

**PROJECT LEARNING OF MODEL PUD – BJ OF KINDERGARDEN  
“FROM IDEA TO PRODUCT”  
BEEKEEPING IN THE OLDEN DAYS AND NOW**

**PROJEKTNO UČNO DELO PO MODELU PUD – BJ V VRTCU  
“OD IDEJE DO IZDELKA “  
ČEBELARSTVO NEKOČ IN DANES**

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**Abstract**

*The center of pre-school teaching is the child and its interests, wishes, needs and experience. Learning topic, that are covered, derive from children and their life situations, since we want to motive them additionally. We have to be aware of that fact that pre-school children learn experimentally through all their senses and by their own way of thinking, searching and exploring, through games and other activities. They are actively involved in all stages of a learning process, which enlarges the quality and prolongs the durability of the gained knowledge. Everyone is an individual; therefore, it is necessary to provide them with knowledge in various ways, and by doing so, include as many areas from the curriculum. Interaction between children and adults and their mutual communication are essential in pre-school period. Kindergarten has to provide to each child conditions for gaining knowledge, skills, ability for a complete and optimal personal development.*

*Project work is one of the most qualitative didactic systems in pre-school teaching. With its characteristics, structure and procedure it includes all necessary elements of learning and pre-school teaching. It meets all criteria that are essential for a comprehensive and complete personal development of a pre-school child*

**Povzetek**

*V predšolski vzgoji v ospredje postavljamo otroka in njegove interese, želje, potrebe, izkušnje in doživetja. Učne teme, ki jih obravnavamo, izhajajo iz otrok in njihovih življenjskih situacij, saj jih s tem še dodatno motiviramo . Upoštevati moramo razvojno stopnjo otrok, njihove spretnosti in sposobnosti ter način učenja. Zavedati se moramo, da se predšolski otrok uči izkustveno preko vseh svojih čutil in prihaja do spoznanj po lastni miselni poti, z lastnim iskanjem, raziskovanjem in odkrivanjem, preko igre in drugih dejavnosti in aktivnosti. Je aktivno vključen v vse faze učnega procesa, kar poveča kakovost in trajnost pridobljenega znanja. Vsak posameznik je individuum, zato je potrebno, da jim znanje posredujemo po različnih poteh, pri tem pa vključimo čim več področij, ki jih zajema kurikulum. V predšolskem obdobju je zelo pomembna interakcija med otroki in odraslimi in medsebojna komunikacija. Vrtec mora vsakemu otroku zagotoviti pogoje za pridobivanje znanj, spretnost, sposobnosti za celovit in optimalen osebni razvoj.*

*Projektno delo je ena izmed najkvalitetnejših didaktičnih sistemov v predšolski vzgoji. Z svojimi značilnostmi, zgradbo in potekom zajema vse bistvene sestavine učenja in vzgoje predšolskega otroka. Ustreza vsem kriterijem, ki so odločilni za razvoj predšolskega otroka v vsestransko in celovito osebnost.*

## EXORDIUM

Beekeeping and bees are nowadays not appreciated and valued enough. We are not aware what a major and essential role the bees have in our lives, not just in the lives of humans but of all living creatures. Already the famous mathematician and physicist Albert Einstein ones said: "If the bee disappears from the surface of the Earth, man would have no more than four years to live." These tiny little creatures were the ones, that got our attention; especially because of their role in nature and the massive killing of the bees.

