

Climate Change Curriculum Committee

Update
2025-26

SEU Unit A

Language



Climate Change Curriculum Committee: This Committee is tasked with developing and assisting in the implementation of a new cross-curricular climate change curriculum. This Committee will make recommendations to the Ed Program Subcommittee of the School Committee for their consideration and approval. This committee will operate until the end of this contract in 2025. Committee members will be paid at the hourly rate for curriculum work per Article IV section F subparagraph 2b.

ARTICLE VIII:

TEXTBOOKS AND

CURRICULUM

This work stems from the current SEU contract language and is also driven by an unwavering commitment from SPS staff and students to ensure we all have the information we DESERVE to prepare for our collective future.

CCCC Challenges

01

Complexity of
this topic

03

Interdisciplinary work in
discipline-driven day

02

Scope of this work across
grade levels and subjects

04

Demands on
teachers/Time in the
school day

Key Stakeholders



Students

This is all about them! And their (our) future.

Staff

We can't do this without buy-in from staff



Universities

Research and pedagogical support

Industry

Future climate related fields

Community Organizations

Ground level support

City Offices

Cross sector support

Elected Officials

Advocacy and funding

OUR TIMELINE

As the SY24-25 work wraps up, we will deliver a detailed report and a full set of recommendations by June 12, 2025

SY22-23 SY23-24 SY24-25 SY25-26

- Pre-committee work
- 2023 Staff survey
- Steering Committee
- Frameworks and curricular crosswalks
- Teams: OST, Curriculum Evaluation, Pilot Process Evaluation
- Developed mission and vision
- Climate Palooza Event at Healey with Brown
- Earth Day Week Resources
- Climate Tech Academy April Break Program
- Student led meeting with SHS Dept. Heads
- Staff Survey 2024
- Teen Climate summer Interns
- Climate Advisory Team
- Mass Audubon Professional Development
- Civics Grant Submission for \$40K
- MIT Day of Climate
- Climate Clubs
- Earth Month Resources
- Student Survey
- Staff Survey 2025
- Teen Climate summer interns
- Curriculum work continues, Year long
- STEM Week, October 2025, Grade 5
- SHS Climate Team, Student Facilitators
- Climate Clubs, Winter/Spring 2026
- Climate Tech Academy, Spring 2026
- Youth Climate Action Summit
- Additional items TBD

Mass Audubon's Core Values of Teaching Climate Change

Keep it **local, simple, and concrete**



Use storytelling and objects of care

Focus on taking action



ALWAYS end with solutions, and move from “Me to We”

Increase hope and optimism



Honor mental health and child development and focus on the society we wish to create

Mass Audubon's Core Values of Teaching Climate Change

Climate justice is inherent in climate change education



We can't teach climate without understand the historical and social context.

Climate education is interdisciplinary



Climate education is interconnected. Both within school curriculum and in the greater community.

Tools and Resources

Our team has developed a number of resources for internal and external use. We will include them in our final report and set of recommendations

Curriculum Trajectory

A working draft of a prek-12 roadmap of the multiple ways climate education can be integrated into existing unit and options for new lessons and experiences.

Climate Advisory Roster

A collection of passionate stakeholders working to support climate change education in Somerville.

Earth Month Resources

Staff pulled together a host of activities and shared event info about the City's annual sustainability fair:
Sustainaville

SPS 2024-25 Pilots

ESCS Pilot

6 weeks long - 1 lesson a week - 1 hour block

Partner:
Mass Audubon

- Fox grade 5
- Ceballos grade 4
- Woodcock grade 4
- Martinez grade 1

This pilot was a continuation from
last year's work with Mass
Audubon

Funded via a grant
Mass Audubon teacher is Sarah Howdy

Grade 6 Pilot

Partner:

Tufts
Center for
Engineering
Education
Outreach

4 - 6 weeks long - during science block

- AFA - Ramsey
- ESCS - Curbelo
- HLY - Moysey
- WSNS - Burgess

This pilot was a continuation from
last year's work with Tufts CEEO

Funded via a grant

CEEO Team includes Chelsea Andrews and Dr. Kristen Wendell

Climate Clubs Pilot

Partner:
City of
Somerville

City of Somerville Partners:

- Office of Sustainability and the Environment
- SomerPromise

Funded via Principals, Youth Services, and SomerPromise

10 weeks long - Once a week
1 hour block after school

- Argenziano
 - Lamer, 4 SHS teens, 22 students
- East
 - Fleites, 3 SHS teens, 24 students
- Winter Hill
 - Murphy-Beardsley, 3 SHS teens, 15 students

NWFC Alt. School Pilot

Interdisciplinary
curriculum:
science in social
context

Partners:

- The Mystic Learning Center, Somerville

Funded in part by a Boston University Consortium Grant

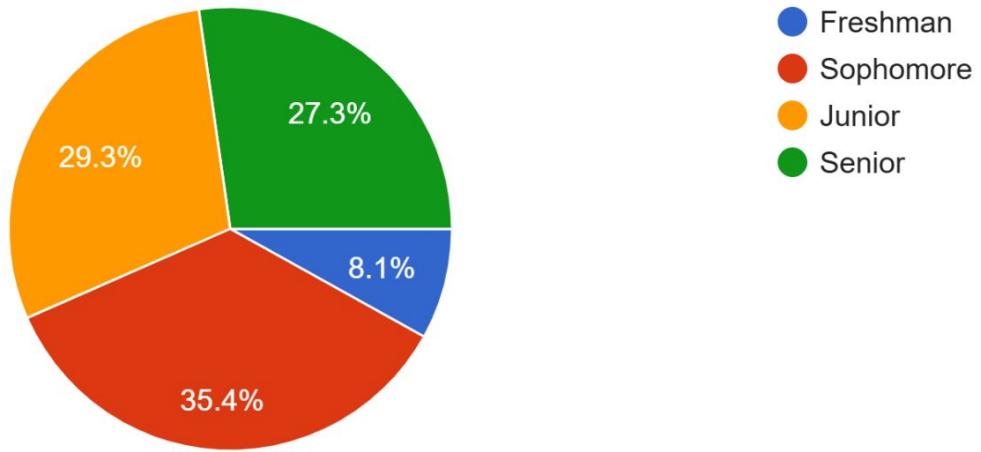
Trimester - 12 weeks - 65 minute block
Riddington, NWFC grades 9-12

- Mystery of the Woolly Mammoth
- Biomimicry for Imagineering
- Blue Planet Oceanography
- Citizen Food
- Plant Power
- Sustainable Cities
- Resilient Somerville

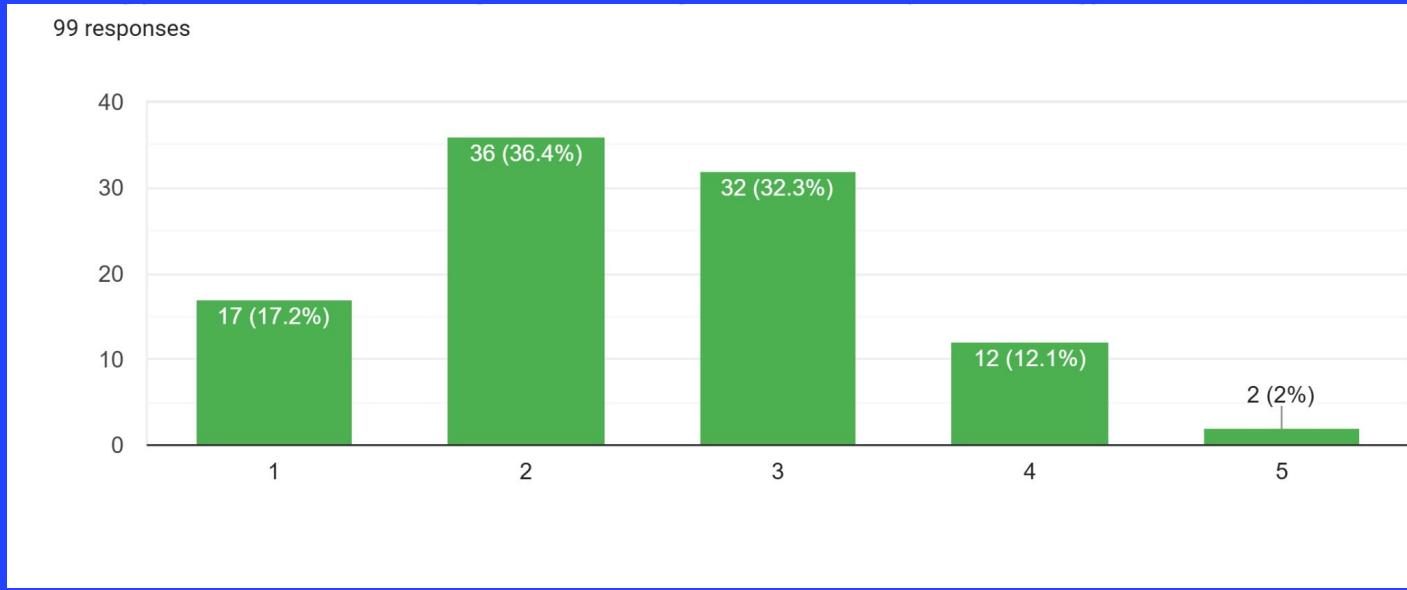
Student Survey Results

What is your current grade level at Somerville High School?

