##### [00:00:00.250] - Introduction

Welcome to EU Code Week podcasts. We bring coding, computational thinking, robotics and innovation closer to you, your community, and your schools.

##### [00:00:17.370] - Eugenia

Hi, we are your hosts Eugenia Casariego and Maha Elkheir.

##### [00:00:20.560] - Maha

We are part of the EU Code Week team that wants to support adaptation of education in Europe to face the digital challenges of the future.

##### [00:00:27.310] - Eugenia

And today we're actually going to learn more about EU Code Week and the reason why this grassroots initiative is an important player in equipping future generations with the skills they might need in your market.

##### [00:00:37.160] - Maha

We have here today with us two guests who can best talk about EU Code Week, Annika Ostergren Pofantis from the European Commission and Thomas Dalla Vecchia from European Schoolnet. They have been both instrumental in the success of EU Code Week and welcome both. Can you introduce yourself to our listeners and tell us a bit more about your role in Code Week?

##### [00:00:57.130] - Annika

Yeah, sure. Hi. So I'm Annika and I work at the European Commission and I am the coordinator of the EU Code Week team for the Commission side. I'm also an expert in digital education policies.

##### [00:01:12.340] - Tommaso

Hello. I'm happy to be with you today. My name is Tommaso. I work for European Schoolnet, and after a few years in the Future Classroom Lab program, then I had the chance to coordinate the input of our organization to EU Code Week, and therefore, I'm proud member of this wonderful team.

##### [00:01:33.170] - Eugenia

Welcome both. It's a pleasure to have you here and as well as good. I think for our audience to go back to the basics and actually talk and discuss what is actually you Kodwic, and what are we actually trying to do with this initiative? So can you give our listeners a rundown of what is actually Code Week and also how it started because I think this is something we don't often discuss or bring during our events and so on?

##### [00:01:56.290] - Annika

Sure. So it all started back in 2013 when there were some young people who were actually advising the European Commission on digital matters, how to bring digital policy skills to young people. So in about a month, they launched EU Code Week because they wanted to bring computational thinking and coding to the forefront and really make all the actors cooperate around it. All the providers. I mean, there were a lot of small coding clubs. There were also a lot of teachers doing things, but nothing was really done together.

##### [00:02:31.820] - Annika

And for them, it still is very important to show how you create with code. You build things like you build houses with brick or with stones. You can build useful applications with code. And they also emphasize that it was very important for all people to understand what's going on behind the screen inside the computer because our world is so digital and everything is digitally connected and all these digital technologies, they are run with lines of codes, of course.

##### [00:03:05.890] - Tommaso

And then around 2018, what happened is that the Commission and the community actually also had a brilliant idea. So they thought and we all thought that the way to bring these skills, this opportunity to everybody was through schools through formal education. So we decided that it was important to engage more and more teachers, schools, primary and secondary schools, to reach to each and every student in Europe to give them the chance to move their first steps into digital creativity. And since then, the initiative has been growing quite extensively.

##### [00:03:47.500] - Tommaso

And our role in mission, especially when I'm speaking about my close colleagues in a way, was to make sure that the initiative was meaningful and effective to support the vision of schools and teachers so that they could empower their students. Of course, Code Week remains and always was for everyone, for all. But there's a difference, of course, between teaching and learning about coding, about programming if you are an adult compared to a child trying to learn different set of skills connected to computing while they are in school.

##### [00:04:34.180] - Tommaso

So all these differences have been taken into consideration in the further development of Code Week. And now we have this wonderful initiative that brings forward the importance of equipping all students with skills that has unexpected are so fundamental for their present and future.

##### [00:04:56.200] - Eugenia

Yeah. And it's good that you mentioned that because I was actually going to ask for clarification where Code Week targets more, schools or the general public? But I think that was quite clear. And so we're going to dive deeper into initiatives of Code Week and why we do it.

##### [00:05:15.010] - Maha

Why do you think it's important that people learn about computational thinking, coding, and all other related digital skills? Why is it so important that it is taught in schools?

