Google for Education

Future of the Classroom

Emerging Trends in K-12 Education
Mexico Edition
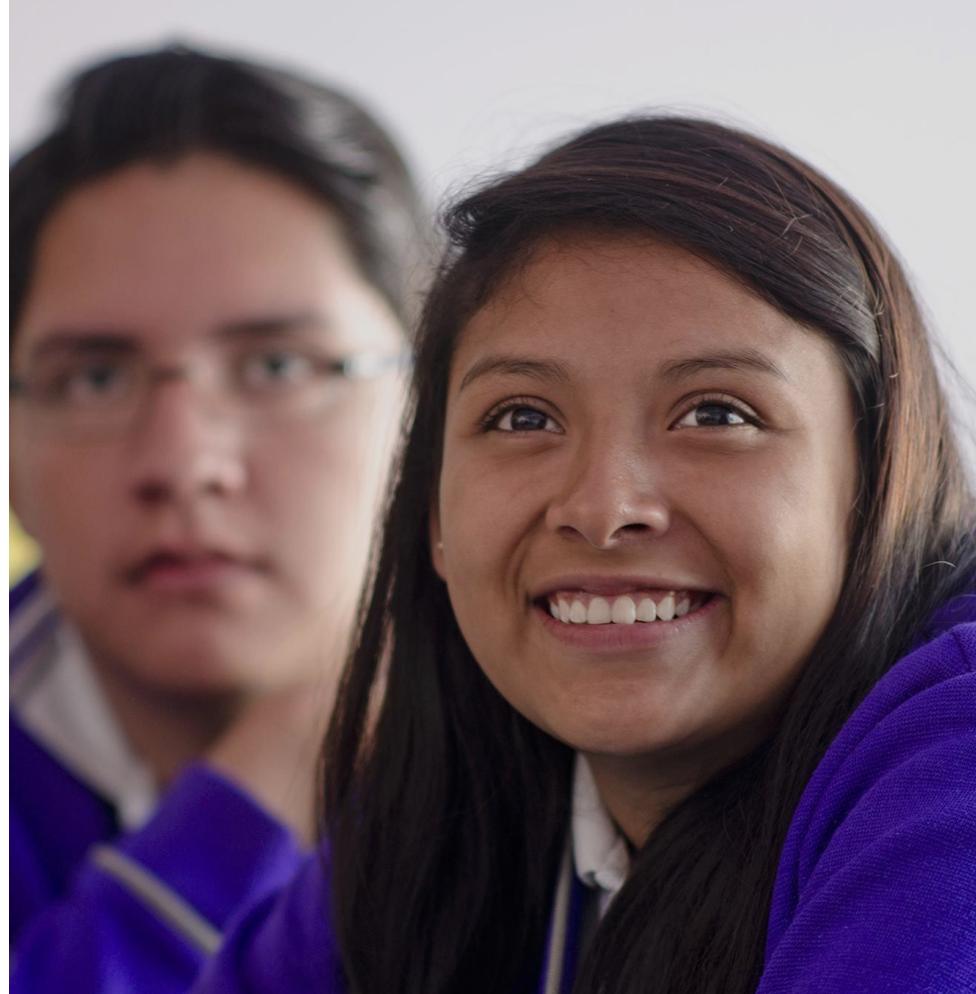
Our approach

This report is part of a series on the evolution of K-12 education, mapping out current and emerging trends in classroom education. In collaboration with our research partner, **Canvas8**, we conducted a global analysis spanning:

- Fourteen expert interviews with global and country-specific thought leaders in education

- Academic literature review focusing on the last two years of peer-reviewed publications

- Desk research and media narrative analysis across the education sector, including policy research and teacher surveys, as well as input from Google for Education representatives across the globe

We acknowledge that some of the areas discussed in this report are ones that overlap with Google-led products and programs. In order to maintain a focus on the research and studies presented, we've intentionally excluded them.

