

Use of MOOC for ICT Digital Competences



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Summary

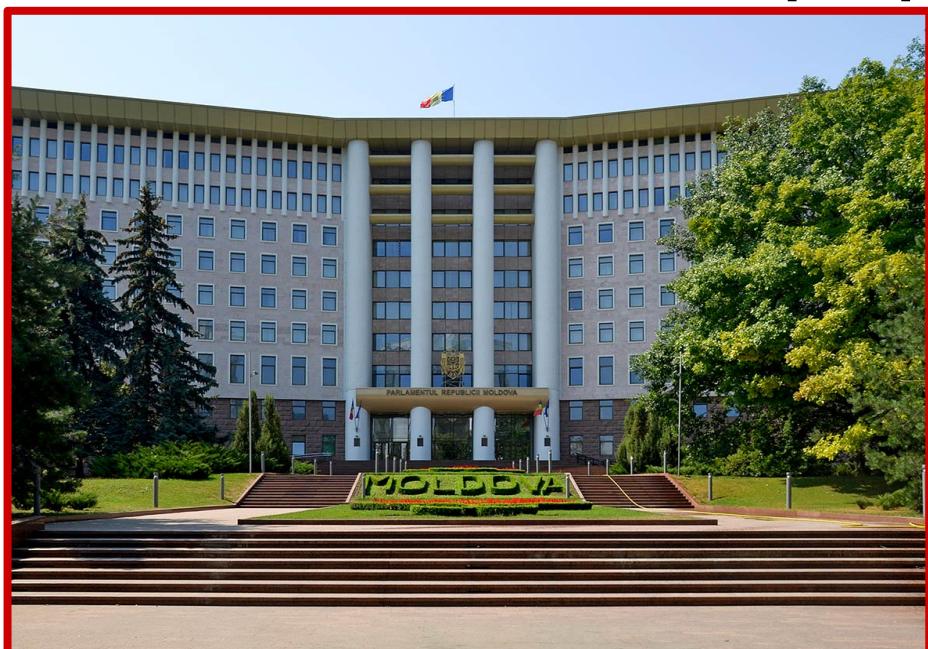


- ◆ ICT in Republic of Moldova
 - ◆ Digital skills
 - ◆ Digital literacy
 - ◆ Massive Open Online Course (MOOC)

About my country



Near 3,5 millions people of which 97.000 studying



GRADUATION



About myself



UNIVERSIDAD
DE GRANADA



Nowadays,
PhD
student and
teacher of
computer
science

Master's
Degree in
Educational
Management

Master's
Degree in
Technologies
of
Educational
Software's
Elaboration

Bachelor's
Degree in
Computer
Science

Baccalaureate
Diploma



Primary and
Secondary
school





“Mihai Viteazul” highschoo



Near 1700 students (pupils) and 140 teachers



ICT in Republic of Moldova

Strategy “Digital Moldova 2020”



- ◆ **Ministry of Education is aware of:**
 - ◆ **Improve Digital skills to students**
 - ◆ **But, also to teachers!**
 - ◆ **Using e-learning / MOOC**

Trends in Republic of Moldova: facts



**The mission of the implementation ICT in
Republic of Moldova is:**

- ◆ Maintaining high and rigorous standards professional and **digital competences**.
- ◆ Sharing **educational tools** and **software**, and
- ◆ Providing a national **system certifying** teachers.

Our Approach: Improve ICT by using e-learning

**Project:
“Teachers’ Continuous Professional Training
through Development of MOOCs” (*)**



**“Ion Creangă” State Pedagogical University
Republic of Moldova**



**West University from Timișoara
Romania**

(*) Romanian project, started in the West University of Timisoara 2017-2019

How to Improve ICT skills?



The answer is, we focus on:

MOOCs

A good Methodology to achieve better results

MOOC features (for ICT goals):

*It is **Massive***, so we can achieve a large student population participation with different skills and needs.

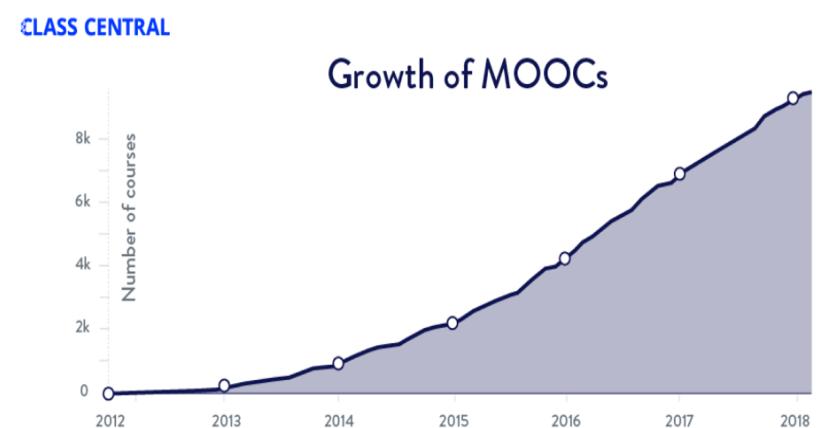
*It is **Open*** – so we can offer this course to a wider community.

*It is **Online*** – so we can follow as you need without mobility barriers, and

*it is a **Course*** – so we can evaluate the progress of student with our methodological approach.

[Also is growing the use of MOOC]

<https://www.class-central.com/moocs-year-in-review-2017>



Methodological approach: steps



1. The teachers' opinion;
2. The Five Fields of competence for teachers;
3. The ICT standards for school teachers in RM(*);
4. The use of TPACK Framework.

* RM – Republic of Moldova

The Teachers' opinion: step 1

440 teachers from
Republic of Moldova



1300 teachers from
Romania

- ◆ 90% of the teachers intend to learn something new or to update their knowledge;
- ◆ 75% of the teachers are eager to be enrolled in the online courses;
- ◆ The most demanded topics selected by teachers are in the ICT field.

The Five Fields of competence for teachers: step 2

http://mecc.gov.md/sites/default/files/standarde_cadre_didactice.pdf

1

The teacher projects the curricular approach to education.

2

The teacher provides a learning environment for development.

5

The teacher provides relationships of collaboration and respect with family and community, developing partnerships.

3

The teacher assures the achievement of the quality educational process.

4

The teacher manages their own continuous professional development.

Teachers NEED a continuous updated of these tasks using ICT

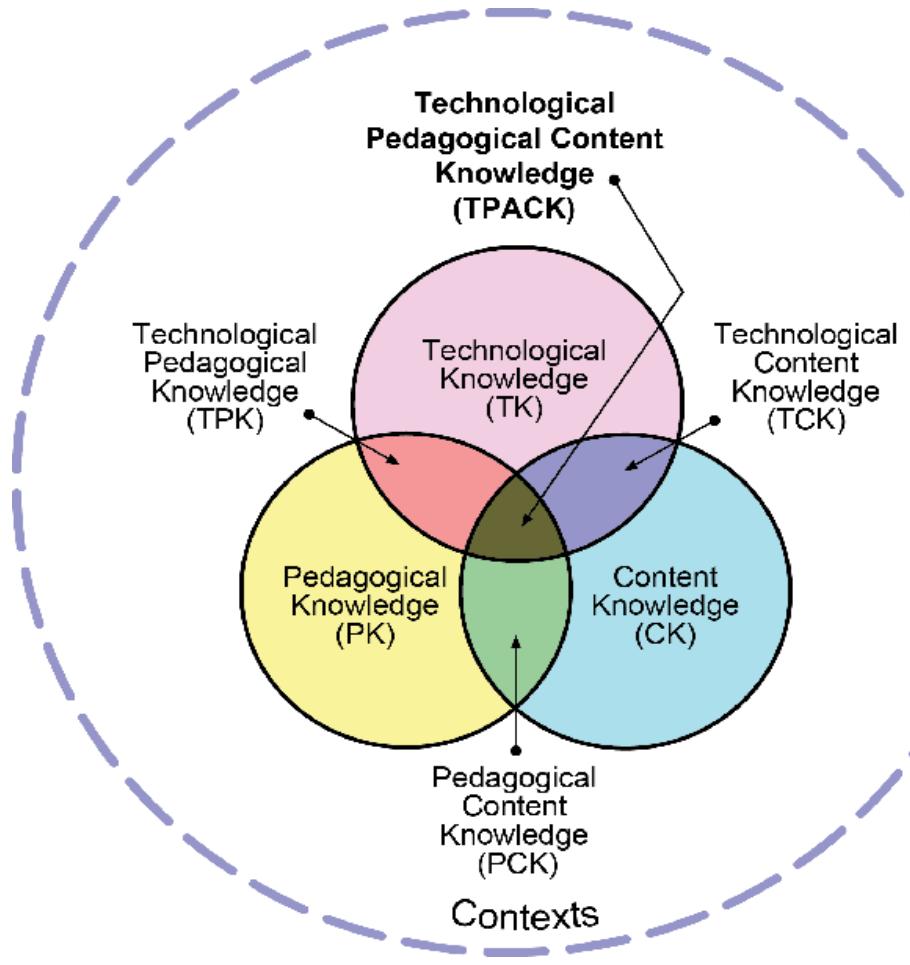
ICT standards for school teachers in RM: step 3

The areas of digital competences in RM:

- 1. The digital communication;**
- 2. The information Management;**
- 3. The creation of digital educational content;**
- 4. The management of teaching activities through digital tools;**
- 5. The use of Educational Content Management System;**
- 6. The use of digital equipment in education;**
- 7. The compliance with ethical and legal norms in digital space.**



The Technological Pedagogical Content Knowledge (TPACK) framework



- It allows you to create a learning and sharing culture in which there are opportunities to develop your technological abilities.
- It does not allow technology to dictate learning, but combines it with pedagogy and knowledge about content.

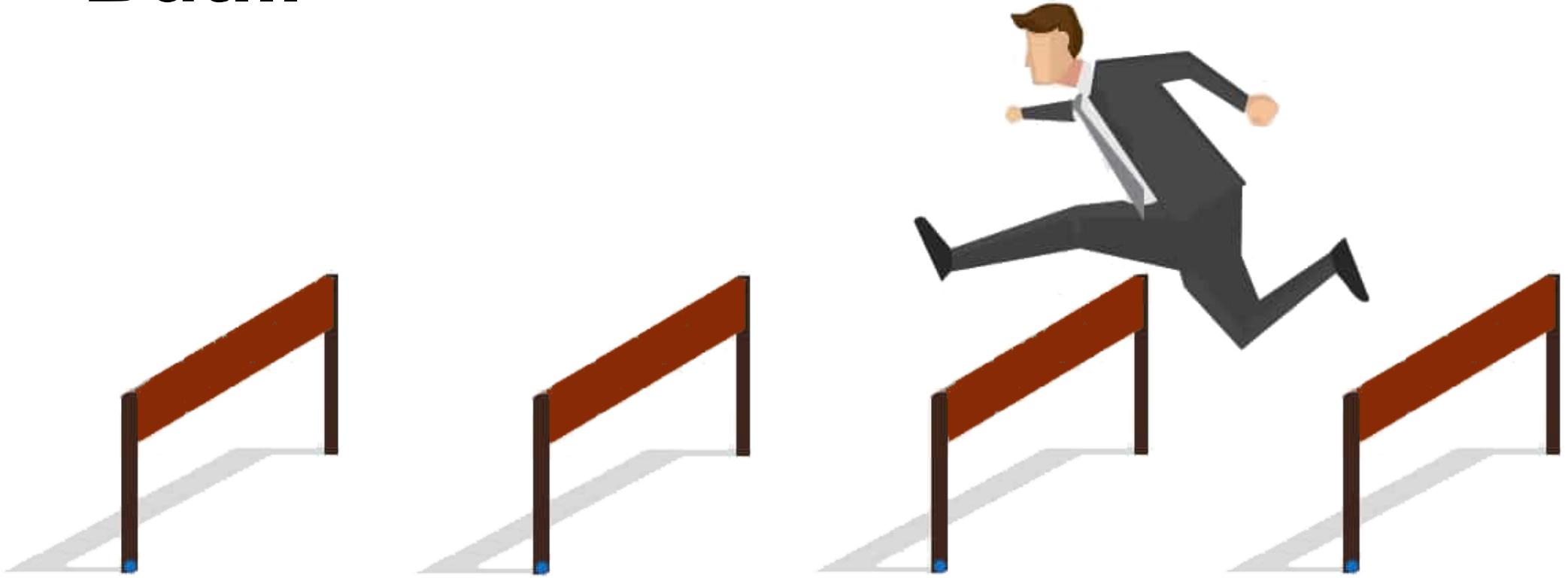
Overcoming Challenges



The main challenges we have to achieve are:

- The teachers doesn't have all the resources available that it is necessary.
- We have a small team to fulfill the proposed goals.
- We have no specific space for working.
- We have no a good equipment for working (filming).

But...



Positive aspects:

- Promote collaboration among external pedagogical staff.
- Check pedagogical issues to drive successful MOOC courses.
- Look for alternative learning strategies: flipped classroom.

Conclusions



- ◆ It is URGENT to improve the digital skills to teachers and pupils / students;
- ◆ We propose the use of MOOC with the TPACK methodological approach.
- ◆ Now, in progress the MOOC course building.

Future Work I



- 1. The evaluation process:** We expect that the creation of the MOOC courses will be finished on September and we can evaluate the results during the next semester.
- 2. Grow up** with more pupils / schools.
- 3. Report** to the Ministry of Education **the advances** in ICT using this MOOC.

Future Work II

1. Check for new alternative methods (continue working).
2. MOOC + Flipped Classroom.
3. MOOC + Crowdsourcing.



**THANK YOU SO MUCH
EVERYONE!**

Any suggestion are welcome!

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