##### [00:05:24.750] - Annika

Well, as I said, digital technologies are all around us. We pay our bills, we order food, we date, you play games, you socialize, everyone works. During the last year, most pupils have been studying from home and everything is driven by digital technologies and the thought of including more coding, computational thinking and digital skills in schools. It's because it gives everyone an equal chance to learn girls and boys and also socioeconomic background.

##### [00:05:58.190] - Tommaso

And indeed, that's the bit where the school can come in and play this role for democratizing the access to these important skills. And to answer your question also, Maha, I think we're just getting more and more used to hear about computational thinking and coding as foundational fundamental skills. Really. So we would talk until a few years ago about numeracy, literacy, and we thought those were the competencies that every child would need to have. Now competencies related to computer science, to coding, to competencies that define the relationship we have with technology and with digital world become absolutely necessary to each and every citizen.

##### [00:06:48.510] - Tommaso

So Code Week and it focus on schools, but also on all European citizens, aims also to do that to make sure that everybody has that essential component to interpret, to converse with technology, to be active and responsible in a digital world. And finally, I just want to remind that could we advocate for a fun introduction of computing into education or training. So that's absolutely a very good reason why to teach these skills because it can be engaging, it can be inspiring.

##### [00:07:25.520] - Annika

Yeah. I would also like to that add we also think it's important to, you said that before Tommaso, about to empower teachers to provide easy learning materials for teachers so that they can feel comfortable of introducing coding, computational thinking in their classrooms and to empower their students that way.

##### [00:07:44.990] - Eugenia

Right. To kind of take the first step together with them in a way.

##### [00:07:48.470] - Annika

Yeah. Exactly, yep.

##### [00:07:49.340] - Maha

That's important. But like you mentioned, there is this important aspect of communication and collaboration. And in this way, we can see that Code Week leans on its active community of teachers and education stakeholder. How do you keep active such a wide and diverse community spread all over Europe? And how exactly do you promote this sense of belonging within the EU Code Week community?

##### [00:08:09.120] - Annika

Well, we have a super active community of volunteers. There are actually many different parts of this community. On one side, we have the EU Code Week ambassadors who are responsible for the activities in their countries, and they bring together stakeholders, business, and also maybe they have contacts with the authorities, and they try and spread the mission of EU Code Week. Then we have a group that we call the leading teachers. They are teachers that are extra active in Code Week. And then we have the European Commission, and then we have representatives at the National Ministries of Education or the education agencies, for example.

##### [00:08:52.590] - Annika

And then we have the thousands and thousands and thousands of teachers who participate in Code Week. Every year. This year alone, they have organized over 70,000 activities the same last year. So this involves several million people every year. We try and keep the enthusiasm going. These are very creative people and very enthusiastic, and we listen to them as much as we can, and we try and implement their ideas. So that Code Week is really their Code Week, their communities' Code Week let's say.

##### [00:09:32.680] - Tommaso

It's a very important question how to keep together and activate such a broad community of like minded but not so like minded people, either for an initiative such as Code Week. We, from our side, what we've tried to do is to keep the initiative relevant and meaningful for schools. First of all, because we believe that coding needs to be developed and learned throughout the school year or even throughout the life of a person. And as you mentioned before, it's also an opportunity for teachers in their lifelong learning path to learn new skills and just catch up with where the technological world is going, but also society.

##### [00:10:20.740] - Tommaso

And it's really nice how these two components and elements interact. So we would invite all our ambassadors, EduCoordinators, leading teacher to participate in our Pan European events. And then we would get in return, to a certain extent, invite to these wonderful local national activities and events that are organized by them in first person. So for this year, also responding to a wish of the community to have more opportunities to exchange and interact among themselves locally and internationally, we had this innovative, massive open online courses that we organized for primary and secondary school teachers.

##### [00:11:04.670] - Tommaso

Specifically, this MOOC had a component, an online learning environment for every teacher to attend, exchange and complete the tasks that we would assign them. And that was to give everybody the chance to undergo this learning path. And it had also study groups running in parallel to this online course. And these study groups were very practically groups of teachers led by one coordinator in a country in a local community where teachers could come together either online or face to face. Often they did both. So they met online.

