

MANIFESTO FOR INFORMATICS IN SPAIN

With the emergence of the Internet and information and communications technology, the language of informatics has become the language in which our world is written. Having a good understanding of the environment we live in means understanding not only English but also the language of digital machines. However, it is a language we are still a long way from mastering.

Far from being limited to the technical professions, informatics permeates all forms of communication, creativity and personal and professional development in the modern world. According to data from the Observatory of Informatics in Spain, 9 out of 10 people consider that studying programming fosters structured thinking, and 54% acknowledge that it improves the ability to deal with frustration. The educational system must therefore view digital literacy as a key tool for relating to the world around us. That is why it is essential to integrate informatics fully into the school curriculum and teach all children without distinction to understand and master it. Only in this way will people become the active subjects of the technological revolution and not merely passive users.

Informatics, which includes programming, forms part of the general knowledge in the digital age, and must be positioned at the core of Education. If we provide our children and young people with the skills not only to understand informatics but to be capable of creating computational artefacts from an ethical and humanitarian perspective, we will provide them with the tools they need to build a better future and reduce their vulnerability to manipulation. That is because learning informatics fosters skills such as logic, creativity, problem-solving and critical thinking. In fact, in the survey 87% of parents with children aged between 6 and 16 years agree that teaching the subject should be included in the primary and secondary curriculum.

For all the above reasons, we ask the public authorities to act so that all students in all the Spanish schools learn informatics in the same way that they now study mathematics, language or biology. Only in this way can we resolve the three failings which slow down students: our society's general lack of awareness of the importance of these languages in our everyday lives; lack of resources for teacher training; and a persistent low level of participation of women in STEM-related studies in a system that does not generate aspirational models for them. It is estimated that at the current rate, the educational system will take 40 years to meet the demand for digital skills in the labour market.

We therefore demand that:

1. The next reform of the Education Act should include informatics as a core subject in all the cycles of education from Primary to Baccalaureate, and that the Autonomous Regions - to the extent they have the authority to do so - extend the introduction of informatics into their teaching programmes for all the educational cycles.
2. Sufficient resources and training should be provided for teachers to support them in the transition to an educational system adapted to the digital age in which we live, in the conviction that providing teachers with the right skills constitutes the only way of successfully implementing this educational programme.
3. The public authorities, families, civil society and the educational sector should all pledge to make society - and in particular the younger generations - aware of the importance of creating and using technology with an ethical and humanitarian perspective.

The signatories to this manifesto come from a variety of social, professional and ideological backgrounds. Together, we call on the public authorities to make a clear and effective commitment to integrate informatics into the Spanish academic curriculum and to implement teacher training in this subject. If we work together, we will be able to activate a society which

understands technology and is capable of adapting its development to the social, economic and climate challenges we are facing.