Tool-kit for Teachers to Teach Outdoor Learning

**BE-AWARE RE-AWARE AND RE-DISCOVER
CURIOSITY AND CONNECTION IN EDUCATION
THROUGH OUTDOOR LEARNING**

Content

Executive Summary

The sudden, unplanned move to distance learning during spring 2020 drove a wedge into the middle of the school year—disrupting academic schedules, putting an end to extracurriculars, and undercutting most schools' assessment and academic feedback cycles. Engaging students in learning and adapting them to the new normal is a requirement at all: Children today who are experiencing the coronavirus pandemic need lots of imaginative play opportunities to help them make sense of the radical changes that have affected so many aspects of their lives. And once kids return to in-person school, they will need a lot of time to play to process all the changes they've been through. The curiosity and connection parked by outdoor learning could be a much-needed antidote to the anxiety and stress of 2020. Decades of research and theory tell us that play is the primary way young children make sense of their world.

The toolkit is an educational resource, which is for teachers. With the global pandemic period, teachers and students found themselves in the center of the turbulence, and engagement is again challenged to provide a structured and relevant answer to the needs of teachers and students. Education authorities are struggling to provide relevant competencies, mostly because of the lack of professional development opportunities and the availability of free digital educational resources. The toolkit is intended for a primary audience of teachers. A toolkit is an educational resource, it is a set of tools and activities that have been developed during the implementation of the Erasmus+ program KA226 strategic partnership project "Be-aware Re-aware and Re-discover curiosity and connection in education through outdoor learning. (Pop-up Learning)" reference number 2020-1-LT01-KA226-SCH-094825.

Project team

Methodical materials with ideas and examples were prepared by members of the project team from Lithuania, Turkey, Italy, Latvia, Croatia, and Greece.

Rokiskis nursery-kindergarten „Varpelis", Lithuania:
project coordinator, deputy of headmaster Violėta Deksnienė;
Methodist teacher of preschool education Laimutė Lašienė;
preschool teacher Edita Miškūnienė.

European Innovative Society Association (EISA) an NGO, Turkey:
project coordinator, researcher Murat Aydoğmuş;
teacher Serpil Umutlu Demir;
teacher Nebi Demir.

Progress in European Union (PROGEU) institute for European development, Italy:
project coordinator Dario Noschese;
PR Manager & Project Manager, researcher Sara Ali;
Project Area Manager Dott. Gianmarco Gianino.

Baloži Secondary school, Latvia:
project coordinator Reinis Zobens;
teacher Irina Jefimova;
teacher Artūrs Ansons.

Association for Human Resources Development (Polymath), Croatia:
project coordinator, manager Haris Muhic;
teacher, researcher Benjamin Muhic.

'Synchroni Paideia' private school, Mykonos, Greece:
project coordinator Maria-Nefeli Stasinou;
teacher Panagiotis Kapsalis.

Needs Analysis in Digital Learning

Innovative practices in a digital era.

When children are engaged in activities that align with their particular interests, their psychosocial development is enhanced. They not only learn a variety of useful skills, they learn to express themselves, go on a journey of self-discovery, and grow into adulthood with authentic characteristics and values. As one of our students put it, online school "is just like in-person school but with all the fun bits removed." Without the ambient social interactions that are such a rich part of a regular day at school, and guidance from teachers, coaches, and counselors, many of the key motivational drivers were suddenly gone. In most schools, there were no fully formed distance-learning alternatives waiting in the wings. Bearing this in mind, decades of research and theory tell us that play is the primary way that young children make sense of their world. Play is how children maintain emotional balance; it's how they cope. Play is such a driving force in children's lives that it is sometimes called the engine of their development. Children today who are experiencing the coronavirus pandemic need lots of imaginative play opportunities to help them make sense of the radical changes that have affected so many aspects of their lives.

Benefits of Online Learning.

Online learning is one of the current trends in the education sector worldwide. Online learning is distributed in all educational establishments, both in pre-primary education institutions and in higher education. Online learning refers to the way knowledge is acquired, which is achieved through the Internet. With advanced and modernized technologies, this type of learning makes teaching and learning simpler, more appealing, and more interesting. The difference lies in content and the interaction of learners, and the style and training methods of the educator. The definitions related to online education reflect the continued development of technology, the complexity and changes of online learning methods, and the interaction of organizations providing online education services with institutions, people, and students using them. Millions of learners worldwide participate in online training and can learn with comfort in their homes. Online learning education can take different forms. It can be used by an educational website, a video on the Internet, or by using platforms for online learning. The article will explain online education, its results, and its benefits.

Online education is certainly not dull and uniform in pre-primary and primary schools. You can offer interesting and creative ideas to children of this great age, how to multiply the lesson. Below, is a list of interactive activity ideas and available learning platforms that can be used in online activities with children:

Card games. The teacher shows cards, and the kids answer what they see. Alternatively, children have cards (or they draw them themselves) and, at the request of the teacher, the children show the card.

Show and say. The class, at the request of the teacher, shows the topic of the hour, in their view, a related case at home.

Home trip. Children prepare a narrative about their home (room) and show and tell others about it in an hour.

Guess what it is... A game with (YouTube). The teacher turns on YouTube videos, such as "Guess Animal Game" and plays video during her lesson, then stops the video and asks questions.

Repeat the steps. The teacher, give instructions such as "Luck Like a Hare," "Tap Your Nose," or play a song and perform actions like songs in the text.

What's missing? The teacher prepares a PowerPoint game, has pictures in a particular order on the slide, pupils memorize their sequence, then the slide disappears and appears with changes, children need to find what has changed.

Charades. Children with movements show the fictional animal (or anything related to your subject) and others try to guess.

We do it together. The pupils in the teacher's management form together origami, and masks. You can also cook some simple food recipes.

Coolkindergarten.com has both language art and math games for kindergarten, as well as a small favorite of reading and math videos. All items meet kindergarten standards.

Starfall.com is a classic starting-learning site for reading, as well as learning language and Turtlediary.com are both reading and math games.

Pbskids.org has a variety of free resources to support families.

Education is an integral part of human life. It is very diverse today compared to how it was before, as learning methods and other major inventions have developed, introducing more obvious teaching methods. THE COVID-19 pandemic has changed the type of training in and outside educational institutions. Teaching and learning activities typically performed when meeting in person have become virtual in different online training applications and online learning has become a new norm. However, education does not end at the gates of the educational establishment. Educators have done everywhere to keep students from going out of this crisis to the losers. Online teaching for teachers is an effective way to give teaching to learners. Online learning has several tools, such as video, PDF files, podcasts, and teachers can use all of these tools as part of their lesson plans. By expanding the curriculum beyond traditional textbooks to include online resources, teachers can become more efficient educators.

In online learning, students can study at home or in any other convenient place for themselves and obtain online learning materials. Online learning teaching materials can be texts, audio, notes, videos, and pictures. Such training has its advantages and, however, a variety of shortcomings. There are a lot of fun ads on the Internet, and they can distract from the learning process. In the online learning of a remote, class members are distinguished by a computer screen. If too many computers are used, learners may face plagiarism, because a variety of available Internet resources are very much used and fewer learners think about themselves. Sitting on a laptop nearly all day can cause visual impairment, as well as online education, can hamper physical development. Online learning can be quite complicated because an educator is responsible for his or her learning and the teacher is not next to calling for a task.

The use of online learning technologies will improve technical skills. Online learning enables you to interact, participate and communicate with your peers and trainers in a variety of ways. Online learning can play virtual and written communication games. Online learning helps you learn to ask specific questions to get the answers you need and also make compelling arguments in a written way. Acquiring a virtual label can also help later by creating a future professional career.

Online learning provides myriad benefits for learners because it provides flexibility. A great way to benefit more from online learning is to combine online learning with traditional forms of teaching. One of the most important aspects of online learning is its inherent flexibility, but it is necessary and must be extremely self-motivated. The best online learners develop a variety of approaches to keeping the spotlight on teaching work. An approach such as booking time every week to learn and create a workspace with minimal entertainment can help. Using online lessons doesn't require traveling to another city or taking long distances. In online learning, we can stay where we are and continue our current work while we work to improve our careers with an online degree. Online learning also helps digital roaming students who have technology-related or location-independent lifestyles. You can watch lectures online and complete your work wherever you are. Online learning allows you to learn from different teachers and educators in different areas, increasing knowledge and skills. It relieves pupils' nervousness because many can communicate more easily through online learning than through regular lessons. Online learning usually allows you to learn for yourself because there is no rush. You can learn from anywhere, provided that your Internet device is available. You don't have to wait several hours to talk to an educator, you can immediately access it via chat or email. There is a lot of educational information on the Internet, with free access.

Online learning is suitable for those who can't visit or get a traditional educational method for one or the other reason. Several million students are currently attending online courses, and this figure is increasing every year. Online education is generally more accessible. Online learning is also relatively cheaper compared to traditional education training. Under traditional university programs, students must offset transportation spending, textbooks, institutional spaces such as gyms, libraries, swimming pools, and other costs that increase the cost of university education. Online learning from it costs only tuition and additional essential costs. Thus, virtual education offers an opportunity for both the wealthy and the poor. Each pupil has a different learning trip and a different learning style.

Some students are visual learners, while some students prefer to learn with audio. Similarly, some students learn in the classroom, while others like to learn individually, and are distracted by large groups. An online learning system with different capabilities and resources can be personalized in different ways. This is the best way to create an ideal learning environment suited to the needs of each pupil. Some people, too, have trouble concentrating and participating in crowded classrooms. Online learning can make it easier for students to focus and more engage students so they can answer questions or ideas that can boost their confidence and positive perceptions.

The advantage of online learning is that the brain can be used anytime and anywhere when an Internet connection is available. In a continuous learning process, the brain does what they do best: think. Active brain function enhances mental health, reduces the chances of developing dementia, and helps the mind absorb information more quickly. Constantly challenging the brain is active and healthy, which can have long-term health and well-being benefits. You can perform different quizzes, watch and listen to educational videos, and read the news.

Potential benefits of online learning include greater access to education. It provides high-quality learning opportunities, improves student outcomes and skills, and expands educational choices. So, location, time, and quality due to online education are no longer considered to be factors requiring the search for study courses or higher education.

Digital technologies provide people with completely different development opportunities in all areas of life: faster access to information, wider job opportunities, a more diverse and wider network of communication and cooperation, and easier access to knowledge.

2021-2027 one of the two strategic priorities of the digital education action plan is to improve the digital skills and abilities necessary for digital transformation. For this you need:

• basic digital skills and abilities from an early age;

• digital literacy, including the fight against disinformation;

• computer education;

• good knowledge and understanding of technologies that require large amounts of data, such as artificial intelligence;

• high-level digital skills that allow more digital professionals to emerge; there is also a need to ensure that girls and young women are equally represented among digital students; the same goes for careers in this field.

With new technologies and new priorities in education, new challenges arise. Naturally, we and our work, the methodologies we use, or the digital teaching tools we choose must change. So, our lessons must also change.

Digital Technology and Media

There is no doubt that technology is bringing a lot of transformations to education, so it opens up a great opportunity for the child and the teacher to expand their knowledge, helping classroom discussions and stimulating interest.

When teachers consciously use interactive media, students can explore and benefit from almost endless resources.

The use of passive media or games that do the work for students or simply entertain them is not encouraged.

True integration occurs when the use of digital technology and media becomes normal and transparent—when the student or educator focuses on the activity or exploration itself, rather than the technology or media being used.

The integration of digital technology and media is successful when it supports the goals of educators and programs for students, provides students with digital tools for learning and communication, and helps improve learning outcomes.

> Digital and media literacy for educators means that they have the knowledge and experience to think critically about the selection, analysis, use and evaluation of technology and media for students to assess their impact on learning and development.

> Digital and media literacy for students means critical skills in viewing, listening and navigating the web. Students learn to filter the messages they receive to make wise choices and gain actionable skills

In other words, teachers should take a very critical look at the offered digital technologies and their benefits for children. Students should not feel hungry for digital technologies, because the acquired digital skills open possible and wider development paths.

Given the current generation's relatively free access to digital technology, we can use it to increase the immediate impact and encourage children to get outside and experience it. Thus, one of the possibilities of the use of digital technologies in the educational process is the knowledge of the environment.

What preparation is needed?

- Tablet, phone, or computer.
- When planning, the teacher predicts which apps he will use in his lessons.
- Takes time with students to download those apps and create an account.
- You can call on an informatics teacher to help you, and dedicate at least one lesson to integration with IT for a common purpose.
- Writes the necessary information or simply prints the app icons and hangs them in a visible place.

What of it?

- Common agreements will emerge.
- Clarity on the use of digital tools.
- The ability to manage them.
- The necessary codes, QR, or icons are always at hand in a visible place.

The Benefits of Outdoor Play for Children

Outdoor games are not only fun but also extremely rewarding activities. Child development professionals distinguish three benefits of playing on the field: physical, emotional, and social. First, the physical benefits. Contrary to popular belief, physical activity is not just about developing great motor skills, it's just as good about fine motor skills. For example, from the age of three, children learn to employ both vision and hand movements at the same time, so they can take not only worthy beads on a wire, but also catch a ball. Eye-hand coordination can also be developed by playing ball, racket, or throwing rings. Exercise itself is no less favourable for physical health: active leisure reduces the likelihood of obesity, improves blood circulation, and strengthens muscles.

Second, outdoor games are also important for emotional growth. Even though you are nearby, being outdoors gives children a sense of freedom and builds self-confidence. It also directly affects the brain - children who play more outdoors acquire organizational and problem-solving skills faster. Outdoor games also help to employ all the basic senses, which improves sensory skills.

Finally, outdoor games are directly related to socialization. By allowing children to play outside over a distance of this distance, we show children confidence in themselves, which strengthens their relationship with their parents. Active outdoor activities allow other children to meet, so communication skills are developed not only between parents but also among peers.

Early educators observed their students in nature and described its positive impact on the child. We can find a myriad of literary works that explore a child's connection to nature and its educational benefits by exploring it on their own. The authors note not only the impact of learning from nature but also the importance of the balance between intelligence and good physical health. Thus, the balance between the spiritual and the physical state, between the body and the mind, has been valued since ancient times. The connection between man and nature is valued.

Mr. Pestalozzi also supported the importance of the idea of teaching from nature. He researched boys left in the wild to study without help. Research has shown that nature is vital to learning and exploring, but according to J. H. Pestalozzi, it is useful when there is an educator nearby.

Most early educators passionately believed in F. V. Froebel's principles and methods. More philosophies supported the idea of a child's upbringing and development through knowledge of the natural environment.

To create a full-fledged environment in which a child can be fully educated and develop, it is important to know the impact of individual elements of the outdoor environment on him or her. Today, the science of psychology has already proven the effect of colours, smells, pleasant sounds, and aesthetic images on a child's psychophysical development. Let's close our eyes, and let's try to go back to childhood and remember what interested us and our friends. How did we like to jump in the

ball, drown in the tall grass, the branches of the tree that we could climb, and if we could still find a grove that we could explore...? The question is why would be.

Many authors and poets have written about the special interaction between children and nature. The special interaction between nature and the child is reflected in almost all of the works of the children's favourite Swedish writer A. Lindgren. Interactions manifested in the spaces he can explore, create, and take advantage of what natural nature gives them. Ms. Lindgren is loved because children find what they are looking for while reading her books.

It is important to adopt a long-term perspective on human development and to create an environment in which children learn to understand and appreciate our complex, interconnected lives on the planet.

Children can gain this experience by interacting with the natural environment around them. Children learn best when they can explore things on their own. Where you want and when you want.

