Susan is a Finnish secondary school science teacher and has a class of 20 fifteen-year-olds. Half of her class are female students. She is 35 years old, has two kids age 10 and 7 and she goes twice a week in a gym. Susan is very much interested in technology and was the driving force that her school bought a 3D printer for different projects. For her, it is important to build a collaborative learning environment in and outside of the classroom. The projects that she is launching with her students are mostly global themes and topics, sometimes even found in the local community. She believes that her role as teacher includes also to empower her students and encourage them for creative and critical thinking.

## Susan

#### 35 – Science Teacher – Finland



## Nikos

#### 42 – Teacher of Science and Music – Greece



Nikos lives in Athens and teaches Math. Physics and Music. He is 42 years old, is member of a band where he plays the drums. His other passions are robots and building different kinds of vehicles. With his older son, aged 9, he has built already several of them with different systems (Lego Robot, Clix, etc.). Thus, he is very fond of projects where students have to find ideas and craft their own creations. He is a teacher that pays high attention to the individual needs of students, and proposes tools that can be customized to these needs. He is very flexible allowing students to work with other tools, since he is of the opinion that each student needs to make his/her own experiences for learning. He supports the students and checks the progress from time to time but leaves it up to them to create, design, craft and program their creations. If a student has issues, he discusses with them the problem and guides them to possible solutions. Still, he is guite restricted within his curriculum but he is very creative in finding ways to combine both, project and curriculum requirements. This is also due to a very flexible headmaster that has high trust in Nikos and his way of teaching.

## Petros

Petros age 28, has studied IT, Physics and Math in Greece. He decided not to continue with an academic career since he wanted to be closer to teaching. Thus, he took part in a training of an educational institution dedicated to enabling people to hold STEAM workshops with kids. Now he is working as a facilitator in a non-formal educational institution that fosters educational activities of new Technologies and STEAM. He believes that learning can be fun and that it should be combined with hands-on activities. He lets go of clutter and focuses on the essentials, thus on the principles that kids should understand. Petros has built already robots for several years from many different materials and is increasingly interested in the maker movements. He is member of an online maker platform where he supports quite often the makers that seek for creative solutions in programming or IT in general. Last year he was traveling to Rome to take part in a big maker faire.

#### 28 – Non-formal Education Trainer – Greece



# Barbara

#### 37 – Science Teacher – Austria



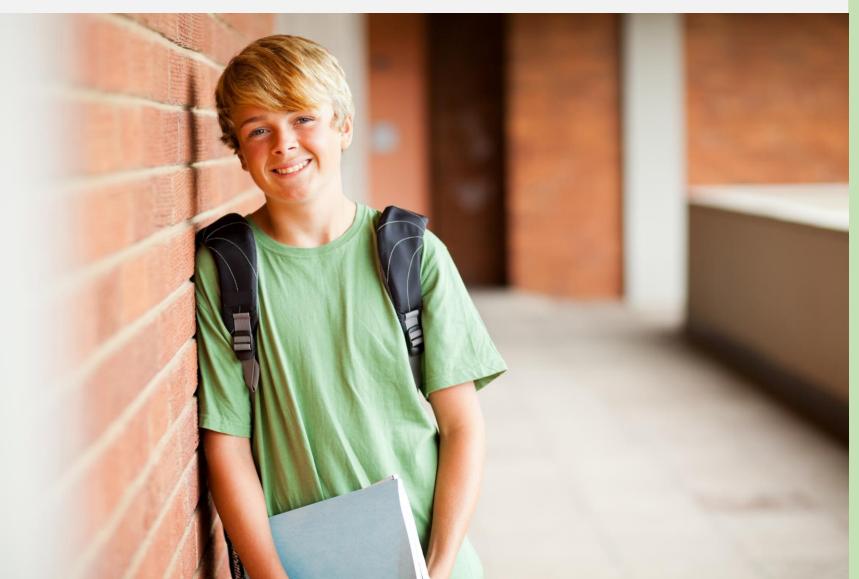
Barbara is an Austrian teacher for Math, Biology and Crafting for secondary students. She is 37 years old, married, has three kids and loves to go hiking with her family. Her husband, Andreas, is teaching Math, Physics, Sports and IT. She is a very motivated teacher, knows how to spice up the classroom to engage the students and uses simulations and computer programs for her teaching in Math and Biology. She made good experiences with gamification of learning, although some of her teacher colleagues are rather critical with this kind of teaching. But she is acknowledged in her school as innovative and open person. She is convinced that also education has to be innovative and understands. her teaching as the preparation of the students for the 'real' working life. She sees an issue with the fact that she has to fulfill the curriculum and at the same time the possibility to take part in so many interesting projects. Thus, she needs to be very selective in projects she launches. Due to the fact that she has only limited IT knowledge, she needs very clear and detailed instructions when she launches projects with IT inclusion. Luckily her colleague who teaches IT is a great team player and is often willing in launching projects together with her. She herself learned already a lot from these common projects, but she feels not confident enough to do her next crafting project herself (sewing bags with flashing lights).

