

## "MAKING THE INSTRUMENTS ZITHER " OF MODEL A PUD-BJ »FROM IDEA TO PRODUCT«

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### **Povzetek**

*V današnjem času se vse spreminja z veliko hitrostjo. Vsak dan sproti se moramo prilagajati novim posodobitvam, ki nas spremljajo v življenju. Tudi šola mora te posodobitve in novosti upoštevati. Vsakemu otroku posebej moramo zagotoviti najboljše možne pogoje, za njegov napredek. Šola se mora prilagoditi otrokom ter njihovem okolju, da doseže najboljšo mero znanja v vseh pogledih. V šolah otrokom ponujamo različna znanja pri različnih predmetih, vendar je to znanje velikokrat samo teoretično. Sama sem mnenja, da bi učenci veliko več odnesli, oziroma se naučili, če bi jim namesto teorije zanje podajali bolj praktično, ter za njih bolj prilagojen način.*

*Primer praktičnega dela je tudi projektno učno delo, ki smo ga študentje izvajali pri predmetu tehnika pod mentorstvom profesorice ddr. Jožice Bezjak. Izdelki, ki smo jih izdelovali, nam lahko koristijo tudi pri ostalih predmetih, kar pa je cilj vseh učiteljev. Podajanje znanja učencem, tako, da predmete povezujemo med seboj, ter jih ne ločujemo po predalčkih. Izdelek, ki je predstavljen v nadaljevanju, tako lahko izdelamo ob kulturnem ali tehniškem dnevu. Z izdelavo glasbil, v mojem primeru citer se učenci učijo sodelovanja, razvijajo ročne spretnosti, oblikujejo se osebno ter se seznanjajo z našo kulturo ter novimi poklici. Projektno učno delo omogoča učencem učenje preko lastnih izkušenj. Ravno na teh lastnih izkušnjah pa se vsi največ naučimo ter si te izkušnje tudi zapomnimo.*

### **Abstract**

*Everything changes really quickly today. Daily we have to adjust to modern technologies that we live with. Modern technologies and other novelties have to be taken into consideration also at school. Each child must be assured to have the best possible conditions for his or her progress. The school has to conform to the children and their environment to achieve the best possible degree of knowledge in all respects. In school children are provided with knowledge and skills in various subjects, but this knowledge is often merely theoretical. In my opinion children would learn more if they were taught more practically. Project teaching work is one of the examples of practical work and we performed it within the subject of technical science. The products that we made may be used also in other subjects and this is a goal of every teacher – teaching the learners by connecting the subjects and not by dividing them. The product that is described later on may be made on a cultural or a technical science day. By making instruments, in my case the zither, children learn how to cooperate; they develop manual skills, form their personalities and get acquainted with our culture and new professions.*

*Project teaching work enables learning by experience. And precisely by self-experience we learn the most and we remember it for a longer period of time.*

### **INTRODUCTION**

In project teaching work by model PUD-BJ I decided to manufacture folk instrument – zither under mentorship ddr. Jožice Bezjak. My uncle Jože Puc is manufacturing zithers as an amateur and because of that I ask him for a help making smaller ones for me. Because the

manufacture of zithers are not so difficult, I could pass the knowledge further on into schools, where could children make their own instruments, including zithers.

Further on I will briefly describe zithers.

## **INSERTING AMONG INSTRUMENTS**

We are talking about zithers, when strings are parallel stretched over resonant body. Function of resonant body is to reinforce sound. Musicians are placing zithers into family of strums but we know zithers which are combination of family of strums and string instruments – violin zithers and piano zithers, where strings swing with a help of key buttons. On other type of zithers we twang with right hand and with left hand we select strings. They have from 30 to 45 strings. Among them there are 4, 5 or 6 melodical, which there are strained over metal stick, which is divided with crossbar – similar as guitar. The rest of strings are escorting strings. On melody strings we play with plastic or metal twitcher, escorting strings we swing with a help of fingers on left hand. Zithers are very handy instrument because we can take them with us anywhere. Usually we play on them on table or on our knees. Mostly there are as soloistic instrument, they are accompanying singers or dances.