# Mexico is focusing on accessible education

In Mexico, where quality education is a right, the focus is on ensuring access to all students across socio-economic backgrounds.[1] There is also a focus on giving students the best start from a young age. Enrollment in pre-primary education is high, reaching 91% among 4-year-olds in 2016.[2]

But while a growing number of pre-primary children are receiving education, accessible education for older students is an issue that still needs tackling. More than a million children, or about 13% of the school-aged population, do not attend classes because they cannot afford it. This rises to more than a third among 15- to 17-year-olds.[3]

"The focus now is on equity rather than equality. Equality is the same for all. However, given inequalities, more attention and resources have to be destined to those who need them the most, and that is equity."

Sylvia Schmelkes, Sociologist and Academic Vice-President of Universidad Iberoamericana

The Mexican classroom at a glance

Primary school 21

Lower secondary school 23
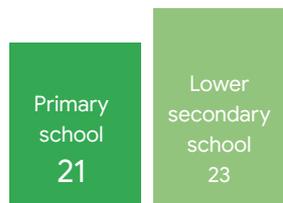
21

students is the average class size for primary public schools, which is slightly lower than the OECD average of 22. Meanwhile, 23 students is the average class size for lower secondary public schools in Mexico.

OECD (2016)[2]

Primary school 800

Lower secondary school 1047
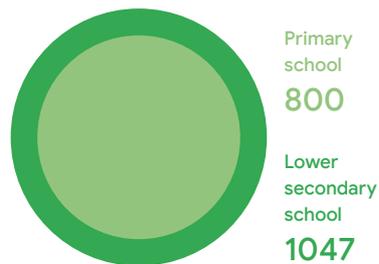
800 hours

are worked by Mexican primary school teachers every year (the OECD average is 799 hours), while lower secondary school teachers work 1,167 hours annually, much more than the OECD average of 913 hours.

OECD (2017)[2]

50%

of teachers in Mexico say that the use of technology in the classroom has a high impact on student motivation, while 29% say it has a very high impact.

Blink Learning (2018)[6]

Key Trends

From our Global Report, we've analyzed three of the most prominent trends in Mexico's K-12 classrooms

01 Life Skills & Workforce Preparation
People want children to have a more holistic education that goes beyond standardized testing to include social and vocational skills.

02 Computational Thinking
Parents and teachers want students to develop problem solving alongside digital skills so they will be better prepared for future jobs.

03 Innovating Pedagogy
Motivated teachers have more engaged classes and they want to streamline administrative tasks to focus on teaching.

"Curricular autonomy does focus on the needs and interests of the students, but also on the needs and demands of the local context, especially since Mexico is a culturally diverse country."

Sylvia Schmelkes, Sociologist and Academic Vice-President of Universidad Iberoamericana

Life Skills & Workforce Preparation

Mexico has a 100% enrollment rate for 5- to 14-year-olds, making it one of the highest-ranked OECD countries in this regard. However, this drops to 59% among 15- to 19-year-olds, the second-lowest out of the 39 countries included in the research.[2] So, Mexico is focusing on creating curriculums that better prepare students for the world of work from an early age.

With 91% of CEOs globally saying they need to strengthen the soft skills within their organizations, preparing students for the future also means encouraging them to develop these capabilities.[7] It benefits the school environment as well. A survey of Mexican students found a positive correlation between scores in socio-emotional skills – such as autonomy, social awareness, and academic locus of control – and grades and good behavior.[8]

76%

of teachers in Mexico say autonomous learning is one of the biggest advantages of using technology in the classroom.

Blink Learning (2018)[6]

"For the first time, life skills and vocational skills are clearly included as an area within the curriculum."

Sylvia Schmelkes, Sociologist and Academic Vice-President of Universidad Iberoamericana

To promote these areas, the Secretariat of Public Education and the United Nations Development Program launched Construye T – an initiative that supports teachers in educating students in socio-emotional skills. Its research has found that these skills help students identify and manage their own emotions, establish constructive relationships with others, and make thoughtful and responsible decisions in different areas of life to achieve their goals. [5]

It is seeing tasks and pedagogy that promote life skills being incorporated into the classroom and taught in parallel with traditional subjects like math and writing skills. For example, 91% of Mexican teachers practice project-based learning in the classroom and 82% encourage collaborative learning between students. [6]

"There has been a lot of talk around 21st-century skills or socio-emotional skills – we're starting to see more focus on not just traditional academic outcomes but also non-academic or non-cognitive outcomes."