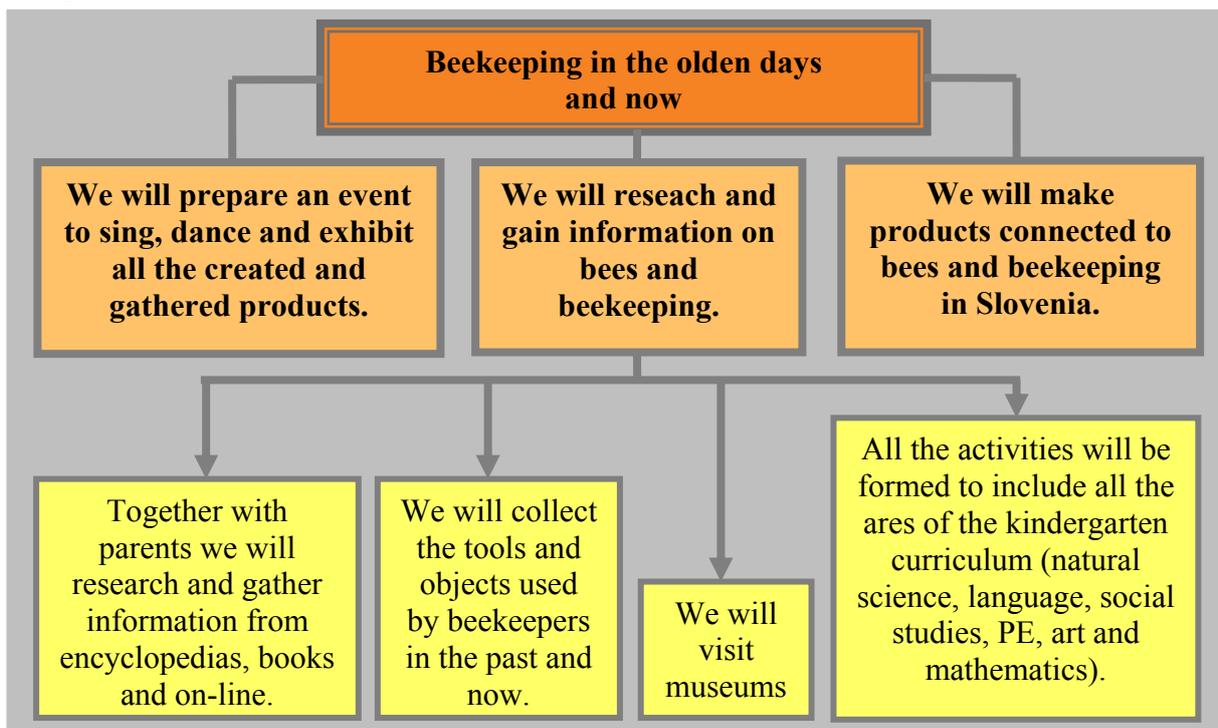
The concept of the project enables the children to learn in details about the Slovenian autochthon Carniolian bee, its structure, development, way of living, habitat and its great meaning and role in nature. Children start to recognize the importance and the role of beekeeping in Slovenia that presents an important part of the Slovenian cultural heritage.

Throughout the whole procedure children learn, gain information, develop various skills and competence and optimally evolve a comprehensive and complete personality. They are involved into all activities form the kindergarten curriculum. They make products that have a special value in beekeeping. They handle different materials and tools. They collect tools, equipment and objects that were used by the beekeepers in the past and those that are still in use today. They are being creative with movement, voice, lines and words. Children play and by playing they learn and create.

## PROJECT LEARNING OF MODEL PUD – BJ “FROM IDEA TO PRODUCT”

### 1 MACRO PREPARATION OF THE PROJECT

We prepared a macro plan which represents a draft of the project. It was in the form of a poster and due to the specification of the pre-school teaching, it was full of graphic materials.. Our macro preparation showed what we will research, prepare, gain information on, create and produce.



## 2 MICRO PREPARATION OF THE PROJECT

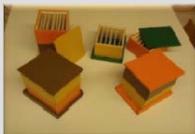
Micro preparation provides procedures and activities that will be carried out during the project.

	1st partial activity	2nd partial activity	3rd partial activity
	Research and information gathering	Product production	Event and product exhibition
What?	<ul style="list-style-type: none"> <li>- on bees, their lives, habitat, evolution, structure, reproduction, feeding</li> <li>- on beekeeping in Slovenia from the early beginnings to this day</li> <li>- on beekeeper's tasks, tools and equipment</li> </ul>	<ul style="list-style-type: none"> <li>- introductory instruction</li> <li>- safety and protection instructions</li> <li>- planning and sketching</li> <li>- choosing the materials and tools</li> <li>- making the products</li> </ul>	<ul style="list-style-type: none"> <li>- arranging the exhibition, photographs, art and technical products</li> <li>- inviting parents and friends to the event and exhibition</li> </ul>
How?	<ul style="list-style-type: none"> <li>- with dance, linguistic, music and acting performances</li> <li>- by using encyclopedias, books and internet</li> <li>- by visiting bee hives</li> <li>- by excursions to the museum</li> </ul>	<ul style="list-style-type: none"> <li>- by listening</li> <li>- by creativity</li> <li>- with one's own work</li> <li>- with skills</li> <li>- by taking safety at work into consideration</li> </ul>	<ul style="list-style-type: none"> <li>- with one's own work</li> <li>- with ideas and creativity</li> <li>- with presentation</li> </ul>
Where?	<ul style="list-style-type: none"> <li>- in the library, on internet</li> <li>- on excursions</li> <li>- in the playroom</li> </ul>	<ul style="list-style-type: none"> <li>- in the playroom</li> <li>- in the technical room and workshop</li> </ul>	<ul style="list-style-type: none"> <li>- at the gym</li> </ul>
When?	<ul style="list-style-type: none"> <li>- throughout the project</li> </ul>	<ul style="list-style-type: none"> <li>- throughout the project</li> </ul>	<ul style="list-style-type: none"> <li>- April (Earth Day)</li> </ul>
Who?	<ul style="list-style-type: none"> <li>- children with parents</li> <li>- pre-school teacher and her assistant</li> </ul>	<ul style="list-style-type: none"> <li>- children</li> <li>- 9th grade pupils</li> <li>- pre-school teacher and her assistant</li> <li>- woodworking technician</li> </ul>	<ul style="list-style-type: none"> <li>- children</li> <li>- beekeepers</li> <li>- 4th and 5th grade pupils</li> <li>- outer experts</li> </ul>
With what?	<ul style="list-style-type: none"> <li>- researching, collecting information on bees and beekeeping</li> <li>- with talking, singing, dancing and acting</li> <li>- with collecting different old and modern beekeeping tools, devices and objects</li> </ul>	<ul style="list-style-type: none"> <li>- with taking instructions and serious work into consideration</li> <li>- with tools</li> <li>- with machines</li> <li>- objects (sanding sponge)</li> </ul>	<ul style="list-style-type: none"> <li>- with art and technical products</li> <li>- with music and dance</li> <li>- beekeepers with their tools, devices and machines and also beekeeping products</li> </ul>
Why?	<ul style="list-style-type: none"> <li>- for children to gain more knowledge and information on Slovenian autochthon Carniolian honey bee</li> <li>- to get aware of the importance of Slovenian beekeeping through the centuries, that represents rich, cultural, Slovenian heritage</li> <li>- to get familiar with beekeeper's work, tools, devices and machines</li> </ul>	<ul style="list-style-type: none"> <li>- to teach children to be precise</li> <li>- to develop hand skills and creativity</li> <li>- to get to know all stages in product making</li> <li>- to learn how to work on different machines, with various tools and devices</li> </ul>	<ul style="list-style-type: none"> <li>- to present the meaning of preserving cultural heritage</li> <li>- to exhibit beekeeping tools and devices from the olden day to this day</li> <li>- to make people aware of the importance of the autochthon Carniolian honey bee and beekeeping in Slovenia</li> </ul>

