

## Interview to João Santos

We met [João Santos](#) in his role as an expert and consultant on education and training during his participation in the “[New Education Forum](#)” in Vigo, in February 2024.

During the forum, João took part in a roundtable discussion on inclusive practices in educational settings and addressed key questions such as: *What challenges might schools face when implementing inclusive practices? And how can these challenges be overcome to ensure an inclusive and supportive learning environment for all students?*

Now, we have spoken with João to learn more about the broader scope of his work, and to share with you how an education expert influences international policies and trends in education.



João, could you tell us about some of the tasks you have performed at the European Union related to your experience in education?

Thank you for reaching out to me and giving me this opportunity to share some of my thoughts on the future of education and training.

**During my career of 33 years at the European institution I worked in various policy fields including Scientific research and development, Industrial policy, International trade, External relations, Structural policies, and Education and training policy.** Few organisations allow staff to be so mobile within its structures. The European Commission is an example of best practises in motivating staff to continuously learn and build expertise throughout its services.

From 1990 to 1994 I worked at the Joint research Centre in Italy, and from 2009 to 2013, I was posted at the EU Delegation to China and Mongolia as a diplomatic counsellor dealing with bilateral trade and investment issues, as well as people-to-people dialogue.

The rest of the time I was based in Brussels (Belgium), where I worked on international relations covering the employment and social affairs dimension of the EU's bilateral cooperation with China, the USA and Canada, as well as on multilateral cooperation within the United Nations framework, on issues related to the social dimension of globalisation and the Decent Work Agenda.

In my latest assignment at the Directorate-General for Employment, Social Affairs and Inclusion at the European Commission, I worked as a Senior expert, Deputy Head of Unit, and Acting Head of Unit, in the service responsible for vocational education and training as well as the policy orientation of the Erasmus+ programme in this sector.

As part of my regular functions, I was closely involved in the development and implementation of major European initiatives such as the Centres of Vocational Excellence, the European Vocational Skills Week, the ErasmusPRO initiative to support long duration mobility of VET apprentices and learners, the European Alliance for Apprenticeships, etc.

I have retired from the European Commission in 2023, but I continue very active speaking at many international events as an expert and consultant on education and training, and **I also collaborate with a few organisations in the field of education. Among them:**

- a. Member of the Consultative committee of "[Iniciativa Educação](#)" a Portuguese initiative to raise the quality and attractiveness in VET in Portugal,
- b. Consultant to the VET Team of the [Portuguese Erasmus+ national agency](#), and I occasionally also collaborate with the VET team of [SEPIE](#) in Spain.,
- c. Member of the Consultative committee of [INETE Instituto de Educação Técnica](#), a Portuguese vocational education and training institution,
- d. Board member of "[Euro App Mobility](#)" an organisation based in Brussels aimed at boosting the transnational mobility of Apprentices, and
- e. Member of the Scientific consultative committee of [ENAIP Veneto](#).

Moreover, CEDEFOP promotes collaboration among EU member states, supporting peer learning and the sharing of best practices. This helps to elevate the quality of teaching across Europe by ensuring that VET teachers continuously develop their competencies and adapt to new educational and technological developments.

I would like to mention that there is another EU agency that also contributes to develop teachers and trainers competencies. The [European Training Foundation \(ETF\)](#) based in Turin (Italy) is an EU agency that supports the development of education, training, and labour market systems in countries surrounding the European Union, primarily focusing on EU neighbouring regions such as the Western Balkans, Eastern Europe, Central Asia, and the Mediterranean. Its mission is to foster socio-economic development through improved human capital, particularly by enhancing vocational education and training (VET) systems in these regions.

The ETF influences teacher competencies by promoting high standards in teaching and teacher education, aligned with EU best practices. It provides expertise and support to countries in designing policies and strategies for teacher training and professional development. The ETF helps these countries develop their capacity to modernize their VET systems, ensuring that teachers can deliver skills relevant to today's labour market.

Additionally, the ETF facilitates peer learning and networking opportunities among VET teachers, institutions, and policymakers across Europe and neighbouring regions. This exchange of knowledge and practices helps VET teachers stay updated with innovative teaching methodologies and emerging technologies, making their teaching more effective and responsive to labour market needs.

Ultimately, the ETF contributes to building the professional competencies of VET teachers in ways that improve education quality and student outcomes, both within the EU and in its neighbouring countries.

## What tools does the European Union have to regulate the use of new technologies in education?

The European Union uses a range of tools to regulate and promote the use of new technologies in education, focusing on ensuring quality, inclusivity, and innovation. These tools also address the emerging role of Artificial Intelligence (AI) in education, ensuring its safe and ethical use.