At present, educational institutions are free to choose the curriculum and methods. This is a great responsibility because the team of teachers is responsible for the children's physical condition, health, development of physical and mental abilities, and movement skills. It is important to pay attention not only to the individual abilities and physical abilities of the child but also to the age when applying the chosen methodologies. It is equally important to understand the basic concepts of the theory of physical education, such as physical development, physical capacity, physical education, and so on. Outdoor games are essential for a child's health and well-being. We can safely say that it is not only important to develop movements and coordination when running, jumping, surrounding, and climbing, but also for fine motor skills - when children dig a kindergarten, collect insects or play with sand. Physical activity during outdoor games is also strongly related to the development of a child's cognition. Outdoor games are a natural "laboratory" of research, where children directly observe and explore nature. Children successfully master some means of cognition of the world, acquire first knowledge, and know elementary regularities and causal connections thanks to cognitive – research activities. Through this activity, he knows not only natural phenomena but also himself. This is how socio-cultural understanding is formed.

The outdoor playground is also an environment for social experiences. The child prides himself on acting independently. It boosts his self-confidence. By sharing tools, children learn to communicate, and they learn to cooperate when building sand castles, digging tunnels, or creating safety rules. Studies have shown that children's activities with sand and water soothe agitated and depressed children. During this activity, they express their feelings and thoughts. Children 's emotional state has a significant impact on their communication and cooperation, which means that outdoor activities strongly influence their social competence.

Children become rich in their vocabulary by learning about the names of natural phenomena and natural objects. They use adjectives to describe them and use books to find out the names of trees,

birds, or beasts. By playing with sand and water, they not only expand their vocabulary by using new words but also improve their literacy skills by writing letters in the sand or "baking" letters in formulas. All areas of a child's language - reading, writing, listening, and speaking - can improve during outdoor play. Language is a child's being. Her education cannot be separated from the child's daily life and experience. The more a child knows about objects, phenomena, states, and properties, the more he uses linguistic tools to accurately name the environment. The time the children spend in the yard is just as rewarding as the time spent in the group, and maybe even more rewarding. Educators can use outdoor games to promote children's developmental and cognitive processes.

The fact that education in nature is a constant joy of discovery and cognition is evidenced by the children's thoughts: "I saw a small ant, and its shadow was great" (Kamilė, 6 years old), "Oooo miracle! You can draw with milk" (Eva, 7 years old), "I knew that I could paint, but I didn't think I could draw on paper" (Gytis,6 years old), "I have dandelion-like an eraser. It managed to wipe the pencil with it" (Toma, 6 years old).

Recommendations for Outdoor Learning

Children need constant movement, and they need to play for their healthy development. Activities such as running, jumping, climbing, and playing with water, soil, and sand in natural learning environments enable children to realize their abilities and support their physical development (Francis, 1998; Marcus & Francis, 1998). For this reason, open spaces that allow children to discover new things and play games are very important. Especially in the spring and summer periods when the weather is warm, the importance of open spaces draws more attention.

Open spaces meet the movement and play needs of children and also affect their healthy development in terms of physical, spiritual, mental, and social aspects. These effects can be listed as follows:

* Outdoors contribute to children's ability to move freely, think creatively, enrich their imagination, solve problems, and socialize.

* As a result of urbanization, children cannot explore artificial spaces and their surroundings. However, with outdoor spaces, children are intertwined with nature and are sensitive to nature. With nature, children can activate their senses (touch, smell, hearing, sight, hearing).

* With plants in open areas and gardens, children notice that the color of the plant changes and the seeds are formed and germinate. Thus, a sense of curiosity arises in children, and this allows them to establish a cause-effect relationship.

* As children learn the names of plants and animals, their abilities such as exploration, observation, and research development. Children become sensitive to the environment with plants and animals, they love living things.

* With the outdoors, children learn to express themselves. They develop their decision-making and organizational skills with self-confidence.

* Children play in cooperation with each other in the outdoors. Outdoors supports the social and emotional development of children.

* Outdoor games have effects on children in areas such as research, risk-taking, and psychomotor skills.

With the education it provides, pre-school education and primary education institutions aim to socialize children and develop the right personality by supporting all developmental areas of children aged 03-10 with healthy environmental conditions and expert educators. For this reason, the exterior and equipment of the preschool education institution are at least as important as the interior space for the development of children. In this context, the environment of the school is defined as a place where home-like design features are intertwined with educational design elements. Consistent with the interior design, the exterior design of the school should have an entrance that welcomes children in form, materials, scenery, and space.

The following are some of the issues to be considered in terms of effectiveness while organizing the outdoor space.

* The size of the outdoor space should be such that children can move freely. According to some opinions, there should be at least 3 square meters of space for each child, while according to others, the area per child should be at least 6.5 square meters.

 * Placement of playgrounds should be arranged by considering the participation of children in activities. It is important that the active areas (moving playground) and passive areas (science education area, sandbox, art, and literacy area) are placed in such a way that they balance each other. For example, moving areas such as slides, swings, see-saws, and climbing ladders in the playground should be together; Quiet areas such as sandbox, science education area, art area, and literacy area, where children can communicate more with their friends, should be together (Ummanel, 2017).

* Outdoor covered areas should be suitable for use in activities such as Turkish language activities, and art events. The teacher should not only allocate time for these activities in the classroom but also perform the activities indoors (Bay, 2016).

* Playgrounds should include both individual and group activities. Both individual and group activities, such as art activities, games, science activities, and Turkish language activities, should be planned in a way that allows children to learn by doing and experiencing.

* Children's access to water is very important both for activities and for the care of plants grown by children in the garden. The child should be able to wet the soil and sand with water while playing; be able to observe the differences in the wet sand; should be able to discover floating and sinking objects in water (Ummanel, 2017).

Some points to be considered in terms of materials when arranging an outdoor space are listed below.

* The places where the game tools are in the playgrounds should be well organized. Children should distinguish in which areas they can play; equipment should not be intertwined/mixed. Like learning centers in classrooms, playgrounds should be planned with clear boundaries. For example, the slide in the playground should not fall within the boundaries of other areas (Gül, 2012).

* The variety of materials should be suitable for the number of children; It should be convenient for children to do individual activities, communicate with each other, share, and cooperate.

* The materials must be of a quality that will support all developmental areas of children. Physically, children's physical skills such as gross and fine motor; social-emotionally, socializing, playing cooperative games with their friends, and communication skills; From a cognitive perspective, it should support problem-solving skills, thinking skills from different perspectives, and discovery skills (Ummanel, 2017).

* The materials should be of a quality that will attract the attention of children. It should consist of materials that activate the imaginations of children, develop their creative thinking skills, and consist of vivid colors. Materials should consist of natural life (stone, branch, leaf, wood, etc.) and materials that the child may encounter in daily life (sieve, rake, shovel, bucket, etc.).

 Some points to be considered in terms of adaptation while arranging the exterior are listed below.

* Outdoor should be suitable for different age groups. Children aged 0-3 are willing to try. Outdoors should provide a safe zone for children. It should be adapted to create an environment suitable for the development and physical characteristics of children. In children aged 3-5, 5-7, 7-11, on the other hand, activity levels, finesse in motor skills, thinking processes, etc. should benefit from the outdoors (Gül, 2012). Outdoor materials should be adapted in such a way that children choose materials suitable for their age group.

* Outdoors should also be suitable for children with special disabilities. Children with special needs should be able to receive education together with their peers in the same classroom environment and outdoors, participate in activities, and adapt the materials. Especially for students with physical disabilities, the entrance to school buildings should be supported with ramps, and guardrails should be placed on the side of the ramps. School and classroom doors should be suitable for wheelchairs (Kaymaz, 2015).

 Some points to be considered in terms of diversity while arranging outdoor spaces are listed below.

* Outdoor terrain should be suitable for children's mobility needs. Children enjoy spending time on rough terrain rather than flat terrain. Therefore, rough terrain (hills, pits, etc.) should be designed in such a way that children can move freely (Ömeroğlu, 2005; Gül, 2012).

* Outdoor must have different floor areas. The ground should consist of natural (soil, grass, gravel) and artificial surfaces (concrete and rubber), a natural arrangement of the ground with bushes and trees. In this way, it should recognize different soil properties (Güleş and Erişen, 2013).

* Outdoor should be suitable for children to observe the plant life cycle. In this area, children should be able to recognize and love plants and develop a conscious perspective toward protecting the environment (Gülay, 2011). The child should be in touch with nature, there should be plant areas where he can grow himself. Children should participate actively in this area and be able to observe the formation of plants. In this way, children can develop a sense of responsibility and life skills in the work they do (Çelik, 2012; Bay, 2016).

* Outdoors should be suitable for animals to observe they are natural habitats. As a result of this observation, children should get to know animals, gain sensitivity in terms of protecting them, and gain feelings of love and responsibility for animals (Gülay, 2011). Alongside these clear connections with the "natural" world, a diverse and well-designed gaming environment provides an opportunity to develop important lessons in cooperation, ownership, belonging, respect, and responsibility (Johnson 2000, Malone & Tranter, 2003).

* Visual figures used outdoors should be attractive to children. The venue should provide a pleasant and pleasant environment for the child. Colors and figures should be designed in a way that attracts the attention of the child and should give an aesthetic appearance (Benliay, Cüce, & Soydan, 2014).

Mentoring in the New Normal

Continuation of learning without the presence of physical classes

There are indications that teachers have not gotten over the difficulties due to the abrupt changes in the education system, with most of them leaning towards learning technological skills to cope with the needs of the online modality. In addition, teachers have problems with the transition of materials from traditional to digital teaching. These are complicated by the need to make these lessons interesting and functional for the learners.

Letting the educators have their learning adventures can be advantageous since they must grasp further the concepts being studied in science. In addition, he also pitched that teachers also pick up knowledge by doing activities that they are teaching. The pedagogical aspect should focus more on the student's skills development, which encourages them to participate actively in the discussion.

Challenges encountered by the teachers

Along with these changes are challenges that these educators face. Several problems are experienced in this learning modality. One of which is how learners can cope with the lesson, including the materials used in the class session. In addition, the reliability of assessment being given after the learning session is also of great concern for the educators. It is highlighted when most students are not present in class.

Also, there is a high possibility of cheating and academic dishonesty in this type of learning scenario.

One of the biggest casualties of the pandemic has been the freedom for trainees to move around a school, following students or teachers for example. There is also limited opportunity to spend time with a range of staff. Schools compensate for this in several ways, for example using the 'virtual tours' that many schools have now created to help trainees find their way around and arranging pre-visit remote calls with a wide range of teachers and support staff.

Some activities aren't allowed at the moment in many schools – such as practical work and these obviously can't be done by trainees at the moment. Experienced teachers are also finding that some common teaching practices are harder than others, for example, group research projects.

Remote meetings and possibilities

Remote mentoring became a necessity at the start of the pandemic – but more and more schools and teacher training organizations are introducing innovations that would not have been possible earlier. For example, mentors are bringing mentees together in small lesson study groups or bringing other expert members of staff into discussions. Meetings can also take place at more flexible times, as mentors don't have to travel long distances at the start or end of the day.

Defining the outdoor education

There are several key terms used to define this growing movement:

- Environmental education is a process that helps individuals explore environmental issues, engage in problem-solving, and take action to help the environment.
- Place-based education is a teaching philosophy that uses "place"—lands, waters, people, history, and culture—as a starting point for learning.
- Nature-based early childhood education combines early childhood and environmental education to use the natural world to guide learning through time spent engaged with nature.
- Outdoor learning is simply the act of teaching and learning outside.

No two outdoor classrooms are the same. Learning spaces can be created in schoolyards by incorporating stumps, hay bales, or other natural elements for socially distanced seating.

Studies confirm what we intuitively know to be true - nature is good for kids. Incorporating nature improves academic achievement when compared with "traditional" instruction. Teachers report increased student engagement, critical thinking, and social skills.

The Proper Creation of Educational Environments

The proper creation of educational environments and their constant reorganization should help children to understand that no matter what they experience and come close to, they are always expected to have a reasonable and critical attitude, a commitment to overcome superficiality, and seek a deeper understanding of certain things. A properly designed educational environment conducive to the development of critical thinking can stimulate thinking, ingenuity, and curiosity, raise self-esteem, self-confidence, and a sense of self-worth, and strengthen motivation to act. To create such an environment, it is important to ensure sincere, warm, safe learning conditions, for cooperation between the teacher and the child to prevail, and for the environment to be activating and motivating.

Learning takes place both indoors and outdoors. The outdoor environment is a place to run, play, and learn. Research shows that children learn best in environments where they feel safe and free to explore and learn, and where they have secure relationships with caring and responsive adults.

The environment not only affects how we feel and tells us how to behave, but it can also influence what we learn. The Reggio Emilia approach to early childhood education recognizes the enormous influence of the environment, calling it the "third teacher" (parents and teachers are children's first and second teachers). The Reggio Emilia method was developed by Loris Malaguzzi, who is best known for his role in developing and developing the Reggio Emilia approach, a child-centered philosophy of early childhood education based on the belief that children are powerful and capable individuals, capable and willing to create their knowledge. This approach assumes that children are powerful learners and that children's interests should guide adults' decisions about learning, including the environment and materials provided.

The learning environment plays a critical role, and teachers' awareness or thoughtful planning and action in creating

spaces and selecting and placing materials have a significant impact on children's levels of engagement and learning.

When creating an outdoor space, educators must consider various design aspects to ensure that it is accessible to all children. Good design will give children choice and challenge them enough to allow them to take risks while balancing the need for safety.

Natural play spaces provide children with a unique opportunity to take thoughtful risks and challenge themselves through physical activity that they cannot achieve in other ways.

Experimenting and working in natural environments fosters a sense of connection with nature. It is this connection with nature that creates opportunities for the development of harmony for very young children.

Permanent outdoor spaces should be flexible so that educators can respond to children's interests and development.

With separated parts and unlimited resources, children can play and participate in the game according to their level and follow their ideas.

The role of the educator is to engage with children in these spaces and help explore children's ideas, provoke learning, and test theories.

What is it?

When we analyze what drives young children's explorations and activities, especially outdoors, in real and natural environments, we find that they raise complex questions about the world: how the world works; what is in it; who am I; what things do; what should I do with them

The outdoor environment is an inexhaustible source of questions. Outdoors, children have more opportunities to explore the world, thus developing their cognitive functions. Here, children find not only plants but also various insects (bees, butterflies, ants, etc.) that they can touch, examine, and observe. Children can make paints from the plants collected in the field, with which they can then reproduce them while observing the falling autumn leaves in the field, and looking for colors, thus developing attention concentration and artistic taste.

Digital Environment

National and international educational documents emphasize the importance of developing a person who bases his life on human values, thinks critically, and can adapt to a changing society.

Digital technologies play an important role in education today. They are an important resource in the process between theory development and educational practice and are essential in the process of understanding sustainability.

Sustainability in education is understood as the educational system's ability to engage in multifaceted and continuous improvement-oriented activities that are consistent with basic human values

When we talk about outdoor education and the use of digital technologies in the educational process, we cannot avoid talking about the very important topic of environmental education. Environmental education arose out of a prominent need to protect the environment, and with this concern to be careful and diligent about nature and everything that belongs to it, people, as an integral part of nature, also began to develop certain strategies to teach the public to appreciate the importance of this topic. According to Maciel et al. (2019), contact with nature is very important for individuals, because they learn a lot about the values that exist in society, always paying attention to conservation and

maintenance of sustainability. Protecting nature is everyone's responsibility because it is a collective good, the preservation of which we must all take care of. Education has to provide students with various education understanding of natural phenomena.

Contact with nature is very important for individuals because they learn a lot about the values that exist in society, always paying attention to conservation and maintenance of sustainability.

Protecting nature is everyone's responsibility because it is a collective good, the preservation of which we must all take care of.

The concept of environmental education

It is very important to understand that environmental education is a field of training whose purpose is to raise the awareness of individuals about environmental problems and to help fight them by conserving nature reserves and not polluting the environment. Environmental education seeks to preserve precious resources - nature and everything that surrounds it. This is a task that arouses public concern about what harms nature: deforestation, soil degradation, air and water pollution, and garbage.

Environmental education is understood as a process during which the individual and the community develop social values, knowledge, skills, attitudes, and competencies, the purpose of which is to protect the environment, for the common use of people, for a healthy quality of life.

Environmental education is more than just learning about plants and animals and the environment: it is an invaluable tool in teaching critical thinking skills and their application in children's everyday world.

