



ITTP-21CS

Integrating technology in the teaching process, path towards building 21st century skills

Learning Teaching Training Activities in Kamnik (March 2019)

Let's "Live long and prosper"

Transcribed by Maša Kotnik



Janez Klemenčič – Slovenia (hereinafter Janez): Welcome at the press conference. Here is our school press group team and also the journalist from the main newspaper in the region, Gorenjski Glas.

Our school is currently involved in 16 projects. Some of them are probably bigger and more demanding as our Erasmus+ ITTP-21CS, but we are proud and excited that we host first official school partnership meeting of the European projects. Our guests come from Romania, Portugal and Turkey.

The aim of this press conference is first of all, the dissemination of our project in local community and wider. We do this project for our students so we wish to give them the opportunity to ask our guests anything about the selected project topics, partner schools or countries as well as about presented teachers' professional preferences.



Lenart GSŠRM Press (hereinafter Lenart): We can start with representatives of each country telling us, why you joined the project and what it means to you.

Salih Demirci –Turkey (hereinafter Salih): In Turkey the project, the use of ICT in education of 21st century is in the centre. In certain areas. We are coming from technical school that is divided in three parts, one of them is ICT, another map-cadastre information system and third logistics. I think that robotics is the most related to ICT. We are focusing on robotics, which is a new area in Turkey. However, creativity and responsibility are important as well. I am a history teacher and I think I can improve my class with the use of ICT, like for example, your English teacher Milan does.

Marius Buzera – Romania (hereinafter Marius): To be a part of this project is very important to us. Since the year 1968 Japanese researchers have spoken about the world of information. In 1972 Japan made plan on how to improve their didactical act, the teaching act with the use of technology. At this moment, all people agree that we live in era of information and knowledge. Information and knowledge are commodities and people buy and sell them. When I was young, school prepared me for work in my country, but students who attend school right now – we have to prepare them for a new era, for the future jobs that don't exist at this moment. It is a problem to know what competences you will need in next 18 years, because the world is changing very fast. We are participating in the project to work together, to learn how to develop new or how to improve our didactical methods for you, to discover the new skills for you in the 21st century.



Lenart: So you are saying that by contributing to this program, you are trying to learn how to improve your school system, so your children will be better equipped for the future?

Marius: Exactly.

Nuno Proença - Portugal (hereinafter Nuno): The wider the range of your learning, the better it is. If you are only learning from people who are close to you, you are not going to learn as much as if you widen that range of people. The knowledge that we teachers get from such exchanges will most definitely help us to be better teachers and improve our teaching. The main purpose of being in this project is to learn from your school, from the students at your school and teacher colleagues here.

Lenart: You all said that in some way or another you are looking to enrich your knowledge of the school system. What are some of the differences that you see here, between our school system

and the school system in your country? What are perhaps some things you saw at our school that are not common practice at yours?

Salih: Well, for a start, your building is better compared to our school building. Our school is located in a neighbourhood of Istanbul in Sultangazi where there are a lot of refugees. There are constantly new people coming in, because Sultangazi is the cheapest place to live in Istanbul. There are 16 million people living in Istanbul and just because of that, your school and your neighbourhood are very different from ours. It seems there are no minorities here in Slovenia. Everyone is Slovene.



Lenart: No, no, we have minorities, the ethnicities of our students are very diverse, but you can't really see it, because we're more or less from the Balkan. There are not so many differences in our appearance, but you could hear the difference in the accent, if you knew Slovene.

Salih: I understand. Comparing the physical elements of the school, yours are better, however, our classes are different from yours. In our school, teachers move from classroom to classroom, students don't go around.

Lenart: And which do you think is better?

Salih: Yours, however, is not acceptable for Turkey. In the 5 minute breaks it is impossible for students to change classrooms, because we have 1600 students. That is twice as much as you. We are now focusing on robotics and artificial intelligence and teachers like me are learning alongside students, how to teach this.

Cristian Maria – Romania: I like the fact that you use a lot of technology in your classes. Your English professor, Mr. Mandeljic, uses mobile phones to answer questions to quizzes. We use technology in our high school but maybe not to such degree.



Marius: Like schools in Turkey and Portugal, our school is technical as well and it is difficult to have technology everywhere, in each class. In our schools students prepare themselves for different vocations. The rest is the same. I agree with my colleague, you use a lot of technology; it is nice to have such interactive lessons.

Nuno: Do you know the character of Mr. Spock from Star Trek?

Lenart: Of course we know him.

