



LEARNING THROUGH SHAPES AND COLORS

Ana Hanžekovič, Jessica Jaklin, Jure Ričnik, Klemen Rous, Marcel Gajšt, Valentina Kreft

Cvetka Hojnik (*supervisor*)

Igor Hovnik, dr. Martin Klinc (*practical realization*)

Wood Technology school Maribor, Higher Vocational College

Address: Lesarska ulica 2, 2000 Maribor

Webpage: <https://visja.lsmb.si/>

E-mail: referat@lsmb.si

Phone: +386 2 421 66 58

Research field: V 003 Design

Research purpose. We combined knowledge from Art Theory, manual woodworking, and knowledge of the characteristics of different woods in our Project week. With that we made child-friendly and interesting didactic toys.

Keywords: animals, basic shapes, basic colors, bunny, children, clock, colors, cube, didactic toys, project week, scales, shapes, simple shapes, students, study, time, toys, train, wagons, weather

Research Methodology. This time the theme of the project week was making of didactic children's toys. We would like to emphasize that the toys were not only created during the project week, but the preparation of ideas started in October and we only finished the work in April.

The toys that we will present are intended for children from the first to the fourth year of age. During the game, the child is trained in various motor skills and develops a sense of colors, shapes and textures.

To spike the interest of children, we made the products in basic colors and simple shapes.

While working, we learned to use different design programs, such as AutoCAD, machines (lathe, CNC laser, various saws, grinding machines) and learned about different materials and which materials are best to be paired together.

Results / Findings. We have learnt about the importance of didactic toys and how useful they are for children learning the basics of life. We got to learn how to work in pairs and how to schedule work for it to be efficient. Since we designed the toys ourselves, we were the ones bringing it to life with the help of our existing knowledge and the machines in the workshop. Seeing the final products, it was a big accomplishment for all of us.

Originality / Practical implications. All toys are based on wood, as a warm material that is environmentally friendly, so we created a Learning cube-recognition of time and weather (fig. 1), a Bunny scale (fig. 2), Building blocks based on basic geometric shapes (fig. 3) and a Building train-with differently recognizable wagons (fig. 4).



Figure 1. Learning cube
Author: Ana Hanžekovič, Klemen Rous, 2021/2022



Picture 2. Bunny scale
Author: Jessica Jaklin, Nik Gračner, 2021/2022



Picture 3. Building blocks
Author: Jure Ričnik, 2021/2022



Picture 4. Building train

Author: Marcel Gajšt, Valentina Kreft, 2021/2022