## **ZITHERS IN SLOVENIA**

They start developing instrument zithers on Štajerska, Koroška and Kranjska region in Slovenia. If anybody in family knows, how to play zithers, it was almost tradition, that all children in family knew, how to play them, that is why we can say that the zither tradition was passing from generation to generation. The most common song, which children learn was Holly night. In 1895 it was published a book - first slovenian school for zithers: Poduk v igranju citer by author Fran Korun Koželjski. At the end of 19. century they periodically published magazine called Slovenski citrar, which texts was mostly from Josip Mežiček in Fran Korun Koželjski, arrangements was written by Karl Vilfan, Josip Petrič in Ivan Kiferle, who published 18 volumes with 350 adaptations folk and popular songs. A turning point for zithers in Slovenia was in 1986, when there was first show called »Golden zithers«. With 2. world war zithers has died away and it was again awoken in 1994. That year they had first competition on playing zithers. They started in village called Griže pri Žalcu, on traditional meeting of zither players called »Golden zithers«. In Griže in 1999 they established Zither society of Slovenia. September 2003 zithers become equal instrument in musical schools.

The most famous zither players today are Miha Dovžan, Cita Galič, Tomaž Plahutnik, Peter Napret, Jasmina Levičar, Karli Gradišnik and others.

## **MANUFACTURING ZITHERS**

For manufacturing zithers we need oak or beech wood, which has to be dry, among wood we need glue for wood and iron wire. First we do resonant box sticking together with glue for wood. We have to wait, that the glue is dry and with sandpaper we grind all edges. On this box we make holes for strainers, which we make them from iron stick diameter 7 or 8 mm and 4 cm long. Strained sticks has to fit, that they can roll while they are strained and at the same time they prevent, that they don't rolls under the tension of strings. We can now put lacquer on box, that their outlook will be nicer and long-lasting. The best is to put lacquer twice. On both sides of box we make marks, where we put nails to fix strings. We fix iron or brass strip, which holds right distance between strings and box. The best spots is, where

strings crossed strip, with triangular file we polish small groove, that the string fit nice. For strings we use 45 cm long iron wire, chopped on pieces. On one side of nails, we do snare and we put string on nail. On the other side we just wind up strained stick by doing crossing first two or three wappings among them. By doing this we achieve good structure of strings on strecher. In the end we have to tune instrument. We tune instrument by listening but the best way to do it is to give it to someone, who plays any instruments. We can tune zithers in any major scale but in the beginning it is the best to tune in C-dur. In the end we can decorate zithers.

## CONCLUSION

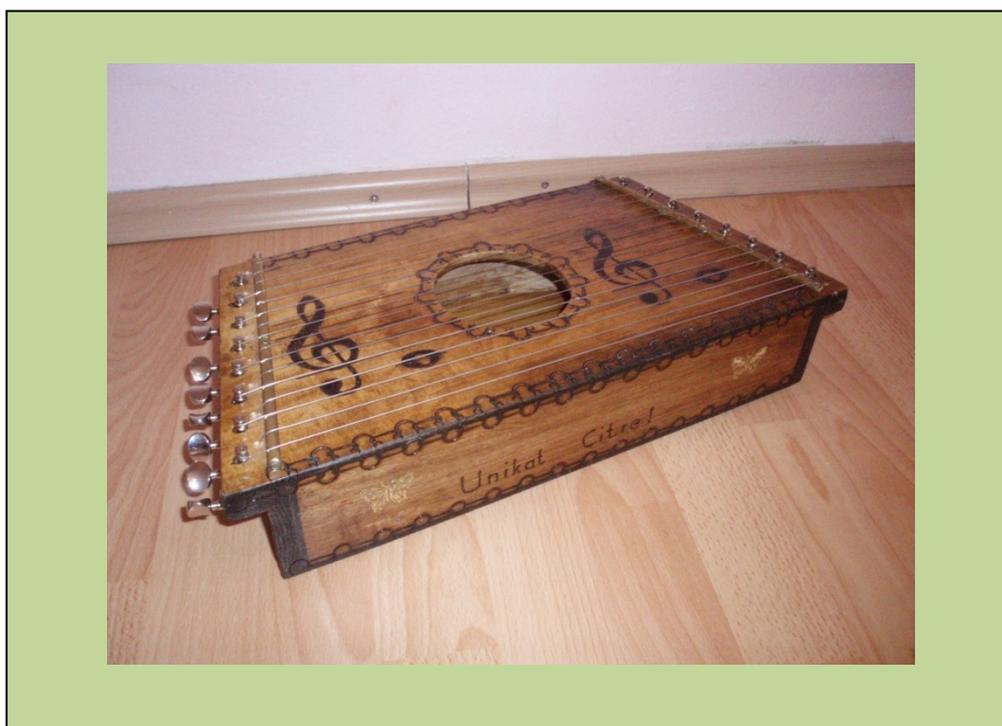
In this days, where modern technology is surrounding us, it is important, that we are maintaining folk tradition with our children, which was suiting everyday life of our ancestors in old days, that is why it is necessary, that teachers teach pupils in school about our culture. One of the ways of teaching could be manufacturing instruments, what is offering us model PUD-BJ, specially in interdisciplinary connections with technical and musical education.