Maša GSŠRM Press (hereinafter Maša): “Live long and prosper!” (showing Vulcan salutation)

(laugh)

Nuno: The idea behind education at this point in your life is to prepare you to live long and prosper. Or so we wish. I think your school is a very good school – it has the right size in terms of physical space, in terms of students etc. For example, when I was your age and was in secondary school, before I went to university, I attended school with 3000 students. There were too many of us. There was no room for the press club or literature club or science club ... Here you have just the right size of the building, the number of students and teachers and you have a lot of resources available which you can use to your advantage so you can live long and prosper. (laugh)

Today we live in a very technological world. Out there is the world of knowledge and content creation, social interaction – nobody works alone today, you have to work in teams and interact with other people. And you should learn as much technology as you can before you become a part of the working process. Perhaps there should be more teaching of informatics.



Janez: Of course there is another problem; there has been a lot of discussion about where the limits in use of technology are. I don't think that it is good advertisement to say that we use as much technology as possible. Technology is not everything. Human interaction is important as well.

Maša: If I can just follow up on this statement – there is a lot of discussion these days about where the line is between too much technology and not enough technology. My question is do you think that there are possible side effects of using technology in class? What do you fear would be some negative effects on your students?

Marius: There are negative effects, there have been studies which are well documented through research in education. For example, the level of knowledge acceptance is lower if you read from the screen in comparison to reading a book. You can learn more from a book. So it is a disadvantage if you learn by interacting with a computer screen.

Maša: But don't you think that we remember more from experiences, such as quizzes in school, when the whole class learns about a topic through a quiz than if we all just went home and read about it in a book?

Marius: If you read, you will learn more. If you answer a quiz on a paper or in a book it is different than answering it on a screen.

Maša: I see your colleague does not agree.

Lenart: Do you think technology has more advantages than disadvantages?

Carla Silva – Portugal (hereinafter Carla): I think that we are afraid. The purpose of technology is to serve, to be used. In that sense it is always an advantage, because we are following this path. I agree with your teacher when he says that human interaction is important. Of course it is important, that's why the teachers are here, it is a relationship we humans need. That is why in technology we use machine learning to form this kind of relation. The machines talk to us. It can be done. The only thing a machine doesn't do in the class is – it doesn't interact with you. Right now we are actually developing this kind of machine. However I don't think it will substitute a teacher. The teacher will always be the supervisor of educational process. I think that in 10, 15 years a teacher will have a more orientative role in the classroom. He will not be the one that develops the knowledge, but the one that points you to the right path. And I think that this is the right way to use the technology.



Nuno: I think that artificial intelligence is moving in this direction. People are starting to interact with computers. But this is not the same as interacting with humans – every human is unique. He has feelings and life experience, which a machine doesn't have. Perhaps I am a little bit romantic.

In terms of education, technology serves its purpose if you use it to enhance the teaching and learning, not if you use it as a replacement.

Lenart: I know I shouldn't have personal opinion, but I have to agree with you.

Nika GSŠRM Press (hereinafter Nika): I have a question for you all. What do you think would happen if a computer got feelings? Would you think it would be appropriate then to think of it as a unique thing?

Nuno: Maybe, but what makes who we are, are the experiences. You would be different if you were born elsewhere; however, computers in Slovenia, Turkey and Portugal are the same.

Nika: You know what's interesting to me? In ancient Greece there was a philosopher that thought books were bad because if he wrote something down he would forget it. If we are scared of computers, we don't see the upsides, that it is a tool.

Nuno: Yes, it is a tool, and I'm not against it, I love it actually, however, my personal opinion is that they are not good for humanity.

Carla: But what is a feeling? I can work with a robot that produces feelings.

Lenart: But won't those feelings be programmed? Artificial feelings?

Carla: Artificial feelings are another thing, yes.

Nuno: Hungry is a feeling and computer can't feel hungry.

Maša: Well, isn't 'hungry' more of a physical sensation than a feeling?

Carla: I can produce anger – anger is a feeling.

Lenart: I have another question – if artificial feelings are not real feelings, how about somebody that uses anti-depressants? Medications can produce artificial feelings, so does a person on anti-depressants then have no feelings?

Nuno: Let me ask you this – do you like literature?

Lenart: Yes, I am a poet.

Nuno: Well, a computer doesn't do that.

Lenart: Well, I agree. I have a very limited knowledge on this subject but if I had to name one thing that sets humans apart from the machines is that we are able to see grey. In moral dilemmas. We can answer a question with yes and no. If you ask me if somebody is a good person I can say, well, yes and no. Can computer do the same?

Maša: Because they see the worlds in zeroes and ones?

Carla: No, it can do this.

Marius: The computer can. An algorithm in computer intelligence means to have a lot of experiences. You have to train an artificial brain. I don't think a computer will have feelings, if you train it a lot it will produce something like a feeling. But it won't be exactly like a human feeling.

