



Elektrika pri predmetu TIT v 7. razredu z uporabo IKT

Electricity in the Technique and technology subject in the 7th class using ICT

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Povzetek

Predstavila bi rada eksperimentiranje, utrjevanje in ocenjevanje elektrike pri predmetu tehnika in tehnologija v 7. razredu z uporabo IKT.

Po obravnavani snovi o elektriki sem izvedla eksperimentiranje z električnim vezji s pomočjo spletne simulacije ter preverjanje in ocenjevanje snovi v spletni učilnici. V spletni učilnici so učenci podajali svoje mnenje o snovi v forumu in rešili elektronsko anketo o takem načinu dela.

Pri eksperimentiranju so bili učenci 7. razreda po parih razdeljeni v dve skupine, kjer je polovica razreda praktično eksperimentirala in izpolnjevala delovni list, druga polovica v drugem razredu pa je eksperimente izvajala na malih prenosnih računalnikih z uporabo simuliranega vezja PHET. Tako pridobljeno snov smo nato preverili in ocenili v spletni učilnici z reševanjem pripravljenih testov.

Simulirano vezje, narejeno za sestavljanja in merjenja električnih elementov in prirejeno osnovnošolskemu nivoju, je izdelala skupina PHET na Univerzi v Koloradu in je prevedeno v slovenščino ter je za izobraževalne namene prosto dostopno na njihovi spletni strani <http://phet.colorado.edu/simulations/translations.php#sl>.

Abstract

We would like to present experimentation, consolidation and evaluation of electricity in the Technique and Technology subject in the 7th class with implementation of ICT. According to the presented subject on electricity, followed by experimentation with electrical circuitry and through online simulations students take the test in the online classroom. In online classroom, the students convey their views on the matter in the forum, and fill in e-survey regarding this process. In the experiment, students of 7th class worked in pairs, divided into two groups



where half of the class practically experimented and completed the worksheet, and another half in the second group experimented using simulated circuits PHET on small portable computers. In such a way obtained material was then checked and evaluated in an online classroom with solving the ready-made tests.

Simulated circuit designed for assembling and measuring electrical components, is suitable also for a primary school. The simulation was developed by PHET group at the University of Colorado and has been translated into Slovene, and is freely available for educational purposes on their website <http://phet.colorado.edu/simulations/translations.php#sl>.