"Our task is to help children communicate with the world using all their abilities, strengths and languages, and to overcome all the barriers created by our culture." (Loris Malaguzzi)

Society depends on technology

The speed at which information reaches its destination is impressive and in record time outpaces information and changes in all sectors of today's society, primarily reflecting the health, education, policies, and practices of all people involved in this reality.

There is no doubt that technology is bringing many transformations to education, providing a great opportunity for the child and the teacher to expand their knowledge, helping classroom discussions, and stimulating curiosity.

Of the great revolutions in human communication, technology is undoubtedly the most recent of our time.

The use of digital technologies can promote quality education when combined with inclusive education, as it can remove barriers, which for some is the only way to enter the world of education and culture.

How can digital technology tools be used to encourage students to engage in activities that help them appreciate nature and explore environmental issues?

When teachers consciously use interactive media to reinforce the foundations already established in their group, children can explore and benefit from almost endless resources. The use of passive media or games that do work for children or simply entertain them is not advocated. It is very important to use interactive technologies that help children establish relationships with the natural environment and live with it.

Integrating digital technology into the regular curriculum provides children with additional tools to enhance their educational experience. Digital technologies can help children with different learning styles understand and communicate their experiences through verbal, written, spatial, quantitative, and/or graphic means.

Use of digital technologies | Interaction with digital technology should be playful and support creativity, exploration, pretend play, active play and outdoor activities.

Interaction with digital technology should be playful and support creativity, exploration, pretend play, active play, and outdoor activities. Play is a key factor in children's development and learning. Children's interactions with technology and media mirror their interactions with other play materials and include sensorimotor or hands-on play, make-believe play, and games with rules. Therefore, children need opportunities to explore technology and interactive media playfully and creatively. Appropriate experiences with technology and media allow children to control the medium and the outcome of the experience, explore the functionality of these tools, and pretend how they might be used in real life.

True integration occurs when the use of technology and media becomes normal and transparent—when the child or teacher focuses on the activity or exploration itself, rather than the technology or media being used. Technology integration is successful when the use of technology and media support the goals of educators and programs for children, provides children with digital tools for learning and communication and helps improve child outcomes.

For example, drawing on a touch screen can complement children's graphic representation experience; By manipulating the colorful shapes on the light table, children can explore colors and shapes. These options should not replace paints, markers, crayons, and other graphic art materials, but should provide additional opportunities for self-expression. By focusing on technology and interactive media as tools rather than ends in themselves, teachers can avoid the passive and potentially harmful use of non-interactive linear screen media that is inappropriate in early childhood.

Accuracy is the key to proper development.

One must consider whether the objectives can be more easily achieved through traditional classroom materials, or whether the use of certain technologies and interactive media extends learning and development in other ways. Exciting new resources in today's technology-rich world, such as 3D-rendered collaborative games and immersive world environments, are the next frontier in digital learning for our youngest citizens, leaving talented teachers and caring adults to decide how best to age-appropriately use each new technology as an opportunity. use children to learn in developmentally appropriate ways. Proper integration of technology and media requires careful evaluation and selection of tools.

Accuracy is the key to proper development.

Digital Tools for Teachers

Below are some ideas for interactive tools and resources that we can use with students when thinking about environmental education, outdoor learning, or visualizing collected materials.

Web cameras give educators 24/7 access to wildlife.

Webcams can bring distant locations into the classroom and allow students to observe events in real-time. Of course, with webcams, animals are sometimes active and sometimes not. However, it is often possible to see fragments of animal activity from previous days or view data recorded by scientists. Webcams can also allow video conferencing and collaboration with other children, educators, or experts across the city or the world or eTwinning projects.

https://www.edinburghzoo.org.uk/webcams/penguin-cam/#penguincam

POP-UP LEARNING

More Cams to Explore

Tundra Lodge Cam

See wild polar bears in their natural setting as they wait for the sea ice to form on Hudson Bay.

Watch Live Cam

Beluga Cam

Tune into the Beluga Cam to immerse yourself in the chirps, clicks, and charisma of these gregarious whales.

Watch Live Cam

Northern Lights Cam

Watch northern lights ripple across the night sky in Churchill, Manitoba—best viewed in February and March.

Watch Live Cam

https://polarbearsinternational.org/education-center/polar-bear-cams/

https://explore.org/livecams/panda-bears/china-panda-cam-1
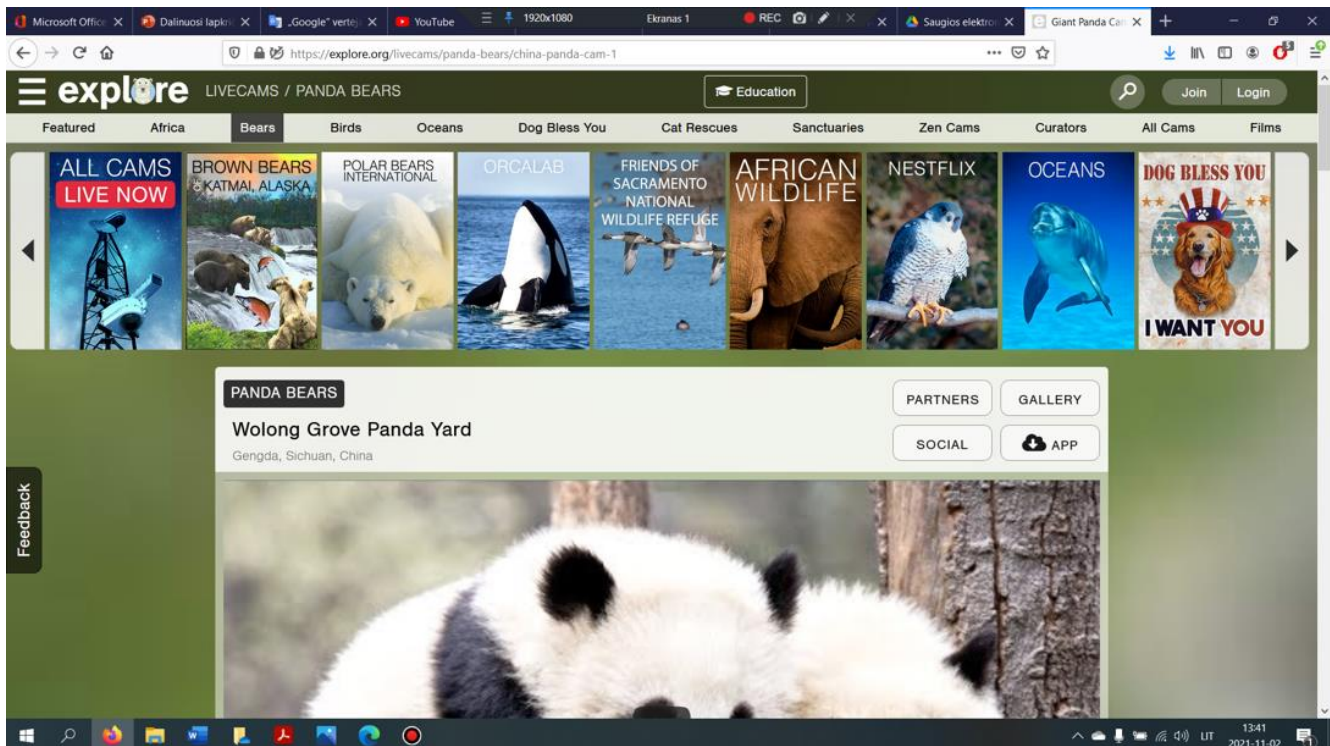
We can observe the celestial bodies even during the day with the help of the Star Walk 2 android application that works on a phone or tablet. We can download it from Play Store.
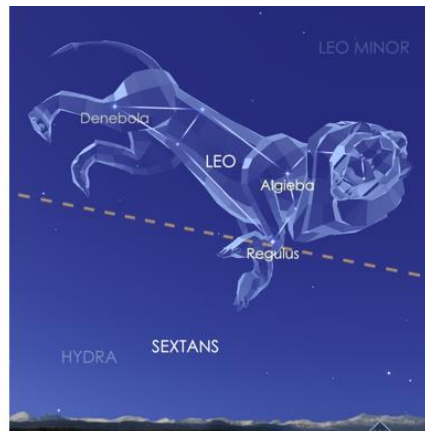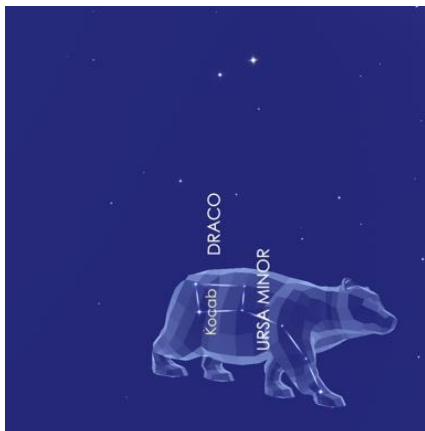
Observing the "Heavenly Bodies" | Star Walk 2

After learning in the classroom, we can go outside and try to find familiar animals, symbols, constellations, planets, or horoscope signs in the sky. We can also find Sun, Moon, Jupiter, Mars, and other planets in this app. We can also view them in 3D even during the day.

Scanners are inexpensive tools that allow teachers to create digital images of a wide variety of objects that can be used in the classroom in a variety of creative ways. Everything from a student's work to the leaves of a schoolyard tree can be digitized using the scanner. Scanners can create digital images of plants, insects, or other specimens from the environment for close-up examination. Once the scanned images are created, they can be integrated into other programs for classroom activities.

We simply lay out natural materials, we can use scraps of fabric, thus creating important essive pictures, and photos that we can use to decorate greetings or boor ks, stories.

Leaf dance

POP-UP LEARNING
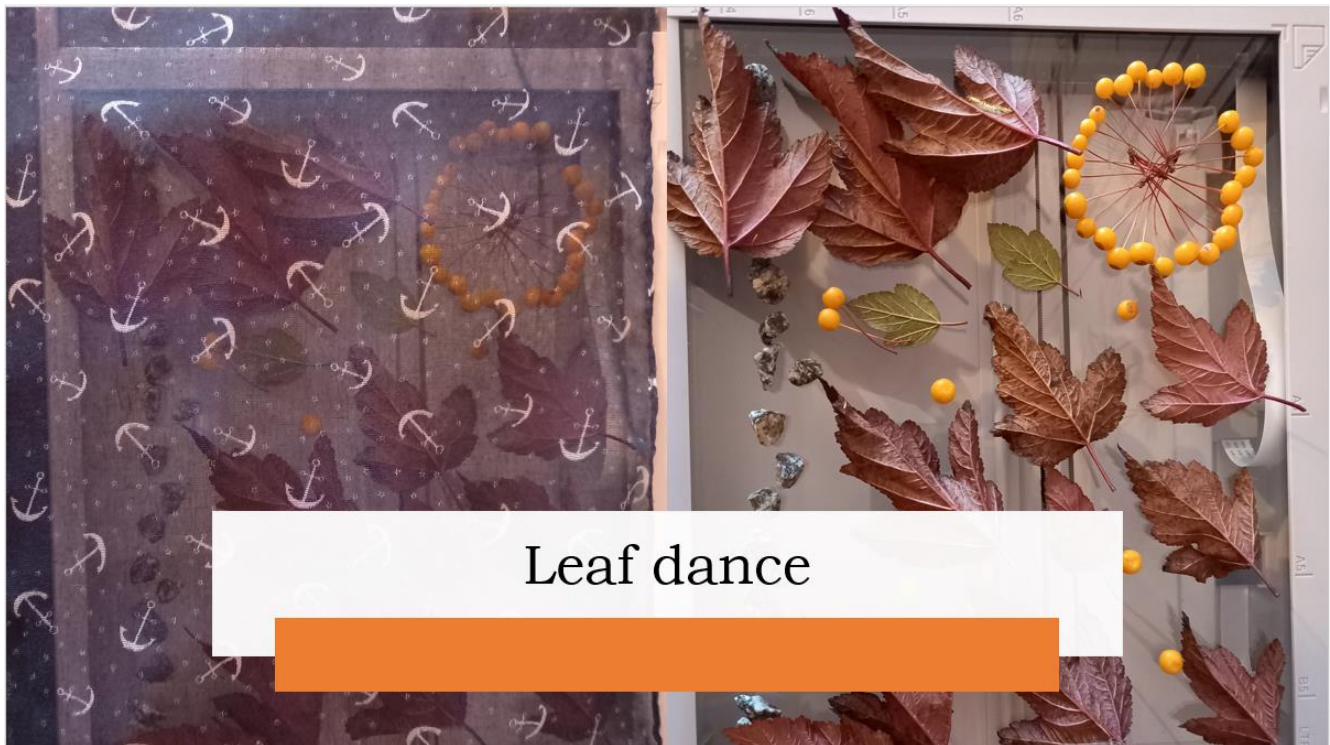
BirdNET. How can computers learn to recognize birds from sounds? The BirdNET research project uses artificial intelligence and neural networks to train computers to identify more than 3,000 of the most abundant bird species around the world. You can record a sound with your Android device's microphone and see if BirdNET correctly identifies the likely bird species in your recording. Get to know the birds around you and help us collect sightings by submitting your posts.

BirdNET

BirdNET is a joint project of the K. Lisa Yang Center for Conservation Bioacoustics at the Cornell Laboratory of Ornithology and Chemnitz University of Technology.

| Record a bird call. | Identify the species. | Learn more about the bird. | Explore your area. |

https://birdnet.cornell.edu/
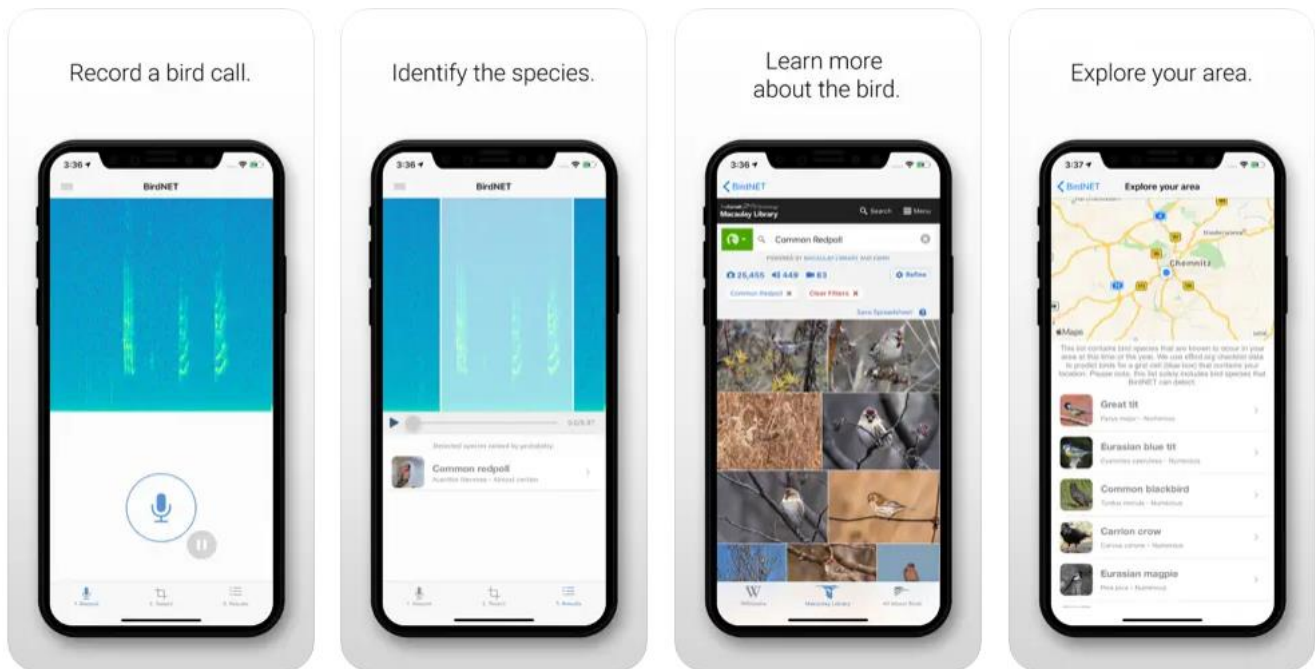
Voice recording Web Apps by 123apps

