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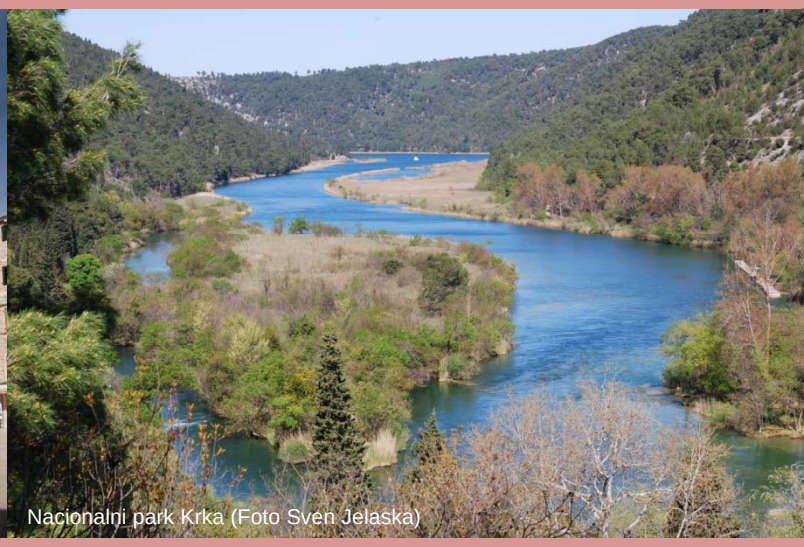
11. HRVATSKI BIOLOŠKI KONGRES
s međunarodnim sudjelovanjem
11th CROATIAN BIOLOGICAL CONGRESS
with International Participation

Šibenik,16. – 21. IX 2012.


Šibenik, Katedrala Sv. Jakova (Foto Dario Žagar)


Nacionalni park Krka (Foto Sven Jelaska)

ZBORNIK SAŽETAKA

PROCEEDING OF ABSTRACTS

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BOOK OF ABSTRACTS
OF THE 11TH CROATIAN BIOLOGICAL CONGRESS

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of the fifth and sixth grade of the selected primary schools from Croatian inland and coast towns (Samobor, Lovran). The results collected in written examination are analyzed by the examined pupil's sex, grade, nature education achievement, overall achievement, and results of this examination. The results of this research show differences in the percentage of completeness in the written examination between pupils living in coastal and inland Croatia. Girls are more successful in acquiring themes comprised in this Program, but they also show more success in nature education achievement and in overall achievement than boys. The results of this research point out that research-oriented teaching helps pupils to easier and better adopt the educational contents they perceptively experienced, while workshops makes them more interested in science and also stimulates them to be more responsible to the challenges of the modern society.

Keywords: workshop, biology education, sea

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AKCIJSKO ISTRAŽIVANJE: UČENICI MLAĐE ŠKOLSKE DOBI I ZAŠTITA OKOLIŠA

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Provedeno je akcijsko istraživanje o zaštiti okoliša u stajalištima i ponašanjima učenika rane školske dobi s ciljem otkrivanja reakcija djece na odgojne poticaje o potrebi zaštite okoliša. Istraživanje je provedeno s 27 učenika 1. razreda osnovne škole. Učenici su sudjelovali u 21 aktivnosti u tijekom tri tjedna. Svaka učenička aktivnost je praćena i bilježena(fotografiranjem, neformalnim razgovorom, analizom učeničkih radova i evaluacijskim upitnikom), a prikupljena dokumentacija o aktivnostima učenika je analizirana deskriptivnim statističkim metodama. Učenici su povremeno ispunjavali evaluacijske listiće koji su kvantificirani i analizirani tijekom istraživanja. U radu će biti prikazani rezultati svih aktivnosti koji su potvrdili visoku osjetljivost djece prema predstavljenim problemima zaštite okoliša kroz različite aktivnosti u nastavi. Učenici su uočavali probleme u okolišu i uz vođenje predviđali moguće posljedice ili rješenja postojećih problema. Osnovna hipoteza, da su učenici spremni na aktivnosti o zaštiti okoliša, je potvrđena. Razlike u ponašanju dječaka u odnosu na djevojčice nismo uočili, kao što su utvrdili drugi autori u sličnim istraživanjima. Neočekivane reakcije djece su zabilježene pa su u drugom krugu provedbe istraživanja izbjegnute na zadovoljavajući način, dok smo u trećem dijelu postigli najbolje rezultate. Tijekom provedbe istraživanja i nakon obrade svih parametara uočena je ključna uloga učitelja u organizaciji nastavnih aktivnosti na temu zaštite okoliša s djecom mlađe školske dobi.