##### [00:11:47.620] - Tommaso

They worked online, they collaborated online, but they also finally met in person in the same room around the same table to design their teaching and learning scenarios to implement with their classes. And I think that's maybe also one way to go to keep these two elements together and continue valuing national and local diversity and perspectives while giving this broad international and European context in which we feel, or we are, less isolated.

##### [00:12:20.800] - Eugenia

Yeah, I would actually agree very much. I think that one advantage of one easy way of getting to know Code Week is the fact that Code Week has both of an international level and a local level. So those who find motivation on the international network and collaborating with peers from other countries can find it. And those who find motivation on networking at local level can also find that level in Code Week. And I think it's also a good way to spread Code Week for what you are saying no?

##### [00:12:49.810] - Eugenia

But you've mentioned several activities, several things that have been happening over the course of the past year in Code Week. So I wonder, Annika, Tommaso, when you look back at all of these years working for Code Week, with Code Week, with the Code Week community. What are some highlights that come to mind in this past year? What are something that you look back fondly or that you think, oh, that was an important milestone for us?

##### [00:13:12.230] - Annika

I think it's mostly about meeting all these very passionate people out in the community that are so innovative and creative and really believe in the importance of encouraging young people, or other older people as well, to learn about computational thinking or coding. We have fantastic community meetings. There's a lot of creativity. As I said, we have had this like a Treasure Hunt where we were outside and we could just solve some simple coding questions, let's say. And you're actually doing a parkour outside in a town or in a park or somewhere.

##### [00:13:55.430] - Annika

I think we're the only initiative, I'm sure we are the only initiative that have our own anthem. That is the Ode to Code. We also have our own dance, the Code Week dance. And I think every year to see the children dancing, this dance and doing activities to the Ode to Code is really very inspiring.

##### [00:14:16.460] - Eugenia

And Tommaso, what are some of your highlights when you look back?

##### [00:14:20.180] - Tommaso

We had the chance also to organize the first summer school was a train the trainer course here in Brussels for leading teachers coming to Brussels and learning how to bring these messages back into their communities. And we saw that the effects of that course were quite outstanding because people were motivated. They were connected to colleagues from other countries. When they would go back to theirs, they were happy just by having understood that they were not alone in this quest for innovating the way they were teaching. So that's definitely something that we will try to replicate.

##### [00:15:01.360] - Tommaso

We've done similar courses online also in the past years for the reasons we all know and this also works and this collaboration between peers, it's what I think is really the backbone of the initiative. Finally, we are also very happy with the results. And yeah, so it's just impressive how this grassroots initiative really develops and reach out to many new people, many new schools, many new training centers and grows the numbers and grows the participation every year. And in fact, it's not just on the numbers per se, but it's also on the quality of these numbers.

##### [00:15:42.060] - Tommaso

And for instance, just to quote one knowing that almost half of the people that are engaged in coding activities during Code Week are female, are girls and women, is also tell us how this process that we mentioned several times until now of democratizing the access to digital creativity is actually working through Code Week and then seeing pupils empowered through this initiative, creating, through the hackathons that were organized this year for instance, prototypes solutions to real problems that they encounter in their society by using technology, digital technology for a good cause, for a good purpose that's really reinvigorating and very motivating for all the time and effort that we put in this initiative.

##### [00:16:31.820] - Eugenia

Right. I can imagine that seeing the community come to life in this face to face events, but otherwise online as well must be actually something really powerful and to see actually at the end of an edition to see the numbers as well. And I think it's interesting to see that Code Week keeps growing and it keeps reaching new milestones. If I can say it like that. And on that note, let's discuss the future of Code Week and actually, what can our listeners do to get more involved?

##### [00:17:07.210] - Eugenia

And so Tommaso, you've mentioned schools and teachers several times, you've mentioned teacher training. So then I think I have a very basic question. Do you have any advice for teachers or educators who would like to contribute to EU Code Week? So how to get started, and also why? What would you say to our audience here that may not have heard yet of Code Week or has heard of Code Week that has not yet started? How do you think they can take the first step?