Voice Recorder is a convenient and simple online tool that can be used right in your browser. It allows you to record your voice using a microphone and save it as an mp3 file**.**

https://online-voice-recorder.com/
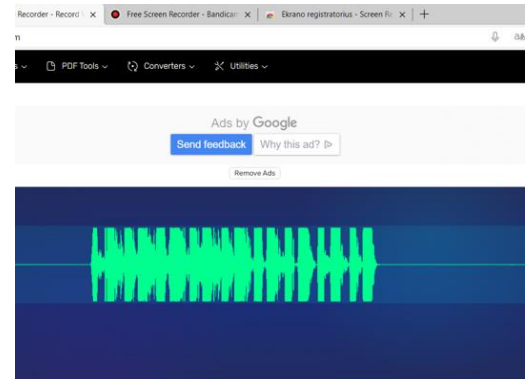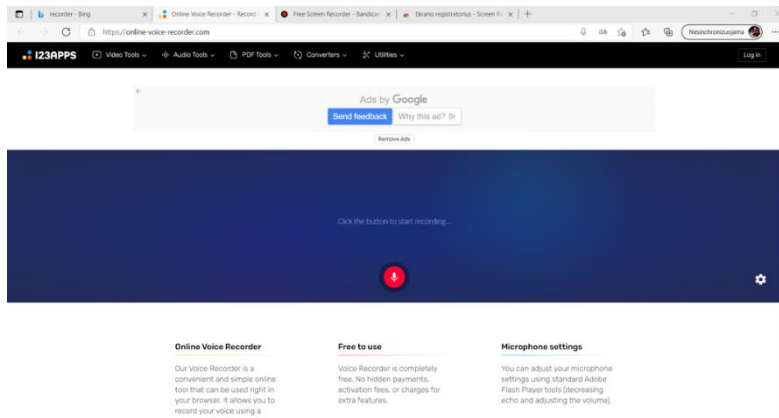
Sound library MIX KIT. Mix kit is a free gallery of awesome stock video clips, music tracks, sound effects and video templates.

https://mixkit.co/fre,,,e-sound-effects/rain/
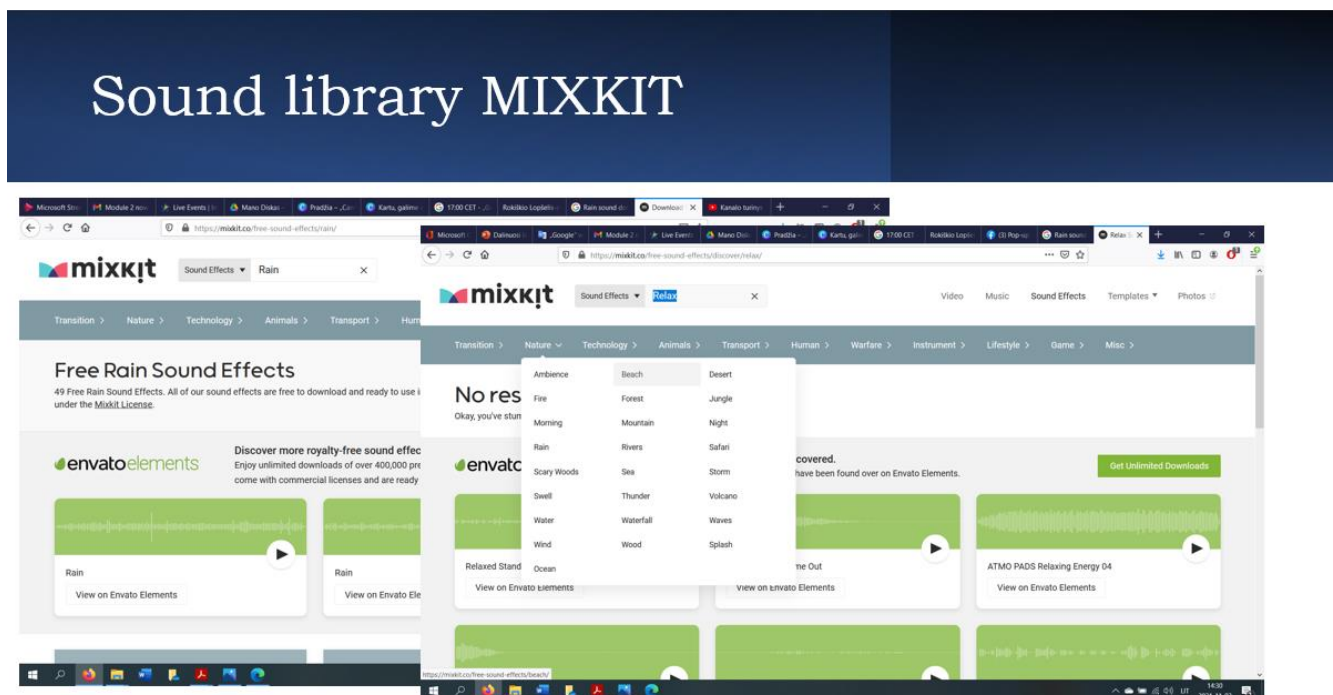
Development of design with Canva. For people and teams who want to create absolutely anything from logos and social media content to documents, prints, and more. Loads of free templates, photos, and fonts to bring photos vision to life.

https://www.canva.com/
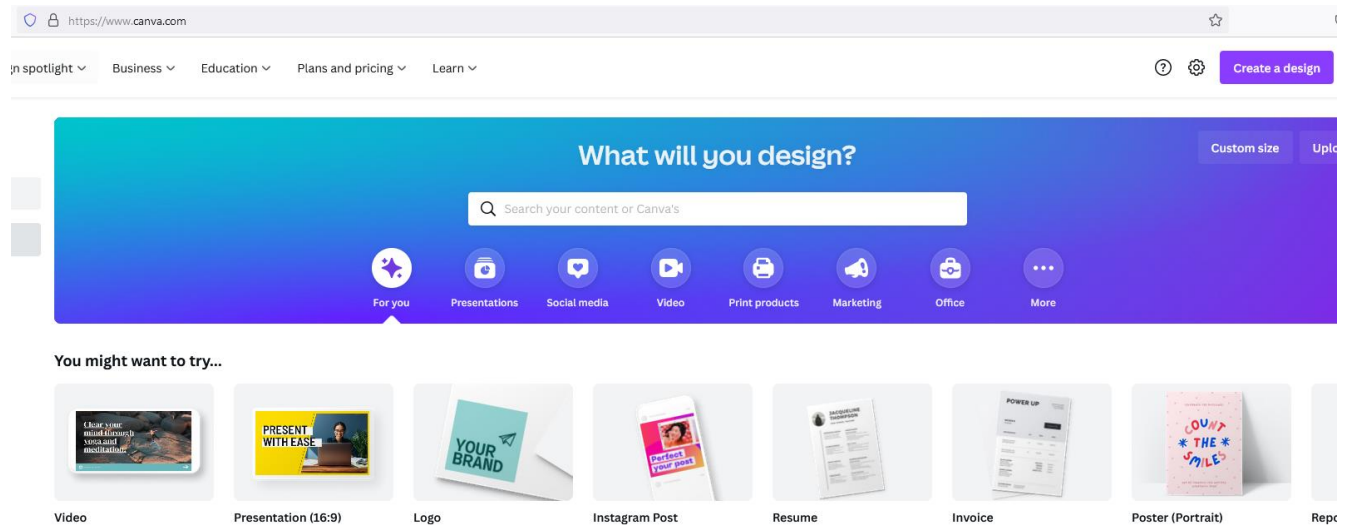
The 3D viewer is a 3D computer graphics viewer and augmented reality application. Easily view 3D models and animations in real-time. 3D Viewer lets you view 3D models with lighting controls, inspect model data and visualize different shading modes. In Mixed Reality mode, combine the digital and physical. Push the boundaries of reality and capture it all with a video or photo to share.
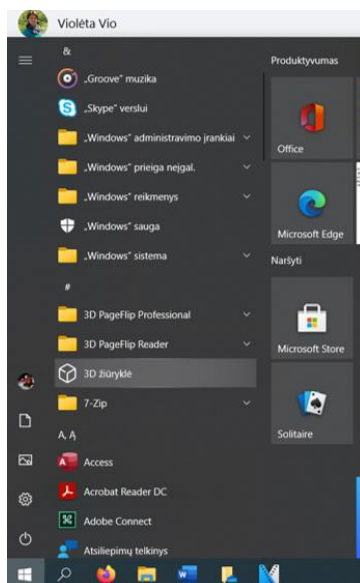
How to view 3D animals in Google Search

1. Open Google app on your Android or iOS smartphone.

2. Search for the animal that you want to view in 3D.

3. Scroll down and tap on the View in the 3D option below the description.

4. Now you will be able to see the animal you searched in 3D view.
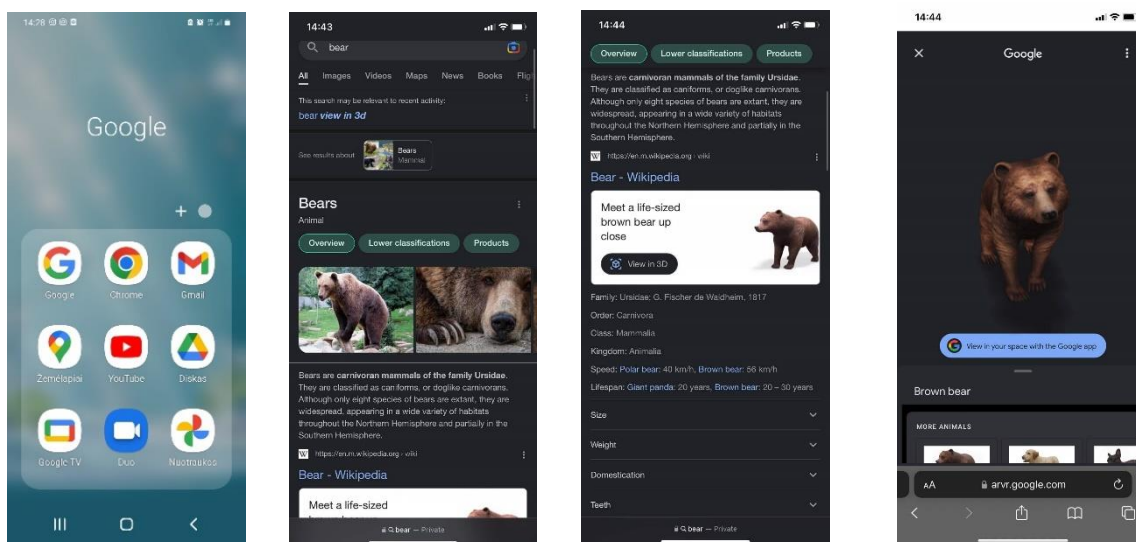
Given the current generation's relatively free access to digital technology, we can use it to increase the immediate impact and encourage children to get outside and experience it. Thus, one of the possibilities of the use of digital technologies in the educational process is the knowledge of the environment.

Outdoor Activity Planning

When organizing group activities, the teacher needs to consider four phases:

Preparation for group activities	→	Organization of group activities	→	Monitoring and controlling the work of groups and intervening in it	→	Assessment of group work results and process
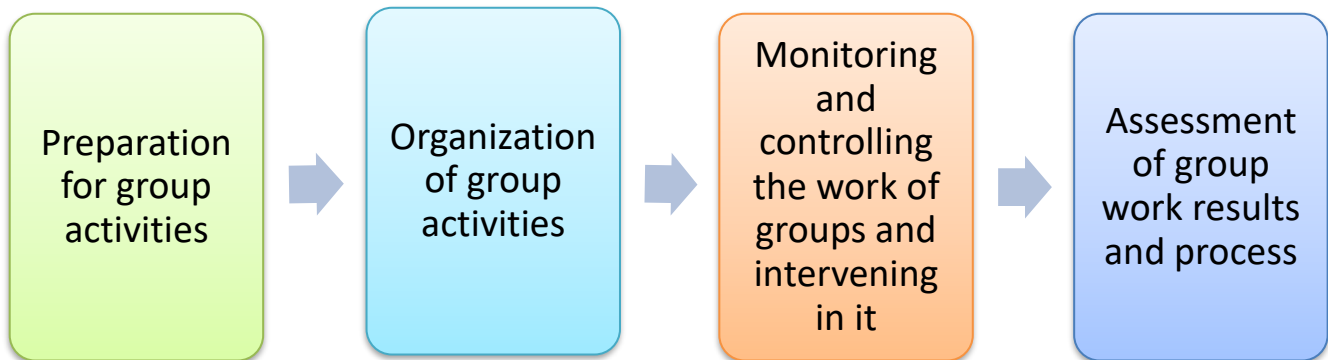
When choosing methods and activities, it is important to consider:

✓ connections with the topic under consideration/discussed, session objectives, and participants' expectations;

✓ opportunities for all participants to participate in all sessions;

✓ preparation of the environment to perform the intended tasks;

✓ selection of interesting tasks for the participants;

✓ time to task prediction;

✓ knowledge of the course of the task and its consistent application and its place of use in the session;

✓ consistent interpretation of task conditions/rules, if necessary, demonstration;

✓ the availability of the necessary means to perform the task;

✓ ability to work and manage a group.

Working in groups allows:

✓ better use of participants' potential;

✓ create conditions for new participants' contacts;

✓ it is easier to discuss - even those participants who do not wish to speak can appear;

✓ promote the activity and work intensity of individual participants;

✓ in different groups to study the topic in different ways and achieve different results.

Examples of Outdoor Learning

The outdoor learning environment should be an extension of the indoor environment. Learning time outdoors offers endless possibilities. We can improve our activities by taking them outside and using natural elements to teach concepts. The following are ideas and examples of ways to enhance learning through the outdoor environment.

Life cycle of a Plant

Forms a dandelion growth cycle.

POP-UP LEARNING

Preparation:

- working sheet on the life cycle of the plant;
- telephone;
- dandelion field;
- interactive blackboard;
- a presentation of the plant's life cycle with video and interactive games.

Description

Introduce the class to the subject of teaching, the life cycle of the plant. In a presentation with video and interactive games, the class goes down to the fact that the life cycle of most plants starts with a seed and then complete grows a plant.

Engage students in a discussion of what they are known about plants. Some great discussions the questions are:

Where do we see plants? What plants need to grow?

The study takes place throughout the dandelion growth cycle. Children go out and work in groups, and the photographer (filmed) photographs correspond to each growth cycle. At the end of the study, complete the working page and make digital material for the dandelion growth cycle with the help of the teacher, using their photos and videos.

Skills to be developed

- The student will be able to name stages of the growth cycle.

- Will name what plants need to grow.
- Learn digital skills.

- Will know more about the growth and reproduction of dandelions.

- Jointly develop digital material on the dandelion growth cycle.

- The learning process can be integrated with other teaching subjects. (math, art, languages, etc.)

My 5 senses outdoor hunting

Name and group 5 senses.

Preparation:

- a worksheet with a list of things you're looking for;
- the phone;
- go to the park, open-air, or school area.

Description

In an hour of knowledge of nature, children develop their tracking skills.

The theme of the hour is sensory organs. Engage students in a brief discussion of the five senses (scent, vision, touch, taste, and hearing).

Children feel in Detectives using a working page. The students go out with their phones and their job is to find and photograph as many things as possible that fit each sense. Then the children interactively group together with the teacher the things that have been billowed (by sensory organs).

Skills to be developed

- Helps to develop observation skills (color and texture recognition, which is important for learning science.)
- Name and recognize all senses.
- The use of digital technologies.

Building a bridge or city model
Scientific activity.

Preparation:

- walk through town (bridges, buildings...);
- marshmallows;
- toothpick;
- cardboard;
- paper;
- scissors;
- glue;
- felt pens.