Ključne riječi: akcijsko istraživanje, zaštita okoliša, učenici mlađe školske dobi

ACTION RESEARCH: YOUNG LEARNERS AND THE ENVIRONMENT

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Action research was conducted on environmental attitudes and behaviour of young learners in order to detect the reaction of children to educational initiatives on environmental issues. The investigation was conducted on 27 pupils of the first grade of the primary school. Pupils participated in 21 activities for three weeks. Each pupil’s activity was annotated, and so collected documentation about the activities were analyzed by descriptive statistical methods. Pupils were asked to complete several evaluation sheets, which were quantified and analyzed during the investigation period. The paper presents the results of all activities that confirmed the high sensitivity of the children on problems of environmental protection which were presented through various educational activities. The basic hypothesis, that pupils are ready for action on environmental protection through activities, was confirmed. Differences in behaviour of boys in comparison to girls have not been noticed, as found by other authors in similar studies.

Unexpected reactions of children were recorded, so in the second round of the investigation it was satisfactorily avoided while during the third investigation period, we achieved the best results. During the investigation and after the processing of all parameters we can conclude about a key role of teacher in the organization of teaching activities on environmental protection with young learners.

Keywords: action research, environmental protection, young learners

ACTION RESEARCH: YOUNG LEARNERS AND THE ENVIRONMENT

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INTRODUCTION

The school focused on change, teachers can no longer be the only beneficiaries of the research results who often spend professional researchers within academic institutions or research centers, but they need to become active participants in the research process. By taking an active role in academic studies teachers become reflective practitioners (Schön, 1984), teachers researchers or action researchers (McNiff, 2002). Research being conducted at the school level should be directed towards the evaluation of the results of educational activities aimed at improving the quality educational practice. To achieve that goal action research is particularly suitable (Bognar 2006) . Today, action research for many authors is the key lever in order to improve professional practice of each teacher and for changing schools and society at large. Education for the environment begins when the child experiences its first contact with nature and should continue systematically during school time. Our goal was to conduct action research on environmental attitudes and behavior of young learners in order to detect the reaction of children to educational initiatives on environmental issues.

Some of young learners acivities during the investigation.

Young learners investigation of a type and number of wase discarted during two days (a total of 508).

METHODS

The investigation was conducted on 27 pupils (14 boys and 13 girls) of the first grade of the primary school Zdenko Turković in Kutjevo. Pupils participated in 21 activities for three weeks (May20th to Jun10th 2010). Each pupil's activity was annotated, and so collected documentation about the activities were analyzed by descriptive statistical methods. Pupils were asked to complete several evaluation sheets, which were quantified and analyzed during the investigation period.

RESULTS

Action research was organized on three stages. Firstly less number of activities were planned mostly according to Peko at al. (2005), Uzelac and Starčević (1999) and Mati (2000). After first stage evaluation and discussion with critical friend and mentor we added more modified activities. Later during second stage, discussion with children participants, we added three more reaching finally 21 activities: sad and happy country, school yard, sorting waste in the classroom, sorting waste in tanks, investigation of the types of waste at home, making flowers on sticks, singing the song "Our Beautiful Croatia", creating the choreography for the song, the performance "One little bee", planting flowers on rocky terrain, painting eco-bags, eco-crossword, excursion to Kutjevačka rika creek, writing eco-messages for protection of rivers and streams, decorating boxes, creating mathematical story, a trip to lookout point Vila, outdoor relay games, writing stories, 10 commanded of a friend of nature. Differences in behaviour of boys in comparison to girls have not been noticed.Unexpected reactions of children were recorded, so in the second round of the investigation it was satisfactorily avoided while during the third stage.

CONCLUSION

We reached our goal in developing and carrying out activities according to action research. It can be concluded that our investigation has shown variety of different activities for raising environmental awareness for young learners. Our step by step investigation can be used as a model for other school teachers to conduct their own action research projects.

Action research can become a significant factor in improving the quality of our school system only if they are recognized and supported at the level of the entire school system. As long as their implementation is a matter of some enthusiastic teachers and professional representation and their impact will be very small (Bognar, 2006). Nevertheless, teachers just need to show that they are able to pursue their practice quality action research so that others outside the school context to understand their significance.

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