Dimitris is a principal for a second-grade school with 400 students in Greece and before becoming the principal, he was teaching IT, Maths, Physics and Sport for more than 20 years. He comes out of a three generation of teachers, is married for 31 years and turns 55 next year. In his duties he has a lot of administrative tasks, but he is very interested in what innovations happen in education and tries to support his teachers in implementing these innovations. Often, they have to handle financial restrictions as well as restrictions due to the curriculum, but Dimitris tries to provide the teachers a good framework in which they can act flexibly. Thus, he is very open to collaborations also outside the school and tries. to keep up with the technological development. He has high trust in his IT administrators and he knows that his team of teachers work very well by supporting each other in different projects and initiatives. When supplementing an IT lesson, he would like to give the students the possibility to explore with different systems and understand the basic principles behind it but also foster their soft skills like creativity, their ability of planning, collaboration and creation. At the same time, he looks out for systems that are easily accessible, moderate in costs and highly effective for the students.

### **Dimitris** 55 – School Principal – Greece



## **Veikko** 12 – Student – Finland



Veikko is a 12-year-old student in Helsinki. Twice a week he attends the swimming training. He likes techno music, plays piano and is fond of online games and computers. Veikko also has a younger sister, Neela, that just started school. Since they live a bit outside of Helsinki, both have to leave early in the morning to go to school. His favorite subjects at school are English and Sports. He is very fond of projects in school since he is a very creative youngster. Also at home he is persevering in crafting things. While reading Harry Potter in English, he decided to craft a magic wand for himself with sparkling lights when waved properly. With the help of his parents, a technical engineer and a lawyer, he managed to create his own wand.

Elena is a Greek student living in Athens. She is 17 years old and attends a higher private school. Her favorite subjects are Arts and French. She is very gifted in sewing and knitting and has designed for herself already several clothes and accessories like bags, scarves etc. She regularly visits websites and blogs that deal with fashion and design. She has a lot of friends that she meets in the community center, but of course she has much more 'virtual' friends in Facebook. Elena usually posts her creations there to present what she has done. She considers herself as an average student but she has difficulties in Maths and Biology since her interest in these subjects is really low. As a very creative person she likes collaborative projects with her classmates where she immediately takes care of really cool designs but leaves the conceptualization usually up to the others.

## Elena

#### 17 – Student – Greece



## Noah 12 – Student – Austria



Noah can't remember a time where there wasn't some form of digital media in his home. He received a Nintendo DS at Christmas when he was 6 years old, and since then has moved up to a PlayStation3 videogame console. He is very active and involved in sports and loves going outside playing with his friends, with the Nerfs, or ride his bike. When his friends come over they often decide to stay indoor to play a computer game, even when it's nice weather outside. He attends a public secondary school in Austria and during his summer holidays he visited a camp on robotics and programming. He is very proud of his first self-created robot and continued to expand a little online game he created himself in Snap! Noah is now 12 years old, but he is sure when he has finished the NMS (secondary school) he wants to go to a higher school that focuses on IT.