Photo1: THE INSTRUMENTS ZITHER " OF MODEL A PUD-BJ »FROM IDEA TO PRODUCT«

## SOURCES AND LITERATURE

- Bezjak, J. (2009). *Project learning of model PUD – BJ – from idea to the product*. Klagenfurt: LVM.
- Bezjak, J.: *Materials in Technics*, Tehniška založba Slovenije, 2003, Ljubljana.
- Bezjak, J.: *A different way to knowledge, Project based learning – from idea to the product – connections between subjects and intercultural connections*, 2006, Somaru.
- BEZJAK, Jožica. *A different way to knowledge: project based learning BJ – from idea to product*. Ljubljana: Somaru, 2006. 1 el. optični disk (612 str.), barve. ISBN 961-91750-0-X. [COBISS.SI-ID [224452352](#)]
- BEZJAK, Jožica. *Idea projects in technical days, (Project based learning III)*. Ljubljana: Somaru, 2003. 138 str., ilustr. ISBN 961-238-213-1. [COBISS.SI-ID [125291264](#)]
- BEZJAK, Jožica. *Project learning*. Klagenfurt: Fakultät für Kulturwissenschaften, 2004. 1 optični disk (CD-ROM). [COBISS.SI-ID [5610313](#)]
- BEZJAK, Jožica. *Die Entwicklung der Didaktik des Schulpraktikums*. Ljubljana: Somaru, 2007. 1 CDROM (130 str.). ISBN 978-961-91750-9-5. [COBISS.SI-ID [231526656](#)]
- BEZJAK, Jožica. *Didactics of Technics, Pedagogical practice in Technics lessons*. Ljubljana: LVM, 2001. 40 str., ilustr., tabele. ISBN 961-6397-08-7. [COBISS.SI-ID [114333440](#)]
- BEZJAK, Jožica. *Project learning work: from idea to product*. Klagenfurt: Fakultät für Kulturwissenschaften, 2003. 1 optični disk (CD-ROM). [COBISS.SI-ID [5285705](#)]
- BEZJAK, Jožica (ur.). *Technical creativity in school's curricula with the form of project learning "From idea to the product": from the kindergarten to the technical faculty: proceedings: 5th International science symposium 18.-20. april 2007, Portorož, Slovenia*. Ljubljana: Somaru, 2007. 1 CDROM (1010 str.), ilustr. ISBN 978-961-91750-7-1. [COBISS.SI-ID [231414784](#)]



