

# Manifesto for Empowered Education in Europe

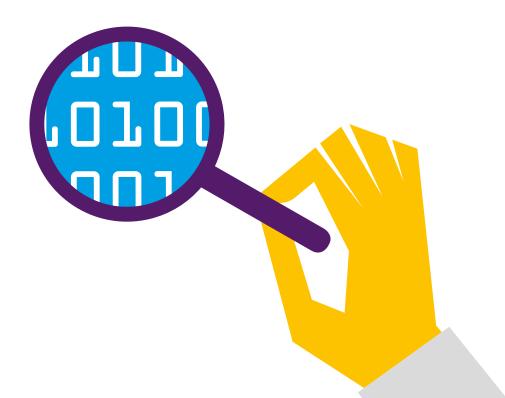
Empowered education for all is crucial for building Europe's future. We need to:

- · Focus on approaches for effective, high quality education for all of Europe's learners
- · Accelerate the adoption of technologies that have proven value and benefits
- Re-invest savings in innovation, capacity building and educational research.

"This Manifesto echoes a key issue that our "Opening up Education" Communication highlighted as critical for Europe's future: the need to support the modernisation of education systems, and to encourage innovation in teaching and learning. Europe can do more to grasp the opportunities that technology offers for both excellence and equity in education: this is why the European Commission is so determined to support countries, institutions and education leaders in their efforts to give students the new skills, competences and knowledge they will need for their lives and careers.

European citizens know that education is the future – but not education as we know it today: their expectations will only be met if educators have the right means, incentives and support, if Europe and its member countries make a concerted effort for the development of modern and open educational materials, of enabling infrastructure and devices, of better learning environments and educators' competences."

Xavier Prats-Monné, Director General for the Commission of Education and Culture Section "Investing in Education"



# Identifying the issues

Spending on education across Europe is decreasing and stagnating, posing a threat to Europe's potential for growth. Bold and innovative approaches based on strong multi-stakeholder partnerships are crucial. We must collectively address today's challenges in education and ensure that Europe's young people are fully prepared for their future lives and careers.

#### **EDUCATION AND EMPLOYABILITY**

Almost a quarter of European adults have only basic levels of numeracy, and 24% have basic literacy. Only half of young Europeans feel that school adequately develops entrepreneurial skills. Less than 15% of students have the opportunity for higher level use of ICT in schools to develop 21st century skills such as collaboration, self-regulation and problem-solving. Education systems need to increase the skill level of all students and boost their capacity to create their own jobs.

### TEACHER CAPACITY BUILDING AND SUPPLY

Most teachers in Europe have completed a bachelor's degree but 1 in 2 feel they need more training – few countries have annual training requirements for in-service teachers. Many teachers are nearing retirement. In some EU countries, 45% are over 50 years of age and recruitment of new teachers is insufficient to bridge the gap – in parts of Europe there are almost no teachers under 30. Principals in more than a third of schools report a shortage of qualified teachers.

## DIGITAL COMPETENCE AND THE DIGITAL DIVIDE

Students in Europe use technology in school very rarely (on average, from a few times a month to almost never), and student to computer ratios are still unsatisfactory with 3-7 students per computer. School principals and teachers point to a lack of ICT infrastructure as the biggest obstacle to innovate, ICT-based approaches at school. Around a quarter of students in Europe have low access to technology at home and school. Major disparities persist in young people's digital skill level both between and within countries, leaving them insufficiently prepared to participate in the knowledge society.

### **EARLY SCHOOL LEAVING**

In Europe almost a quarter of students still leave education and training early. Improving the situation is critical to enhance their chances of employment. 40% of early school leavers are unable to find a job. Innovative pedagogies and job-relevant vocational training opportunities are not provided widely enough to address this challenge.

### **INNOVATIONS FAIL TO SCALE**

European countries have invested substantially in numerous innovative education pilots and projects both nationally and through European programmes. Despite increasing numbers of islands of innovation, mainstreaming of innovation remains inadequate.









## Investing in education

Europe's education system has the potential to meet current and future challenges by following key, proven principles. Pilots and research projects across the world have demonstrated the value of investing in these key areas.

### MAINSTREAMING INNOVATION

Reaping the benefits of investment in education innovation through ICT requires system-wide mainstreaming. Infrastructure is still a barrier in too many schools in Europe and can help innovation to scale.