Sameer Sampat, Co-founder of Global School Leaders

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Computational Thinking

Science and technology are front-of-mind for Mexicans – according to the Survey on the Public Perception of Science and Technology in Mexico, 92.2% of people want to increase government investment in scientific research.[10]

The OECD has highlighted that students entering schools in 2018 will face future challenges that can't be predicted today, so there is a need for STEM subjects to play a bigger role in students' education in order to prepare children for an uncertain future.[9] Teachers in Mexico share this view, with 51% of them saying that preparing students in the use of technology for future labor is one of the main advantages of using technology in the classroom.[6]

51%

of teachers in Mexico say that preparing students in the use of technology for future labor is one of the main advantages of using technology in the classroom.

Blink Learning (2018)

"STEM skills are even more important than coding because it's virtually impossible to teach yourself math, but you can teach yourself coding if you have good math and logic skills."

Rachel Wolf, Founding Partner at Public First

Recent education reforms have aimed to boost technical skills and encourage young people to pursue careers and research in STEM fields.[1] But teachers are looking for support in these areas – 84% of teachers strongly agree that it is necessary to establish a common framework for digital teaching competence that trains teachers to guide their students in the digital ecosystem.[6]

There is also a desire to ensure that underrepresented groups have more participation in these fields. For example, 54.8% of the public agree that there need to be more women working in scientific research and 34.3% strongly agree.[10] A key way to tackle this is through education in school, thereby encouraging more girls to take part in these subjects.

"Many teachers were badly taught mathematics and don't know how to teach mathematics – we need to offer them more support."

Sylvia Schmelkes, Sociologist and Academic Vice-President of Universidad Iberoamericana

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03

Innovating Pedagogy

Motivated and engaged teachers are key to a successful classroom, but a lack of time, long hours, and excessive administrative tasks can be a problem. In Mexico, 64% of teachers say they love their work as a teacher and are very motivated, and 34% say that though they do enjoy being a teacher, there are certain factors that make them feel unmotivated.[6]

There's a desire to use technology to help rebalance teachers' time – 50% of teachers in Mexico say it helps them decrease the time spent grading. Another clear benefit is facilitating collaboration – 83% say that having access to more content and resources is a key benefit of using technology in the classroom, helping them to share and adapt lesson plans and ideas for pedagogy.[6]

83%

of Mexican teachers say that having access to more content and resources is a key benefit of using technology in the classroom.

Blink Learning (2018)

"Lesson planning and marking take a disproportionate amount of time. This is where technology can be leveraged to free up time and allow teachers to do what they're meant to be doing – which is teaching."

Vikas Pota, Group CEO of Tmrw Digital and Chairman of the Board of Trustees of the Varkey Foundation

Technology presents an opportunity to cater to individual needs, which is traditionally difficult to achieve due to the time it takes. In fact, 53% of teachers say that being able to adapt learning to the needs and characteristics of the student is a key advantage of using technology in pedagogy.[6]

Though teachers are already aware of the benefits of technology, they're looking for schools to provide the training and infrastructure to facilitate it. With 59% of teachers in Mexico reporting that faculty training is a key challenge during the introduction of technology to the classroom, 62% would like to receive more training in digital software management.[6]

"I do believe that, in general, there's a trend towards a pedagogical change that focuses on the student themselves and on problem-based learning. Helping them learn to learn has priority."

Sylvia Schmelkes, Sociologist and Academic Vice-President of Universidad Iberoamericana

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"In the future, we are going to see investment in equality, instead of investment in more innovations that will only benefit certain regions or certain students."

Sylvia Schmelkes, Sociologist and Academic Vice-President of Universidad Iberoamericana

Read the <u>Future of the Classroom</u>: *Global Edition*
for insights across all eight emerging trends

Digital Responsibility

Computational Thinking

Collaborative Classrooms

Innovating Pedagogy

Life Skills & Workforce Preparation

Student-led Learning

Connecting Guardians & Schools

Emerging Technologies

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