HOUSE No. 496

The Commonwealth of Massachusetts

PRESENTED BY:

James K. Hawkins

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act implementing elementary and secondary interdisciplinary climate justice education across the Commonwealth.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
James K. Hawkins	2nd Bristol	1/12/2023
Edward R. Philips	8th Norfolk	2/8/2023
David M. Rogers	24th Middlesex	2/8/2023
Frank A. Moran	17th Essex	2/13/2023
Bradley H. Jones, Jr.	20th Middlesex	3/31/2023
Simon Cataldo	14th Middlesex	4/10/2023
William J. Driscoll, Jr.	7th Norfolk	4/10/2023
Carmine Lawrence Gentile	13th Middlesex	2/1/2024
Pavel M. Payano	First Essex	2/1/2024
Judith A. Garcia	11th Suffolk	2/1/2024
Estela A. Reyes	4th Essex	2/1/2024
Peter Capano	11th Essex	2/1/2024
Joan B. Lovely	Second Essex	2/1/2024

HOUSE No. 496

By Representative Hawkins of Attleboro, a petition (accompanied by bill, House, No. 496) of James K. Hawkins and others relative to implementing elementary and secondary interdisciplinary climate justice education in the Commonwealth. Education.

The Commonwealth of Alassachusetts

In the One Hundred and Ninety-Third General Court (2023-2024)

An Act implementing elementary and secondary interdisciplinary climate justice education across the Commonwealth.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

- 1 Chapter 69 of the General Laws is hereby further amended by inserting after section 1Q 2 the following new section:-
- 3 Section 1R. Elementary and Secondary Interdisciplinary Climate Justice Education
- 4 (a) The board shall direct the commissioner to revise and update curriculum standards for
- 5 the subjects of science, technology, and engineering to include relevant and interdisciplinary
- 6 climate change standards that will provide students with a deeper understanding of
- 7 anthropogenic climate change, its disproportionate impacts, energy technology and technological
- 8 and ecosystems strategies in ways that help students apply scientific knowledge to equitable
- 9 climate solutions, including but not limited to:
- 10 (1) The current human impact on the carbon cycle, emphasizing the long residence
- 11 time of carbon dioxide in the atmosphere and ocean surface waters.

(2) Climate change's impact on the water cycle, including the loss of both sea and land-based ice, specifically in regard to the Arctic region, Greenland, and Antarctica, increase in evaporation due to higher temperatures in lower latitudes, higher likelihood of severe storms and the release of greenhouse gasses from melting permafrost, lower albedo relating to less ice/snow coverage, increased water vapor in the atmosphere with higher temperatures, and the release of carbon dioxide from soils and plant biomass from large scale fires.

- (3) How various energy sources, including fossil fuel combustion, photovoltaics, geothermal technology, biomass combustion, wind, and hydroelectric, directly and indirectly affect human and ecological health, including how climate change, natural disasters, energy facilities, resource extraction, and pollutants cause severe health issues: asthma, cancer, lead poisoning, inaccessibility of housing, food, and water.
- (4) How the above impacts disproportionately affect people across race, class and geography in the US and globally.
- (5) Ways that humans influence the abilities of forests, oceans, agricultural land, and settled land to contribute to, mitigate, and adapt to climate change, including carbon uptake, sequestration, and ocean acidification.
- (6) How governments, companies, schools and other entities can integrate the above concepts into viable and just climate policies and solutions.

