogical concept of forest kindergartens and a comprehensive methodology (education, hygiene, accident prevention) has been developed and verified. There was also a comparison of morbidity, school readiness, and other indicators of the children from the *Lesníček* class with other children (MŠMT, 2010).

The results of the pilot survey were published in interim reports. The founders of other forest kindergartens in the Czech Republic found in these materials information useful for the multiplication of forest kindergartens in the Czech Republic (NÚV, 2010).

The final evaluation of the pilot validation confirmed the assumption that forest kindergartens can be an alternative to mainstream pre-school education (2012). As a result, an amendment of the legislation was initiated. These now allow the establishment of forest kindergartens completely independent of the background of a regular kindergarten. It has been a long process, but it has been successful.

Teachers and people, who wanted the development of forest kindergartens in the Czech Republic, together founded The Forest Kindergarten Association (*Asociace lesních mateřských škol*) in December 2010. Its aim is a) to take care of good conditions of pre-school education in nature and to help on the way to quality and sustainability of forest clubs and forest kindergartens in the Czech Republic, b) to connect Czech forest kindergartens with foreign countries (ALMŠ, 2018b, web page of *Asociace lesních mateřských škol* – www.lesnims.cz). Thanks to this association, it was possible to avert the threat in 2014. In that year, a new school law was being prepared in the Czech Republic that did not provide for this form of school attendance; forest kindergartens were therefore threatened with extinction.

Now forest kindergartens in the Czech Republic are grounded in law as a full – fledged preschool education since school year 2017/2018.

Czech Forest kindergartens background

Semínko kindergarten and other kindergarten forest schools in the Czech Republic follow the Ella Flatau's ideas. She established first forest kindergarten in their present form were in mid-20th century in Denmark (Kane & Kane, 2011; MacQuarrie, Nugent, & Warden, 2015). Interestingly, the founders neglect the Czech tradition of outdoor learning, which was promoted by the representatives of eubiotics (Štorch, Růžička etc.) after the independence of Czechoslovakia (1918). This is probably because they as Czech Scout representatives were erased from the textbooks of pedagogy; the Nazis and the Communists banned scouting in our country (Jančaříková, 2019).

Today, forest schools can be found in dozens of countries around the world, and their programs are as diverse and unique as their locations, students and teachers, ie. In Denmark, Sweden, Germany, the United States, the United Kingdom, Australia, New Zealand, Canada, China, Japan and Italy (Lubbock, 2020), Slovakia, Poland, Hungary (ALMŠ, 2020), and in Lithuania (ALMŠ, 2018a).

About 200 pre-school groups are now involved in the forest kindergarten movement (Valkounová, 2022). Lot of them (160) are associated in the Czech Forest Kindergarten Association. In the year 2022, worked 888 people in these 160 preschools associated with the Forest Kindergarten Association, and they cared for 3,367 children (ALMŠ, 2022).

The topic of forest kindergartens has also been dealt with for some time as a topic for diploma and bachelor theses (for example Kapuciánová, 2010, Bendíková, 2022). However, three articles have been published on Web of Science by Czech authors (Michek, Nováková & Menclová, 2015, Domljan, Šimek, Iliev, 2020, Cibulková, 2021).

Czech Forest Education movement

The movement for forest elementary schools is a continuation of the movement for forest kindergartens in the Czech Republic a few years ago. Parents of Forest Kindergarten children have been looking for ways to continue outdoor education at the elementary school. Establishment of *forest schools* is today's trend. Unfortunately, Czech legislation does not allow community schools. Parents of children therefore enroll them as individually educated (homeschooling). Homeschooling has been possible in the Czech Republic since 1997 (Kostelecká at all, 2016).

Parents and educators from these alternatives (homeschooling, forest kindergarten, outdoor education, and community schools) significantly influence traditional Czech education. A very strong influence has Lessons in Grass movement with its slogan "Go out!" from 2017 (TEREZA, 2022). Its goal is to promote outdoor learning and support the transformation of school gardens into natural gardens.

We will focus on "garden, forest and outdoor primary school movement in Czech Republic" in our future research.

Methods

We use qualitative research methods. Our approach is based on the grounded theory method (Strauss, Corbin, 1998). Our goal was to realize the description of *Lesníček* as an output of scientific work. In this case, we consider the description very important, because abroad there is not enough awareness about forest kindergartens in the Czech Republic.