One key instrument is the **Digital Education Action Plan (2021-2027)**, which sets a framework for enhancing digital skills and infrastructure across Europe's education systems. It encourages institutions to adopt new technologies like AI to improve teaching and learning. The plan promotes innovative approaches, such as blended learning, while ensuring that teachers and students are prepared to engage with AI responsibly.

The **Artificial Intelligence Act**, which was recently adopted, is another significant instrument. The AI Act establishes a legal framework for the use of AI across all sectors, including education, classifying AI systems into categories based on their risk levels (e.g., minimal, limited, high, and unacceptable risk).

For the education sector, AI systems used in grading, admissions, or managing learning outcomes are considered high-risk. The Act imposes strict obligations on providers of these AI systems, such as transparency, ensuring human oversight, and mitigating risks related to bias, discrimination, and data privacy. This ensures that AI tools used in educational settings are safe, transparent, and aligned with EU values of fairness and inclusivity.

Additionally, the **Council of Europe's Framework Convention on AI, Human Rights, Democracy, and the Rule of Law** is another legal instrument that influences AI use in education. This convention, though broader in scope, emphasizes that AI should be designed and used in ways that uphold human rights, including the right to education. It advocates for safeguards to ensure AI does not perpetuate inequalities or infringe on the rights of learners. The convention provides guidelines on ethical AI use in education, ensuring that AI-driven tools enhance learning while protecting the dignity and rights of students and teachers.

Besides these regulatory frameworks, the EU also promotes AI in education through programmes like **Erasmus+**, which funds projects exploring how AI and new technologies can be integrated into teaching and learning. The **European Skills Agenda** further emphasizes the need for digital skills development, including AI literacy, so that educators and learners are equipped to work with these new tools.

In summary, the EU's approach to regulating AI and new technologies in education balances innovation with ethical considerations. Through the **AI Act**, the **Council of Europe's Framework Convention**, and **broader digital education policies**, the EU ensures that technology enhances learning while safeguarding inclusivity, privacy, and human rights.

**Regarding Artificial Intelligence, are regulations already being implemented in Europe to limit its use?**

The adoption of the AI Act is a significant milestone in the regulation of artificial intelligence in Europe. While the specific implementation details are still being worked out, several concrete steps have been initiated as a follow-up:

1. **Formation of the AI Board:** The AI Act establishes an AI Board to oversee the implementation of the regulation. This board will play a crucial role in providing guidance, coordinating efforts, and ensuring consistent application of the rules across different sectors.
2. **Development of Regulatory Technical Standards (RTS):** The European Commission will develop RTS to provide more specific guidance on the requirements of the AI Act. These standards will help clarify the obligations of AI developers, providers, and users.
3. **Establishment of National Competent Authorities:** Member states are required to designate national competent authorities responsible for overseeing the implementation of the AI Act within their territories. These authorities will play a key role in enforcing the rules and investigating potential breaches.
4. **Public Consultation:** The European Commission has launched public consultations to gather feedback on various aspects of the AI Act, including the definition of high-risk AI systems and the specific requirements that apply to them. This input will help shape the final implementation of the regulation.
5. **International Cooperation:** The EU is working to promote international cooperation on AI regulation. This includes engaging with other countries and international organizations to develop common standards and best practices.

Another very recent European Commission initiative is the launch of a call for setting up AI Factories to boost European leadership in trustworthy artificial intelligence. AI Factories will be created around the EU's world-class network of European High-Performance Computing (HPC) supercomputers and will be available to a range of European users, such as startups, industry and researchers. The Factories will be networked across Europe, providing a unique European collaborative AI framework.

It is important to note that the implementation of the AI Act is an ongoing process, and the specific steps taken may evolve over time. However, the initiatives mentioned above represent a solid foundation for ensuring that AI is developed and used in a responsible and ethical manner in Europe.



## How can we ensure that Artificial Intelligence improves education without compromising human rights?

The integration of AI into education presents both opportunities and challenges. To ensure that AI benefits education while safeguarding human rights, several key considerations must and are being addressed.

**First, clear ethical frameworks must be developed** to outline the principles and values that should govern the development and use of AI in education. These frameworks should prioritize human rights, fairness, and transparency. To ensure that diverse perspectives are considered, educators, students, parents, and policymakers should be involved in the development of these guidelines. This is exactly what the European AI Act, and the Council of Europe's Framework Convention on AI aim to achieve.

**Second, data privacy and security must be a top priority.** Robust data privacy measures, such as strong encryption, anonymization techniques, and data minimization practices, should be implemented to protect student data from unauthorized access, use, or disclosure. Additionally, transparency regarding data practices is essential. Clear information about how student data is collected, used, and stored should be provided, and informed consent should be obtained from students and parents.

**Third, algorithmic bias and fairness must be addressed.** Regular assessments of AI systems for potential biases that could discriminate against certain groups of students are necessary. Using diverse datasets to train AI models and implementing human oversight mechanisms can help reduce the risk of bias.

