

Tec & Arizona State University reflect on future challenges



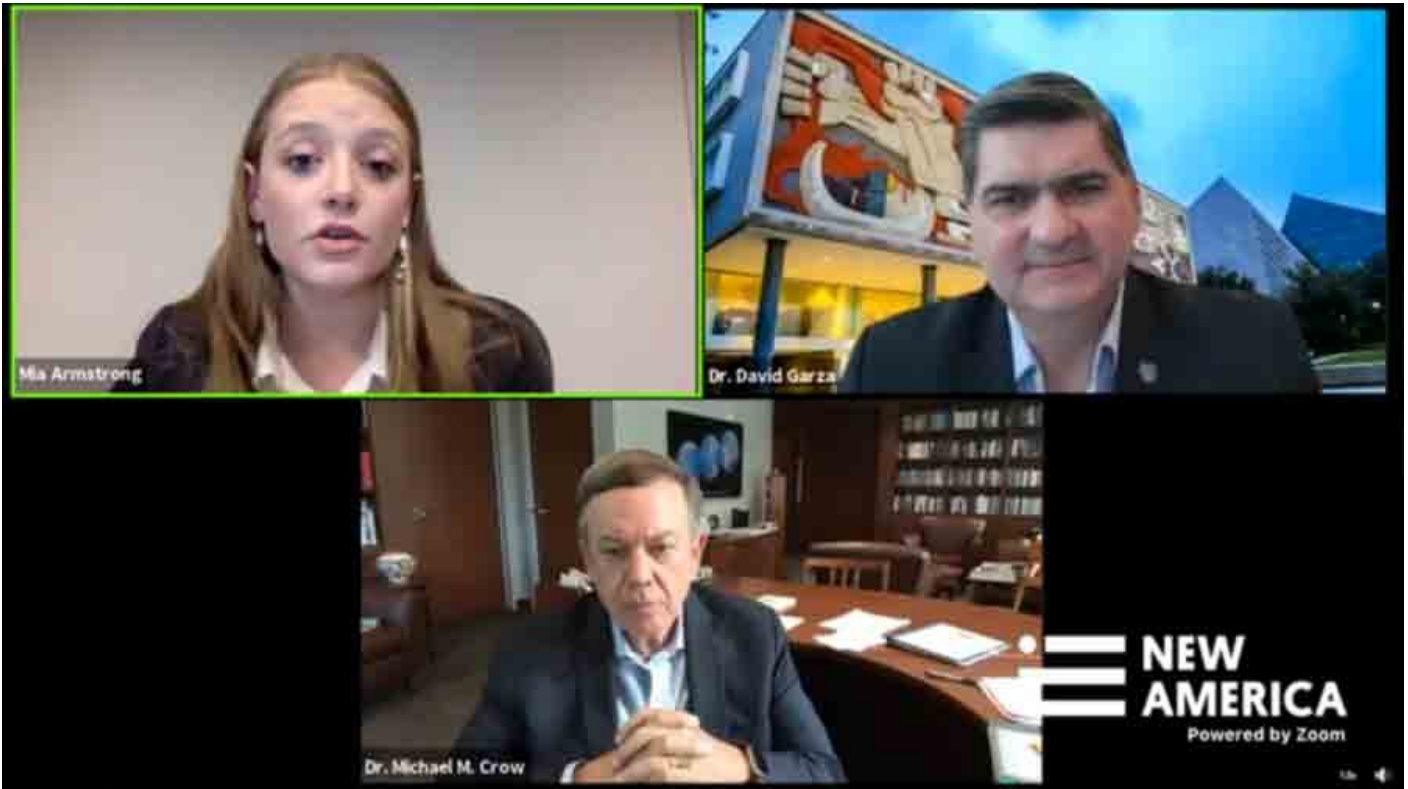
During a virtual talk, the **presidents** of [Tec de Monterrey](#) and [Arizona State University \(ASU\)](#) shared their reflections on the **important** role of **universities** in changing the **future**.

David Garza, rector and executive president of the Tec, and **Michael Crow**, president of ASU, spoke at the event entitled “Is Your University Designed to Create a Better Future”, held on **December 8**.

Both directors agreed that **universities** must **go beyond** the academic to **impact social, economic**, and other contexts not only to adapt but also to **define the future**.

*“We always need to think about the **impact** universities are having and how we can **continue to have that impact**,”* Garza said.

*“We have to **adapt**. The pandemic is an opportunity to move forward and to **learn** how to prevent it from happening again,”* Crow said.



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The “fifth wave” in education

Crow mentioned that **universities** have undergone **changes** for **decades** and that there is currently a **fifth stage**, which they also referred to as “**the fifth wave**”, on which both the **Tec** and **ASU** are collaborating.