Our description is based on long-term (more than 10 years) of monitoring. Two authors (Magdalena Kapuciánová and Karolína Kapuciánová) observed inside (as a principal and teacher in the kindergarten) and the second (Kateřina Jančaříková) observed as an outside expert. We have written documentation, diary-type records, photos, videos, that we keep at all times. We decided to present a day and a year in *Lesníček*.

SWOT analysis, ie. external and internal strengths, weaknesses, opportunities, threats (Miranda, Rosadas, Assone, Pereira, Vallinoto, Ishak, 2022) was realized in the school year 2021/2022 (autumn). Respondents of SWOT analysis were 8 teachers, 20 parents (mothers and fathers) and 10 children (which attends or was attending *Lesníček*). We followed up with interviews with teachers and parents and discussed some of the findings from the SWOT analysis (school year 2021/2022, spring).

Results

Preprimary education in *Lesníček* class: general information

Lesníček (a Little Forester) is one of the founders of Association of Forest Kindergartens. It is one of three classes in Kindergarten *Semínko* (The Little Seed) in Toulcův dvůr, environmental education center in Prague. Forest class *Lesníček* was grounded in 2010 as a pilot testing project of the Czech Ministry of Education, Youth and Sports. In the year 2012, this project won UNESCO award as a *project for sustainable development*.

There are 15 children registered in a mixed age class (boys and girls aged 3-7 years). Three teachers work with the children. There are always two with the children; the kindergarten tries to have a mix of female and male teachers.

The educational program is carried out in all weather conditions outdoors in the natural area of the Toulcův dvůr - Environmental Education Centre. In addition, the natural surroundings within 5 km are used. Teachers and children sometimes go on trips to more distant parts of the city, to the zoo, botanical gardens, galleries, museums, libraries, etc.

In case of bad weather, there is a mobile trailer for year-round use. In addition, a classroom is available in case of really bad weather. It is furnished with natural materials, has a thick carpet of sheep's wool on the floor and is painted in the spirit of the stories of the Little Prince by Antoine de Saint-Exupéry. The children use this for about 2/12 of the year. Not so much because of the cold but because of the drying space.

In nature, not only mental resilience is strengthened, but also manual and physical resilience. In addition, the mental, emotional and social development of children is positively promoted. The most important thing is that being outdoors strengthens the immune system and helps to prevent diseases. It also serves to prevent injuries, prevent addictions, allergies, etc.

Playing outdoors promotes creativity, communication skills, planning, but also equally important elements such as self-confidence, perseverance, ability to concentrate. The environment inspires children to be creative, skillful and to develop their imagination. In nature, it is possible to experience more sensitively and with all the senses.

At school education, there are used natural materials for building and environment creating. It is used a worktable for produce and repair. Children are using real tools. Children can prepare and cook their own food. They cook it on the fire and after they eat it.

Meals

They consider meals and eating together a very important element, because the ritual of eating together is also disappearing from family life. The children have their snacks outside as a picnic. They have lunch in the kindergarten dining room. They also prepare ingredients for their own cooking or baking in the canteen if they are not doing cooking on the fire.

Hygiene

Natural facilities include a separate composting toilet and a sink with running hot water from a canister for personal hygiene. Organic soap is used for washing. Children dry their hands with machine washable cloth towels. Outside the facility, children perform their needs in the open air. There is a flush toilet with a sink in the bricked-in back room, in the Little Prince classroom. The kindergarten building has a flush toilet and a bathroom with a shower.

Close contact with parents

Every morning and afternoon, parents have the opportunity to talk to teachers. There are regular monthly meetings between parents, children and teachers. Thanks to these festivals, the teachers have closer relationships with the parents who are often present at the events.

Close contact with animals

Children in *Lesníček* are in regular and direct contact with animals in the kindergarten (bearded agama, stick insect, fish or canister therapy dog border collie Dora) or on the neighborhood farm (rabbits, chickens, sheep, goats, horses, cows ...). The children are also in contact with wild animals - birds that they feed at bird feeders, aquatic and terrestrial arthropods and amphibians, snails that they catch and observe.

Social area

The intergenerational meetings are implemented in *Lesníček*. Teachers from school invite the grandparents of children for a day. In this day, the children look after their grandparents. They prepare snacks for them, dance together, sing for them, draw their portraits and play with them (MŠ Semínko, 2019). Children with teachers come regularly to the home for the elderly to sing, dance and make things together (Kubejová, 2022).