##### [00:17:28.460] - Tommaso

Now, teachers and educators that want to start? They don't have excuses in terms of availability of resources, because by now we have developed and collected really hundreds of teaching and learning resources that can be found on the Code Week portal. There's also specifically designed training modules, which we call Learning Bits, which are translated in 29 languages, and they cover a variety of topics and approaches to teaching and learning how to code, and they also are adapted to several subjects. There are also challenges on the website since this year that can be picked up easily by a teacher and done with students, even by students itself, actually.

##### [00:18:16.550] - Tommaso

And then there are also our annual massive open online courses which are specifically dedicated to teachers and educators. So I really recommend any teacher interested to follow this initiative to really leverage these tools that are made available. And most importantly, they should be really pushing to overcome their fears by developing confidence. It's not about what you know and what you think you can teach when it comes to teaching. Coding is a lot of experimentation, of trial and error learning by doing activities that you can do with your students.

##### [00:19:00.180] - Tommaso

That's the first thing that you as an educator should keep in mind. While starting with these kind of activities, you are going out of your comfort zone because these are new elements for many teachers. But you're entering into a creative zone, an area where you might be more free in your students as well, and an area in which, as Annika mentioned before, you will learn with your students. You won't just teach them something that you know by heart. So it's a discovery path, really for everybody, which I really encourage anybody to get engaged into.

##### [00:19:36.090] - Eugenia

Yeah. And I think it's a good moment now to remind our listeners that actually EU Code Week materials are translated into 29 European languages. So explore the website and you will see that it's not only just the website translated, but also lesson plans and resources, the materials, all of the individual things that Tommaso has mentioned. Most of them are translated. So I invite you to explore these many resources. So, during a conference, Tommaso, Annika, I heard the following sentence, which is that Covid has made what we call the School of Tomorrow, actually the School of today.

##### [00:20:09.670] - Eugenia

And so I was wondering, do you think the pandemic, the fact that the students had to learn remotely and that we kind of focus a bit more on digital technologies? Do you think that this has increased the need or highlight the need to learn coding at a young age? What's your thoughts on this?

##### [00:20:25.020] - Annika

Well, I think the COVID pandemic has, um, it was like a shock start when it comes to digital skills in general for all people, since everyone had to work or study from home. So it will be interesting to see data on the increase of digital skills in general. Let's say maybe next year, see how it has improved because I think it should have improved quite a lot because people really had to learn by doing I would say.

##### [00:20:54.980] - Tommaso

Yes, and uh, I agree. And also what certainly happened is that anybody became even more exposed to the digital technologies and the digital world than before. So it's not just about school, it's about society, it's about the work environment and all families and households also increase the number of devices they had, the type of activities that they would engage in. They started communicating more to one another through technology. Pupils also and kids and children, they were exposed also to increase the risk because of the increased time they would spend or the additional tools or application they would use.

##### [00:21:41.120] - Tommaso

That's also something that we have to keep in mind. We were discussing even before the pandemic about even things like screen time or risks that are on the web. Now, I think the pandemic made all of this more apparent, more obvious and an area where everybody needs to be responsible and take action. So definitely there is probably a taste of what the future would look like, and maybe it's also a first taste that allows us to better plan and to really come up with a plan for a digital education or a school of a future that responds better to our needs.

##### [00:22:20.350] - Tommaso

And it's not just a reaction to an emergency situation such as the Covid crisis. Of course.

##### [00:22:26.860] - Eugenia

Right. So you see, there's a motor for change as well, and you see that it has brought people closer to digital skills and the digital technologies. And on the topic of the future that we are touching right now, I have final question and what's the future of Code Week? Is there anything that you can share with us that you look forward to, or how might Code Weekactually improve in the coming years?

##### [00:22:49.680] - Annika

Well, of course, we are going to celebrate our 10th anniversary next year. That's going to be very exciting. In the longer term when discussing, I remember having discussions with the ambassadors already a few years ago, we had this brainstorming. So what is the ultimate goal of Code Week? And we kind of agreed that it would be to cease to exist. So when everyone has the opportunity to learn about coding, robotics, AI, cyber, et cetera in school, then there is really no need for Code Week anymore. On the other hand, it could still be fun to celebrate.

##### [00:23:25.330] - Annika

There are already countries who have coding or computational thinking in their curriculum, and they're still very active in Code Week, and they see it as something fun to celebrate.

