

Tec lessons learned and challenges: vision of presidents and rectors



78 years have passed for Tec de Monterrey, from **teaching** 350 students in a large house in the **city of Monterrey** to becoming a **multi-campus university** with presence at 25 locations in **Mexico**.

Rafael Rangel, Salvador Alva, David Noel Ramírez, and [David Garza](#), four of the leaders who have been at the helm of the institution, spoke with **CONECTA** to mark the Tec's anniversary.

In addition to the advances in education, they shared their priorities on topics such as **technological advances, entrepreneurship, human awareness, research, and internationalization**.



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Rafael Rangel: take education everywhere

Rafael Rangel's main achievements as rector included **successfully laying the foundations for distance learning** "by accident" and working to make the Tec an **institution that supports society**.

A Tec leader from 1985 to 2011, Rafael shared that the institution **pioneered distance learning** in the search for a strategy to ensure that teachers had at least a master's degree.

*"We started to develop an **intranet** that used the **Morelos satellite**, which was relatively new, to send videos of classes to conference rooms on campuses," recalls Rangel.*

That solved the problem of professors obtaining their degrees, which was important for **renewing accreditation** with the Southern Association of Colleges and Schools Commission on Colleges (**SACSCOC**).

Years later, the **arrival of the Internet** (which in Mexico and Latin America was also born at the Tec) and its subsequent boom led to the first steps of online education.

Rafael Rangel Sostmann trabajó de 1985 a 2011 en innovaciones tecnológicas y pedagógicas

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*“The Virtual University was born by **accident** because **we needed it** and the interesting thing was that we became **world leaders in breaking down barriers to providing education**,”* says Rangel.

Visiting the campuses, observing, and talking with teachers and students made him realize another great challenge: getting students to take **advantage of the potential** of this type of education.

“We became world leaders in breaking down barriers to providing education.”- Rafael Rangel

That led him to challenge his academic community to redesign the teaching process and academic programs, so that young people would make a commitment to their role as students and be concerned about the mark they could make.

*“For example, we wanted our students to strengthen **ethics and citizenship**, since we needed **graduates with a marked positive influence on society**,”* says the former rector.

For Rangel, the Tec’s main task was and should continue to be taking quality education everywhere.

*“In the future, I’d like to see the **Tec** being more **intertwined with society**, for it to be an organization that helps society **grow** even more,”* explains Rangel

Salvador Alva: education for the future and opportunities for young leaders

Guiding the Tec’s path into the future was the first big decision that Salvador Alva made as rector of the Tec System.

*“When I arrived, I realized that we were **giving classes with techniques from the past** to students who would experience a **future with issues that hadn’t yet presented themselves or been imagined**,”* Alva shares in an interview.

To achieve this, together with **David Garza** as the architect of a new educational model (**Tec21**), he led the institution to take the first steps towards an **education that challenges students** in order to prepare them for a world that is constantly changing.

Along with the configuration and implementation of Tec21, Alva believed that it would be essential to improve human processes and develop a culture that would attract the best talent.

*“The **Tec** is **driven** by people. I really enjoyed it a lot because the **direction and strategy** had been defined, and there were very talented **people to help make it happen**,”* he says.

Alva, whose role changed from **rector to president of Tec de Monterrey**, also found it necessary to make the university **more humanistic** and **provide more opportunities for talented people**.

That’s why it has programs such as [Leaders of Tomorrow](#), which offers **100% scholarships** for young people who don’t have enough resources, but have the potential for social leadership.

Salvador Alva buscó hacer del Tec una universidad más incluyente width="900" loading="lazy">

Alva says that making the Tec a more **international university** was another of his **goals**, for which it had to blaze its own trail.

*“The desire to **copy highly prestigious universities** is a **recipe for failure** (...) You realize that it’s not where you are that’s **important**, but the **speed** you’re **moving**,”* says the former rector.

One of the aspects that he envisages as part of the Tec’s future is that the university should be a pioneer in **research** and **development ecosystems**, to become the **Silicon Valley of Mexico**.

*“Distrito Tec is one of those examples. It seems to me that it’s the **cornerstone to transforming** not only the Tec but also our **cities**,”* says Alva. *“We still have a long way to go,”* he concludes.

David Noel Ramírez: human awareness to pay the social mortgage

When asked what he considers to be his greatest legacy as rector of the Tec, **David Noel Ramírez** answers without hesitation: to make the Tec community aware of its **“social mortgage.”**

*“I’m convinced that we have to **foster a commitment to help in society**. It’s not OK to be **indifferent** to the **great needs of others**,”* he points out.

The **rector of the Tec from 2011 to 2017** lists the institution’s achievements during this period, such as **climbing the international rankings**, which highlight the education provided and the preparation of graduates.

What lies behind these advances is the Tec’s *raison d’être*: being an institution that **transfers knowledge and therefore benefits society**, according to Ramírez.

So, even after leaving the rector’s office, he continues to be linked to the Tec, since he’s been teaching there for 108 consecutive semesters.

“We have to foster a commitment to help in society. It’s not OK to be indifferent to its great needs.”

Like all Tec teachers, he knows what it’s like to have had to adapt to the new Tec21 educational model, and to the challenges of online education that were intensified by the pandemic.

*“As long as I have the strength, I’ll continue here, since for me **education** is the best weapon for **social permeability** and achieving growth as a community,”* he says.

David Noel ha apoyado a cientos de jóvenes a estudiar width="900" loading="lazy">

David Garza: building an innovative Tec

Seeing how the **Tec** created the **first network** of -then-unknown- **Apple** computers in the 80s, **David Garza** realized that **innovation is shaping society**.

Under his leadership, Garza, who became rector of the Tec in 2017 and president in 2020, wants the university to be distinguished by the three "i"s: **innovation, internationalization, and investigation**.

Thanks to this focus, one of the main innovations in the educational field led by him is the development and implementation of the **Tec21 educational model**.

In seeking to be a more international university, **partnerships with foreign universities have increased**. Currently, **50%** of students have at least one international experience during their studies.



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Regarding the third "i", Garza says that the Tec was **recognized** in areas such as **engineering** or **business**, but **research** was a pending issue.

In order to address this, they have forged partnerships with universities such as **UNAM** to create a **consortium** for **Research, Technology Transfer, and Entrepreneurship**.

*“That’s another **relevant change** that the **Tec** has made. To have a greater **influence** and **participation** in the **research** field. We’re still small, but we’ve already **made an impact**,”* says Garza.

Like the other **three directors**, Garza has emphasized **human awareness** and **social impact**.

*“Tec de Monterrey as an **institution** is a very important part of **society** that works for **society**. I want our **leaders** who **graduate** from the **Tec** to see it that way, that they’re **leaders for society**.”*

*“At the end of the day, we need to **keep in mind** how we can contribute to **our country** so that it **develops** and **makes even more of an impact**,”* Garza concludes.

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