The board shall direct the commissioner to institute a process for setting curriculum standards for the subjects of history, social sciences, and civics to include relevant and interdisciplinary climate change standards that will provide students with a deeper understanding of climate policy, climate justice, and climate action, including engaging elected and appointed

- officials. The commissioner shall ensure that issues involving those disproportionately affected by climate change are addressed in the standards, including but not limited to:
- 36 (7) How conditions and effects in the Northern Hemisphere differ from the conditions
 37 and effects in the Southern Hemisphere.
- 38 (8) How environmental justice communities have been defined historically and legally 39 :

- (i) Historical: Environmental justice communities have been defined as "geographically connected groups of people that experience disproportionate harm from air and water pollution, natural disasters like fires and floods, sea level rise, the siting of energy, transportation and other infrastructure, etc. Often members experience intersecting systems of oppression across race, class, language isolation, citizenship status and more".
- (ii) Legal: An environmental justice community in the Commonwealth is defined per Section 56 of 2021 Acts Chapter 8 as "a neighborhood that meets 1 or more of the following criteria: (i) the annual median household income is not more than 65 percent of the statewide annual median household income; (ii) minorities comprise 40 percent or more of the population; (iii) 25 percent or more of households lack English language proficiency; or (iv) minorities comprise 25 percent or more of the population and the annual median household income of the municipality in which the neighborhood is located does not exceed 150 percent of the statewide annual median household income."
- (9) How environmental issues, including pollution, land use change, and climate change intersect with race, class, human settlement and migration, colonization, war, redlining, English language dominance, economic, political, and legal systems, etc.

56	(10) How students can engage their communities, civic leaders, Indigenous leaders in
57	traditional land management in their area, and government officials in promoting social change,
58	by analyzing historical movements and applying learning to projects for which those officials are
59	the target audience. Analysis of these historical movements will include evidence of the roles of
60	for-profit organizations in shaping legislation, changing public opinion, and obfuscating the
61	impact of industry on the environment.
62	(c) The board shall direct the commissioner to institute a process for setting curriculum
63	standards for all subjects not mentioned above, including arts, languages, wellness, and
64	mathematics, to integrate climate policy, climate justice, and climate action.
65	(d)The commissioner shall:
66	(1) Create and engage a diverse Interdisciplinary Climate Education Council to provide
67	feedback on draft standards and curricular supplements before the board may vote to approve
68	them and then after their approval continues to assess the application of these standards and
69	supplements. The council shall include:
70	(i) youth leaders between the ages of 14 to 18, 18 to 22, and 22 to 25 who reside
71	within the commonwealth from a range of geographic areas, including environmental justice
72	communities in the commonwealth
73	(ii) staff from environmental and climate justice organizations, including majority
74	Black and/or Indigenous organizations
75	teachers across multiple disciplines

educator union representatives with expertise in climate justice

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(v) climate experts and researchers to integrate academic fact-checking with other ways of knowing

- (2) Ensure that bilingual and English as a second language students are given the same curricula and learning opportunities by providing them with multilingual resources regarding environmental activism, climate policy and climate justice in the formation of this curriculum.
- (3) Consult environmental and climate justice organizations and professionals throughout the commonwealth while creating these standards.
- (4) The department of elementary and secondary education shall provide and sponsor professional development opportunities for educators on the history and social science and science and technology frameworks and work to create tools aligned with the framework to support districts in the implementation process. Additional support and outreach from the department may include statewide and regional training, meetings or conferences, additional staff to support students and teachers with this work, and opportunities for districts and stakeholders to assess and share evidence-based best practices in support of climate change education and provide feedback and recommendations to the department.
- (5) The commissioner shall consult with childhood development and mental health specialists to ensure these standards are integrated by grade level according to what will help empower young people at any age to secure their future. The commissioner shall make every effort to solicit feedback from superintendents, teachers and students in the formation of these recommendations.
- (6) A final set of standards approved by the board must include provisions to create assignments for students to directly engage in support of an issue, such as environmental justice.

Climate justice assignments must be structured such that they protect a student's right to their own opinion and position on an issue and so they meet the non-partisan civics project requirement pursuant to General Laws, Chapter 71, Section 2, and therefore schools may apply for funding from the Civics Project Trust Fund to support this work.

(e) The above requirements shall be integrated into DESE's routine curriculum standards revision process and shall be satisfied and implemented by school districts under the department's purview on or before August 1, 2025, in time for the following school year.