**Fourth, accessibility and inclusivity must be considered.** AI tools should be designed to be accessible to all students, including those with disabilities. Additionally, cultural and linguistic diversity should be taken into account to ensure that AI systems are inclusive and sensitive to different backgrounds.

**Fifth, human-centered design should be prioritized.** AI tools should be designed to complement human interaction and support personalized learning experiences. Overreliance on AI should be avoided, as it can limit opportunities for human interaction and critical thinking.

**Finally, continuous monitoring and evaluation are essential.** AI systems should be regularly evaluated to assess their performance and impact on student outcomes. If AI tools are not meeting their intended goals or causing harm, necessary adjustments, such as modifications or replacements, should be made.

By addressing these key considerations, we can harness the potential of AI to improve education while protecting human rights and ensuring that all students have equal opportunities to succeed.

## On a more individual level, as an education sector agent: How does one transition from working at the European Union to becoming an independent professional with a consultant profile in education?

My passion for education has always been at the core of my professional journey. It's often said, 'Find a job you love, and you will not have to work one single day in your life,' and that has certainly been true for me. Over the years, working at the European Commission, I had the privilege of helping to shape policies that directly impacted how we educate future generations.

Whether through vocational education and training (VET) policy making or the Erasmus+ programme, I was constantly reminded of the power that education has to transform lives and build a better society for all.

Transitioning from such a fulfilling role into an independent consultant has been a natural evolution, not a departure. The expertise and network I developed while working at the EU have opened doors to new opportunities where I can continue contributing to the education sector, but now with greater flexibility and a more personal touch. Consulting allows me to take what I've learned and help institutions and governments fine-tune their educational strategies, aligning them with the evolving needs of society and the EU's vision for education. It's a way to keep that passion alive while pursuing new avenues to make an impact.

At the same time, I recognize the importance of stepping back, not because my passion for education has diminished, but because I see younger professionals, full of energy and new ideas, stepping up to shape the future. I believe they will bring fresh perspectives to education that the sector urgently needs, and I'm excited to see where they take it. I also see fantastic developments in personalised teaching like that being developed by Salman Khan and others, that fascinate me, but also make me understand how difficult it is for an independent like me to keep up with the rapid and fascinating developments taking place. My intention is to gradually reduce my involvement in the field, knowing that it's in capable hands.

Additionally, I now feel a stronger pull towards my family, especially my two grandchildren. Watching them grow reminds me daily of the importance of nurturing the future—not only through professional endeavours but also through personal connections. By dedicating more time to them, I'm embracing a different kind of fulfilment, one that balances my long-standing professional passion with the joy of being present for my family.

This transition is not about leaving behind my career but rather reshaping it to reflect both my desire to continue contributing and my commitment to family. It's a delicate balance, but one that feels right for this new chapter of my life.

**Finally, João, very generally speaking, what do you think will be the key idea that will shape the future of education?**

**The future of education will be shaped by the idea that learning is a lifelong, dynamic process.** It is no longer confined to traditional classrooms or defined by age, but evolving in response to rapid technological, social, and economic changes. As society becomes more complex, education must become more adaptable, personalized, and inclusive.

**One of the key shifts will be the recognition that skills need constant updating,** requiring education systems to move beyond the 'one-size-fits-all' model and embrace more flexible, personalized pathways for learners. This means integrating technology, like Artificial Intelligence, to create tailored learning experiences, but always ensuring that technology serves human development and upholds ethical standards.

Equally important is fostering interdisciplinary skills that go beyond technical knowledge. Critical thinking, creativity, collaboration, and **emotional intelligence will become core competencies.** In a world that's increasingly interconnected, education must prepare learners not just for specific jobs, but for roles that require **problem-solving, adaptability,** and a deep understanding of social and cultural contexts.

**Another major idea is the concept of education ecosystems,** where schools, businesses, governments, and communities work together to create environments where learning and skills development are interwoven throughout life. This is very much the idea that was behind the European initiative on Centres of Vocational Excellence (CoVE), that I am very proud of having contributed to launch with other colleagues in my team at the European

Commission. **Education will no longer be confined to institutions but will happen everywhere, at any stage of life, with support from multiple stakeholders.**

Finally, I believe education's future lies in its ability to humanize the learning experience. With younger generations stepping in, we are seeing innovative approaches that emphasize empathy, social responsibility, and inclusivity. Education will increasingly become about nurturing the whole person, empowering learners to be not just skilled workers, but responsible citizens and lifelong learners who can adapt to whatever the future holds.

In sum, **the future of education will be shaped by a blend of innovation, personalization, and human connection**, where learners are equipped with the skills and values they need to thrive in a rapidly changing world.