

# REPORT ON ORGANIZING THE ROSE SURVEY IN SLOVENIA

## ***1. ROSE TEAM***

The Slovenian ROSE team consists of Professor Slavko Dolinšek, Professor Dušan Lesjak, Professor Nada Trunk Širca and Master students: Drago Skurjeni, Nataša Glodež, Barbara Dobrila, Tina Cvar, Bernarda Dolničar, Darja Gabriel, Anita Govc, Aleksandra Gradišnik, Damjana Gustinčič, Sabina Ileršič, Edita Krč, Kristina Kuhanec, Iris Lojevec and Julija Pirnat.

We are all located at University of Primorska, Faculty of Management, Koper.

## ***2. SCHOOL SYSTEM AND SCIENCE TEACHING***

The Slovenian school system has nine years of compulsory education since 2003. Children start school at the age of 6 and they are 15 when they leave. Compulsory school is divided into 3 triads. Pupils normally progress but some could take the same year again for numerous reasons (health and other problems). In a class the maximum number of pupils is 28. Pupils with learning and other disabilities are integrated into regular school. Those with severe disabilities go to special schools. The majority of schools are public and free of charge. There are few private schools (catholic and schools based on alternative pedagogical approaches).

Science is taught throughout all grades. In the first triad the content is taken mainly from biology but also from chemistry and physics. In the second triad there is a subject Science and Technology. In the third triad pupils have Physics, Chemistry, Biology, Technology and they can have one or two subjects from the field of science and technology (e. g. electrical engineering, astronomy ...) according to their choice.

## ***3. TRANSLATION***

The original version of the questionnaire was in English and finalized in 2002. At the end of the year 2005 a group of translators and school teachers translated the questionnaire. The aim was to keep the questions and statements as simple and clear as possible. A group of teachers had to form the questions in order to be understood by the pupils. Before the final version was done, the ROSE team proof-read it and after a few meetings we agreed on the final version.

## ***4. NATIONAL QUESTIONS***

We agreed to eliminate the question asking about the country of the pupils. We did not add any items for background variables and no national questions were added.

## ***5. PILOTING***

Pilot testing was carried out on the population of class 8 pupils who were 13 years old. We assumed that if the 13-year-olds would understand the questions and statements the 14-year-olds would too. The pilot testing took place in February 2006 involving 25 pupils from a small county school. Pupils had little problems answering the questions so there was no need to make changes in the questionnaire.

## ***6. OFFICIAL PERMISSION***

In Slovenia the law forbids unauthorized interference with people's informational privacy, so we had to check whether the questionnaire is possible to be used in schools. The response was that since the only background variables were sex and age, no official permission or registration was required. On the other hand, the parents had to give permission whether their children could be involved in the survey. This was the task of each school.

## ***7. POPULATION***

Before determining the sample we agreed on the principle, that the survey is valid if the sample is big enough. We considered the sample of at least 1000 pupils enough. The target population were pupils attending class 9, where most 14-and 15-year-old pupils were likely to go. They were mainly born in 1991 with some exceptions. The exceptions were because some had to take the same year again and some started school earlier (before the age of 6).

## ***8. SAMPLE AND PARTICIPATION***

The Slovenian Ministry of education has the review of all schools and school statistics in our country. According to those data there were 20, 716 pupils in class 9 in school year 2005/2006. There were 1004 classes with the average of 20 pupils. We needed at least 60 schools which represented 13, 4% of all schools. The number of pupils involved was supposed to be 1236 or 5, 9%. We assumed to get 80% of suitable answers and that would leave us with 988 pupils. The schools were chosen randomly.

In February 2006 we sent letters to the sampled schools inviting them to participate in the ROSE survey. 58 schools or 96, 6 % gave us permission to carry out the survey and 2 schools or 3, 4% rejected. We regard this as a positive attitude towards participating in the survey.

We regard the sample being representative for the Slovenian target population.

## ***9. DATA COLLECTION IN SCHOOLS***

At each school the head teacher appointed one person to organize the project. They received a short introduction to ROSE and we also interviewed the head teachers. Each member of the ROSE team had to carry out the survey in appointed schools. Team members cooperated with school coordinators. The survey started on 20 February 2006 and finished on 15 March 2006.

The pupils had 45 minutes to fill in the questionnaire but on average they needed 20 – 40 minutes. Pupils with learning disabilities needed more time. The questionnaires were reviewed, coded and statistically processed.

## ***10. FEEDBACK AND EXPERIENCES***

Head teachers, school coordinators and pupils took the survey very seriously. Most of the schools requested a feed back on the results of the survey.

## ***11. CODING***

After we collected all the questionnaires we found out that there were 1187 pupils or 96, 3% of assumed sample included. There were 537 boys and 547 girls. The age varied from 13 to 16:

- 7 13-year-olds (0, 58%)
- 853 14 year-olds (71, 6%)
- 214 15-year-olds (18, 02%)
- 8 16-year-olds (0, 67%)

We excluded 14 questionnaires or 1, 17% because they weren't properly answered (answers were missing). At the end we got 1084 questionnaires or 91, 32% of the sample.

All responses were coded directly into the SPSS by the master students. They found the job uncomplicated.