

EARLY LEARNING OF THE TECHNIQUE IN THE FORM OF A PROJECT WORK BY MODEL PUD-BJ- FROM IDEA TO THE PRODUCT - “BRIDGES FROM SPAGHETTI”

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Abstract

For better comprehension the mechanics of building construction much research work has been done to present its basic characteristics in an efficient way.

The following contribution describes the use of the models of spaghetti bridges as well as their testing that was performed by students themselves and presented to the future students of our school on information and technical days.

Students can also learn about the real bridge before and after its pulling down. In this way youngsters, intellectual growth is stimulated.

Key words: building, construction, bridges, mechanics, models, test, learning, forces, deformation, bowing, iron concrete, spaghetti, creativeness, project work, laying, motivation, learning, research work, study project, creativeness

Abstrakt

V prispevku so opisane uporabe didaktičnih modelov mostov iz špaget in njihovih preizkusov, ki jih dijaki sami izdelujejo in predstavijo širši javnosti v okviru zgodnjega uvajanja v tehniko, in sicer otrokom v vrtcih, učencem v osnovnih šolah in bodočim dijakom na informativnih dnevih in tehniških dnevih, ki potekajo na šolah.

Spoznali naj bi različne modele konstrukcij mostov ter obnašanje mostov v naravnem okolju pred in po porušitvah. Hkrati pa spoznavamo boljše razumevanje učne snovi s področja mehanike gradbenih konstrukcij, inovativnih didaktičnih načinov in poti do učinkovitega prikaza in razlage osnovnih konstrukcijskih zakonitosti.

S projektnimi pristopi dela modelov PUD-BJ, spodbujamo kreativne ideje v zgodnje uvajanje v tehniko, predvsem pa miselni razvoj otrok že v vrtcih, pri učencih v osnovni šoli ter pri dijakih pri izbiri svoje poklicne poti.

Klíčová slova: projektno delo, od ideje do izdelka, PUD-BJ, konstrukcije mostov, zgodnje uvajanje v tehniku, medpredmetno povezovanje, medgeneracijsko povezovanje

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