The **ASU** president mentioned that this process has been going on for about **400 years**.

Universities have moved from a classic vision where they taught only a select number of people, to being, in the **present**, capable of **adapting to change**.

*“The **fifth wave** is an **immersive approach**. They are also **institutions** with a big **technological presence**,”* explained Crow.

Garza added that universities such as the Tec and ASU are **adapting** to the **needs of society** in order to have a **positive impact**.

*“We understand that, as a university, we have missions that are **educational**, for **research**, and for **contributing to the economy**,”* added Garza.

We focus on accessibility, open-access knowledge, and the improvement of society, as well as **resilience** and the **opportunity to exploit human potential**.

Aspects such as these must, both presidents confirm, **exist** for a **university** to be capable not only of adapting, but of **defining the future**.



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Tec de Monterrey's current strategy

David Garza mentioned that the Tec's strategy has been to pay attention to **3 essential issues: innovation, research, and internationalization**

*"The **world** changes quickly: it is **volatile** and **complex**. When our students graduate, they will have to get **jobs which do not yet exist** and will have to find **solutions** to **problems that have not yet appeared**," he said.*

One of the changes mentioned by Garza was the **implementation** of the **Tec21 educational model**, whose core pillars are **challenge-based learning**, flexibility, inspiring teachers, and a memorable environment.

These involve **real-world challenges** which allow students not only to develop their **academic skills** but also other **life skills**.



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Similarly, Crow said that **Arizona State University** has designed an **environment** that is both **adaptive** and **flexible** for students.

One of the aspects mentioned by Crow was the **need to increase value** not only for students but also for the general population.

He even mentioned that they have thought about **future issues** such as **space exploration** and interaction with other species and ecosystems.

*“**Humans** are not going to be on this **planet** forever. We are already thinking of working on that.*

*“We trying to develop **solutions** at the **community** level, support **teachers**, involve **research**, and **eliminate barriers**,” said Crow.*

How do both universities promote innovation and research?

Garza mentioned that they have sought to establish an **environment** for **innovation** to happen **more easily** for **Tec researchers**.

*“We have **annual research events**. We also **fund** research that we are promoting and to which we want to **contribute**,” he added.*

Similarly, Crow pointed out that **ASU** has sought to facilitate its staff working on **multidisciplinary** projects.

*“We’ve given our **teachers** the ability to **not just to be staff**. We’ve made it easier for them to **contribute**,” he said.*

For both presidents, another **essential focus** that universities must have if they want to define the future is **cooperation** between them.

*“In **North America** there are approximately **500 million people** who live in one of the world’s largest economies.*

*“Yet we have not been able to work together on **important issues** such as **water management**, for example,” Crow said.*

One of their messages was that facing **challenges** with a **long-term vision benefits** not only one institution, but can benefit several of them and even **several countries**.

Given this need, **both institutions** have **worked** on the topic of **internationalization** through exchange programs and by working on joint **initiatives**.

*“We want to develop **internationalization** by tackling **global problems** which will also **help us locally**,” Garza said.*

One example of the work that both universities have done **together** is a [wastewater monitoring initiative](#) to find signs of **COVID-19** in Nuevo León.

This project is being worked on by **Tec** and **Arizona State researchers**, the **Nuevo León Health Ministry**, and **Monterrey’s Water and Drainage Services**.



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Challenges of the pandemic and opportunities to adapt

*“The **pandemic** got out of hand and **universities**, in general, **have not figured out how to collaborate and work together**,”* said the ASU president.

Crow also said that **crises** should not be **solved in the moment** but, rather, should be **prevented** and, thanks to the current **pandemic**, **new models** for **cooperation** are being developed.

In addition to the pandemic, both presidents mentioned that there are **challenges** that the **future** will bring, and that it will be necessary to work **together** to **adapt** to them and to **solve** them.

The scarcity of water, mass **migrations**, **global warming**, technological advances, and autonomous systems, were some of those mentioned.

*“This crisis has taught us that we can make **bold decisions** that are very different from those we were taking before. **Cooperation** between global **universities** will be **essential**.”*