Description

The topic of the hour is the city. The teacher shows the city with the help of the presentation and what is typical of it. The class walks around town together, and the children watch bridges and buildings (a photographer's favorite buildings). When come to a class, the task is to create a bridge or building model in groups. Once all the groups have finished, they can create a whole city outside of the models.

The lesson is integrated (design and technology, knowledge of nature).

Skills to be developed

- Develops your thinking in design.
- The first pre-existing houses and bridges are forming.
- The student works in science.

Floating or sinking?
A study on the relative density of objects.

Preparation:

- things from different materials;
- containers for pouring water (lake or river);
- interactive blackboard;
- worksheet for tracking.

Description

Students will work in small groups to check for objects to sink or float and will describe them on the worksheet. The students write up their own list of objects which they think are sinking and which are floating. Then the students go out to check if it can be used to pour into the water in dishes or go near a lake or river. Finally, the teacher on the interactive blackboard shows and explains why objects sink, while others float.

Skills to be developed

- Present basic concepts of sinking and floating.

- Students learn the relative density of different subjects.

- Perform experiments on the relative density of objects.

- Recording observations and analysis of the data obtained.

Magical magnifying glass
Perform a study with a magnifying glass.

Preparation:

• magnifying glass outdoors (e.g. courtyard, park, etc.);

• natural materials (buds, trees, stones, seeds, leaves, grass, etc.);

• paper or journal;

• coloring materials.

Description

The class goes out. The teacher explains to the class that magnifying glass is a feature that scientists use to see things at a small, molecular level. Find something interesting outside, like a ladybug. The kid first looks at the ladybug without a magnifying glass and draws/tells about what they see. Children then observe the ladybug using a magnifying glass.

Then children compare their sights with and without a magnifying glass. Students continue to study nature around themselves.

Point to discoveries such as veins on a leaf or ants on three parts of the body. When come to the classroom, a teacher with an interactive blackboard shows how is make magnifying glasses and their principle of action, as well as interesting things that can be seen using a magnifying glass.

Skills to be developed

• Magnifying glass gives new sightings to be revealed and suspects about the world around them.

• Students shall develop their science skills.

• Students have pre-screens, as magnifying glasses have been made.

Making a parachute or machine

Students feel in the roles of engineers.

Preparation:

- straw;
- balloons;
- corks;
- trees;
- plastic bags;
- thick thread;
- other household articles that can be used.

Description

In this design thinking exercise, children will create a parachute for a small toy or car model using typical household objects. Children can experiment with different materials until they find those that work best. The aim is to create a parachute that will keep their toy in the air for as long as possible. They can create different types of parachutes and compare them to see who works best.

The students watch the video as they make their own car, powered by a balloon. Created models, children try outside film trips and form competitions.

Skills to be developed

- Students will find out about Newton's second law, using their engineers' design skills.

- Students develop a pre-test, which is an engine.

- Useful use of technology in the learning process.

Erasmus+

Find treasures with compass

Learn how to use a compass, by coordinates.

POP-UP LEARNING

Description

The teacher begins an hour about the cardinal directions. Tells that children will use a compass at this hour to find north, south, east, and west. Students must find the hidden prize at the given coordinates, using only a compass.

In the field of design and technology, children can create their compasses, which will help them learn better about compass design. The compasses created, the class can be used in the hunt for hidden treasures.

Skills to be developed

- Students will learn cardinal directions.
- Learn how to use, a compass with given coordinates.
- Gets a pretext about compass structure.

Preparation:

- compass (* can use created compass);
- hide treasures somewhere outside;
- coordinates leading to hidden treasures;
- compass (magnet, felt pen, paper container, attachment).

Erasmus+

All about trees

Students know the trees in a variety of ways.

POP-UP LEARNING

Preparation:

• working sheets about trees;

• presentation and interactive games about trees;

• the phone;

• go to a park, open-air, or school area.

Description

The teacher calls the lesson subject trees. At the beginning of the lesson, children watch videos and participate in interactive games about trees. Then the class goes out, studying the trees. The children will work with the given worksheet and use the phones. Children have to photograph different trees and collect the leaves of trees that were listed on the worksheet. Children fill out working sheets and tell about their jobs to classmates. Later, a class with a teacher makes its own established digital material about trees.

Skills to be developed

• Students can name a tree structure.

• Practice finding the type of leaves of each tree.

• Use of technology.

Erasmus+

How does a rainbow form?

Students study the rainbow in different ways.

Preparations:

• to create a rainbow, will need;

• small container (saucepan);

• sunlight or lamp;

• white surface or paper;

• mirror;

• working page for rainbow sightings.

Description

The teacher, through an interactive blackboard, shows and tells how a rainbow is formed. Students go outside to perform an experiment, which can also be conducted during sunny and cloudy times. Fill a small container half with water. Place the mirror in the water at an angle. Moves the light of the headlamp into the water where the mirror is located (or experiment with daylight, pull out the container and place it so that the beams get directly into the mirror below the water).

Holds a white sheet of paper above the mirror, adjusting the angle so that the rainbow appears. In the classroom, the teacher shows how to get a rainbow (even in the dark). Students fill out a working page on rainbow sightings.

Skills to be developed

• Students learned how a rainbow forms.

• Children try to learn how to create small and large rainbows using different ways.

• Students learn the colors of the rainbow.

Another way how to see a rainbow has to be a hose connected to a tap with water. It is then necessary to squeeze the end of the hose so that the water is released from it in a fine spray and to push it up into the sun. A rainbow will play in water spraying.

All about birds
Students know birds in a variety of ways.

Preparations:

• working sheets about birds;

• presentation and interactive games about birds;

• the phone;

• go to a park, open-air or school area, or class can go to the bird watching place.

https://birdnet.cornell.edu

Description

The teacher calls the lesson the subject birds. At the beginning of the lesson, children watch videos and participate in interactive games about birds. Then the class goes out or goes out in nature, for studying the birds. Students will work with the given worksheet and use their phones. Children have to photograph different birds and type their songs as fares possible. Children fill out working sheets and tell them about their sights on classmates. Later, a class with a teacher makes its own established digital material about birds.

Skills to be developed

• Get to know the bird species.

• Can describe the structure of the bird's body.

• Learn the concepts of migratory birds and hunters.

• Use of technology

• Learn how to distinguish bird songs.

How to refresh on a hot summer day?
Task – kids will make ice cream and choose which of them is most delicious.

POP-UP LEARNING

Tools: wooden ice cream sticks, plastic cups for making ice cream, various berries, water, different size spoons, jars, ruler, task sheet "Berries diagram".

Preparation: tools are being laid out in the educational space "Curiosity garden".

Children age 4 years.

An idea for an activity. While children were talking about how to cool down on a hot summer day, one boy asked a question: "but how to make ice cream ourselves?"
Each one chooses an ice cream mold (or disposable cup), bowl, spoon, puts selected berries, pours water, and mixes.
The resulting mass is placed in ice cream molds of different sizes and carried to the freezer. While waiting for the ice cream to "be done", children taste the berries. each one has the opportunity to put the wanted amount and discuss the taste, color, and mass thickness. Compares: in which size of containers ice cream froze faster, the amount of substance decreased or increased.
After eating their own ice cream, they "voted" - put their sticks in a bowl with berries, spoked:
- ❖ the best ones are strawberry ice cream
- ❖ for ice cream you need berries, water, sugar, or honey
- ❖ ice cream can be sour, bitter, sweet, and paint the tongue.
- ❖ in the smaller cup ice cream froze faster and is harder.
- ❖ you can make ice cream at home

Achievements and improvement of skills.
Knowledge of the environment - names 4-5 berries, names the taste: sweet, sour, bitter; mass consistency: „like a water (liquid)", „like a porridge (thick)".
Exploration - when tasting ice cream, names the taste of berries, measure by comparing the quantity; puts one mold near another, and compares how much ice cream was added.
Calculation and measurement - starts to count up to 5, counts when putting berries mass with a spoon, compares two groups of items, names the concepts - more, less. Suggests putting more or fewer berries in the mold. Recognize and show round, square, and triangle ice cream molds, and disposable cups.
Relationship with peers - waits for their turn, while other friend puts berries in a bowl, and shares different molds for ice cream, wooden sticks, and spoons. Accepts the suggested comprise: mixes two kinds of berries and monitors the changes in the color of berries mass. In a few sentences says their opinion: "color is beautiful, maybe the ice cream will be delicious", "I think it will be sour because the whole cup became darker".

Paint from the nature

Task - by using vegetables, will make paints, and with them will color different surfaces.

POP-UP LEARNING

Tools: spinach, beetroot, carrot, paprika, cutting boards, knives, juicer machine, food blender, pencils, sheets of paper, scissors.

Preparation: place washed plants on pallets; on the table place tools for blending vegetables, wooden boards, knives, and blender.

Children age 4 years.

Description.

Children roots carrots, beetroots, and spinaches from the garden bed and pick red paprikas. Discuss vegetable species, forms, and colors. Kids take vegetables to the group, wash, cut, and taste them and names: sweet, no taste, spicy. Puts them into the blender. Blended vegetables are strained - children got natural paint from their own grown vegetables: red, green, pink, and yellow. Children go outside and monitor plants' leaves, blossoms colors, and forms and compare them to the paint that they have made. By using tree leaves, children make stencils from paper and fabric. Mixes colors and monitors how vegetable paint dyes different materials.

Children recognize that:
• on the paper painting "stays"
• on the fabric is needed to put more paint because the fabric absorbs more.
• when you mix green and red you get a "dirty" color.

Achievements and improvement of skills.

• By using help from adults, children waited for their turn and shared tools.
• Recognized and named vegetables: carrots, beetroots, paprikas.
• Developed sensory sensations: visual, smell, taste.
• Saw different vegetable properties.
• Named the season and its characteristic features: the air is cold, the leaves are falling, it is raining, vegetables have grown, and they need to be rooted and picked.
The activity made sure that vegetables can be used to make dyes, and the dye can be used to color paper and fabric. Expressed creative thoughts.
Improved the skills of safe handling of sharp tools: cut vegetables, put them in a shredder, cut sheet stencils from paper and cloth with scissors.

Ice painting

Task - while experimenting they will find out how and from who to create paintings with no paper.

Tools: flower blossoms, watering cans, funnels, water, various size empty jars, boxes, mobile phone, and cameras.

Preparation: flower blossoms, berries, and leaves are placed in different containers. Near watering cans are placed funnels and water, Tools are placed in the educational space "Curiosity garden".

Children age 4 years.
Children picked tree leaves, and flower blossoms placed berries, and arranged them on trays of different sizes, and shapes, in empty candy boxes. The arranged "paintings" of flowers were filled with water and taken to the freezer. The next day, the frozen forms were taken out outdoor. The children asked the question: "how to remove "pictures" from the forms?". Some turned the trays upside down and patted them with stones until the "painting" got out. Others placed them in the garden bed in the sun. They questioned: it is autumn.. how much time it will take until the sun will melt the "paintings?". Monitored the process: melting "paintings" changed their form, size, and texture. (the next day paintings were melted. There was only a wet spot and brown flowers left). Others - took the wooden sticks and tried to remove the icy paintings from the mold. They inspected the paintings they took out and decided: that the colors of the flowers in the ice did not change, but became firm and do not fall out; one ice is translucent and the other is white as milk and the painting is not very visible. They took their own cameras and mobile phones and took pictures of their creations.

Achievements and improvement of skills:
When composing plant paintings, larger pots are chosen for larger flowers and smaller ones for smaller ones.
Name the plants: rowan berries, dahlia flowers, cloves.
Picks friends and works in a team. Research - pours water and monitors how much water fits in a candy box, a bucket, or a small bucket. Skills of pouring water from one jar to another are improved, and large-scale motor skills are developed.
Takes photos, compares photos with peers - ICT skills.
Creativity - uses natural materials: places various ornaments, easily change and places them differently - suggests other options, are glad about the successful "ice flower painting". Makes sure, that creating a painting is possible without using paper.
Ways to solve problems - using objects found in the environment: pebbles, sticks, and working with peers, find out how to remove "icy paintings". Consult, search for appropriate solutions, and offer help to each other.

Little tourists

Task: by help from friends, according to the map, will overcome obstacles, set up a campsite, will discuss safe behavior and spend as much time as possible in nature, increase physical strength.

Preparation: in the group, children asked the teacher about safe behavior in nature, watched animations about tourists, and clarified what they need to take when camping.

Tools: a spider with map, wooden logs, wooden bridges, pinecones "curtain", wooden mushrooms, wicker basket, bear hat, colored "snake", tents, pot, stones for a fireplace, foldable chairs for each child, garbage bag.

After putting on backpacks and taking thermoses, flashlights, binoculars, and toy saws, children began their journey with interest. At the beginning of the journey, they found a spider's hidden map, which they explored, tried to explain "sing language" and traveled along the written route. In the magical forest, they counted hidden animals, picked pine cones, and compared which one of them collected the most; by going through the "swamp", bridge, and moving log, they developed coordination, kept the distance, and inspired each other. Touching the curtains of the pine cones, which were hung high, practiced jumping and dexterity. They developed an understanding of the benefits of nature by tasting berries, sniffing herbs, and recognizing growing vegetables in a farmer's garden. When playing a game with a bear, remembers and repeats the words of the song, making sure that it is possible to play in a friendly and fun way. When they came to the camp, gathered the fallen twigs for a bonfire, found out what kind of tree they are, compared it: thick-thin, set up a tent, had snacks, and discussed the challenges of the hike. Leaders, children's experience, friendliness, and help were highlighted. Children strengthened their physical strength by spending time in the fresh air.

Achievements and improvement of skills:
With the help of adults, they research the digitized map, find out and name the travel route marked with conventional signs, remember tasks and overcome obstacles. With the SMART board, plays virtually while traveling on a virtual map. Finds and counts up to 5 and names forest animals and birds: hare, fox, squirrel, hedgehog, wolf, bear, owl, crow.
Develops coordination, dexterity, jumping, caution, courage, and speed.
Says the names of berries: raspberries, strawberries. Recognizes, names counts growing vegetables: potatoes, carrots, beets, onions, beans, pumpkins, uses general terms - vegetables, berries, herbs.
Works benevolently with each other. Uses the words to describe the size differences: thicker-thinner, longer-shorter. Self-attempts to overcome obstacles, when fails asks the adult for help. Tells what worked, and noticed what failed. Identifies hazards in nature: mosquitoes, ticks, fallen trees, swamps.

Erasmus+

Palette of colors and shapes in the yard

The task is to find and name colors and shapes by using stencils.

Preparation: the stencils are cut, discussed what is pictured in them, and which colors and forms do animals, flowers, and windows exist. Pictures in encyclopedias and photos of pets brought by children are viewed.
Tools: fish, cat, flower, star, window stencils.

After learning about the colors in the group, the children are invited to go outside to continue the activities. And what colors can be flowers, fish, animals, stones?
Problematic issue.
How to paint in outdoors, without paint, with having only empty stencils? Is it possible to find different shapes and colors in the environment for the same stencils?
Children's thoughts: stencils can be laid on the sidewalk, outlined, and then colored.
Educator: „We have nothing to outline with".
Deivile: „Then we can look in the house where the arbor is (outside there is an educational space" Art Studio"), there were chalks...
Luknė: "Oh, I put it on the stones and the window turned gray."
Children choose empty stencils, walk around the yard, and "color" them by adding various objects: stones, flowers, grass, and trees.
As they complete the tasks, they will see that the stencil they choose can come in a variety of colors and shapes.

Achievements and improvement of skills:

Recognizes in the environment and paintings the most commonly seen animals and flowers. Says their names - the cat is gentle, the stone is hard, white, the flowers smell delicious and are yellow. They speak and ask what they see. Identifies items by shape, and size.
Finds different objects of the same color: yellow flowers and a yellow bicycle, red tulips, and a red earthworm.

A hair from dandelion

Task - while experimenting with water and dandelions will find out what happens to the flowers when their stems are soaked in water.

Preparation:
children collect and pluck the dandelions.

Tools: colorful bowls, water buckets, dandelion blossoms with stems.

The children inspected and collected dandelions. Counted who collected more. Explained, and discussed their structure: blossom, stem, roots.