How legislation differs for normal classes and *Lesníček* class

The legislative requirements for the forest class are the same as those for the normal class. In addition, the forest class has a natural background, but this is not a legislative requirement. The advantage of this arrangement is that children can have space inside if they need to. If not needed, the indoor space can be used for workshops, special groups or further education.

A typical day in Lesníček

Beginning

In the morning, teachers arrive at work, pack the day's necessities in their backpacks, prepare tea for themselves and spare tea for the children, dress in outdoor clothes and head out into the natural environment to wait for the children.

Then the parents bring the children in and greet the teachers with handshakes. There is space for very brief organizational conversations with the teacher (child's exceptional condition, important event in the family). Children play free games, look at books, or play a game with the other teacher.

Morning circle

The guided program starts with a morning circle. It is a time for making the children present, "now we are together in kindergarten". In the circle, the children learn to feel their

community, count each other, find out who is there and who is missing. In the morning circle, topics related to the time of year, the situation around the children are also addressed and gradually motivation for the planned activities of the day is approached.

The afternoon guided program

The guided education takes the form of an offer. A transfer (on foot, on bicycles) to a suitable location usually precedes it. Fine and gross motor skills, all competences and pre-literacy are developed naturally (children collect firewood, cook, make things, draw, make music, climb slopes and climb trees). The program ends with an evaluation, a summary of what the children have learned.

Lunch

Afterwards, they go to the school lunchroom (approx. 250 m). After lunch, the children return to the place of forest kindergarten and rest in their sleeping bags and sleeping mats under the treetops or in the mobile house. Their teacher reads them a story. Those who do not fall asleep look at a book or get dressed and play free games.

Free play

Spontaneous free play is important in a child's life. Play is the child's means of learning, in free play the child has enough space to experiment and evaluate the results independently, in group play the child learns in different roles (dominant, submissive, ...). During free play, new ideas are generated and creativity and imagination are developed. The teacher enters the free play minimally and stands aside in the role of observer but also protector.

Children have space for free play in the morning before they all meet, after snack before they all finish their food and at the end of the day before they are picked up by their parents. Free play is also included during the forenoon between the activities controlled from teachers or instead of it (on a trip, etc.).

Handing over the children to their parents

Parents collect the children at 3pm. Again, there is space for short conversations with the teachers.

Teacher related work

After the teachers have handed the children in, they write a report to the parents on the e-board about what the children have experienced that day. This way parents know what happened and can ask the children guiding questions to help them tell their story. They also post photos. This e-board is closed and parents can see it after entering their password. Some parents make a diary of these messages and photos for their children. Sometimes teachers have consultation sessions with parents; sometimes they have joint meetings with other teachers in the school about joint events. Finally, the teachers prepare the aids for the next day.

A typical day is described in more detail in the school's educational program named "Harvesting the whole year depends on the spring sowing" (MŠ Semínko, 2021).

School year 2021/2022 in forest kindergarten *Lesníček*

September – The children have to know their teachers, each other, the environment and set rules together

Autumn workshops -creation of children with parents, tasting of healthy homemade pastries from the school kitchen and from home by parents

Dental students came to the children with a program about dental hygiene.

Children and teachers from the whole kindergarten took part in the Clean up the Czech Republic event - cleaning up litter in nature.

Michael's Feast was held - teachers and children bought vegetables, cleaned them, cut them and cooked soup. After being fortified with the soup, the children went into the forest on their own or with the teacher's accompaniment to find the treasure. The treasure was a red apple.

October - Gifts of autumn

Children harvested what they grew in the garden beds - the last tomatoes, peppers, zucchini, and pumpkins. They picked fallen apples and nuts, and collected chestnuts for the animals.

The children dyed silk with natural dye from boiled walnut leaves and made elves.

Autumn brigade - joint beautification of the premises of the kindergarten by parents, children and the school team, sitting around the fire with singing and roasting, playing musical instruments together.

November – St. Martin arrives on his white horse

Preparations for the Martin festival, children made lanterns, listened to the story of St. Martin, participated in a theatre performance, then a real horse arrived and St. Martin rode on it, who helped the beggar, sharing Martin cakes - with each other, with parents, with teachers.