99 responses

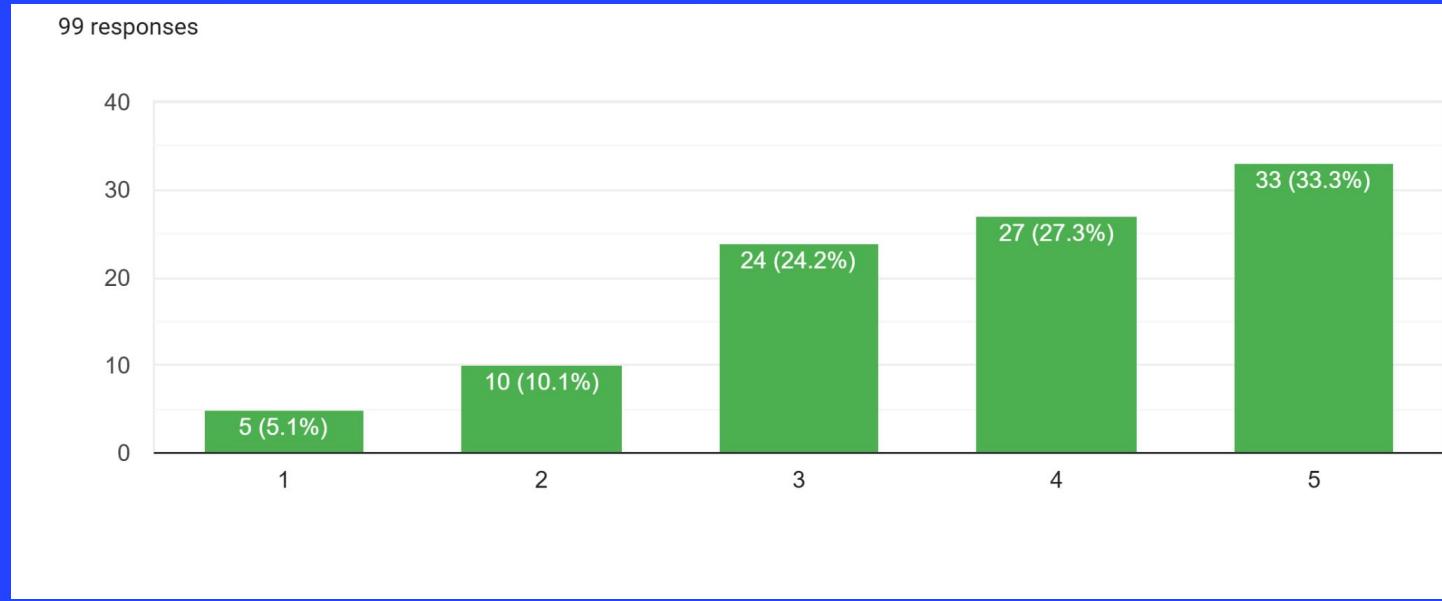


Student Survey Results



On a scale of 1 to 5, please identify the level of climate-change related material you have received during your time at Somerville High School through **MANDATORY** courses like English, Biology, US history, etc. (don't include non-mandatory courses like environmental science or electives). This could include class discussions, documentaries, lectures, assigned readings, or independent work on climate-related topics like energy use, emissions, etc.

Student Survey Results



On a scale of 1 to 5, identify how interested you would be in receiving more material related to climate change in the SHS curriculum? Particularly, material related to sources of climate change and our collective and individual carbon footprint.

Student Survey Results

Open Response

Are there any other thoughts you would like to share related to climate change education in public school? I am working on an article that explores integrating more climate change-related material into the SHS curriculum through existing science/humanities classes, or potentially through a new course. Please let me know your opinions on such a proposal (positive or negative), and include your full name and year of graduation if you would like your opinion to be included in the article).

Student Survey Results

Key Themes & Insights

1. Broader Curriculum Integration

- Many students want climate change topics embedded across multiple subjects (biology, history, social studies) rather than limited to certain electives (e.g., AP Environmental Science, ecology).
- Some recall past interdisciplinary classes (e.g., environmental history co-taught by science and history teachers) and suggest bringing them back.
- Interest in seeing climate change education at every grade level.

2. Focus on Climate Justice & Equity

- Strong calls to include climate justice and environmental racism in the curriculum, with emphasis on local relevance to Somerville.
- Recognition that responsibility should not be placed solely on individuals—students want to understand the role of governments and corporations.

Student Survey Results

Key Themes & Insights

3. Hands-On & Action-Oriented Learning

- Field trips for clean-up projects.
- A school garden managed by students.
- Visible recycling initiatives.
- Student-led climate clubs, including outreach to middle schools.
- Opportunities to work on tangible projects that result in measurable change.