Children are divided into pairs: they picked one part of the cropped image, and after you find the second part, you find your pair. Each pair chose a colored bowl and filled it with water. One member of the pair dipped dandelion blossoms into the water - watched what was happening to them and commented: "Nothing happened to the blossom, but my hands and my flower are wet."
"Fluff not even looks like a dandelion anymore."
Another member of the pair divided the dandelion stem into 3 parts and dipped it into the water:
- "Oh Good! They curled like noodles, or like the rubber!"
"Mom curls her hair like that".
The research made sure that the dandelion blossoms did not change and that the stems twisted like "hair".

Achievements and improvement of skills:

Calculates, compares, and measures blossom size, stem length, and thickness.
Begin to use the words to describe the differences in size: longer-shorter, thicker-thinner.
When interacting with peers, they act in good faith with each other, offer ideas, and accept the ideas of others, fantasize ("what if all the blossoms start flying?).
Accepts activity-related adult offers - divides the dandelion stem into 2-3 parts.
Distinguishes the obvious properties of the plant: breaks, milk drips out, fluff appears when the flower is over bloomed.

Digital tool: Dandelions puzzle
Task: tell what kind of flowers are here and where they grow?

Link for students:
https://www.jigsawplanet.com/dandelions

Erasmus+

Small lawn residents

Task - will find and recognize flying, crawling beetles and insects, discuss their appearance. From natural matter will create beetles.

Preparation: outside, in the educational space of the garden, wooden cards with images of beetles are "inserted" into the ground.
Tools: wooden cards withdrawn beetles, plastic beetle figures, magnifying glasses, natural material, worksheets, wax crayons.

Do all beetles eat flowers and trees? In the group, children looked at the figures of beetles and searched for information in encyclopedias and on the Internet. When they found it, they counted how many each beetle has legs, a mustache, and wings, and were interested in what they are eating. They found a ladybug outside, counted dots with a magnifying glass, put it on a sheet, and watched it: will it fly?
The children inspected the fruit trees growing in the "Curiosity garden" and made sure that there were no cockchafers there. And what other beetles live in our garden, do all of them fly? Divided into groups of 2-3, they searched for crawling, flying insects, and beetles, and painted as many squares on the worksheets as they saw beetles. They talked: "It is good that there are no cockchafers because the apples will grow."
From pine cones and sticks, everybody created beetles.

Achievements and improvement of skills:
Names four beetles: ant, ladybug, spider, cockchafer. Tells what they see and what they understand by looking at the figures of beetles. Playing an interactive game improves ICT skills, and children are able to identify who flies, crawls, and jumps.
Starts counting items and compares two groups of items according to the number of items in the group. Counts up to 3.
Uses words: forward-backward, up-down.
Creates based on a preconceived idea, accompanies the creative process with a story, mimicry.

Digital tool
Task: say what flies, what crawls, and count.

Link for teachers:
https://suite.smarttech.com/beetles

Link for students:
https://suite.smarttech.com/student/beetles

Fairy-tale three Piglets

Task - will solve the problem "How to fit all the piglets in one house?"

Preparation: outside is a house with windows of different geometric shapes.

Tools: dolls on sticks: piglets, wolf, house, pebbles, leaves, sticks, basket.

The children know the fairytale of the piglets and the wolf. The children listened, watched a video, and performed it by themselves. After going to the field, there were no three houses for piglets.

The problem was one house and three piglets. What to do, that all the piglets would know where to live? The ability to solve problematic issues, imagine, fantasize, and offer original ideas is developed.

Children suggested: „Write the name of the piglet on each room"; "Paint doors and windows in different colors"; „For piglets to live in separate rooms, we need to mark the rooms with straw, sticks, and pebbles". Divided into groups of 2-3, they collect sticks, pebbles, and fallen tree leaves and glue them to the windows of the house. Piglets are "housed" in differently marked rooms. Children talk and discuss the feed, where piglets and wolves live. Improvises the meeting of piglets with a wolf - plays, talks.

Achievements and improvement of skills:

Raises problematic issues, are able to solve a problem.
Offers ideas, and solutions. When performing tasks, they are divided into teams, together they consult on tools, and advises each other.
Thinks about the differences between the lives of domestic and wild animals.
Acts and depicts a fantastic storyline, and changes the intonation of the voice while speaking.

Digital tool

Task: Find the right picture for "Whose house is this?"

https://wordwall.net/resource/34190756

Tea from our garden bed I part

Task - will recognize, collect herbs, prepare them for drying, and create pictures.

POP-UP LEARNING

Place: "Curiosity garden" - herbal bed.

Tools: scissors, baskets for herbs, buckets.

In the spring children sowed herb seeds into the pot, covered and watered them, the covered bags became wet "sweated", then uncovered to dry.

They monitored sprouting seedlings, with help of the adult, marked them by writing their names. When the weather became warmer, the seedlings were planted in the garden beds and marked by the cards with the name of the herb. In the summer, chamomile, mint, and thyme grew blossoms and leaves: Children came out with the question: "Which part of the herb is suitable for tea?". Searched for the information on the internet and encyclopedias. Found out that chamomile, thyme, lavender, and calendula blossoms are suitable for tea, mint, catnip, and sage - leaves. Children went to the garden beds and while discussing cut the richest part of the herbs. The remaining blossoms leaves and stems started to combine - managed to create fragrant paintings.

Achievements and improvement of skills:

With the help of adults, gets to know the seeds of herbs, sows them, and names them: small, tiny, many of them. Makes an experiment - covers seeds with plastic bags. Draws a conclusion - too damp. Monitors sprouting seedlings: the faster grew bigger seeds, the plants are bigger, from tiny seeds - tiny plants - there are many of them. While looking after and collecting medicinal herbs, they notice changes and draw conclusions: after cutting off the flowers, the stalks remain, and the plants cannot be uprooted - they will no longer be used for tea.
Improves ICT skills - turns on tablets, tries to write names with help from the example: leaves, blossoms.
Improves scissor cutting skills.
Learns to collect different parts of the plant for drying - flowers, leaves, seeds.
Creates paintings from parts of medicinal plants - admires colors, shapes, and created images.

Tea from our garden bed II part

Task - will recognize, collect herbs, prepare them for drying, and create pictures.

Digital tool

The parts of herbs suitable for collection.

Task: to find the flowers or leaves to be collected for drying.

Link for teachers:
https://suite.smarttech.com/herbs

Link for students:
https://suite.smarttech.com/student/herbs

Tomatoes - from seeds to fruit I part

Task - compare tomatoes' size, color, and taste, collect the seeds and pick the best.

Place: Greenhouse in the "Curiosity garden".

Tools: tomatoes, trays, plastic knives, plates, 4 baskets.

The teacher explains to the children that they must pick only ripe ones, e.g. those with color (yellow, red, black) and tomatoes of various sizes. After tasting, you will have to choose the most delicious ones. In the greenhouse, children inspect, observe, compare and pick - this is how they make sure which tomatoes are ripe, which are too early to pick, and whether they are all the same size or different. Some children have a question – are the seeds in large and small tomatoes the same size? How to know? On the bench, the children arrange the tomatoes from the largest to the smallest, and with the help of an adult, they cut the tomatoes in half and remove the seeds. Examines the comparisons and finds that the seeds of the small tomatoes are small and the seeds of the large tomatoes are larger. After tasting tomatoes of all colors and sizes, the children conclude that the tastiest tomatoes are yellow.

Achievements and improvement of skills:

Divides into pairs of three.
Counts up to three. Uses the words: larger-smaller to describe size differences.

Sorts tomatoes - finds them in the greenhouse and divides them into baskets of 2 and 3 each.
Develops sensory sensations: sight, taste, smell.
Names the shape and color of tomatoes - round, oblong, yellow, black, orange, red.

Seeks the attention of others, favorable evaluation, encouragement - are happy to have done the task correctly.
When solving a problem, they consult with others and look for the right solutions.

Works in good faith together with others offers its decision, makes a compromise offer - after discussing, decides which tomatoes are the most delicious.

Tomatoes - from seeds to fruit II part

Task - compare tomatoes' size, color, and taste, collect the seeds and pick the best.
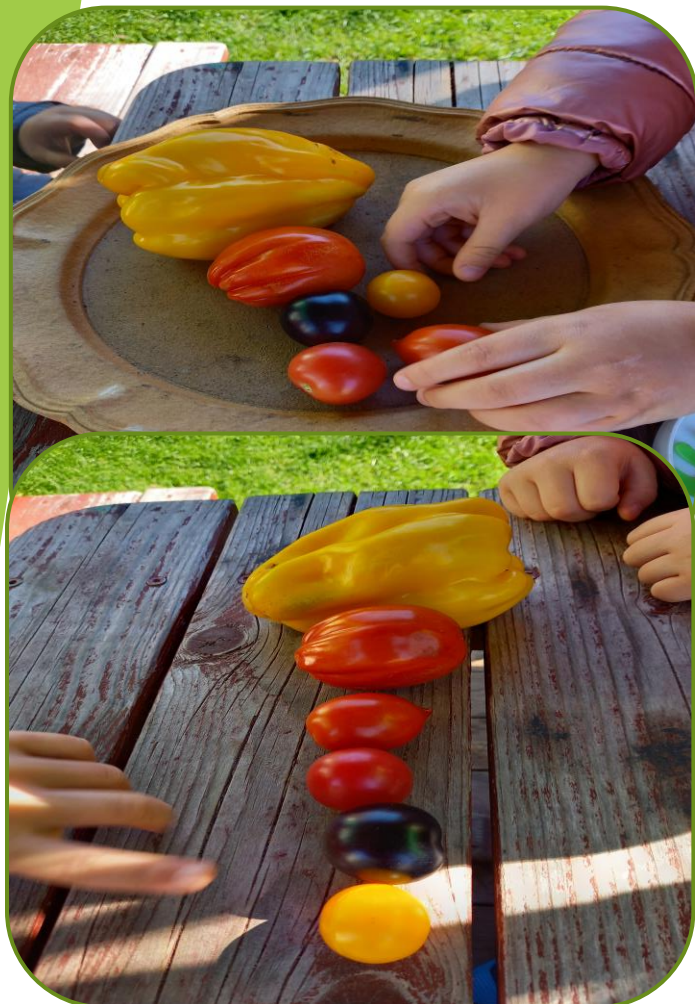
TASTE AND COLOR THAT BOX WHAT A FLAVOR FEEL

TOMATO	SOUR	SWEET	BITTER	UNRIPE

A presentation about tomatoes (PDF):

https://docs.google.com/pop-learning/tomatoes

In the grandmother's village

Task - to find, recognize and show domestic animals, and birds.

Tools: domestic animal figurines, natural materials - acorns, chestnut tree pines, pine needles, twigs, and greenhouse.

Children age 3 years.
Not all children have grandmothers who live in villages, or parents, who have a farm and grow animals. Children love domestic animals, especially their babies. Children want to get to know and work with them in an environment similar to a farmstead. An educational space was created in the yard of the kindergarten, where children had the opportunity to plant vegetables in a mini-greenhouse, and compose paths and bridges for animals to walk, using natural materials: acorns, chestnuts, and pine needles for them. They lined up the animals in a row, put them to sleep, and invited another animal to go along - a sheep, a pig. Tried to imitate a sound of a cock.
After the weather has cooled down, such an educational space can be created in the room, where children gain experience about the farm, the animals raised there, the equipment used, and the vegetables.

Achievements and improvement of skills:

Recognizes, names 3-4 domestic animals, 2 birds. Participates, using natural material, imitates the feeding of animals, chooses food: grass, pine needles, twigs, and says their names.
Recognizes concepts: "little-many" - few cows, one greenhouse, many chestnuts.
Communicates with facial expressions, moves talks to each other plays together, and briefly engages in another child's game.
They talk about what they see, what they have heard - „Does the pig eat grass?", "Are the cows asleep?".

Digital tool

Task: to open pairs of animals and their young, count and say how many domestic animals and how many poultry there are.
Link for teachers:
https://suite.smarttech.com/share/domesticanimals

Link for students:
https://suite.smarttech.com/student/domestic

Task in a yard

The task is to find the right amount of vegetables that are required.

Place:
educational outdoor environment – garden beds where vegetables have already grown and ripened.

Tools :
task sheet, baskets for vegetables.

The educator introduces the kids to the task sheet, which is indicated how many and what kind of vegetables they need to bring from the garden. The children feel responsible for the task entrusted to them because they are collecting vegetables for making lunch.

Teamwork is happening. One child carries a worksheet and tells the others what vegetables are needed. Other children find out in which garden beds those vegetables grow. Every child has something to do. After the tasks are distributed, the children pick, check, and count, whether the tasks have been done correctly and put vegetables in the basket.

Feeling great joy and pride in the task they did, the children take the vegetable baskets to the kitchen staff.

Achievements and improvement of skills:

Can name 4-5 vegetables, and describe how to use them for food.

In the kindergarten garden beds, children find names and pick or uproots the required vegetables. When working, they name what vegetables they like to eat and what products are made from them.

Starts counting items up to 5.

When picking vegetables, they understand that the number of vegetables does not depend on the size. Finds different amounts of large and small vegetables.

When counting collected and arranged vegetables, use reference numerals (first, second ...).

Seeks attention from others and favorable evaluations.

The children are happy that they have been entrusted with the task of bringing vegetables. After collecting and bringing vegetables to the kitchen staff, the children are proud to have performed an important task - the vegetables will be used to make dishes for lunch, for all the children in the kindergarten.

Task in a yard

An appendix.

Digital-interactive task "Find the vegetables":

https://wordwall.net/vegetables

SEARCH SHEET

1		BEETROOT
2		LARGE TOMATOES
3		SMALL TOMATOES
4		CARROTS
5		BEAN PODS

Math in a sandbox

Task – will count objects up to 5 i.e., will understand numbers' quantity and structure, will get to know symbols and numbers indicating the object's quantity.

Preparation: onto used translucent plastic buckets glue geometrical figures with numbers on them and an appropriate number of objects (hearts).

Tools: prepared buckets for each child; corresponding geometric shapes as on buckets - for the distribution of commands; corresponding geometrical figures as on the buckets for gluing; small pots (cups) of equal size for pouring sand; sand.

When pulling out a geometric figure, the children find a table with buckets on which the corresponding figures are glued.

They count the objects (hearts) under the geometric figure and say the number written on the geometric figure. Finds the same geometric shapes-stickers and glues them to the bucket. Each child pours as many sand cups into their bucket as the number written on the geometric figure. When the educator asks, they place two buckets side by side filled with different amounts of sand. Children show in which bucket there is more sand. When they are asked why they decided so, kids say that there were more cups of sand filled. By showing interest in why kids know it, they name numbers on the geometric figures and count objects as well as the glued geometric shapes-stickers. Children's initiative: One boy was curious to find out which bucket of sand was heavier and which was lighter. By holding both buckets in different hands, he named that heavier the one which is more sand.

Achievements and improvement of skills

Takes a geometrical figure, describes its color, says a name, and finds a bucket with the appropriate figures. By sticking geometrical figures, they link the number on a geometric figure with appropriate object (hearts, geometric shapes-stickers) quantity. When filling the sand into a bucket with a cup, uses a conditional measure (the third object-cup). Pours as many cups with sand as there are objects (hearts, geometric shapes) on the bucket. Understands what it means to sort from the smallest to the largest, and vice versa. Are able to answer the questions: How much in total? How much more? How much less? Notices how a sequence of objects (elements) is formed and are able to extend it by adding 1-2 objects (elements). Separates ordinal numerals - deducts and shows the first, fourth, second, fifth, and third buckets. When talking about the mass of things, uses the words: lighter - heavier.

Math in a sandbox

An appendix.

When pulling out a geometric figure, the children find a table with buckets on which the corresponding figures are glued.