### NEW FORMS OF CURRICULUM, CONTENT AND ASSESSMENT

Reforming curriculum, content and assessment methods enables education systems to develop students' 21st century skills. Acquiring these skills will help young people into employment.

### **EFFECTIVE EDUCATIONAL LEADERSHIP**

Connected leaders with a strong transformational vision are essential to drive change. Supporting capacity development of leaders and offering them data-driven tools for decision-making will enhance educational institutions at every level.

#### PERSONALIZED, ANYTIME, ANYWHERE LEARNING

Today's students expect tailored learning experiences and tools that can be accessed by any device whenever they choose. Education systems must offer content and solutions that enable students to learn beyond the classroom. Students need to develop 21st century skills to do well in school, overcome every day challenges and build a successful career.

#### **CAPACITY BUILDING**

Professional development is crucial to increasing educational attainment, and too many teachers face obstacles in accessing formal and informal training. Technology can enable them to access training when and where they need it, and join communities of practice to reinforce and develop capacity on an ongoing basis. Innovative teaching practices combined with access to technology support student acquisition of 21st century skills.

## **LEARNING COMMUNITIES**

Enabling sharing of knowledge and collaboration between educators, students and the wider community is fundamental in the shift towards a more open and authentic learning experience. ICT helps educational institutions to engage stakeholders in ongoing dialogue and build relationships with external experts.

## LEARNING ENVIRONMENTS

Active, personalized and collaborative learning environments ought to be designed and offered to students for them to engage in effective, efficient and rich learning paths, developing the knowledge and key competences needed by 21st century societies. Technology, properly integrated for the sake of learning, can substantially drive education systems' success.

# Prioritizing solutions for real impact

Microsoft's devices and services have a strong track record in helping education leaders transform their institutions whether from a teaching and learning perspective, or in supporting effective administration. Pioneering institutions around Europe have tried and tested innovative approaches to education using our mobile first, cloud first technologies.

### ACHIEVING THE VISION OF PERSONALIZED, ANYTIME, ANYWHERE LEARNING

Giving students and teachers access to tablets, netbooks and hybrid devices helps invigorate the learning experience and bridge the digital divide. Europe needs a major effort to increase both device and internet access in schools. Mobile devices encourage collaborative, flexible and dynamic classroom experiences, with 100s of apps to support all subjects. New tools like Office Mix help educators create and adapt content into more compelling formats.

#### **Examples**

Broadclyst Community Primary School in the UK is combining tablets with Office 365 to offer an enhanced learning environment at home and school. Children work together in learning groups with Lync to support communication, and share updates on their tasks and assignments with their teachers through OneNote.

In Denmark, Fursund School aims to lead the way by demonstrating what a digital sustainable school looks like. Students spend extensive time outdoors, learning through doing, with Microsoft Surface tablets to enable them to document, photograph and explain their findings. All the school's IT services are hosted in the cloud for children to access wherever they are.



#### FLEXIBLE SYSTEM-WIDE COLLABORATION

Team working is an essential skill for today's students, and can also help educators exchange, build and improve their instructional methods. Flexible collaboration tools facilitate collective work, and also to reach out to students and experts at distance. Secure platforms enable educational institutions to comply with European law and guarantee student privacy and safety.

#### **Examples**

Primary school pupils at Jacob 2 school, Livry Gargan, in France are learning subjects like English through small group work on OneNote, and sharing their work with the class by presenting from their tablets. Teachers share and jointly prepare materials through Office 365 hosted on the cloud.

Viherkallion School in Finland has promoted collaborative approaches as part of an effort to make school more appealing to its students. Lync is used for distance learning and group work - even when students are at home. Windows 8 Surface tablets foster sharing of media, creating video and exchange between pupils.

#### FFFECTIVE CAPACITY BUILDING FOR STUDENTS AND TEACHERS.

Teachers are keen to get up to date training in effective use of technology for teaching and learning. Certification in technology for students acts as a complement to academic qualifications and make them more employable.

#### **Examples**

University College in Copenhagen is training the next generation of teachers using Lenovo Windows 8 tablets. Instead of traditional written projects, the student teachers use and create digital video, photography and other digital materials to document their learning process. Mobile technology enables them to keep in touch with their tutors during internships that they carry out outside the College.