Carla: I asked myself what a feeling was the feeling occurs, when you do something emotional. The computer doesn't feel the emotion, but it can show the emotion. That is a feeling. For example, when a robot tells you something funny and you don't laugh, a robot will make a sad face. He is transmitting emotion. Humans see emotions like that. That is why I was asking myself, "what is a feeling"? There is an emotional feeling that is only human. That is a characteristic of humans. The machine can produce emotion, because we define emotion like that.

Nuno: But where will this emotion come from? A list that machine chooses from?

Carla: Yes. It is incredible but we also have emotional programming. We have neuro programming tool in us, the same as machines. But it is physiological.

Lenart: But emotions sometimes cause us to act irrationally and against our own interests. If a machine had emotions it would also act out irrationally. And all the computers I have seen and the programmes are very rational, mathematical. Could a machine with emotions sometimes act out irrationally and against itself?

Maša: And possibly dangerously?

Carla: Of course it would be a danger to humanity, everything can be a danger.

Lenart: Okay, we have a kind of sidetracked.

Maša: Yes, I have one more question for representatives from Romania. You talked previously that goal of your involvement in this project is to prepare yourself and your way of teaching for future generations that are more tech-savvy. But is it enough just to start using ICT or will it be at some point necessary to adapt the school system as well? For example, before technology, the important thing to learn was how to gather information. If somebody had a project he had to go to library, read books and gather information. But we have information at our hand 24/7. The more important thing for us to learn is how to filter that information. So the previous school system was based on memorisation, but isn't it more important to understand and to solve problems than to memorise? Will the school system at some point have to be changed?

Marius: Yes. The school is a living, dynamical system. We have to constantly change things. It is not a closed system. We have to interact with economic, political, social factors. It adapts all the time. Here we talk about the use of ICT, how to improve collaboration, communication, how to develop critical thinking. ICT is only a tool. With it we improve the methods of developing critical thinking in students, how to make them more creative, innovative.

Maša: If I understand you correctly, you think that by using ICT like a tool, the school system will eventually adapt to newer generations.

Carla: It will have to adapt, there is no other way.

Lenart: One final question. You've seen our school, you've seen the students. What would you say is the biggest cultural difference, the culture inside the school?

Marius: For me, coming from a Romanian school, wearing slippers in high school is strange, but it is a good thing. It is strange seeing students on corridors wearing slippers, so I think this is the biggest cultural difference.

Lenart: Some schools have shoes also.

Maša: Yes, this is not the case in all Slovenian high schools.

Lenart: But it is nice, because then the school isn't dirty and you feel like at home. (to the Salih) You come from Turkey so I'm quite interested in your answer, as your country might be considered a more conservative one.

Salih: You will see when you will come to Istanbul, that it is quite open city. The rural parts are more conservative, but not Istanbul, where we come from. So our school is very similar to yours.

Nuno: You said that it is nice to wear slippers, that the environment is more cosy this way. My question is this – how much do you think that the environment in the school and inside the classroom should be like home?

Lenart: I think that in some cases the environment depends on the teacher. Some teachers can create a very strict order, almost like in the military, you can't talk, you can't smile, you can't move-

Carla: -like a robot!

(laugh)

Lenart: In other classes, where the teachers are more relaxed and they don't try so hard to keep order and keep us quiet, the environment can get out of control. If I speak objectively – I think that environment feels more like home, the connection between students is much stronger. And that is always a positive thing, because we help each other out a lot. For example, I'm quite a procrastinator and kind of lazy, to be honest, and if I didn't have the schoolmates who help me out, I wouldn't have such good grades. Overall, it's a positive thing.

Maša: And I think when school environment is relaxed the students can focus more on learning and less on the stress of school. You don't have to think of how you are scared of the teachers or how the school is an institution, where everything is formal and by the rules. If the environment is more relaxed, you can focus more on learning and participating in class. You can get more from school this way.

Lenart: At the end of the day, it all depends on how much you want to learn. If you do, the environment is good, but if you don't, well, the teachers can't force you into learning and the environment is bad.

Nuno: One final question: If there was a rule that no smartphones are allowed inside the school-

Lenart: -I would probably go against it.

Carla: There are a lot of schools that have this rule in Europe, even in Portugal.

Maša: We are not allowed having phones during classes. We are still trying to figure out the line between using ICT and not allowing phones in the class. Also, there are school regulations where the teacher can't even take the phone away as that would be considered stealing. There's still a lot of grey area here.

Janez: Thank you all for participation, ingenious questions and witty answers. We will continue with separate press conferences for each country.