They count the objects (hearts) under the geometric figure and say the number written on the geometric figure. Finds the same geometric shapes-stickers and glues them to the bucket. Each child pours as many sand cups into their bucket as the number written on the geometric figure. When the educator asks, they place two buckets side by side filled with different amounts of sand. Children show in which bucket there is more sand. When they are asked why they decided so, kids say that there were more cups of sand filled. By showing interest in why kids know it, they name numbers on the geometric figures and count objects as well as the glued geometric shapes-stickers. Children's initiative: One boy was curious to find out which bucket of sand was heavier and which was lighter. By holding both buckets in different hands, he named that heavier the one which is more sand.

Digital-interactive tasks:

Numbers and quantity

https://wordwall.net/play/1264/214/814

https://wordwall.net/play/1428/124/955

Geometric shapes (puzzle)

https://www.jigsawplanet.com/shapes

Green windowsill

Task – by taking care of and observing the plants on a daily basis, will learn how the cultivated plants develop and change.

Preparation:
If possible, make jars that require ceramic means (clay, sticks, glaze, ceramic kiln).

Tools:
used translucent plastic containers, soil, and seeds.

Work begins in early spring. In order to grow vegetables on the windowsill, we started the work by making clay pots by ourselves. The children, helping each other, poured the soil into pots, watered it, and poured the seeds. Of course, everyone was interested to know why educators offered to put a translucent film on pots with soil. To make sure the educator's explanation is correct, children leave a few pots uncovered. By watching the pots on the windowsill, the children make sure that the "leaves grow" faster in the jars that have been covered. It is necessary to water what is sprouting or just about to sprout. Young farmers perform these responsibilities diligently. Through transparent plastic containers, children watch the roots grow, branch out, and see how fast the vegetables grow. When the first leaves turn green, of course, it's curious to taste what we've grown.

Achievements and improvement of skills

While caring for the plants, they notice changes, draw conclusions, and make decisions (for example, they notice and rejoice when onions spread their leaves or when the leaves of lettuce wilt - they have to water them). Notices and names the most noticeable features of plants: distinguishes vegetables, and describes how to use them for food. They choose the necessary items and tools for growing plants and explain why they chose them. Distinguishes the obvious properties of the plant: the salad needs to be watered more often, the onion leaves are spicy, and the radishes are crispy. They like to observe the growth of plants, and willingly perform simple experiments: observe the germination of vegetables covered with plastic film and uncovered, and examine the roots of onions and other vegetables. Loves to work, offers ideas for activities, takes initiative to implement them, notices and comments on the consequences. Tells what they did and learned. Tells what they don't know or doubt. Discusses the work done, plans, guesses, and checks what will happen if the plants will grow where there is no sun, and if will not be watered.

Colors aquarium

Task – by experimenting with art materials and tools, they find a variety of colors, lines, forms, shapes, and textures.

Preparation:
take care of used packaging cardboard boxes.

Tools:
protection from paint (aprons, shirts);
paint (water-based);
paint brushes, rollers, sponges;
used plastic buckets for painting;
a kit for hand washing (water, towels, soap).

From used cardboard packages the house or other wanted building is made.

After putting on the clothes of "artists" children are allowed to freely explore with various painting tools by leaving traces of the paint.

Activity development :

When the house is painted in bright colors and decorated with multicolored patterns and drawings, it is nice to have a fun activity inside of it: reading books, building from blocks and playing role-playing games.

Achievements and improvement of skills

Holding a bucket of paint in one hand and a brush in the other hand, better combines the movements of the eye-hand, both hands, arms, and legs. When they choose the color of the paint and discuss what they will want to do in the decorated house - speaks in sentences of several words, and combines the words according to number and inflection.
Spontaneously expresses emotions, and impressions with art tools and materials. Draws various lines, combines them into shapes, increasingly coordinating hand movements. Tries to portray someone (mom, car, trees, flowers). Sees objects or events in their drawn abstractions. Experiments with art materials and tools investigate various ways of working with them. When drawing, or stamping, enjoys the process rather than the result.
Communicates with facial expressions, movements, and actions talks more often with another child, and alternately performs actions with the same color or brush. Asks, consults, and waits, when one kid wants another child's favorite color bucket or other drawing tools.

It is good that it has a wheels

Task - by exploring and searching, to find on what surface it is easiest for the "Bee-Bot" robot to drive outside.

Place:
various surfaces and spaces outside.

Tools:
„Bee-Bot" robot.

„Bee-Bot" robot is a popular educational tool worldwide. For kids to play and learn at the same time with Bee-Bot is really fun.

Playing with the „Bee-Bot" robot on the table and the carpet, the children noticed that it was moving slower on the carpet. One girl offered to take the bee outside and let her ride there. Outside children searched and explored the easiest surface for a "bee-bot" robot to ride.

Children try to ride a green meadow with a Bee-Bot robot, cross a log bridge, cross a narrow log bench, cross a pebble path, and a flat tile path.

Achievements and improvement of skills

While researching, they explore objects and materials, and organize, plan and select the spaces needed for the research. Playing with an educational bee, the little ones not only learn to communicate with a friend, and share a toy, but also get acquainted with the first steps of programming, using the words to move the robot: forward-backward, left-right.

Children speak and tell what they have seen, known, and understood.

Evaluates the research, uses elementary terms, and draw conclusions:
- On the grass doesn't move because it can't.
- On the pebbles - hard.
- Gets stuck on the bridge.
- Bench - too narrow, does not fit to turn.
- On the path goes well because it is smooth.

Erasmus+

What vegetable hides under the QR code?

Task - to find information and get acquainted with vegetables using digital technologies.

POP-UP LEARNING

Garden care - tillage, sowing, waiting for the first seedlings, rescuing them from weeds, the joy of the first harvest - are the basics of experiential education. And to make the activities in the garden more fun and attractive, we also use digital technologies to get acquainted with the vegetables and their growing conditions.

It is a modern non-traditional approach to already traditional forms.
Children scan the QR code on their phones or tablet. QR codes contain various information: link to the website; the picture of vegetables; the vegetable name. Children use this information according to their age abilities.

Sometimes QR codes get mixed. Children carefully group them under the appropriate vegetables.

Preparation:
garden beds, QR codes near every vegetable.

Tools: phones, tablets.

Achievements and improvement of skills

Discovers the possibilities of using digital technologies, and willingly learns how to use them.
By using the phone or tablet to scan the QR code, children, according to their abilities :
looks for information about vegetables on the internet
Reads the name of the vegetable
Observes a picture on a screen and compare it to a growing vegetable
Critically evaluates, if the description, name, or image does not match the vegetable. Finds the right vegetable for a QR code.

SCAN ME

What vegetable hides under the QR code?

An appendix.

Digital tools

Puzzle "Vegetables"
https://www.jigsawplanet.com/vegetables

Puzzle "Salat"
https://www.jigsawplanet.com/salat

Website for additional games

Soup's Up!
https://pbskids.org/elinor/games/elinor-soups-up

Food Farmer
https://pbskids.org/readyjetgo/games/space-scout-food-farmer

To create QR code
https://me-qr.com/

What is it? Scan me.

Erasmus+

Measurements and observations outdoor

Task - to observe, measure, supervise, and taste vegetables and fruits while performing tasks.

Place:
Garden beds

Tools:
vegetable cards, vegetable research sheet, vegetable ruler, flavor worksheet.

In curiosity garden, not only agricultural work takes place, but also observations are made, the results are recorded and the acquired knowledge is consolidated.

With the help of vegetable cards, children compare growing vegetables and watch what kind of weather they like and what they don't.

With the mobile garden ruler measures and compares how much vegetables have been grown.

By using the research sheet, children are looking for the inhabitants of the garden - earthworms, and ladybirds. Tries to hear the sounds - how birds are chirping and leaf's crunches. Plays a game - see, touch or show. Sniffs the herps and depending on the smell or appearance says the name. Waits impatiently for the first harvest, and tastes the first fruits or vegetables. By using taste worksheets, searches for different flavors of vegetables and fruits.

Achievements and improvement of skills

With the help of adults, children prepare the soil, sow vegetables, and take care of them.

Gets acquainted with the appearance of vegetables, and learns to distinguish them from weeds.

Monitors, when plants need to be watered.

Research on how vegetables grow measures them and calculates how much has grown, which one of them is higher, and which one is lower. On which plant are more flowers.

Develops their sensory senses - smelling, hearing, touch, sight, and taste.

During the tasks, the children divide the work, consult and help each other. This is how they learn to work in a team, to cooperate.

# Measurements and observations outdoor
An appendix.

Tasks sheets:

https://drive.google.com/file/gardencalender

https://drive.google.com/file/gardenlabels

https://drive.google.com/file/gardeningstudies

https://drive.google.com/file/tasksheet

Leaf light lodge

Task – by using a source of light and digital tools, realizes and identifies fallen leaves from the trees.

POP-UP LEARNING

Preparation:
dimmed room, shadow theatre tool.

Tools:
fallen leaves, drawing tools, open work plastic boxes, spotlights, bulbs with batteries, light garlands, tablets, and phones.

Children are invited to a mysterious, dimmed outdoor house. In order to enter, a permit is required - 5 fallen tree leaves.

Everyone together watches the shadow theater of tree leaves. After the end, children choose other tools for activities.

Sorts the fallen leaves, and identifies them with the trees on which they grew.

While playing the shadow theater of leaves, learns the name of the leaves.

Searches for ways to use a light source, and decides to draw tree leaves using it.

Studying the light source, tree leaves, and secondary raw materials, creates and observes the dance of leaves and light.

With the use of ICT, draws leaves, and takes photos of them.

Achievements and improvement of skills

Enjoys the unique operating process and result.

They ask, and try to understand new, for them unknown things.

Discovers the possibilities of using digital technologies, and willingly learns how to use them.

The activity offered by an adult is performed in a focused, inventive, unique way. When wants to learn something, tell them what they don't know or what they doubt. Bravely guesses, tries, makes mistakes and corrects the ones that others made, listens to what others are saying, and clarifies. Acts benevolently with others, offer ideas, accepts them, and fantasizes. While playing try and investigates new tools and materials.

Leaf light lodge

Photos from activities how children interact

Integration with:

STEAM
Reggio Emilia
IT
Theatre

Guardian of the garden

Task - to make a scarecrow from unused clothes that will protect vegetables and fruits from birds.

Preparation:
Select unused clothes.

Tools:
unused clothes and decoration details (hats, scarfs, necklace), sticks for the frame, and drawing tools.

In the territory of the institution, every child group takes care of their own garden bed. Children here sow, plant, and take care of various vegetables and fruits. But very often uninvited guests visit the garden beds - jackdaws, which dig freshly sown seeds or just sprouted seedlings, eats the berries. A human tries to preserve his harvest, which is why he builds scarecrows in gardens or orchards. The scarecrow is not only a guardian of the garden but also an expression of human imagination. We decided to make such garden helpers with the children. The students were actively involved in the creation of a garden guard. In the team, the girls naturally distributed creative work. One by helped the other drawn a face, dressed in a dress, weaved braids and adjusted the embellishments. When children made their own guardians of the garden, they calmly sit down to enjoy red-cheeked strawberries, knowing that now the birds will not eat the berries from the garden.

Achievements and improvement of skills

Children take care, feel responsible and try to preserve the harvest of the vegetables and fruits.
They notice the similarities and differences between "Guardian of the garden" and man.
Considers, why they are made like that and draws conclusions.
When creating the "Guardian of the garden" they try to make it similar to the human image.
Uses secondary raw materials. Creatively and inventively forms, marks and emphasizes the main parts of the human body, shapes, and decorative details.
Works in a team, and distributes tasks. Are glad about the result.

Produce and play

Task – while making measurements, will create bubble liquid and will play.

POP-UP LEARNING

Preparation:
glycerin, purchased at the pharmacy, tools, measuring flasks, and mixing bowls have to be ideally clean; prepare recipe-scheme

Tools:
distilled water, glycerin, dish soap, measuring flasks and bowls for mixing, bubble making scheme, sticks, and thread for bubbles to blow.

In the summer, kids love to play with soap bubbles, but the usual small bottles end up really fast, are uncomfortable, and also spill very fast. One girl suggested making our own bubbles. Logically, soap bubbles are made from soap. However, bubbles turn out only when you soap your hands really well. We decided to determine this challenge. The educator found a recipe for soap bubbles and the necessary tools for preparation.

The students carefully examined the scheme, measured, counted, and checked whether everything was filled correctly. The prepared liquid had to be left for a day to be ready to use. The children were looking forward to tomorrow. The little chemistries wanted to test the soap bubbles they created. Turns out that after making accurate measurements the bubbles got an incredible size and granted a lot of fun moments.

Achievements and improvement of skills

Boldly guesses and offers the ideas from which to make soap bubbles. Tries, experiments, and checks their idea. After they didn't succeed in making bubbles as they expected - correct the mistakes they made, and listen to what others have to say.

While researching, they test materials and objects and make sure, that the composition of bubbles has been tested.

Are interested in the materials from which the soap bubbles are made and what are their properties.

The teacher explains that unknown solutions and mixtures that are poured into transparent bottles should be handled with care, and the children are trying to do as told.

Inventively, unusually use of various materials and tools (for the measuring flask suggests using a jar).

Observes the consequences of their own actions, and understand, that when difficulties are overcome - huge soap bubbles are blown out. Children enjoy their unique operating process and result.

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Produce and play

Photos from activities how children interact

POP-UP LEARNING

Integration with:

STEAM

MAKING SOAP BUBBLES NEEDS:

1 liter of distilled water

30 ml glycerin

250 ml liquid dishwashing detergent "Fairy"

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COLOR YOUR PENCIL CASE

POP-UP LEARNING

Activities for children aged 5 to 6

The students take the molds they want and paint them with the help of a paintbrush. Then they make print work using these shapes on their pencil holders. When the mold printing process is finished, they write their own names using the letters(doing the same thing again)

Outcomes:

❖ Students learn a new painting technique.

❖ Using this new technique, they make new pencil holders for themselves.

Tools:

One fabric pencil holder for each student, colorful fabric paints, and stencils.

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CRAZY BALLS

Activities for children aged 4 to 6

The purpose of this activity is to develop the motor skills of the students and to have fun while doing it. First of all, a suitable area is selected in the garden area. Clear duct tape is drawn between two trees or poles. (with the sticky part coming out). Then, the students take turns taking the plastic balls from the box and trying to throw them into the banded area. The aim here is to keep the ball sticking to the duct tape. The activity continues until all the balls are gone.

Outcomes:

❖ Students develop their gross motor skills.

❖ They realize that this game is not as easy as it seems and that this game requires attention, balance, and strength.

❖ While playing the game, they learn to be careful, strong, and balanced.

Tools:
- plastic ball,
- clear duct tape,
- open space (school garden).

DO EGGS FLOAT?

POP-UP LEARNING

For 4-5-year-old students

Before the activity, questions about swimming are asked. For example, do you know swimming? Who swims? Where to swim? How can we stay on the surface of the water without sinking?

Then the materials prepared for the experiment are given to the students. Saltwater is put in one of the glasses and normal water in the other. Eggs are thrown into it and students are asked to describe what happened.

Outcomes:

❖ Students learn through concrete experience that salt water has buoyancy.

❖ Students with a phobia of drowning in the sea said they felt better at the end of the experiment.

Tools

Materials required for this activity, for each student:

- 2 eggs,
- 2 glasses and a pack of salt.

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FOCUS AND WALK

Tools

The only tool needed is a green area where the lesson can be taught (forest, parks, school garden...) Recommended clothing: students should wear comfortable clothes (tights, tracksuits) and sports shoes.

Materials we need: 3 branches to be collected from the forest area separately for each student or 3 pre-made wooden sticks.

Activities for children aged 4 to 13

The teacher asks children what is balance, using the question and answer method. How about physical balance, spiritual balance, and balance in relationships? Chats about them.

The subject is reinforced by discussing the examples given by the teachers and students.

After that, the students are asked to collect three pieces of twigs from the forest area, and using these pieces of twigs, they are asked to walk in the direction of the designated area without breaking the twigs in their hands. In the evaluation circle created at the end of the session, those who passed the goal and those who did not, share their feelings and thoughts.

Outcomes:

❖ Students gained awareness about the balance in our lives.

❖ They experienced an activity that requires physical balance by using their bodies.

