Final Report of Demonstration Project in the former Yugoslav Republic of Macedonia 2016

Professional Development of Teachers and Trainers in VET in the SEET Region.

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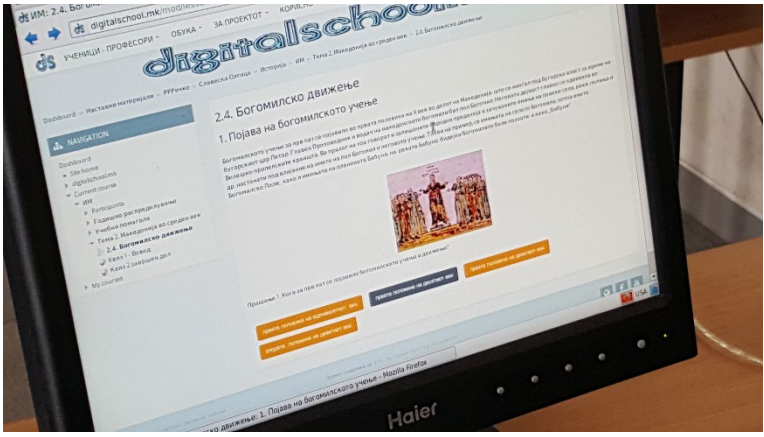
Improvement of the professional competencies of teachers and achievements of students in VET schools by establishing a new concept for digital learning and teaching (E-school concept)

Partners and management

The Demonstration Project was led by The Civic Association - Harvest of Knowledge. Partners in the project were three VET schools – SOU Riste Risteski Ricko from Prilep, SOU Gorce Petrov from Prilep and SOU Naum Naumoski Borche from Krusevo.

Creation of Web site and Manual

In the first phase, a web domain and hosting for digitalschool.mk were bought and a moodle platform was installed and set up for the training of the first 15 trainers and future disseminators.



Master trainers developed a user manual for the trainees which consisted of 13 modules, all of which were uploaded to ETF web site.

Training of teachers

The first part of the training was conducted 5-6 March in Krusevo. The course lasted two days and included 8 sessions on the following topics.

- Process of the professional development of the teacher
- Introduction to Moodle

- Moodle – Users and roles
- Moodle – Categories and courses
- Moodle – Activities and resources
- Moodle – Questions and quizzes
- Moodle – Forums
- Presentations in Google Slides

The second part of the training program took place from 19-20 March. 6 sessions were held on the following topics

- Moodle – Programmed Lessons
- Moodle – Webinars
- Moodle – Maths and Chemistry editor
- Creating video lessons with InstantDemo
- Upload videos to YouTube
- Video editing

Feedback

Upon completion of the first phase of the project, participants being prepared to trainer others were asked to give feedback. In answer to the question of whether they feel confident to train other teachers, 40% agreed, and another 60% strongly agreed. All of the participants agreed that their newly acquired skills would contribute to their CPD and that this training would improve teaching in their subjects.

See the full responses

Review of the manual

After the first phase of the project and evaluation of the feedback, minor changes were made to the manual. One of the modules – Maths and Chemistry editor in Moodle – was removed from the manual as it was considered particularly difficult to use even for experienced mathematics teachers who had already used various editors in other programs. (Later, another moodle plugin was installed with an easier interface)

Dissemination

Dissemination took place in three participating schools during the period of 20-23 June 2016. There were 96 participants in total, 39 in SOU Gorche Petrov - Prilep, 37 in SOU Riste Risteski Richko - Prilep and 20 in SOU Naum Naumovski Borche - Krushevo. Fifteen teacher trainers who were trained during the first phase of the project subsequently delivered the training to their colleagues. The trainees were given instruction materials and in the course of three days, they learnt about using the Moodle based platform at digitalschool.mk allowing them to upload and create learning materials, create programmed lessons, quizzes, forums etc. In addition,

teachers learnt how to use moodle based webinars, screen-recording software, and how to create, edit and upload a video to YouTube.

Feedback

Teachers participating in the dissemination were asked to give feedback. 43% strongly agreed and another 38% agreed that the training will improve their teaching. Similar percentages agreed that the training will help improve achievements of their students. 99% of teachers judged that Moodle quizzes would be useful (53% said very useful).

See full responses.

As part of the training process, by the end of August teachers undertook the final exercise which consisted of applying acquired knowledge and performing a task according to each module of the training.

They were mentored by teachers who had received the earlier training on how to implement the new skills in practice. Their practice and competency was assessed by the mentors according to previously set criteria as a result of which 78 teachers were awarded the certificate.

Application

From August 2016, teachers continued to apply their new skills with other classes and students. In November 2016 there were1137 active users (out of 2548 registered), 288 courses, 6298 assignments and 2077 quiz questions on digitalschool.mk platform. On average, on a daily basis, more than 100 users use the platform with an average duration of 11 minutes per session.

'Digitalschool is wonderful project and I think that it helps the adaptability of the students, the mode of learning and availability of the teaching materials.'

Milena Kondoska (Teacher)

Approximately 50% of the trained teachers are actively using the platform.

Monthly meetings

During the dissemination, teachers and their mentors had their regular monthly meetings where they shared their experiences, ideas, problems and obstacles. Three meetings took place in August, September and October. Apart from the regular meetings, teacher-mentors as well as master trainers are available for help and advice on all aspects relating to the project.

Certificates

78 teachers received certificates for participation and successfully performing project tasks, accounting for 81% of total participants in the dissemination phase.

15 teacher trainers received certificates for successfully completing their tasks.

Summary

In this digital era where students are using computers, smartphones and various gadgets every day, teachers of the 21st century have to adapt and adopt new teaching techniques and skills. This project provides a model for teaching teachers new digital techniques which can be applied effectively in the teaching process. These skills and techniques improve teachers' competencies and increase interest amongst students. Via interactive classes students have round the clock access to learning materials. Assessment of assignments, tests and quizzes are easier and more acceptable for students.

New modules and plugins are being tested and implemented at digitalschool.mk platform. New improved plugins for using chemistry and math formulas have been installed.

> *I've used the moodle platform before. That was 5-6 years ago. But at that time I was a lone enthusiast and eventually I stopped. Now I am very pleased that with the help of this project, the school has been stirred into action. I'm not alone, there are many colleagues who want to work and we think that they will continue in the future in even greater numbers.*
>
> Vlatko Butleski (Teacher and Project Leader)

Challenges

1. Hardware - teachers at schools in Macedonia face serious problems due to the lack of the computers in the classroom. Only a few classrooms at each school are equipped and the computers are old with outdated software and hardware. Schools also suffer from insufficient support from technicians.
2. Internet - the sometimes poor internet connection and very poor wi-fi coverage at the schools.
3. Video - one of the modules that teachers found to be particularly difficult for them to use is creating and uploading video lessons.
4. Workload – using these new techniques in teaching increases the workload of teachers, which may cause some teacher resistance.
5. Sharing – although cooperation between teachers has improved with this project, it seems that it is still not enough. Traditionally, teachers in Macedonia are not very keen on sharing teaching materials. Adding the sharing module on the platform might improve that.

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