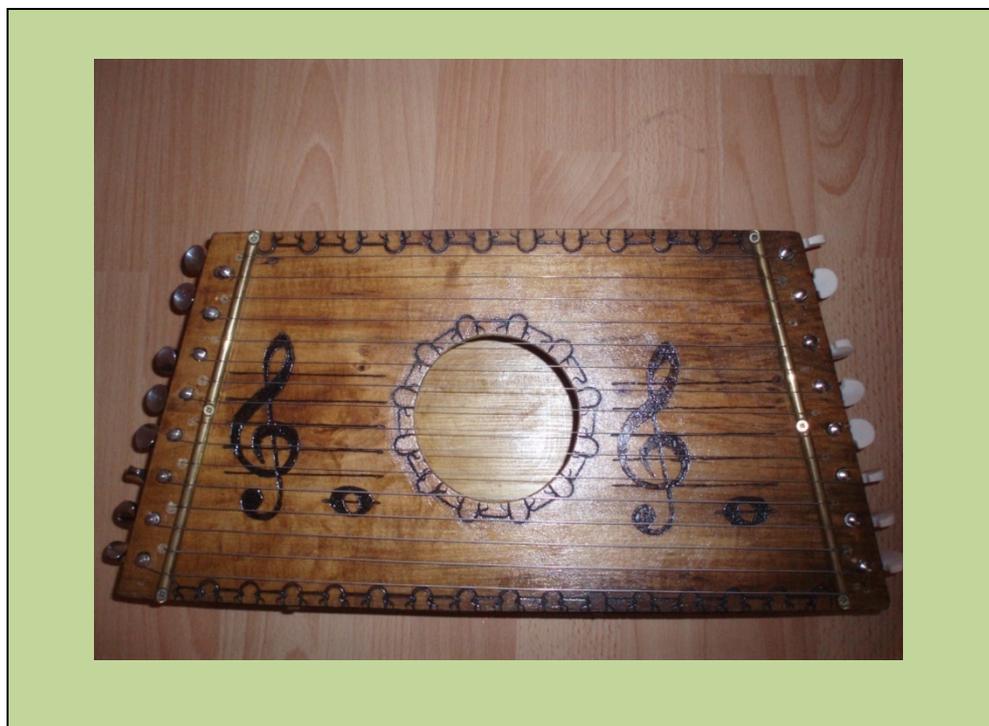
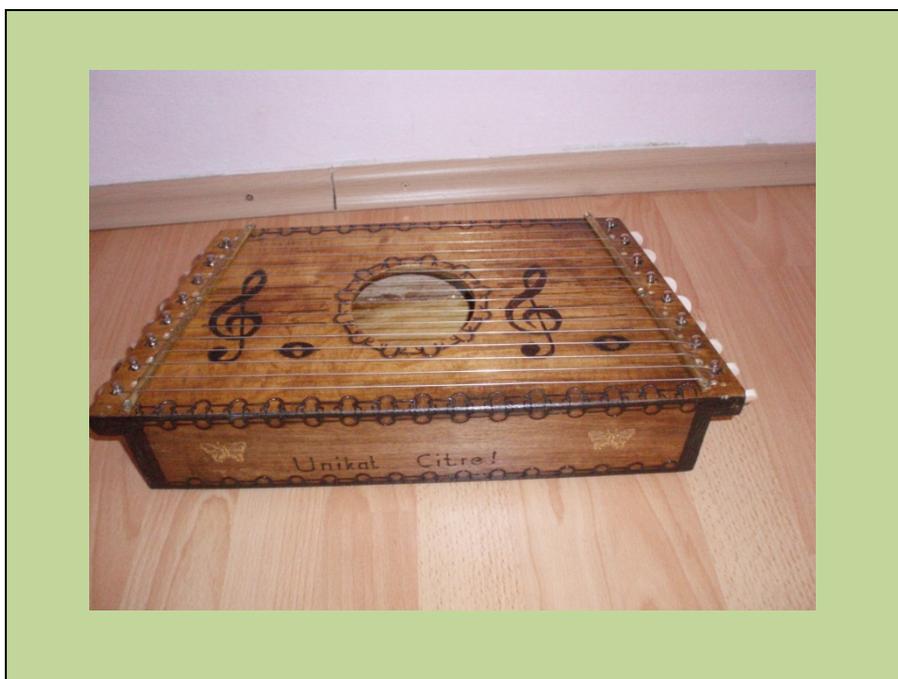


Photo 2, 3, 4: Zither of model PUD-BJ