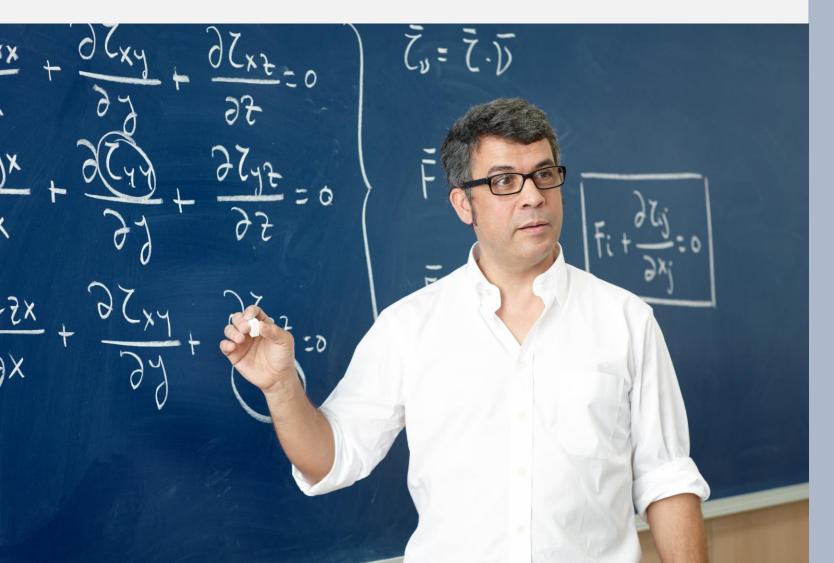
Bora is twelve and studies in a private international school in Albania. All her classmates have personal tablets and emails where they receive homework from their teacher. She is currently working on a historical drama project about the Austrian royal family of Habsburgs where she will represent the character of the Empress Maria Theresia. She loves history, languages and cultures and is mostly interested in female leaders because they show that girls can be powerful. Complementing the drama, Bora prepared a PowerPoint presentation with facts and figures about the Habsburgs and uploaded it in a shared folder of her Google drive. She is now searching Google for costumes fit for her drama character. In her free time, she likes playing with her little sister, teaching her English through YouTube videos, or talking to her friends through pictures on her Snapchat or

Instagram.

### **Bora** 12 – Student – Albania



### **Christoph** 41 – Science Teacher – Austria



Christoph is 41 and teaches physics in an Austrian public school. He is married and has two little children with whom he spends most of his free time besides playing and watching football with friends. The state given curriculum in physics in pretty strict and does not foresee much time for project-based learning during the school hours. The school financial resources have also been restricted and he can hardly find small means for buying equipment he needs for projects. Yet, the school lies in a rich area, so he engages students' parents in funding projects and decides to cut-off some lessons which he deems less important from the curriculum and dedicate the hours to projects. He certainly wishes he could have more time and resources to conduct great projects but he chooses to do what he can with what he has. He believes that letting students do things together can teach better physics and better social skills. Teamwork and social aspects are essential to him and include one of the focuses of his projects.

Ivana is 56 and has been teaching Biology and Chemistry in a Slovenian high school for her entire career. She is very fond of technology in general and especially technological innovations in the field of education. She believes that good IT skills should be a prerequisite for recruiting teachers, and enhancing their skills continuously keeping updated with technological advancements in the digital era, is essential for 21st century education. Around ten years ago, when her children moved out from home to pursue higher education she was left with more free time than earlier. Together with some teachers of her age, Ivana created a teacher's team for projects integrating at least two STEM subjects. Since then, their school has been participating in national and international competitions winning important prizes and building itself a reputation. Some of the projects have brought up such successful innovations that have ended in collaborations with prestigious companies and patents. Almost all the project work is carried out in Ivana's free time and financed with alternative means. Ivana considers this a hobby but regrets the lack of time of her colleagues who are interested in project work and educational technology but don't have any time or resources available.

#### Ivana 56 – Teacher of Biology and Chemistry – Slovenia

