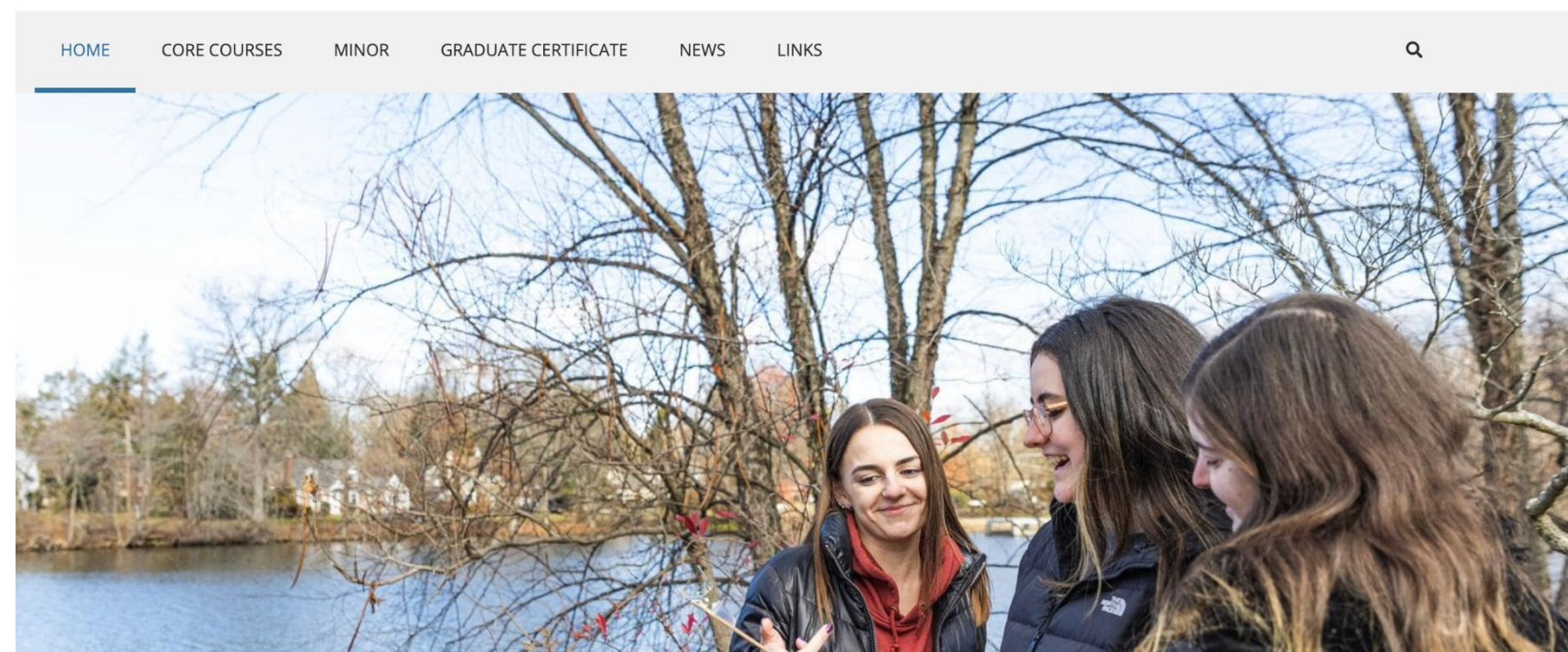


Charting the Course for Climate Change Education in New Jersey

Dr. Lauren Madden, The College of New Jersey

Environmental Sustainability Education School of Education

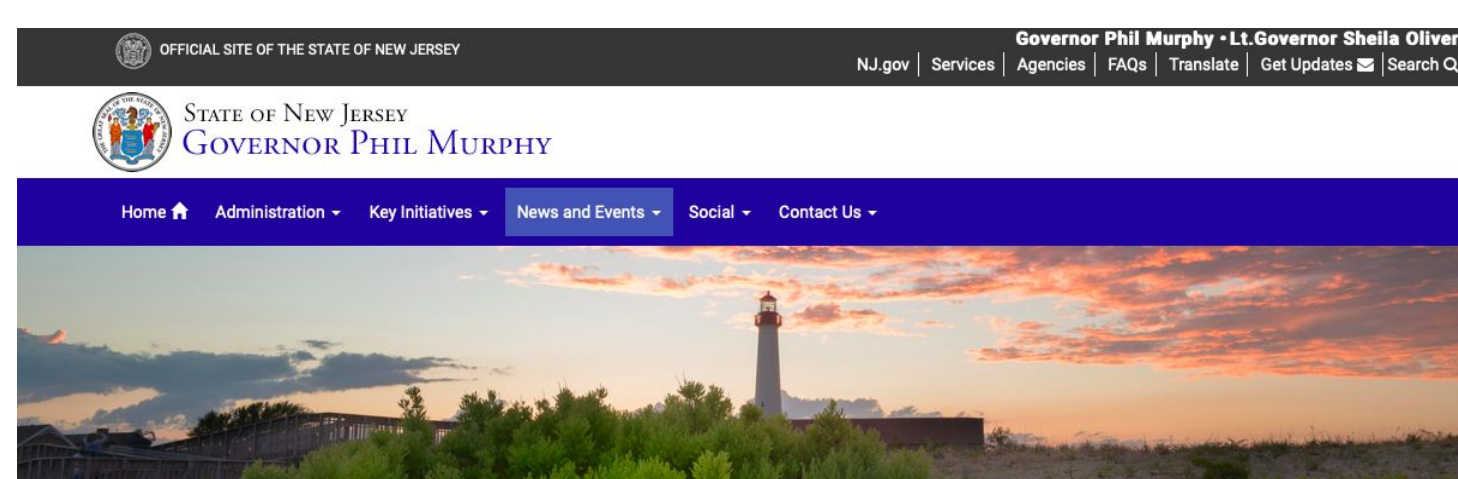


Environmental sustainability education minor receives national accreditation



Students tend to a vertical garden harvest in an introduction to environmental sustainability course.

The College of New Jersey's minor in Environmental Sustainability Education recently received accreditation by the North American Association for Environmental Education.



First Lady Tammy Murphy Announces New Jersey Will Be First State in the Nation to Incorporate Climate Change Across Education Guidelines for K-12 Schools

TRIDENT - First Lady Tammy Murphy today announced that the New Jersey State Board of Education has adopted two initiatives to make New Jersey the first state in the nation to incorporate climate change education across its K-12 learning standards. The New Jersey Student Learning Standards (NJSLS) outline what is taught in New Jersey public schools and set the foundation for school districts to craft instruction accordingly. With the adoption, climate change education will be incorporated across 21st Century Skills and Proficiency Performance Standards and Instructional Practices. [View the full press release.](#)

Climate Change education by Grade Band

With the adoption of the 2020 New Jersey Student Learning Standards (NJSLS), New Jersey became the first state in the nation to include climate change across content areas. These standards are designed to prepare students to understand how and why climate change happens, the impact it has on our local and global communities and to act in informed and sustainable ways.

