

# EdTech Implementation Differences Between Spain and the U.S.

## Introduction

The CoSN 2024 International Education Delegation to Spain engaged in a journey focused on educational and cultural insights in Barcelona and Madrid. The group attended a Global Education Forum, which included breakout sessions and school visits, to observe Spain's educational strategies and adaptations post-pandemic. They also explored key cultural sites like the Sagrada Familia and Barcelona's Gothic Neighborhood. These activities combined professional development with cultural education, enhancing the participants' understanding of Spain's educational landscape and cultural richness.

While on this trip, our conversations with educators, administrators, students, and local and national education leaders revealed many similarities in the challenges involved in implementing digital and AI technologies in schools and the strategies for addressing teachers and schools. From what we learned in our short study tour, the major ways Spain's approaches to advancing educational technology differ from those of the U.S. include the following:

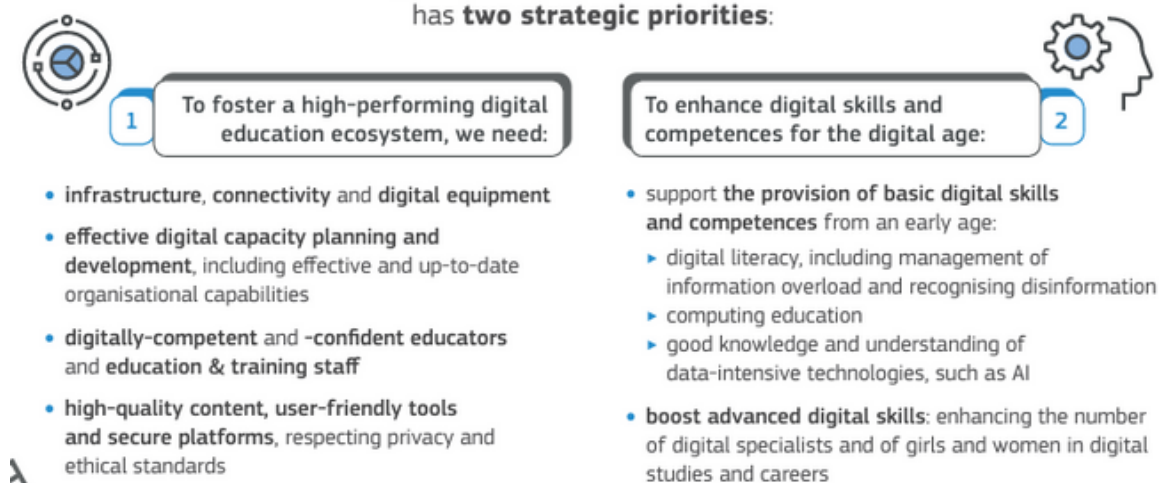
## Strategic Framework: Spain's Digital Learning Initiatives

Spain's digital learning efforts follow the [European Commission's Digital Education Action Plan for 2021–2027](#). The strategic priorities in that plan are summarized in the diagram on the following page:



Panorama of ancient Roman gate and Placa Nova, Barri Gothic Quarter, Barcelona, Spain.

The Digital Education Action Plan (2021-2027)  
has **two strategic priorities**:



Spain shares goals and strategies with multiple EU countries. It also receives significant funding from the EU to support its efforts.

## Components of Spain's #DigEdu Plan

Advancing edtech in education is part of the Digital Spain 2026 agenda launched by the Spanish Government in 2020. This is part of Spain's Recovery, Transformation, and Resilience Plan launched after the pandemic. It includes the Spanish National Plan for Digital Skills and the Digitalisation and Digital Competences of the Education System (aka #DigEdu Plan), which calls for the digitalization of education aligned with the European Commission Digital Education Action Plan. Spain adopts a centralized strategy to integrate technology across all sectors, including education, as part of its national plan to advance digitalization. This approach promotes uniformity and efficiency throughout the country. In contrast, the U.S. employs a highly adaptive education technology planning system, tailored to meet the diverse needs of states and districts. This flexible approach encourages local innovation and aligns with broader national goals, showcasing a strong commitment to enhancing education through technology in both countries, each leveraging its unique governance structure.

The #DigEdu Plan includes four major areas of action:

1. Development of digital competence in education, focused on integrating technology throughout the curriculum, supporting teachers in obtaining their digital competence certification, and guiding schools to design and implement School Digital Plans.
2. School digitalization focuses on improving the availability of digital technologies for teaching and learning and the technical training of teachers in the operation of the equipment provided to schools.

3. Creation of educational resources in open-source digital format.
4. Advanced digital methodologies and competencies, building toward the future with projects on Future Classroom Labs, Computational Thinking and Artificial Intelligence, Programming, and Robotics.

## **Funding and Investment in Educational Technology**

Substantial funding has been committed to the implementation of the #DigEdu Plan. The funding allocated to two of the major actions, the development of digital competence in education and school digitalization, totals 1.297 billion euros, equivalent to more than \$1.4 billion U.S. dollars at current exchange rates. Note that Spain has about 13% of the number of students as the U.S., so allocating a comparable amount per student in the U.S. would require a budget of more than \$10 billion. In the U.S., specific planning, implementation, and funding falls to each state, with the U.S. Department of Education providing general recommendations that each state can choose whether or not to follow.