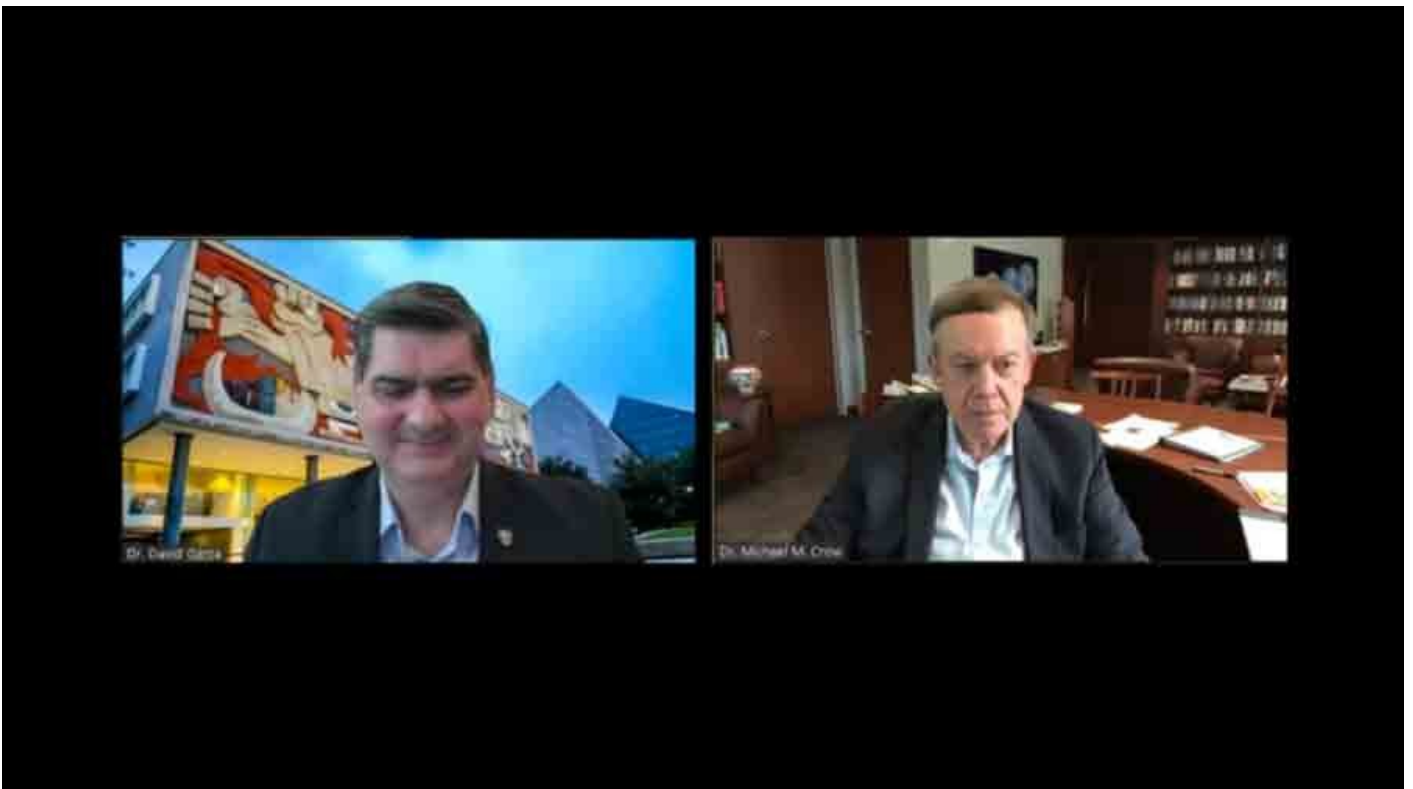
*“Individually, we don’t have all the **capacities**, **resources**, and experiences. **Complementing our skills is the key**,”* said Garza.

ASU Students can now take online Tec courses

Both presidents closed the **virtual event** by **signing** a **memorandum of understanding** between **both universities**.

The document details the **Access program**, which will allow bilingual **ASU students** to take **Tec de Monterrey online courses**.

These courses provide **official credit** for Arizona **State University academic programs**.



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Founded in 1885, **ASU** has risen to position itself as the #1 American university in U.S. magazine's rankings. It is considered one of the "**The most innovative universities**" by **News & World Report** and, since 2005, has been an outstanding research institution.

In recent years, the Tec and ASU have reinforced their exchanges, research projects, participation in forums, and other activities.

For example, since January 2009, Tec students with a **master's degree in Engineering with a focus in Quality and Productivity Systems** can access an online **certification** from **ASU**.

During the first six years of the agreement, a total of 225 students received the **Black Belts in Six Sigma (BBSS) certification**, which is taught by professors from both institutions.

A program created by the **ASU's Center for Law and Global Affairs** has also emerged from this international partnership. In 2018, it brought legal clinics and oral litigation training to the Tec to strengthen the **new criminal justice system in Mexico**.

In terms of sports, **American Football staff at the Monterrey campus** visited Arizona State to learn techniques and strategies, such as the use of software and technology for game analysis and videos, from their coaching staff.

In June 2019, the **ASU** women's soccer team visited the Borregos Stadium to play and give clinics and talks.

If you would like to see the talk, [click here](#).

YOU'LL DEFINITELY WANT TO READ:

<https://tec.mx/en/news/national/research/tec-and-asu-are-analyzing-wastewater-nuevo-leon-map-covid-19>