Districts are encouraged to utilize the NJSLS to develop interdisciplinary units focused on climate change that include authentic learning experiences, integrate a range of perspectives and are action-oriented. While the 2020 NJSLS English Language Arts (ELA) and Mathematics do not have specific climate change standards, districts may want to consider how they can design interdisciplinary climate change units that incorporate relevant ELA and mathematics standards. Likewise, it may be helpful to review the 2020 NJSLS documents to identify other relevant standards that might be incorporated as well as to understand the role of core ideas, performance expectations and practices in curriculum development and lesson planning.

Click on the desired grade band below to see the 2020 NJSLS that specifically reference climate change as well as those that might be incorporated in an interdisciplinary climate change unit. Within each grade band, the 2020 NJSLS appear in order of their standard number.

1 - Visual and Performing Arts	7 - World Languages
2 - Comprehensive Health and Physical Education	8 - Computer Science & Design Thinking
3 - Science	9 - Career Readiness, Life Literacies and Key Skills
4 - Social Studies	

- Kindergarten through Grade 2
- Grades 3 through 5
- Grades 6 through 8
- Grades 9 through 12

So, we got to work right away

April 2020:

Recruited participants by email and social media to participate in survey

166 teachers responded & 164 agreed to participate & completed the survey

A focus group with 10 participants was held later to elaborate on and follow up on the trends from the survey

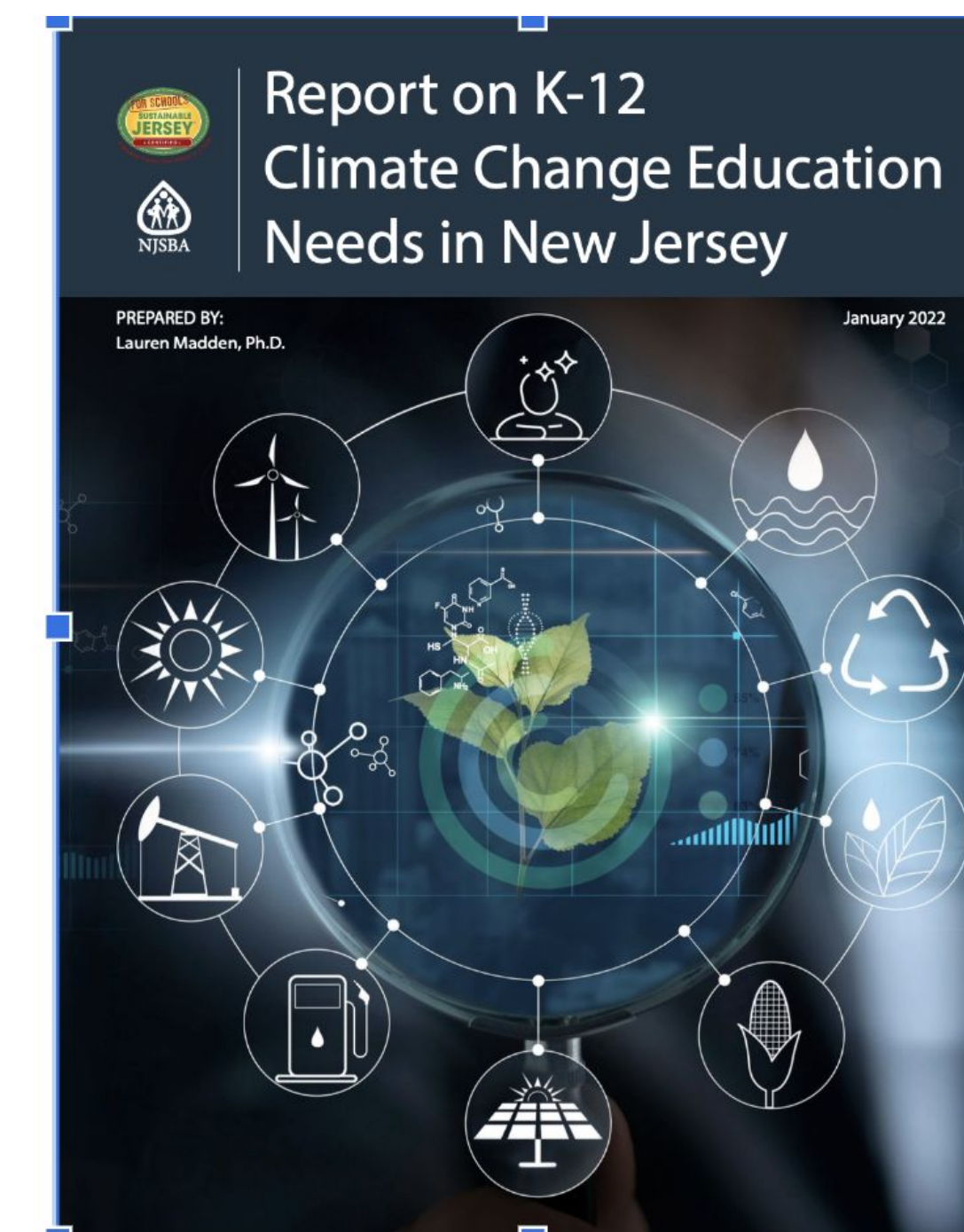
Participants were asked about climate change, marine science and the NGSS with respect to their own content knowledge and teaching

Marine Science, Climate Change, and the Next Generation Science Standards: Understanding the Knowledge and Perspectives of K-8 New Jersey Teachers

LAUREN MADDEN
LOUISE AMMENTORP
NATHAN MAGEE
GRACEANNE TAYLOR

RESEARCH AND EVALUATION

Sea Grant
NJ Sea Grant Consortium



Vision

Ensure that all teachers, students and educational leaders in New Jersey understand climate change and are empowered develop solutions to climate-related problems.

Goals

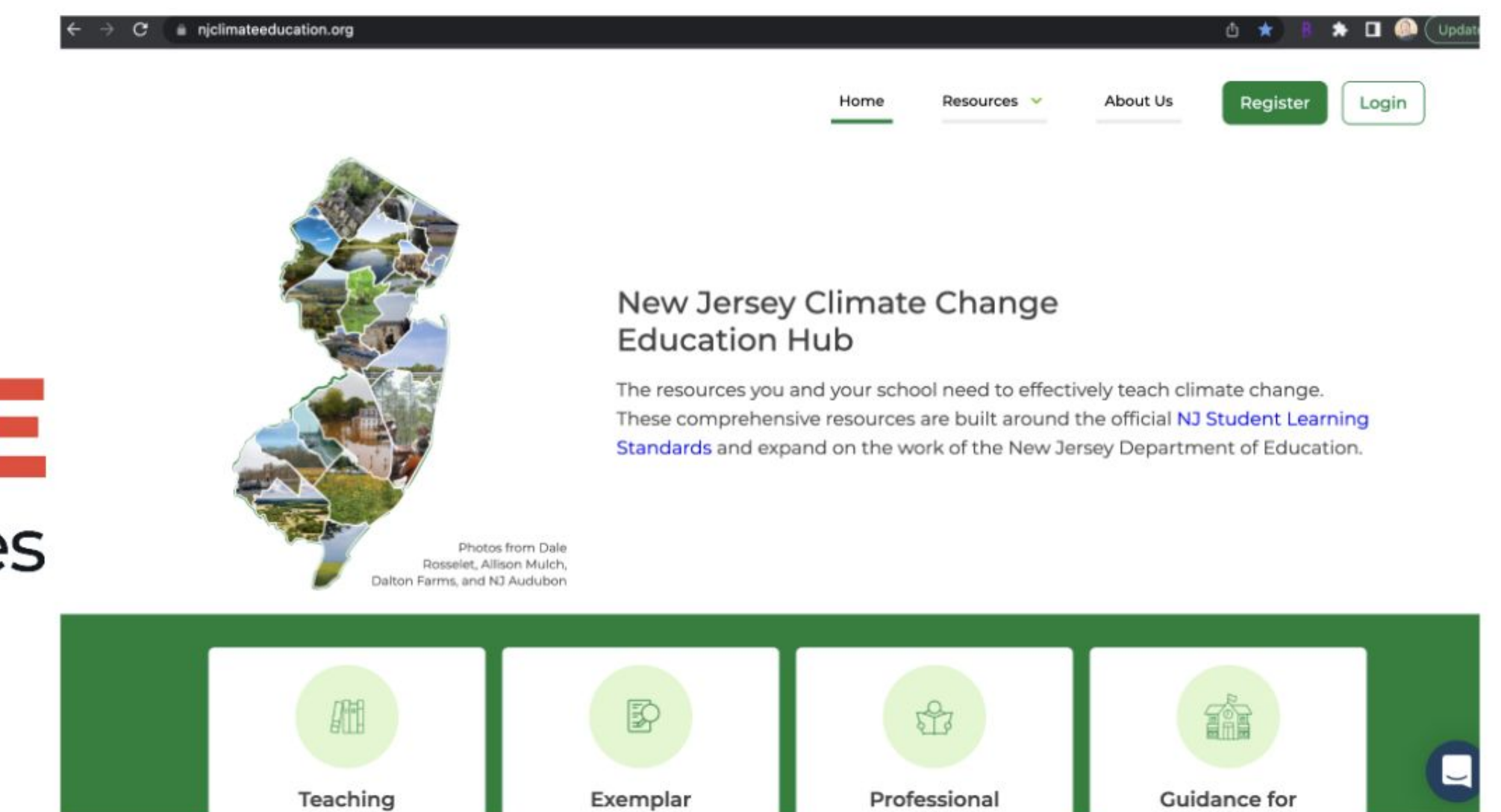
1. Ensure that all New Jersey public school teachers are prepared to fully integrate climate change education across grade levels and content areas within five years of adoption of the 2020 New Jersey Student Learning Standards.
2. Educate all members of school communities, including families, students, teachers, school staff, administrators, school board members and community partners on scientifically accurate information regarding climate change to ensure that schools are designed to foster a sustainable future and economic prosperity.
3. Encourage community-focused collaboration among stakeholders including board members, students, families and teachers, facilities professionals and administrators to ensure that schools develop a comprehensive approach to climate change education.
4. Use an equity-focused approach to ensure that the neediest schools and districts receive the necessary financial and logistical support for climate change education implementation. Further, the disproportionate effects of climate change seen by communities of color, immigrant communities and low-income communities must be highlighted.
5. Center climate change education and experiences on what is happening locally. Place-based approaches to education that emphasize the New Jersey-specific effects of climate change, and the local actions that impact global trends are more likely to make a lasting impact with students and motivate communities to commit to solution-building.
6. Provide multiple entry points to allow for school- and teacher-autonomy in deciding how to integrate climate change content within each unique learning context.

Long story short, we provided clear guidance with regard to supporting:

- a. Teacher Professional Learning
- b. Curricular Resources
- c. Community-based Climate Change Education
- d. Support from School Boards and Administrators

SUBJECT to CLIMATE

Connect to Resources



And...it became critical to document the story as it unfolded. This work is unprecedented.

- We conducted a survey-based study in June & Dec 2022 assess teachers' preparedness with respect to teaching about climate change

New Jersey Teachers' Perspectives on the Implementation of K-12 Climate Change Standards

Initial Findings from Surveys in June and December 2022

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Research and Operations Associate

Some key findings

- 51 & 73 teachers responded representing all grade levels and content areas, and at least 23 school districts
- Mixed responses with regard to their familiarity with the standards
 - The majority of respondents (57%) cited that they needed more access to curricular materials
 - An even larger number (75%) noted that they needed more professional learning opportunities



For more information, next steps, or copies of articles, email: maddenL@tcnj.edu