4. Perceptions & Emotions

- Many students see climate education as urgently important for building an informed, engaged citizenry.
- A few expressed that hearing about climate change can be overwhelming or depressing, comparing it to "end times" narratives.
- Some are unsure how much climate-related content could be added without disrupting current class units.

Student Survey Results

Key Themes & Insights

5. Awareness & Engagement Gaps

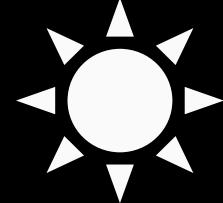
- Several noted you “only learn about it” in specific classes.
- There’s interest in more school-wide initiatives and making resources on how to take action easily available.
- Desire for connection to real-world solutions rather than only problem awareness.

Representative Student Quotes

- *“Climate change education is necessary and relevant in every subject and every grade level.”*
- *“There should be more talk about climate justice/environmental racism... Having a focus on environmental justice in Somerville would be awesome!”*
- *“If there was something people could do directly and they could see actual change, that could make people more responsive.”*
- *“I think it’s kind of depressing to hear about climate change... it just feels like being read the end times from the bible.”*
- *“Education about important worldwide issues is integral to becoming an adult.”*



Recommendation

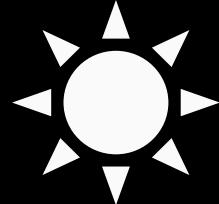


Year-long grade level team (grade 4) focus on exploring existing anchor points for integration.

Identify school-based grade 7-8 team for interdisciplinary climate project across all 4 core subjects.

Explore foundational work with all educators. Provide ample opportunities for all staff to get trained on the basics.

Recommendation

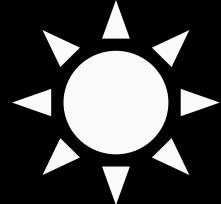


Further develop cross sector Climate Advisory Team to support in-and-out of school opportunities.

Bring together cohorts of universities, community organizations, and industry partners at each K-8 school and the Brown for ongoing partnership.

Create explicit pathways for families and students to explore and pursue emerging climate industries and fields of study.

Recommendation

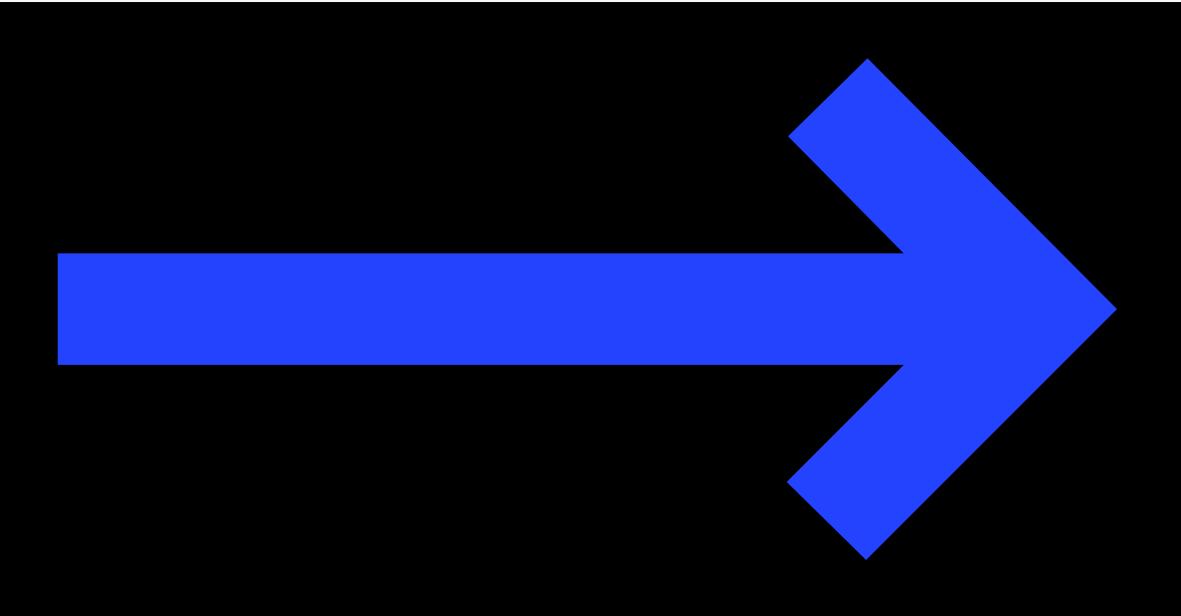


Leverage cohorts of after school climate club students to co-lead projects during the school day.

Leverage cohort of SHS teens to co-lead work at the high school to integrate topics of climate change.

Leverage early adopters in partnership with experts to provide additional professional development for colleagues.

Q&A



Any questions?
Ask away!

Thank you!

Questions?
Please reach out to
jbehrens@k12.somerville.ma.us