The children pressed fallen leaves, stamped them, made leaf crowns and kites, compared sizes and types of leaves.

At the open day, teachers welcomed prospective parents and children.

The children cooked porridge on the fire, roasted “trdelník” (cinnamon pancake) and prepared fermented cabbage.

December - Advent, Christmas time

Children baked Christmas cookies from organic food bought in unpacked shop, and made yogurt. In the pottery workshop, they made mugs for their parents.

Christmas party - children performed in front of the church, teachers played violin and flute, everyone sang. Singing and chatting, exchanging Christmas recipes between parents, tasting Christmas cookies.

January – theme of birds

The children organized a three-king parade for the neighbors.

There were no leaves on the trees so the children could observe and recognize the birds. Children recognized different species, observed through binoculars, recognized their sing, etc.

The Lunar Year was celebrated, as one family is from Vietnam. To celebrate the Lunar New Year, parents prepared a talk with tasting of local fruits and specialties.

February - Mardi Gras

For the class meetings, which were held outside in the garden due to epidemic measures, the children and their cooks prepared soup - meat and vegetable broth - for the parents. The children cleaned and chopped all the vegetables.

The theme of the main Mardi Gras week was "Grandmothers and Grandfathers". Through various games and activities, the children's competences of intergenerational respect, communication, help and mutual enrichment were promoted. During the parade, together with the teachers, the children sang to workers from neighboring organizations and smeared soot on their faces for good luck.

March - Healthy living

Lesníček started pre-growing their own vegetables, and the children observed the baby chicks born on the neighboring farm. They went on long hikes. They also visited the library because March is the month of books. Together they made a wooden doll, the protector of the place.

Medical students came to the preschool with a program called "Teddy Bear Hospital". The children brought plush toys and played that they are patients that doctors treat.

April - Spring is coming

Easter workshops, customs and traditions - joint creation of children and parents, tasting of healthy homemade pastries from parents and spreads from cooks. They also sow microgreens (peas, horseradish, and watercress).

Kateřina Jančařiková came to the kindergarten to present a program about the snakes. With the help of this model organism, she introduced to the children snakes and their life. With models, she practiced the mathematical thinking with the children.

Spring Brigade - spring cleaning, establishing flower beds, decorating the school premises by parents, children and team, sitting around the fire with singing and roasting, playing musical instruments together.

May -The time of love

In May is the Mother's Day. Teachers preparing workshops for dads with their children celebrated it in *Lesníček*. Together they made a wooden heart for Mummy out of wood in a vise using the tools of a saw, rasp and file. Free afternoon without children was also given to mothers as a gift.

The Grandparents' Café was a great celebration - healthy food prepared by the children was tasted, the children sang and danced together with their grandparents.

Moreover, the children came to the home for the elderly where they made music on the drums with the elderly together.

June - Water, Preparing for Holiday Adventures

Children fished for animals in the wetland, rafted on the nearby Botič stream, participated in the local kindergarten Olympics, and the oldest went on a weeklong expedition together.

The end of the year closed with a "farewell to preschoolers" - a children's theatre performance, the giving of gifts and small messages for the school year, the release of butterflies that hatched in the kindergarten and a night sleepover in the garden.

The school year is described in more detail in the *Semínko* Annual Report (MŠ Semínko, 2022).

SWOT analysis outputs

The main **strengths** of *Lesníček* are small group of children, two teachers throughout the lessons, environment allowing contacts with nature, specifically Toulcův dvůr area, garden, animals (for more see at Table 1).

Table 1 Strengths of *Lesníček* kindergarten

PARENTS	TEACHERS	CHILDREN
small group of children	small group of children	friends
two teachers present at the group at all times	background of kindergarten (food, shower, toilette)	teachers
healthy eating	better immunity of children	swing mobile house
close contact with the nature	close contact with the nature, nice environment	garden, animals

Parents, teachers and children see the weaknesses very differently. While parents worry about the cold, teachers and children do not. Teachers see the fact that visitors to *Toulcův dvůr* area can walk right up to the kindergarten premises as a weakness and express concern risk of vandalism. Children see a problem in the fact that the area is muddy in winter (for more see at Table 2).

