

About the Research

This higher education study reviewed 764 publicly available policies across all 50 U.S. states and the District of Columbia.[†] The policies were collected from a sample of 230 public higher education institutions and 36 state boards of higher education.

When selecting institutions to include in the sample, the following characteristics were considered, when possible, for each state:

1. Five public institutions per state
2. Accredited institutions only
3. A ratio of universities, colleges, technical institutes, and community colleges (2:1:1:1)[‡]
4. Range of urban/rural settings
5. Range of student body size

The sample was also proportionally representative** across all states for the following characteristics:

1. Research intensive institutions (i.e., R1 and R2 institutions)
2. Climate-affiliated institutions (i.e., Second Nature University Climate Change Coalition, Second Nature Climate Leadership Network, and We Are Still In^{††} institutions)
3. Sustainability-affiliated institutions (i.e., Association for the Advancement of Sustainability in Higher Education (AASHE), Sustainability Tracking, Assessment & Rating System (STARS) rated institutions, and Global Council for Science and the Environment (GCSE) institutions)
4. Minority-serving institutions (i.e., Historically Black Colleges and Universities, Tribal Colleges and Universities, etc.)

In the study, “policy” refers to official education policy texts, such as strategic plans, teaching and learning policies, operations policies, sustainability policies, emissions reduction policies, and community partnership policies. The study used a “whole institution approach” for data collection and analysis, which includes five domains of institutional activity: 1) overall governance, 2) teaching and learning, 3) facilities and operations, 4) community partnerships, and 5) research (Figure 1). A whole institution approach has been found to be effective for ensuring broader and deeper incorporation of climate change across higher education policy and practice, and is also recommended by international and intergovernmental bodies such as UNESCO and the International Association of Universities.^{9,10,11,12,13}



[†] Policies were collected from January 2022 to May 2022.

[‡] For the purposes of this study, institutions with both graduate and undergraduate programs were usually classified as universities. Institutions that mainly focused on undergraduate programs were labeled as colleges. Technical institutes offer certificates, diplomas, and technical degrees in occupational-related programs. Community colleges usually offer two-year degrees to meet general education requirements that can be transferred to four-year universities.

**That is, we determined the percentage of institutions in the United States that met each criterion (i.e., research-intensive institutions, climate-affiliated institutions, sustainability-affiliated institutions, and minority-serving institutions) and ensured that the sample included the same percentage of institutions.

^{††} We Are Still In is now called America Is All In. <https://www.americaisallin.com/>

Policies were found by searching institutional and state board of higher education websites and more generally on a web search engine, using specific climate change keywords (herein “content”). The extent and type of climate change inclusion in policies was examined using NVivo 12 qualitative research software.## The relative frequency of climate change keywords within the policies identified the extent of climate change inclusion, with a focus also on the type of content included. The keywords were divided into clusters that show the different ways that climate change is engaged in higher education (Appendix 1).

Figure 1. A whole institution approach to addressing climate change in education, and data collection across whole institution domains.



To consider varying policy lengths and numbers of policies per state, keyword frequencies were standardized by 1,000,000 words.