

## R E P O R T

### **Study visit NCEEE at Cito**

4. – 8. October 2010.

*National Centre for External Evaluation of Education* has established the collaboration with dutch examination centre Cito since 2008. With first project *Development of Instruments in Croatian National Assessment* in two years time NCEEE has been consulted by Cito experts throughout first National Assessment. This has taken place in secondary school with emphasis on two subjects mother tongue and mathematics. Aims of the Project have been reached and the results were presented at Conference in september 2009. The Project has also ended in september 2009 with reports and mutual agreement to extent the collaboration if possible.

The second project was then proposed and accepted as short Matra flex programme. This new project under title *Towards modern assessment policies and practise in Croatia* started in june 2010 with first visit from Cito experts and will finish with Conference in decembre 2010. One 5-day study visit of NCEEE experts to Cito has been planned for early october 2010 and ended with succesfull outcome.

Expected results of Project are:

1. An evaluation of the first National Assessment conducted/carried out of Grade 2 in Gymnasium with a view to improve its content and its procedure.
2. Revised procedures for the administration of National Assessment in Primary Education have been produced and implemented.
3. Stakeholders made aware of (improvements in) National Assessment procedure. Strong links with Ministry of Science, Education and Sport and establishing relationship between curriculum development and assessment data.

In respect to aims of the Project a study visit of NCEEE experts was planned at introductory visit in february 2010 by mr Jose Noijons – project director and ms Erna Gille – project manager with NCEEE director mr Goran Sirovatka and NCEEE experts.

The general aim of study visit was planned toward:

1. Introduction on the Dutch education system and its institutions
2. Introduction on the Dutch system of administration of external assessment and monitoring of educational progress

Participants from NCEEE Study visit at Cito:

- Goran Sirovatka, director NCEEE
- Jasmina Muraja, phD - Head of Department for Quality assurance (project coordinator)
- Sanja Fulgosi, phD – senior adviser at Department for Quality assurance (mother tongue specialist)
- Zlatko Zadelj – senior adviser at Department for Test Organisation and Conduction (mathematic specialist)
- Josip Šabić – expert adviser at Department for Research and Development (data analysis and psychometrics)

#### **Monday, 4.10.2010.**

Study visit started with introductory to Cito and discussion of programme in order to plan in detail following days. Programm was presented with description of each session which was of much help to have a clear view into actual content of stated topics. Special requests by NCEEE participants were expressed such as meeting with mother tongue specials and introduction to VET system and assessment possibilities. Also, legal issue of all exams and assessments provided by Cito were mention to be important issue to hear at this visit.

By the end of visit all requests and topics were met succesfuly in respect to National Assessment but also toward external evaluation of education in general.

Department for National Examination was presented with introduction to Dutch educational system and institutions. The process of test development starting from curriculum development through work of CEVO and collaboration with Cito was described. Differences in school programme were mentioned and related to levels of National Exam and also results of final exam were commented. Some questions concerning primary education were raised from NCEEE and introduction to system was provided followed by several presentation during study visit on this topic which is much interest.

National Assessment project was described historicaly from the beginning in 1989 through it's development. The project is conducted in primary education and stated as research project which results are presented to Ministry for Science and Education for policy making. This is an interesting topic for NCEEE from the point of view that has been an ongoing research project which aim is proposed by Cito experts and than aprooved and accepted by Ministry for benefit of educational system. Also it was interesting to hear that those results are used in combination with results from Cito test and Pupil monitoring test to make clearer picture and wide conclusions on schools and system.

ICT system was briefly described with several main issues such us importance of requirements for generic system. Also design of Item bank was briefly introduced on general level with new computer testing possibilities.

**Tuesday, 5.10.2010.**

Activities and progress in Croatia were reported by mr Goran Sirovatka, NCEEE director which were well taken by Cito experts and consultants on this Project. Special interest in description of aim in National Assessment from NCEEE part was well accepted and discussed in detail from different perspectives. General aim as well as aim on level of certain subject namely mathematics and mother tongue were observed and proposed throughout morning. Some points were of special interest such us development of instruments in national assessment toward new croatian curriculum and setting standards. The importance of background questionaries was also acknowledged at this session in regard to different issues from socioeconomic status to details in subject matter. Also, the ownership on all results from exams and assessments stays at Cito which is relevant to position of NCEEE in educational system in Croatia and collaboration to schools and stake holders.

Knowledge center and Information centre were shown to participants with list of material and literature in relevant topics for external evaluation in education.

The use of background questionarie was presented by Cito expert and then discussed in relation to different topics. Responsibilities and roles of different parties in development of BQ was observed with much interest and relation to present situation at NCEEE. Importance of different viewpoints and than collaboration between them was empasised from develeopment of BQ framework to actual questions related to special topics.

Standard setting in respect to scoring and grading was presented with examples from different test such as national assessment vs. national exam. Decision making is based on grades but the process starts from scoring. This issue is very important and yet to be completely established in Croatia to achive objective and error free marking scheme that leads to setting the standards. Also, calculation of possible cut score took many years and experience in the field.

Specific parameters for development of item bank were discussed in small group. The problems were observed on item marking with specific issue of polytomous items since every marking category for polytomous item needs to have an ability linking objectively with students work. Also, from psychometrician point of view standard setting was discussed as important tool for comparison of expectation and student achievement at exam.

