

# CoSN 2024 International Education Delegation to Spain: Learning By Doing

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.

Key to our understanding of educational practices were our school visits in Barcelona and Madrid. In Barcelona, we visited a school called Escola Sagrada Familia, a public elementary school serving 450 students from the ages of 3 years old to 12 years old, all of whom live near the school itself. In Madrid we first visited Escuela las Musas, a public high school and technical school with a focus on science and technology. This school has nearly 600 high school students as well as hundreds of students in their professional programs. Finally, the second school we visited in Madrid was the Santa Isobel School, a private, international elementary school that is part of the SEK Education Group.



CoSN Education Delegation members gather in Madrid.



School-related characters constructed by students at Escola Sagrada Familia, used in community celebrations.

## Play-Based Learning

Playing is one of the most authentic ways to activate curiosity. Fred Rogers, American television host, author, producer better known as Mr. Rogers, described the importance of play in child development by saying, “play is often talked about as if it were a relief from serious learning. But for children, play is serious learning. Play is really the work of childhood.” (1) Play is the most natural form of exploration and socialization for children. Play has the power to engage a child’s imagination, cognition, and collaboration skills all at once.

At the Escola Sagrada Familia, the feeling that most emanated through the hallways was joy. This was certainly influenced by the prevalence of play-based learning. The school day has an entire learning block dedicated to analog and digital games. Students get the choice of what games they play, and they play together in groups that span three grade levels, allowing for opportunities for mentorship and building relationships with students outside of your class. This play could look like board games where they “build” monsters while practicing literacy and numeracy skills, or it could look like playing a computer game where they navigate a maze while building a sense of programming logic. Teachers take this learning further by having students vote for their favorite game and then practice putting the data into a bar graph to visualize the results. Play is thus integrated across disciplines and made part of the daily curriculum.

Play-based learning is similarly integrated at the Santa Isobel School, albeit with a more cross-curricular and cognitive-development bent. During our tour of the school, led by students, the students explained to us the role of games in their learning. All of the older elementary students have a chess class where learning and practicing the strategy of chess is used to enhance cognitive abilities. Additionally, students participate consistently in cognitive development games and activities designed by Barbara Arrowsmith and her work in childhood brain development. Even their physical education class engages directly with their thinking development by intentionally intersecting with an ethics curriculum. While the emphasis seemed to be more on the cognitive than the creative and social aspects of play-based learning, the importance of gamifying education was clearly present at the school.

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1 ROGERS, Fred. *You Are Special. Words of Wisdom from America's Most Beloved Neighbor*. (New York): Viking, (1994).

## Place-Based Learning

The Center for Place-based Learning and Community Engagement defines place-based learning as learning that “immerses students in local heritage, cultures, landscapes, opportunities, and experiences” to facilitate learning across subjects. Rooting learning in place makes it more directly relevant for students while also providing opportunities for them to learn more about themselves and their communities.

The Santa Isobel School referenced place-based learning as a framework that defines its curriculum and the school building design. They pride themselves on how the city of Madrid has “spilled” into the school, with physical maps of Madrid being used to map out learning experiences and classrooms bearing the names of local people and landmarks. Each learning path has its own excursions and field trips into the city, where students explore Madrid to explore different subjects. The school has a collaborative project with Harvard’s Project Zero. Their project is a 3-year endeavor measuring the impact of learning by connecting the outside in, specifically measuring students’ sense of belonging, agency, curiosity, and joy. It is through their commitment to place-based learning that Santa Isobel School fosters growth and learning for their students.



Catalonian Ministry of Education staff in Barcelona meet with CoSN Education Delegation members to share some of the technologies that are deployed in schools .



Although not referenced by name, we also witnessed place-based learning in the Escola Sagrada Familia and Escuela Las Musas. At Escola Sagrada Familia, they integrated their technology education with place-based education by creating a robotics course that mapped the area around the school. Students were given different scenarios, such as their robot being sick and needing to get to the hospital or their robot needing to buy food to make dinner. The task was then to program the robots to get where they needed to go, allowing students to practice their programming skills while becoming better acquainted with their local streets and buildings. At Escuela Las Musas, this looked like a more direct engagement with their local community through community-based projects—one such project involved collaborating with a local school for students needing additional academic support. Students from the two schools joined forces in this project to complete science projects together. Another project was in collaboration with a local retirement home. Students “adopted a grandparent” by interviewing a member of the retirement home each week, culminating in a final presentation where the retirees visited the school and told their stories. Additionally, the school is a community collaboration project as it operates as a technical training school for various careers, opening its doors for community members to continue their education.



Escola Sagrada Família  
Canaan, CC BY-SA 4.0, via [Wikimedia Commons](#)

## Competency-Based Learning

The final type of learning-by-doing that we will discuss here is competency-based learning. Rather than evaluating learning by which facts students can regurgitate on exams, competency-based learning measures the growth in students' abilities to apply their learning in various forms. This pedagogical approach is being encouraged from the top down, with key competencies and basic skills defined by the European Commission which is then outlined by the Spanish Ministry of Education and put into practice by each individual school. Local autonomy is valued highly in the Spanish education system; thus, each school is able to customize its approach to competency-based strategies.

Because of their science and technology focus, competency-based learning at Las Musas manifests as adherence to the IB Curriculum and career-focused objectives. On the other hand, Santa Isobel has created a variety of learning paths that connect to a variety of "passion projects" designed by students and the exploration of their city. They have developed a competency profile that describes what their students should be able to do by the time they graduate. This competency profile consists of four parts: sustainability transformation, knowledge transformation, personal transformation, and relational transformation. Their approach to competencies prepares students for careers and navigating the world as individuals and members of their communities. The freedom to design competencies based on the school's unique vision provides diverse student opportunities.

However, this high level of autonomy in curriculum design also means that each school is at a different point in its capacity to implement competency-based learning. For example, Escola Sagrada Familia indicated to us that they began implementing a competency-based curriculum in 2015 but still find consistency to be a struggle.

Ensuring everyone stays up-to-date on training is left to each school, proving logistically difficult. This is further exacerbated by the fact that there is frequent movement of teachers between different schools. Without standardized training, this movement requires teachers to receive new competency-based curriculum training whenever they switch to a new school. Fortunately, there is buy-in for this learning model, but the constant re-training can feel tedious and time-consuming. Finding a suitable balance between autonomy and centralization is still challenging in this system.



## Conclusion

Learning by doing is a key component in curriculum design across the schools we have witnessed in Spain. Of course, this is also something we see in schools in the United States. Still, it felt particularly important within the context of this delegation, in which we also considered the impacts of Artificial Intelligence (AI) on educational systems and classrooms. As the capabilities of AI continue to grow, it remains important that we know how to do things ourselves, particularly those things that are unique to us as humans. Defining learning by merely acquiring and recalling information alone is becoming increasingly obsolete. Instead, students must be able to practice what they can do with that information. One of the most crucial parts of being human is our innate curiosity about the world around us. As Nieves Segovia, CEO of SEK Education Group, attested in her speech at the EducAltion conference, “the one thing we know for sure about the future of education is that we need to teach our students to ask questions.” By engaging in play-based, place-based, and competency-based education, students can ask questions and practice ways to find answers. Through these educational experiences, we will prepare students to adapt and grow in a world we have yet to imagine.



CoSN Education Delegation touring classrooms at Las Musas School in Madrid with the principal. Classroom walls are transparent to see the learning environment and to increase natural light.



## 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.

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