

## Title

Does Money = Happiness ?

Da li novac znači sreću ?

## Author(s)

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## Short description/ main idea

This is an international project between my students of the 4th grade (High School Lazarevac) and students from USA. They will investigate the relationship between wealth (per capita income) and other social indicators. Students will work in teams with the unknown students from other country. They will surf through the net looking for the information. They will use the English language for a communication with USA students. They will learn to use educational portal edmodo. During the project students will analyze statistical data and draw conclusions based on it. Ovo je zajednički projekat mojih učenika četvrtog razreda Gimnazije Lazarevac i učenika srednje škole Ithaca u New York državi, USA. Oni će uraditi statističku analizu veze između prosečnog dohotka neke zemlje i socijalnih indikatora srećnog života stanovnika te zemlje (npr. prosečni nivo obrazovanja, dužina života,...). Učenici će raditi u grupama zajedno sa američkim djacima. Potrebne podatke će tražiti na internetu. Koristiće engleski jezik za komunikaciju sa američkim vršnjacima. Naučiće da koriste obrazovni portal edmodo. Tokom projekta će raditi statistička izračunavanja i izvući zaključke na osnovu njih.

## Learning objectives

Cognitive - Knowledge: Factual, Procedural, Meta □ cognitive

Cognitive - Process: To understand, To apply, To think critically and creatively

Affective: To pay attention, To respond and participate, To organize values, To form and follow a system of values

Psychomotor: To perform independently, skillfully and precisely, To adapt and perform creatively

## Learning activities

Phase 1: Per Capita Income collection

Description of phase: The students will be divided into mixed groups (few students from each school). Each group is named by one continent.

Teacher will provide useful links and students will have to find and collect data for countries of their continent. After that they will make calculation the mean value, the median, the five number summary. Also, they need to make a box and whisker plot or a histogram.

Activities

1.1: Collect data

1.2: Organize data, calculation

1.3: Making box and whisker plot

Phase 1: Prikupljanje podataka o prosečnom dohotku

Description of phase: Učenici će biti podeljeni u mešovite grupe (po nekoliko iz svake škole). Svaka grupa dobija naziv po jednom kontinentu.

Profesor će im dati korisne linkove gde se mogu naći potrebni podaci o zemljama njihovog kontinenta. Nakon toga će uraditi potrebna izračunavanja - srednje vrednosti, prosečne vrednosti, ekstremnih vrednosti. Na osnovu ovih podataka napraviće odgovarajući histogram.

Activities

1.1: Prikupljanje podataka

1.2: Sredjivanje podataka, izračunavanje srednjih vrednosti

1.3: Izrada histograma

Phase 2: "Happiness" Indicators

Description of phase: The students will investigate life expectancy, literacy rate (percentage of the population who can read and write), population growth rate, unemployment rate. Each group needs to find a correlation between average income and indicators of happiness. They will discuss their conclusions and try to answer the question: Does the money = happiness? One online class via Skype will be organized for their discussion.

Activities

- 2.1: Investigation "happiness" indicators
- 2.2: Discussion about correlation between money and happiness
- 2.3: Exchange of different opinions

Phase 2: Indikatori srećnog života

Description of phase: Učenici će analizirati indikatore sreće - prosečnu dužinu života, prosečni stepen obrazovanja, natalitet, procenat nezaposlenih. Svaka grupa treba da nadje vezu izmedju prosečnog dohotka i indikatora sreće. Oni će diskutovati o svojim zaključcima i pokušaće da odgovore na pitanje : "Da li novac znači sreću?" Jedan online čas preko Skype-a biće organizovan za njihovu diskusiju.

Activities

- 2.1: Analiza indikatora "sreće"
- 2.2: Diskusija o vezi izmedju novca i srećnog života
- 2.3: Razmena različitih mišljenja

## Language

English  
Serbian

## Grade & Age

Grade: secondary education

## Domain

Mathematics>Statistics and Probability>Data analysis>Central tendency measure

## Keywords/subject

Mathematics, statistics, data collection, analysis of statistical data  
Matematika, statistika, prikupljanje podataka, analiza statističkih podataka

## Prerequisites

knowledge of statistics  
teamwork  
knowledge of separating important from unimportant  
independent research information on the Internet  
poznavanje statistike  
timski rad  
znanje odvajanja bitnog od nebitnog  
samostalno istraživanje informacija na internetu

## Difficulty

medium

## Learning environment

Computer-based, Field-based, Lecture-based

## Duration

6 Hours

## Teaching approach

Behaviourist: Programmed instruction

Cognitivist: Direct instruction, Collaborative learning, Problem  based

Constructivist: Action research

## Assessment strategy

Diagnostic-assessment, Summative assessment

## Phases

1.Per Capita Income collection

1.Prikupljanje podataka o prosečnom dohotku

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## Learning activities

1.1 Collect data

1.1 Prikupljanje podataka

1.2 Organize data, calculation

1.2 Sredjivanje podataka, izračunavanje srednjih vrednosti

1.3 Making box and whisker plot

1.3 Izrada histograma

## Phases

2.“Happiness” Indicators

2.Indikatori srećnog života

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## **Learning activities**

2.1 Investigation "happiness" indicators

2.1 Analiza indikatora "sreće"

2.2 Discussion about correlation between money and happiness

2.2 Diskusija o vezi između novca i srećnog života

2.3 Exchange of different opinions

2.3 Razmena različitih mišljenja