## **Cultural Approaches to Educational Innovation**

From our discussions, we've observed different approaches to fostering school innovation between the two countries. Spain adopts an encouraging and trusting method, providing schools with the autonomy to drive change at their own pace. On the other hand, the U.S. employs a more structured approach that emphasizes accountability and measurable outcomes, which can effectively accelerate and guide reforms. This method ensures that changes are aligned with national educational standards and goals, aiming to consistently enhance educational outcomes across various settings. As a member of our group highlighted, each approach has its merits, with Spain's method offering a less pressured environment and the U.S. approach ensuring focused progress and accountability.

In the U.S., school report cards, authorized by state law, serve as a transparent method to assess and communicate the performance of schools to the public. These report cards are designed to foster a culture of accountability and encourage continuous improvement by using a variety of metrics to evaluate school effectiveness. While critics may point out that these metrics can sometimes lead to an overemphasis on certain activities like standardized testing, they also play a crucial role in ensuring that schools meet educational standards and help identify areas for enhancement.

In contrast, the Spanish system takes a different approach by collecting data for internal use only, allowing schools to assess their progress without the pressures of public scrutiny. This method trusts schools to utilize their data effectively and gives educators the flexibility to innovate and integrate new teaching methods, including advanced technologies like AI, without the constraints of standardized metrics. This approach can lead to a more holistic educational experience, where non-tested subjects and student well-being are given as much importance as core academic subjects. Both systems—American and Spanish—demonstrate a commitment to improving education, each adapting strategies that best suit their educational goals and cultural contexts.

## **Professional Development and Teacher Autonomy**

In Spain, teachers are encouraged to engage in ongoing professional learning voluntarily, fostering an environment of trust and self-driven development without recertification mandates or compulsory continuing education requirements. This system supports teachers as professionals seeking to enhance their skills and knowledge proactively. In the U.S., professional development and re-certification are structured as mandatory elements of a teacher's career progression. This requirement is designed to ensure that educators meet consistently high standards of teaching effectiveness and stay current with educational advancements. The obligatory nature of professional development in the U.S. underscores a commitment to educational excellence and accountability, aiming to maintain and elevate the quality of education nationwide. Both approaches highlight the value of professional growth, albeit through different frameworks that reflect each country's educational policies and cultural expectations. In Spain, teachers are encouraged to engage in ongoing professional learning voluntarily, fostering an environment of trust and self-driven development without recertification mandates or compulsory continuing education requirements. This system supports teachers as professionals seeking to enhance their skills and knowledge proactively.

Contrastingly, in the U.S., professional development and re-certification are structured as mandatory elements of a teacher's career progression. This requirement is designed to ensure that educators meet consistently high standards of teaching effectiveness and stay current with educational advancements. The obligatory nature of professional development in the U.S. underscores a commitment to educational excellence and accountability, aiming to maintain and elevate the quality of education nationwide. Both approaches highlight the value of professional growth, albeit through different frameworks that reflect each country's educational policies and cultural expectations.



## Leadership and Administration in Spanish Schools

The relationship between school administrators and teachers is also very different in that Spanish principals are teachers and typically continue to teach part-time while serving as the school leader. At the Sagrada Familia school we met with the teacher leaders, who served in the role we call principal in the US. This allows teachers to take on a direct leadership role. In many schools, different senior teachers take turns serving as principals/teacher leaders for a few years and then return to full-time teaching. The DigEduPlan provides a teacher leader who works with every school, though sometimes more than one school. The digital teacher works with the principals/school leaders, but reports to the Ministry of Education.



CoSN Education Delegation, Spanish Ministry of Education, and SEK Education Group discuss lessons learned during our visits on Simulcast to U.S.

## Key Lessons for U.S. Education Policy

In summary, our visit to Spain has provided valuable insights that could further enhance U.S. educational strategies. It highlighted the importance of coherent long-term planning and the integration of educational technology with broader workforce and societal advancements in digitization, alongside the need for adequate and ongoing funding. These principles, demonstrated effectively in Spain, reinforce their potential to foster effective change in schools. Such insights offer constructive examples for U.S. policymakers and educators, affirming the opportunities for continued advancement in the U.S. educational system.

## About CoSN – The Consortium for School Networking

CoSN, the world-class professional association for K-12 EdTech leaders, stands at the forefront of education innovation. We are driven by a mission to equip current and aspiring K-12 education technology leaders, their teams, and school districts with the community, knowledge, and professional development they need to cultivate engaging learning environments. Our vision is rooted in a future where every learner reaches their unique potential, guided by our community. CoSN represents over 14 million students and continues to grow as a powerful and influential voice in K-12 education.

CoSN also provides opportunities for companies that support the K-12 EdTech community to participate as corporate members.

CoSN is vendor neutral and does not endorse products or services. Any mention of a specific solution is for contextual purposes.





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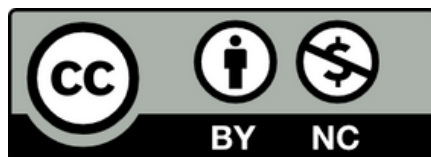
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