Volksbank Mittelhessen Academy in Austria is using Surface Pros combined with a full Office 365 deployment to prepare their students for working life. They provide course materials through Office 365 and students can create and submit their work online. Students appreciate the tools because of their flexibility and user-friendliness.

#### **EXPLOITING THE POTENTIAL OF LEARNING ANALYTICS**

Education institutions generate huge amounts of data which go untracked or require time investment from teachers to collect and analyze manually. Learning analytics systems track key student data and free up time for teachers and decision makers to focus on individual needs. They also enable educators to identify areas where students are lagging and take corrective measures before problems arise.

#### **EFFICIENT EDUCATION MANAGEMENT**

Schools and colleges spend significant time, energy and money on administration, facilities and transportation. Tailored management systems can ensure that institutions make the most efficient use of resources and enable major cost savings.

#### Examples

Benenden School in the UK slashed the internal phone network costs by 40% by moving to Microsoft Lync combined with VoIP phones from their legacy system. The new system is flexible enough for future expansion and has increased staff productivity.

The Computer Technology Institute in Greece reformed and unified the Greek Ministry of Education's information infrastructure. Using Microsoft Sharepoint and SQL Server has enabled users and administrators get complete and up to date data. Data analysis and reports can be generated by non-specialist staff and give faster access to key figures and indicators.

## HARNESSING THE POWER OF CLOUD COMPUTING

Managing IT infrastructure and services is challenging for any education institution. Shifting to cloud-based tools and storage helps school IT services respond better to demand, and keep pace with new technologies while saving time and money.

## Examples

Erasmushogeschool in Belgium wanted to offer easier tools for students and professors to collaborate while keeping control on costs. They selected Office 365 to offer email accounts with large storage space and effective calendar tools for scheduling.

Frederikssund Private Realskole in Denmark has had the need to unify the digital teaching and ensure that all students have access to documents and applications, regardless of whether they work from their own, their parents' or school pc. IT administrators moved all file storage onto the cloud with OneDrive and offered the full suite of Office 365 tools for students on up to 5 devices at home or school, which automatically synch content whether online or offline.

# Policies for real impact

Our experience shows that focusing on innovative approaches for effective, high quality education for all of Europe's learners through empowering teachers will bring tangible value for both the education system and society as a whole. Accelerating the adoption of technologies that have proven value and benefits is essential. Wider uptake of education technologies will both bridge the digital divide, as well as giving students the education they need to transition into jobs in the knowledge economy.

The education system as a whole must also exploit the power of technology to manage and administer resources, liberating time and budget to focus on innovation and capacity building for effective teaching and learning.

Microsoft in Education's Education Transformation Framework can help education leaders build an impactful, holistic vision and strategy for anytime, anywhere learning and ensure we offer the brightest possible future to Europe's young generations.



## , Vice President, World Wide Education, Microsoft:

"Microsoft is committed to support governments at European, national and regional level in addressing the evolving challenges of education. Microsoft's Education Transformation Framework is a powerful tool to enable leaders to bring about impactful change. Through Education Transformation Agreements, Microsoft and education authorities build deep partnerships to improve learning outcomes and give students and teachers a more rewarding experience at school"

## Learn more about Microsoft in Education

- Get a full overview of Microsoft Education and learn more about Microsoft's Education Transformation Framework at www.microsoft.com/education
- Educators can join an active community of innovators at www.pil-network.com
- Join Microsoft VP for Worldwide Education on his Daily Edventures blog http://dailyedventures.com/
- Find out more about the Education Transformation Framework: http://aka.ms/transformationframework

"Innovation in education is a complex process and mainstreaming successful innovation requires appropriate mechanisms among which teachers will have a key role to play. Any mainstreaming process will succeed with a large scale adoption from teachers. One of the current challenges will be to move from innovative teachers to innovative schools. This challenge can only be met if we engage also with school leaders. There are also key challenges for head teachers and school leaders trying to implement whole school use of ICT and the recent cooperation engaged between Microsoft and European Schoolnet and its Ministries of Education will enable to analyse the perceived gaps in the resources and training that is currently available for school leaders which support change management."

Executive Director, European Schoolnet:

