ADAPTATION



Higher education institutions must prepare for the consequences of climate change, including more frequent or intense extreme weather such as heat, flooding, wildfires, and more, which impact campus operations, student enrollment, and campus health.

On September 29th, 2022, Hurricane Ian crashed into Florida's gulf coast delivering a storm surge and severe flooding that resulted in the state's deadliest storm in 80 years. Several higher education institutions found themselves directly in Ian's path. Florida Gulf Coast University canceled classes for over a week and offered its basketball arena as a shelter.¹ Floodwaters stranded hundreds of students at the University of Central Florida, who required rescue transportation from the Federal Emergency Management Agency (FEMA). Bethune-Cookman University, a historically Black institution (HBCU), evacuated the entire campus and suffered damage to multiple historic buildings. Academic researchers have long recognized that elevated greenhouse gasses in the atmosphere increase the intensity of extreme weather, including heat, flooding, drought, and category 4 hurricanes like Ian.²

KEY DEFINITION

Climate Adaptation refers to actions taken at the individual, local, regional, and national levels to reduce risks from even today's changed climate conditions and to prepare for impacts from additional changes projected for the future.³

Adaptation in Action

The recent experience of Florida's colleges also serves as a warning signal for higher education institutions everywhere. College campuses can expect to deal with the consequences of more frequent or more intense extreme weather including floods, hurricanes, tornadoes, wildfires, and heat waves. In California, 18 of 150 public institutions are in severe wildfire zones.⁴ Southwestern colleges may soon need to make plans for limited water supplies.⁵ Schools in the southeast need to prepare for more intense hurricane seasons.⁶ These institutions will need to consider how these risks may threaten their infrastructure as well as increases in their insurance costs.

However, the potential impacts on the higher education system go well beyond severe storms, droughts, and natural disasters. These patterns of extreme weather can impact the ability of institutions to enroll, retain, and graduate students. For instance, institutions in regions more susceptible to climate risks may become less attractive to students seeking stable learning conditions.



BRIGHT SPOT

¹ With increasing reports of climate-induced stress, burnout, and emotional challenges among professionals and the communities they assist, there's a clear need for mental and emotional support frameworks. The Adaptive Mind Project is developing ways to foster resilience, enhance coping strategies, and build a supportive network of professionals in the face of constant traumatic and transformative change.⁷ Their work provides a vital blueprint for ensuring students and faculty are emotionally fortified to address climate challenges and lead transformative solutions. The COVID-19 pandemic demonstrated how broader societal shocks and interruptions to learning harm student success and mental health. Over a million fewer students enrolled in higher education in 2021 compared to 2019 and completion rates fell for the first time in a decade.⁸ Meanwhile, the remaining student body experienced a mental health epidemic: three in five students met the criteria for a mental health problem during the 2020–2021 academic year.⁹

Institutions need to learn from recent experience to adapt to impending climate changes. They can also support broader societal needs and efforts to adapt to a changing climate.

BRIGHT SPOT: ARIZONA

Arizona State University (ASU) has taken on a major leadership role in supporting local and state level community adaptation to climate change. This includes a \$40 million investment¹⁰ in future water security on and off-campus that integrates sustainability into ASU's academic fabric. University leaders also take on critical public roles. For instance, one of ASU's faculty members serves as the Chief Heat Officer for Phoenix, leading research and action on heat resilience.¹¹

State Policy Opportunities

State policymakers can use funding and state regulation to prepare higher education infrastructure for climate change. Policymakers can also look to higher education to help their states adapt, supporting research and technical assistance at state institutions to help other sectors survive and thrive in a changing climate. Finally, state system leaders can ensure adequate health and mental health resources are available for students to build their resilience to respond to climate impacts in the future.



BRIGHT SPOT

Second Nature's Presidential Climate Commitment includes an option for colleges to set a climate resilience goal. Colleges commit to developing a climate action plan that includes concrete steps to integrate climate resilience into their curriculum, research, and operations as well as to take steps to support climate resilience in their broader community.



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