



NYSG engaged educators and teachers from New York's Great Lakes and Long Island regions in an interactive review of a new marine debris and plastic pollution curriculum.

NYSG Engages Educators from Across New York State for Interactive Online Curriculum Review

Marine debris is an emerging pollution issue in communities and watersheds across New York State, from Lake Erie to the Atlantic Ocean. While a variety of educational resources currently address the ecological impact of marine debris, there is a need for an interdisciplinary curricula that include physical and social science elements from a local view. To properly integrate localized perspectives (Great Lakes, Long Island, Hudson River...) into its educational products development, New York Sea Grant (NYSG) routinely gathers the input of NY's classroom teachers and non-formal educators.

In 2021, NYSG developed a 15-lesson curriculum focused on marine debris and plastic pollution. Due to the COVID-19 pandemic and the geographic range of New York State preventing in-person curriculum review workshops, NYSG developed an innovative process to gather feedback on its marine debris-plastic pollution curriculum. An online course on a learning management system called Canvas was developed. With this platform, teachers and educators could access the curriculum draft asynchronously at their convenience and provide feedback for analysis. To review each lesson, participants completed a five-question survey to gauge their perceptions and likelihood of usage. Additionally, the surveys gathered suggestions for improvements, appropriate time length, and grade level recommendations.

Ten teachers from Great Lakes and Long Island area schools provided comments and suggestions on all 15 lessons. This feedback was incorporated into revisions to the curriculum and have led to a more robust educational resource. More than 80% of participants stated they enjoyed using the online curriculum review process and would participate in future digital and interactive programs.

The screenshot shows the user interface for the "New York Sea Grant 'Plastic Pollution and You' Teacher Feedback" page. On the left is a dark sidebar menu with icons for Home, Modules, Assignments, Account, Dashboard, Courses, Calendar, Inbox, History, and Help. The main content area features the Sea Grant New York and Department of Environmental Conservation logos. Below the logos is a thank-you message and a "Course Design" section. Two feedback analytics charts are displayed:

Response	Count	Percentage
Excellent	6	67%
Good	3	33%
Average	0	0%
Poor	0	0%

Overall score: +0.94, Discrimination Index: 67% answered correctly.

Response	Count	Percentage
Yes	7	78%
Maybe	1	11%
No	1	11%

Overall score: +0.93, Discrimination Index: 78% answered correctly.

From top: The homepage, and educator feedback analytics, developed by NYSG for its new marine debris/plastic pollution educational outreach.

This level of success with an online engagement process will allow New York Sea Grant to efficiently and effectively reach more teachers and educators across the state by combining new digital tools with traditional stakeholder programs.

Project Partner: • Funding: New York State Department of Environmental Conservation

NYSG Focus Areas: Environmental Literacy & Workforce Development in NY; Healthy NY Coastal Ecosystems.

New York Sea Grant is a joint program of Cornell University, the State University of New York, and NOAA.

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