

## Open letter to EU Ministers for Education

Dear Ministers,

As stewards of Europe's future generations, you will be all too aware that as early as the age of 7, children reach a critical juncture, when they are learning the core life skills of reading, writing and basic maths. However, to flourish in tomorrow's digital economy and society, they should also be learning to code. And many, sadly, are not.

While it is undeniable that Europe needs more computer scientists and engineers if it is to prosper and compete – the number of unfilled ICT vacancies in Europe is expected to reach 900,000 by 2020 – the ability to code is not a selfish industry ambition. Nor is it just for “geeks” or those destined for a career in ICT. A plethora of interesting, creative jobs all depend on a degree of coding ability. Whether analysing healthcare data, designing security software or creating special effects for movies, coding is the red thread that runs through Europe's future professions.

However, the spread and sophistication of coding teaching in Europe remains too limited. Code is easy to learn but not widely taught in schools. Only 20% of Europe's school children are in schools which have adopted over-arching formal policies covering the use of ICT across all subjects. All too often, ICT and computer science skills are seen as niche, with little relevance to other fundamental academic pursuits. In Europe, fewer than 15% of students have the opportunity to use the kind of higher level ICT in school that would help them develop ‘21st century skills’ such as collaboration, self-regulation and problem-solving.

Earlier this summer, Commissioner for the Digital Agenda, Neelie Kroes, and Commissioner for Education, Culture, Multilingualism, and Youth, Androulla Vassiliou, jointly called for coding to be taught in all European schools. Their leadership in addressing the digital skills gap through initiatives such as EU Code Week, which invites Europeans of all ages to discover what lies behind the apps and gadgets they use every day, has been admirable and we have no doubt that their successors will continue in the same vein.

Some European countries are already on the case. Just a few weeks ago, English schoolchildren returned to their classrooms after the summer to find a new subject on their timetables: computing. Instead of learning how to use computers for word processing or presentation-building – part of the old ICT curriculum – kids as young as five will learn about algorithms, programming and computational thinking.

Yet even in England a poll of teachers showed that two-thirds did not feel they had received enough governmental support to deliver the curriculum.

Teachers have the power to awaken passions and inspire ideas. And they are enthusiastic adopters of technology, keen to implement digital skills in their classroom. However, they receive little to no structured ICT training.

To deliver future-proof digital skills training in schools, Europe's teachers need to be confident and clear about new curricula. This should be a two-fold process: in tandem with getting coding onto timetables, we need to ensure that long-term training programmes and support systems are set up beforehand and throughout. After all, confident teachers inspire confident classrooms.

We also recognise that as an industry we must play our part. When launching the “Grand Coalition for Digital Jobs” in March 2013, Commissioner Kroes made clear that the digital revolution cannot happen in Europe without the contribution of technology companies. And we agree. It is for that reason that, in partnership with European Schoolnet, the network of European ministries of education, we are proud to be launching Europe’s first coding platform\*, which will offer students, teachers, developers or anyone curious about coding, access to resources, training and information on local coding clubs.

But we need to go wider than the ICT industry. The road to code is open to anyone else who wants to help nurture and develop Europe’s digital skills offering. It is clear that Europe’s future workforce will need to have their feet firmly planted in the digital arena – and anyone who can contribute to what must be a long-term effort is welcome to join our journey.

We can’t know for certain what Europe’s job market will look like in five or ten years’ time, but as experts in our field, we owe it to Europe’s youth to help equip with them with the skills they will need to succeed – regardless of where life takes them.

Respectfully,

Stephen Collins  
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Erika Mann  
Managing Director, Brussels  
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Manuel Kohnstamm  
Chief Policy Officer and Senior Vice-President Regulatory and Public Policy  
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*\*At the 2014 World Economic Forum, Commissioner Neelie Kroes called on the private sector, representative organisations and social partners to endorse the “Davos Declaration” on the Grand Coalition for Digital Jobs. One of the three concrete asks of this declaration was to assist in the modernisation of European education systems to ensure that no student leaves school without a basic set of ICT skills.*

*We, the undersigned, responded to this call and with the collaboration of European Schoolnet and the support of [Code.org](http://Code.org), decided to launch a European platform providing localised quality teaching resources for coding.*

*This represents an important step in building a coherent approach to European digital skills education, and we hope that it will mobilise a wide array of stakeholders to recognize*

*coding as a new fundamental skill for all Europeans and an essential element in school timetables and extra-curricular activities.*

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