##### [00:23:35.450] - Tommaso

I'm also looking forward to the celebration for the 10th anniversary next year, of course. So let's plan something even bigger, nicer, more meaningful for the next edition. I also would like to see in a way the need for Code Week to cease in a way, to stop, meaning that we would have reached our objective. On the other side, I think also what is nice what is important about Code Week is that it's a bit of a conversation with the future. It has also already adapted to new technologies that were in a way more prominent in the past years.

##### [00:24:18.700] - Tommaso

Annika mentioned AI, artificial intelligence, which wasn't a topic that was so prominent when Code Week started to exist. Now it is and now it finds in Code Week a context in which it can be channeled and thought on which teachers participating, for instance, to Code Week can be trained. So in a way, I hope it remains an initiative for that purpose to constantly mine our preconceptions about education and about our relationship with new technologies. That, in fact, we don't know which will be in the future. So maybe it will change name.

##### [00:25:01.230] - Tommaso

Maybe it will change formats, but organizations and initiatives such as Code Week should always be there to accompany us along the way.

##### [00:25:15.630] - Maha

So I think it's undeniable that the impact of digital is being felt across all sectors. And it is important to this aim that we make sure that everyone has access to the same tools and to work hand in hand with this digital technology and actually make sure to have the best use of it. So we have learned a little bit more about the Code Week initiative, and it's beautiful network that is built from the bottom up, and that work to enhance the sense of community belonging.

##### [00:25:40.900] - Maha

And that also has an important focus on sharing and being able to learn from each other from everyone practices from across Europe. And I think that through this community, teachers are actually able to implement better and create better lesson plans for the students and learn all these digital skills like you mentioned to master in a fun and creative way. And also this aim gives everyone access to the same equal chances to learn. So it's a wide community that is open for all and help us create a better future together.

##### [00:26:10.080] - Maha

Would you have anything more to add Eugenia?

##### [00:26:12.750] - Eugenia

Well, I think it summarized quite well everything we've discussed, but I think what I take with me from this discussion is that Code Week is flexible and is dynamic and as Annika mentioned, it listens to its community. And I think that's something very important, that it just doesn't follow a set path. It follows the path that the community brings to it. It's truly a grassroots initiative and that's something very inspiring to see. But Annika, Tommaso, would you like to add something for our listeners?

##### [00:26:38.200] - Annika

I would just like to say a big, huge thanks to the community. We are recording this just after cold Week 2021 has finished. We have tens of thousands of active teachers, millions of participants, not only in the European Union, it's all across Europe, all around the world. There are more than 80 countries where activities have taken place. I think this is really wonderful and we are so happy and grateful, so really huge thank you.

##### [00:27:08.830] - Tommaso

And if I may use this chance, I would like also to thank the European Commission, of course, for having kickstarted the initiative long time ago and for having belief in it since day one until now. And of course, from my side, also a big thank you to all schools and teachers who participated in Code Week and a wish for them too. So to never cease to explore and learn with their teachers and students, as we mentioned already a couple of times. And of course, the work that the ambassadors have done and the one of the EduCoordinators and leading teachers has been and always will be very precious.

##### [00:27:52.440] - Tommaso

So also from my side, a big thanks to them, because without it, we really couldn't achieve the same results, of course. And it was really a pleasure to be with you today. Thank you.

##### [00:28:04.930] - Annika

Yes. Thanks. I'm just, as the last word. Don't forget the 10th anniversary next year. Please contact us if you have ideas on how to celebrate it locally or globally, because this glocal aspect is very important to us. And thanks for having me also in this podcast.

##### [00:28:23.950] - Eugenia

Thank you. Annika. Tomaso.

##### [00:28:25.530] - Maha

Yeah. I want, of course, to thank Annika and Tommaso as well. And it was a pleasure to have you both as our guest and also to remind the teacher or the students that in case you want to dive into the exciting programs world as we did, you can also go check out our website Codeweek.eu, in which you can find some tutorials and also some learning bits.

##### [00:28:44.340] - Eugenia

Tune in next time for a new episode of the EU Code Week podcast.