Table 2 Weaknesses of *Lesníček* kindergarten

PARENTS	TEACHERS	CHILDREN
short operating time		low swings
fear of cold	strangers can destroy the background	it is more mud than grass in winter

Some previously mentioned elements are repeated in the category **opportunities** (relationship to nature, fear of vandalism, garden) and solutions are proposed (built a fence). Expansion of capacity is desired so that more children (younger siblings) can attend the forest kindergarten. Contrary to the idea of a forest kindergarten is the wish of one of the children to "build a house" (for more see at Table 3).

Table 3 Opportunities of Lesníček kindergarten

PARENTS	TEACHERS	CHILDREN
graduates can have a better relationship with nature	create more forest classes	little brother come in
children will think about its protection	building a fence to not come in and disturb	more flowers
		bigger garden
		build a house

The fewest items appeared in the **threats** category. Parents cite fears of bad weather, legislative changes (which would ban forest nurseries) and lack of space (as a teachers). Children express fears of being alone and of being threatened by fantastic creatures and thieves (for more see at Table 4).

Table 4 Threats of Lesníček kindergarten

PARENTS	TEACHERS	CHILDREN
a lack of space	there is expected to be lack of natural places for setting up forest kindergartens	a devil came a monster came a dragon came a thief comes
legislative can be changed		
bad weather		if I will be alone there

Discussion

The trend of outdoor learning is developing in the Czech Republic in a similar way as abroad in last decades. Parents, teachers and professionals dissatisfied with public education have pushed for this alternative. Their intention was for children to spend more time in a natural outdoor environment that allows them to experience nature and builds their immunity, resilience and self-regulation. Another advantage of education in forest schools is the smaller number of children in a class and the constant presence of two teachers. Forest kindergartens in Czech Republic are age heterogeneous, which helps newcomers to adapt. Since first forest school in the Czech Republic in 2010 (Kapuciánová, 2010), the movement have come a long

way since then and the base of forest kindergartens that can support each other has expanded many times over.

Comparing a forest kindergarten and a regular kindergarten

Both regular and forest kindergarten care for children whose parents need childcare during their employment, they also seek a place for their children to socialize, make friends and learn to get along with their peers in small mixed-age group. In a traditional Czech state kindergarten, there are sometimes even 28 children per one teacher. The teachers themselves prefer to work in homogeneous groups (Syslová, 2021), but from some points of view it has many disadvantages (Kotátková, 2014). Children spend most of their time indoors (Rubešová, 2010).

Parents who are interested in educating their children in year-round daily contact with nature, with an accent on sustainable development, enroll their children in the Forest Kindergarten. Education and nature are equally important to them. The goal of being in nature is to educate children and teach them not only colors and counting, but also awareness of the basic conditions for life on Earth through real experience with them (Vošáhlíková, 2010).

Covid 19 period in a comparison between the operation of the *Lesníček* kindergarten and the regular classes in the *Semínko* kindergarten and the regular kindergarten

At the time of the Covid 19, the children were taught in *Lesníček* as before - outdoors in nature. In addition, the stay in nature was extended to include meals. The school canteen was also moved outdoors to the garden pavilion. Except for the time when all kindergartens in the whole country had to be closed (11 days), the forest school *Lesníček* was open for children. On the days when it had to be closed, the education was conducted remotely. The children were at home with their parents. Teachers sent education tips to parents.

The garden classes of the Kindergarten *Semínko*, i.e. the regular classes, were at that time similar to the operation of a forest kindergarten. The children's education took place outdoors also during meal and rest times. In contrast, education in regular kindergartens was very limited. The regular kindergartens were closed for two months. Later, after the opening, much of the education in the regular kindergartens also moved outdoors (MŠMT, 2021c), following the example of the forest schools. Hopefully, this trend will increase and more time will be spent outside in regular kindergartens. For example as in Norway, where using of outdoor environments is common everyday teaching practice in all weathers (Melhuus, 2012).

The question is whether some families would choose this alternative if the children in traditional state kindergartens went out for longer periods, if the number of children was reduced and the number of teachers increased. One child in the SWOT analysis expressed a wish to have *a house* on the Forest Kindergarten area.

Rhythm of the day

Analysis of a day in *Lesníček* showed rhythm and rituals that are the same every day govern the day. This is not something new; it is traditional approach in Czech kindergartens (Opravilová, 1963, Kotátková, 2014). Helle Hackmann, the founder of a forest kindergarten in Denmark and the author of several books that are widely read by forest educators, also talks

about the necessity of rituals (Hackmann, 2019). She puts her theory into 5 keys to a fulfilled life with children from birth to 7 years (she is also a Waldorf teacher, that's why 7 years).