❖ They learned that the balance between bodily balance, emotional balance, and relations is a whole.

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MY NATURE OBSERVATION NOTEBOOK

POP-UP LEARNING

Activities for children

First of all, research is done about observing in the classroom. Story books about nature watching and bird watching are read. Then, nature observation notebooks are created. Then they go to the forest to make observations. Students make observations for a certain period of time and draw their experiences in their notebooks as a result of their observations. The most important element in this activity is to repeat the activity at least ten times.

Tools:

Observation notebooks, each containing 10 A-4 papers and with pictures of the children on the cover (prepared before the activity), crayons, and a green area where the lesson can be held (forest, parks, schoolyard...).

Outcomes:

❖ Students gained the ability to observe.

❖ They discovered how seasonal changes have an effect on nature.

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STONE TALES

POP-UP LEARNING

Seaside life Beach park in Antalya/ Turkey

Tools:

stones collected from the beach, felt, and crayons.

Activities for children aged 4 to 6

The aim of the project is to guide children to spend time by the sea, in natural and clean air. Children draw the shapes they want on the stones collected here, and then a story circle is formed. Each child creates a story by giving life to her own stone character and tells it to her friends. so that every child has a story and a hero.

Outcomes:

❖ Students rest and relax by the sea.

❖ They develop their creativity by using natural materials.

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TWO PEOPLE ONE BODY

Forest School Antalya, Turkey

Tools

Rope about 60 cm a long (must be 20 for 10 students), outdoor clothing.

Activities for children aged 4 to 13

The aim of the project is to raise awareness of the sense of trust in children. To guide them to discover their own feelings by chatting about the feeling of trust in this quiet area, surrounded by pine trees, away from the noise and then to trust each other and to give them the opportunity to learn what it feels like to act together.

Outcomes:

❖ Students relax in this area covered with pine trees. They discovered what it felt like to feel safe.

❖ Who do we trust?

❖ How does it feel to feel safe?

❖ They experienced how they progressed in the targeted area by trusting their friends and acting together.

TWO PEOPLE ONE BODY

THE SIZE OF MY ANT

Seaside Life Beach park in Antalya, Turkey

Tools

Ant pictures drawn by students on A-4 paper beforehand and stones collected from the beach.

Activities for children aged 4 to 6

The aim of this project is to provide children with a different outdoor learning environment and to enable them to explore the concept of dimension by using the trial and error method in their natural habitat. Students are asked to draw ants on A-4 papers in the size they want. Then they are asked to go to a nearby beach and use the stones there to cover the bodies of their ants.

Outcomes:

❖ students experienced a new learning environment;
❖ they learned the size of the ants they drew by using the stones;
❖ they gained awareness about the size of objects.

POP-UP LEARNING

Horse riding
Relaxing stress relief activity with horses

POP-UP LEARNING

We need to organize a day trip to a horse-riding active group. On our island (Mykonos, Greece), there are two. Kids must wear comfortable sports clothes, a hat, and sunscreen. They will be provided treats for the horses so they can feel more close to them before they ride.

When we arrive at the horse riding campsite, the trainer will first explain some theoretical things about horses and how they react to the kids. Then we will take kids to feed them and brush them so they can have a first approach to animals they may have never seen. In the end, they can ride them with the help of the trainer for safety reasons and have fun. A good idea is to take care of their equipment given so they learn to respect it.

Kids with this activity can become more confident to try new sports and outdoor activities. They become more familiar with animals and learn to respect them. animals are not toys.

Moreover, they learn to adapt to new circumstances and take care of their equipment. They both practice a sport and have fun with animals in a healthy way.

Freeze/ Dance
self reflex, flexibility, team activity with music

For this activity, we need plastic classic hoops and pilates balls. We can do it outside in the playground or in a square as a competition. Generally in any space. We also need a music speaker.

Children aged 5-7

We make a small track and field with balls and hoops outside so the kids can jump on them or dance or make certain movements with them. Kids are divided into two groups. While music plays from the speaker, they run and jump above the hoops and balls with dancing movements. When the music stops the teacher says Freeze! and they have to stay in their position without moving. If they move or they try to jump another obstacle they lose their turn and they have to go back. The team who takes all their players from the other side wins

Kids in this activity are physically improved because they practice dance and running at the same time. They also learn to act like a team and respect both their teammates and the other team. They have simple rules to obey. They use all their body and may learn English words if you use rules and music in English as well.

Be a farmer for a day

Students can skip class for a day and go outside and make a small garden in their playground. We need vegetable seeds, soil, a shovel, and plastic gloves. Kids need to wear comfortable clothes. We will plant some vegetables altogether and we will water them daily.

Kids will spend a day outdoors and act like a team. They will plant their own vegetables with their teacher. They can learn the vegetables in English as well with their English teacher. Kids will work together and see it as a game. they can play with the soil and even make funny voices with the vegetables as they grow during the day as if they were puppets.

Kids learn to take care of what they plant and create. It is a new experience because some of them may never have done that before. They learn to act like a team and collaborate. for example one can dig, another will put the vegetable in the hole and another will water it during the day. All together will grow their own vegetables and can make something to eat with them when they are ready and be introduced to a healthy lifestyle. They will be proud of what they made on their own.

A sunny day at the beach is always a good idea

We need plastic rubbish bags and plastic gloves. Students must wear comfortable clothes and shoes, sunscreen, and a hat. If they want they can bring a snack, water, and a swimsuit.

Children aged 9-12

Students will go altogether with the teacher to a beach nearby their area. They will collect rubbish from the beach in plastic bags and then they will separate them into recyclable or not. after that, they can take a walk on the beach, have a picnic or swim if they want, and enjoy a clean beach.

Kids learn to protect the environment and respect nature. They will hesitate to leave rubbish behind if they see how many of them there are on the beach and how they affect the environment. Their reward and motivation will be to work all together and then enjoy the day at a clean beach.

Grab fruit instead!

A bucket, apples, and water. Comfortable shoes, maybe a second t-shirt in case they are too wet to continue their classes.

Children aged 7-11

Kids are divided into two teams. Each team has a bucket with water and apples swimming inside a couple of meters away. When the teacher gives the sign two players from the team started running to the bucket and they have to bite an apple from the water. They have to carry it with their teeth to the end of the route to win. If the apple falls they lose. The team that takes all the apples from the bucket wins and can have a delicious apple pie and apple juice as a reward

Kids learn to play and act in teams and respect the result and the other players. They can see fruits as a game part and motivate themselves to run to win apple treats. They will run fast without complaining because they compete and laugh when water is all over their face while trying to catch apples.

Make your own film, earn your treat
Motivation in health

Camera, some props, memory stick, or mobile phone.

Paper and other materials students may need to make their own props for the advertisement.
Fruits and vegetables.

Children aged: 13+

Students can make their own advertisements based on a healthy lifestyle. They can use any material they want and any fruit or vegetable. They can record it with their own mobile phone or you provide them with a camera. Kids have to motivate their viewers to adopt a healthier diet and convince them of the advantages. The movies they will record can be sent in a competition or you can organize your own at school. Students from other classes can vote.

Teamwork and creativity is the key to this activity. Students work in groups and then they can judge the other's work. So they learn to judge their work and their classmates' work efficiently and respectfully. They will learn a lot about healthy diet advantages in order to make a catchy video. First, they need to convince themselves to adopt it and then the viewers.

Who said festivals are only for adults

Get to know with your ancestors

In case you will just teach your students some traditional folk dances you need only comfortable clothes. In case you will take part in a real festival or contest you need costumes.

Traditional folk dances are a great exercise that a lot of students think is only for old people or professional dancers. This is the moment you can change their mind and take them a day out at the playground, put on some music and show them how to dance at a wedding or a celebration. it is a great physical experience and they can learn a lot about their past, too. It can be combined with other subjects such as history or music.

Physical movement, harmony, and collaboration are our keys. Students will sing along and dance, they will exercise without doing any sport. Dance has a combination of hand and leg movement, rhythm, and meters. All of them can be a great activity.

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Water is the healthiest. Element on earth

Children ages 13+

Water is a very healthy element and is needed for our life and diet. But students can realize that doing sports in water is a great and relaxing option, too. Taking them on a day trip for canoe kayak riding in a river, lake or sea is a very good physical exercise.

Canoe kayak training session, life jackets, special wet coats, extra clothes, water, and snacks.

Parents' approval is needed.

It can be organized in the sea or in a river o lake, depending on the area.

Students combine fun with a new sport they will take up. They have to work in pairs in synchronization to move their boat. Collaboration is a key, arms and main body moves at the same time in combination.

Students will be in nature and get to know a new area. Is an activity that combines outdoor learning, sport, and teamwork

SIMON SAYS
interactive dance game

Children age range 5-8

Simon says is a classic game that a teacher or a kid with the role of Simon gives orders and says what the other kids have to do. When 'Simon' says:' Simon says open your mouth' for example, kids have to do it. When Simon says only order like 'Open your mouth and he doesn't say 'Simon says', Kids must do it. If they do, they lose a point.

In this game, we can integrate the English language and practice orders in English, or we can put on some music and Simon will way to the kids' dance movements or sports movements to do.

For this Game, we do not need equipment at all. Kids can make a circle in a class if the weather is not good, in the playground, or on a football field while they are on an excursion.

Kids learn in this way to obey and respect what the teacher says or what their classmate says when he is in the role of Simon. They also learn to concentrate and focus to do the order fast. They have to be respectful of other kids' movements when they may be funny. Students in early childhood can be introduced to class rules in this way. Older kids can practice foreign languages and sports movements

Beach volley
Sports and fun

Students will go for an excursion to the beach, There they need to wear comfortable sports clothes or swimsuit, trainers, a hat and sunscreen.

We need a volleyball net and a volleyball.

Volleyball rules will be explained by their teacher at the beginning. Then, they will practice a bit some movements with the ball, such as making a circle and throwing the ball to each other, then serving the ball without the net.

After that, when they feel more confident to play, the game begins.

In the end, they can dive into the sea to cool down a bit themselves

Skills the students will gain:
- ❖ team spirit,
- ❖ collaboration,
- ❖ respect the rules,
- ❖ body work out.

Google Lens for nature

Istituto Corbino: IIS Orso Mario Corbino„ https://www.iis-orsocorbino.edu.it

POP-UP LEARNING

ISTITUTO ORSO MARIO CORBINO - AUGUSTA

Tools:

Digital devices, WIFI/internet, availability of biodiversity, and plants.
A wide number of digital tools make children study and spot different animals and plants around them. The school promoted the use of community compost.

Activities for children 6-11 years old.

Teachers promote children's learning about biodiversity and digital tools through doing. Identify an outdoor area where there are different types of plants and, if possible, animals.

❖ Explain to the children how to use the digital tool and introduce the activity that they will have to carry out independently, giving them support with pictures, posters, photographs and saying that they will have to "go and discover these plants/animals" (within a given time).

❖ Once they have "found" the species indicated, the teacher will explain to them the characteristics of the plant/animal.

At the end of the explanation, the children will have to do simple tests in relation to what they have learned in the field.

Outcomes:

❖ the child learns to recognize the natural species and animals that surround it;

❖ the child learns to use digital tools in a conscious way;

❖ the child uses digital tools to deepen his/her knowledge.

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Outdoor and Social Learning

Istituto Alfano I: https://www.liceoalfano1.edu.it/

POP-UP LEARNING

ISTITUTO ALFANO I, SALERNO

Tools:

The only tool needed is a green area, where the lesson can take place (parks, the school garden...) equipped with shelves (small benches...).

The teacher encouraged the use of analog and manual tools (but if there is a need, digital tools can also be used).

Activities for 14-18-year-olds

The children were asked to experiment with new educational spaces and to experience learning as an opportunity to grow and deal with the pandemic crisis.

❖ Have the students sit in a circle (maintaining an anti-covid safety distance), the teacher can be inside the circle, or outside.

❖ Provide the children with the right tools for teaching (books and notebooks, paper or digital). In the second case, it is necessary to introduce the teaching module with concepts related to digital safety and the responsible use of the tools (if possible, have a constructive debate with the students).

It is essential that the teacher approaches the topics of the teaching lessons with the awareness that the students will have time to get used to the new methodology.

Outcomes:

❖ Appropriation of new educational spaces;

❖ Increased awareness of the importance of the conscious use of digital tools (when used in lessons).

❖ Elimination of the risk of contagion;

❖ More dynamic relationships with peers.

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From Farm To Class

Istituto Rinnovata Pizzigoni: https://scuolarinnovata.edu.it/

ISTITUTO RINNOVATA PIZZIGONI, MILANO

Tools:

The area near the school to be used as a vegetable garden (or make an agreement with a company/farm that allows students to approach agriculture).
Recommended clothing: boots, gloves, and garden clothing.
Posters, markers, wooden sticks, and gardening tools.

Activities for children aged 6 to 11

With the help of a professional (agronomist, agricultural science teacher, or farmer) explain to the children the life cycle of the most common garden plant species in the area, its nutritional properties, and the benefits of organic farming.

❖ Make separate areas for each class and rename the area using cards and wooden sticks to mark out the work area.

❖ The children, with the help of the expert, will have to prepare the soil for the sowing phase, and then take care of the various plant species sown.

The teachers will have to supplement the lessons in horticulture with lessons in food science.

Outcomes:

❖ Children were invited to learn how the agricultural world works while developing soft skills, which are very useful in other occupations.

❖ Greater involvement of people from outside the school who can convey a passion for their work.

❖ The children understood the importance of cooperation between the public and private sectors when it comes to alternatives in times of crisis.

Classes in historical Museums

Next Level, Torino: https://www.next-level.it/progetti/next-land/

POP-UP LEARNING

Association of social promotion: Next Level in Turin

Tools:

Outdoor area (or large spaces e.g. gyms, museums, cultural venues), adequate seating as an alternative to school desks, containers for storing backpacks (boxes, small cupboards...). The municipality provided, as venues, ten museums in Turin where children are in close contact with art.

Activities for 9-15-year-olds

In order to stimulate the passion and the engagement of children in the project, Next Land coordinates six schools in Turin to have classes in famous museums in the city. After, having identified an area capable of stimulating the student's creativity and inspiration the organizers contribute:

❖ Making the student feel at ease with the area in which he or she will be living an important moment in their school career (e.g. explaining the history of the place, explaining the importance of the place, having the student visit the place before taking the tests...);

❖ ask for feedback from the students at the end of the test to assess the impact the place had on the test and for their personal experience.

Outcomes:

❖ The project is designed to contribute to the economic development of the local entities that produce these facilities.

❖ To highlight the importance of architecture in finding new ways to make education finer.

❖ It aims to reduce school drop-out in depressed neighborhoods in Turin.

For more recourses visit https://pop-uplearning.org
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Class in a very Charming Landscape

Istituto Pegli: https://www.icpegli.edu.it/

POP-UP LEARNING

ISTITUTO COMPRENSIVO PEGLI, GENOVA

Tools:

Portable blackboard, alternative seating (wooden logs, kitchens, hay bales), stationery (finger paints, pencil paints, recycled paper, recycled fabrics...), and outdoor clothing.

Activities for children aged 6 to 11

The aim of the project is to give the children an alternative education, leading them to discover new paths (real and figurative) and new realities far from the chaos of the city.

❖ Telling why the place was chosen;
❖ To tell a story about the importance of personal choices even when the path ahead is not well marked;
❖ Educating about emotions (fear of failure, fear of the unknown, surprise, sense of self, and awareness of others);
❖ Walking routes, on roads that are not always defined, but which nevertheless lead to the achievement of a precise goal (it is necessary in this case to carry out inspections beforehand);
❖ Once at the destination, evaluate the emotions each of them felt, transcribing or coloring on cards and then sharing their emotion with the class.

Outcomes:

❖ The students had the possibility to take a rest from the pollution of the cities and to learn with less pressure due to the open space;
❖ very close contact with the beauty of nature allows students to feel their surroundings.
❖ Greater involvement of children in activities;
❖ increased importance and trust in the group;
❖ awareness of the importance of environmental protection.

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