### 3 REALIZATION OF THE PROJECT

Every child is an individual with its own wishes, needs, skills and success in at least one area. In all stages children carry out the activities, the pre-school teacher is the initiator and advisor. Children are active the whole time, since they cooperate from choosing the idea, collecting the materials to the production itself. With their pre-school teacher they plan excursions and bee hive visits with great care and accuracy with all the adequate activities and goals. They plan the product making very precisely and carefully. Due to the complexity of some activities, help of 9th graders and a woodworking technician has to be included. The pre-school teacher has to pay attention to make every child at least partially active in each stage of the process. The first and the second partial activity of the project go hand in hand according to the chosen topic in the kindergarten at a specific time. All the areas of the kindergarten curriculum are included. The emphasis is on art, music, dance, acting and technical areas, even though these areas are not exposed in the curriculum in particular. Work is done in smaller groups, more difficult tasks, however, individually. It is taken care of safety, protection and the correct use of tools, devices and machines. Theory and practice are interrelated.

### 4 FINAL PRODUCTS

 <p><b>Picture 1:</b> Bees</p>	 <p><b>Picture 2:</b> Honeycomb</p>	 <p><b>Picture 3:</b> Paper flowers</p>	 <p><b>Picture 4:</b> Flowers made from socks</p>
 <p><b>Picture 5:</b> Flowers made from socks</p>	 <p><b>Picture 6:</b> Candles</p>	 <p><b>Picture 7:</b> Bee hives</p>	 <p><b>Picture 8:</b> Bee hive panel paintings</p>
 <p><b>Picture 9:</b> Hive called Kranjič, which has a removable bottom and top</p>	 <p><b>Picture 10:</b> Langstroth-Root hive</p>	 <p><b>Picture 11:</b> Alberti-Žnideršič hive</p>	 <p><b>Picture 12:</b> Beekeeper (marionette)</p>
 <p><b>Picture 13:</b> Bee hive</p>	 <p><b>Picture 14:</b> Bee (costume)</p>	 <p><b>Picture 15:</b> Beekeeper (costume)</p>	 <p><b>Picture 16:</b> Bear (costume)</p>

## CONCLUSION

Project learning strives towards a constant independence and activity of a child. Through music, dance, paintings, words and technical creativity children get to know everything about bees and beekeeping in Slovenia. All areas of the curriculum are combined: PE, language, society, natural science, arts and mathematics. Children use the knowledge of different areas and imply it other situations and, thereby, deepen their knowledge. Everyone cooperates enthusiastically in all the activities. Each of them can show their best, at least in one area. They enjoy the process of wonderful products being made from different materials. Each product is special and unique and it takes a lot of children's effort and energy to make it. Children use their imagination and creativity.

Every child has its own page in the book of life. Not a single page is the same and each child writes its pages on its own, there just has to be a way to help the child direct their thoughts, knowledge, ideas and creativity. Project learning is one of the keys for the optimal, versatile and complete development of a person's personality, which is the heart of pre-school teaching.

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