SWOT analysis

Although the forest kindergartens are now anchored in Czech legislation, according to SWOT analysis, the parents are concerned about the change in legislation and the loss of this alternative for their youngest children.

An interesting finding of the SWOT analysis is that some parents are worried about bad weather and cold, while teachers and children (i.e., those exposed to the weather) are not.

A very interesting finding is that the SWOT analysis did not include the fear of injury to children (falling from a tree, being injured by tools, being burned) or the lack of hygiene (no running water, outdoor toilet). These are the usual objections of people who do not support this alternative. As well as the most common issues addressed by inspections and approval authorities.

A key recommendation for future operations identified by the SWOT analysis is the need for fencing to provide more privacy for the kindergarten. Ordinary kindergartens in the Czech Republic are fenced. On the other hand, forest nursery areas are usually not fenced. The fence provides security from unwelcome visitors (vandals, thieves - mentioned in the SWOT analysis) and eliminates unplanned departure of children from the premises. It is questionable whether the presence of a fence would reduce the children's fear of the arrival of the thief, the monster, the dragon and the devil expressed in the SWOT analysis. This topic was discussed also in 2010 in research Forest schools (Kapuciánová, 2010) in focus group of founders of forest schools – the pillars of the forest schools are also freedom and protective space in the base camp. Interesting thing is, that not fenced space does not mean – with no boundaries. Usually, borders in forest schools are very strictly determined, however, they are marked psychologically rather than physically. For example, in *Lesníček*, there is small raft made of wicker, in some schools, there are cotton strings tied to trees, which represents boundaries. Bounded and unbounded space will be the research topic of the next thesis we commission.

Some of other findings of SWOT analysis also corresponds to the research Kapuciánová (2010), e.g. advantages of forest class are creating a positive relationship with nature, greater number of teachers (more individual approach to children), better immunity. Also concerns about insufficient hygiene, bad weather or, paradoxically, higher morbidity among children were said, unfortunately there are not division of the respondents into teachers and parents as is in this SWOT analysis, so proper comparison cannot be done.

Need for further research

There are many topics that could be devoted to further research, for example the morbidity of children in forest kindergartens compared to regular kindergartens, pro-environmental behavior (or employment) among children from forest kindergartens as adults, different styles of raising children in forest kindergartens in compared to regular kindergarten etc.

Conclusion

Forest kindergartens are an alternative way of preschool education in the Czech Republic. Their popularity is still growing. They are also increasingly attracting the attention of researchers. The forest primary school movement has recently followed the forest kindergarten movement, which is likely to develop at a similar pace in the coming years.

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Attachment 1 (archive of Mateřská škola Semínko, o.p.s.)



Picture 1 There are higher percentage of men as teachers in forest kindergartens in Czech Republic (ALMŠ, 2022)



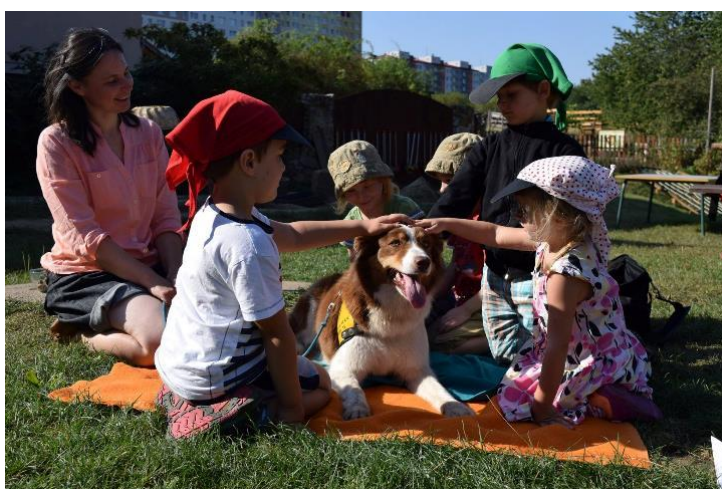
Obrázek 2 Children are preparing meals



Obrázek 3 Cooking tea on fire from self collected herbs



Obrázek 4 Works during spring brigade



Obrázek 5 Canisotherapy