### **Wednesday, 6.10.2010.**

In respect to first aim of study visit and introduction to different institution the trip of NCEEE experts to CEVO, Utrect and Ministry of Science and Education at Hague was kindly organized.

Visit to CEVO has exceeded expectation of participants giving a very broad and at the same time detail picture of CEVO organisation including roles description and test construction. Presentation on above topic was given as well as many answers to specific question on syllabus, exam programm and test construct were answered. Material was also kindly

shared with participants in order to gain new knowledge and possibly include some of experiences to present situation or future plans at NCEEE. Presentation covered institutional setting with details in CEVO organisation from Bord to subject specialist and also documents such as exam programme, syllabus and test construct. This will be of much use in further work of NCEEE in establishing improved administration of exams in Croatia,

At Ministry for Culture, Education and Science responsible party from Department for Secondary Education described dutch educational system from different perspective. That lead a way into institutional setting and role of Ministry as governing body. In that respect comparison with actual position of Ministry and institutional roles and setting in Croatia was found to be similar and lead to conclusion

### **Thursday, 7.10.2010.**

Pupil monitoring system in primary education was presented and given documents that followed presentation. This kind of approach was quite new to hear and very interesting for future planning of quality assurance in primary education. The important part was also to learn that schools itselfs are interested in PMS and other instruments in order to follow a student progress as well as school situation and improvement. Details such as dynamic of test conduction, equation of test and standard setting through pupil report were explained in order to screen a picture of complete monitoring system in elementary schools. Role of Cito role as an expert organisation in test construct was again observed and responsibility of school was made clear.

Legal issues were explained in detail according to NCEEE questions on this topic.

Marketing and consulting as an important part of Cito organisation was briefly explained through presentation which covered three responsible departments with roles and jobs description. Also, all kind of Cito products and customers were mentioned with emphasis on competition and customer needs.

Data processing was described through administration and logistic of assessments an examination. Special interest was shown in final examination and therefore presented in more detail. This included organisational setting from Cito, DUO and other parties involved in administration through marking process to various reports at the end of the cycle. It was new to hear that marking is done by teachers in school with pupils nameknown and than after second marking discussed by colleagues. This was rather different from NCEEE experience so far and good to have insight into different possibilities. Also, the specific

program WOLF developed by Cito and now used by school for provision of data was described in 18 steps. WOLF tool proved to be a versatile and reliable computer application for school as well as Cito whose analytical work continues after first and second teacher input of data.

### **Friday, 8.10.2010.**

Assessment in VET schools was introduced referring to interest of NCEEE in that topic through interactive presentation. That showed how important it is to make clear description of competencies followed by marking scheme and scoring. The special requirements for VET schools such as competence indicators are made and observed but with awareness of specialities of each VET program and school. Diversity of 500 programs is a challenge to externally evaluate therefore the present situation brings 7 general standards that schools observe in their work. Cito has been providing so far training and consultancy and might take part into developing new test for VET schools in mother tongue and mathematics. The approach differs to one in Croatia due to different educational system but some of the challenges were found to be similar.

Mother tongue challenges and present situation in testing were presented and discussed by mother tongue specialist. The introduction of new item writers to test construct group was explained based on this example of mother tongue subject. This was interesting in relation to some new plans for training of item writers for future exams and assessments in Croatia. Details in mother tongue subjects on final exam were discussed from domain to item.

IRT model was discussed and use of it explained as a specific tool for problem solving in comparing the different markers in essay. This knowledge will be of much importance for future essay analysis at matura exam in Croatia.

Special needs were presented on request from NCEEE briefly with description of possibilities for those pupils and some special cases. Pupils with special need have two options from the beginning depending on kind and they are sent to special schools or in regular school with note for special care. In that case they are to take assessments and

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exams but taken into account the need test material is adapted. It is important to include this standards from the very beginning of test preparation which could be a good lead for future work in this segment at NCEEE.

### Evaluation and future collaboration

Study visit finished with short discussion on possibilities for future collaboration. Evaluation of study visit was made through questionnaire but also participants clearly expressed their satisfaction with content of programme and presentation as well as performance of Cito experts through 5 day study visit. Most of the issues were relevant to Project but also to present situation or future plans at NCEEE. Although the programme was prepared months ago there was a flexibility to accommodate new questions and themes that were raised through this project but also on the spot.

Future collaboration brings new possibilities for consultancy in specific areas such as instruction on software for test construction developed by Cito and joint work in regional development. In near future one to one consultancy will be needed with emphasis on psychometric work. Therefore it was proposed that NCEEE psychometric team could join Cito to further develop competencies which are established in prior projects. Also, it was mentioned that this could be a bridging period for preparation of more specific proposals for collaboration.

This Project will be finalized with last visit of Cito consultants at NCEEE later this year during which will be organized final Conference. The aim of Conference and draft ideas were presented on this occasion by NCEEE experts. Main issue at the conference will be bringing the results of this Project to the different stakeholders from educational system but also from economy and labor area. This will be time to inform public on importance and role of National Assessment in quality improvement of educational system linking it to development of economy and labour market in Croatia.

15. 10. 2010.  
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