

Great Bay National Estuarine Research Reserve

K-12 Education Market Analysis Report, June 2014



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Introduction

In March 2014, the Great Bay National Estuarine Research Reserve (GBNERR) conducted a market analysis of environmental education and interpretive programs offered by organizations in New Hampshire, and select organizations in Maine and Massachusetts. The comprehensive list of target organizations was identified by education staff of the Reserve, along with board members of the Great Bay Stewards, the (501c3) friends group of the Reserve.

Findings from the market analysis will enable GBNERR to address identified gaps, and avoid overlap with other relevant programs for the K-12 audience. The primary objective was to obtain information regarding K-12 educational programming and training needs, and gaps in New Hampshire and select bordering states. The analysis focused exclusively on the K-12 audience, and did not address general public or visitor center education to inform a K-12 Teacher Needs Assessment for a summer 2014 completion.

Background

GBNERR is located in the Seacoast region of New Hampshire (Figure 1). The Reserve encompasses 10,235 acres of which approximately 7,300 acres are open water or wetland. GBNERR is one Reserve within the National Estuarine Research Reserve (NERR) System. The NERR System is comprised of 28 Reserves in 22 states and Puerto Rico. Each Reserve consists of a federal and state partner. The federal partner for all Reserves within the NERR System is the National Oceanic and Atmospheric Administration (NOAA). The state partner of GBNERR is the New Hampshire Fish and Game Department. GBNERR focuses on land conservation and stewardship, water quality, biological communities and habitats, and climate change impacts and adaptations. Through the integration of research, stewardship, and education, the Reserve is able to address these important issues.



Figure 1. Great Bay National Estuarine Research Reserve with Great Bay Discovery Center shown by the yellow star. Credit: Great Bay Stewards and Barrington Library, 2014

Sample Process

Survey Monkey was used to conduct an online survey with organizations in the Seacoast area of New Hampshire, as well as select organizations in Maine and Massachusetts. Eighteen organizations (Appendix A) were asked to participate. The organizations were chosen by GBNERR education staff in consultation with other coastal education partners and board members of the 501(c) 3 friends group, the Great Bay Stewards. All 18 (100%) organizations completed the survey. The survey consisted of 23 questions that were designed to gather information on types of educational organizations in the Seacoast area, types of programs offered, grade levels taught, topics addressed in programs, use of climate change programming, use of Next Generation Science Standards in programming, collaboration with higher level institutions, program resources and counties served within New Hampshire. The open survey period ran from 2/28/2014 to 3/29/2014. All participants were informed that the Market Analysis would be made available to them upon completion. In

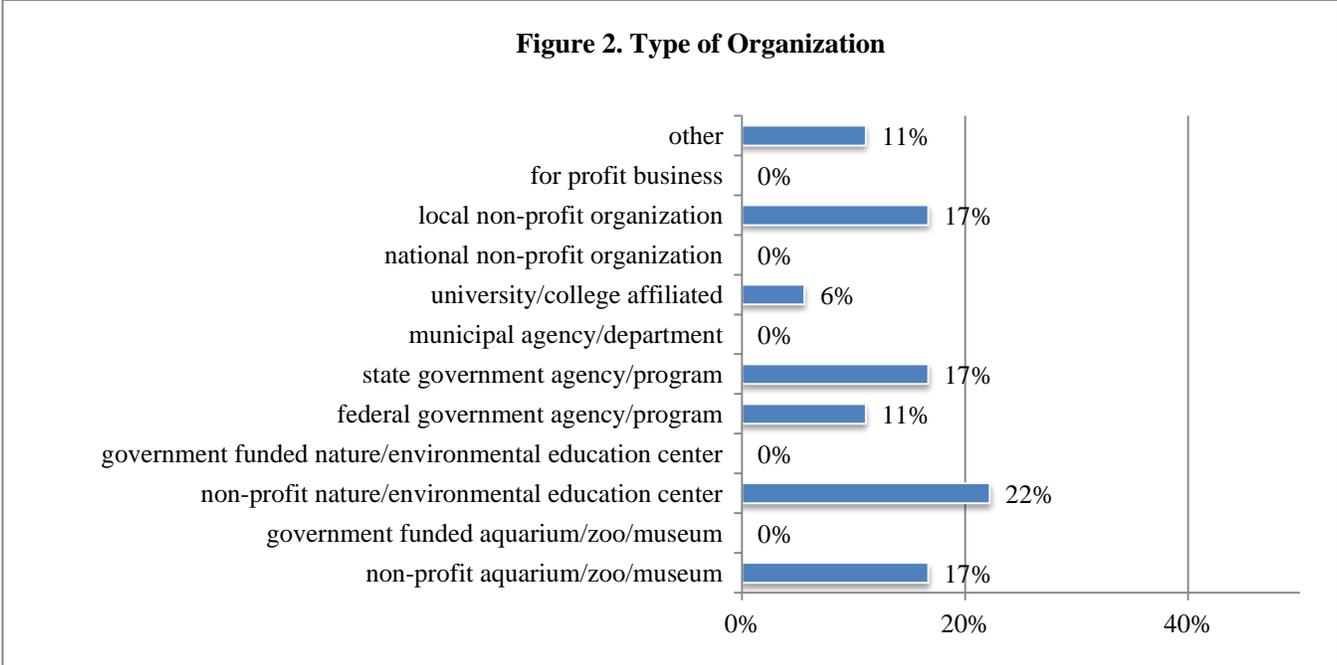
addition to the required questions, several additional questions were asked that addressed Next Generation Science Standards, Climate Change and facilities. These topics were of particular interest due to an increase in teacher activity relative to Next Generation Science Standards and Climate Change. In addition, GBNERR education staff wanted to better understand what program facilities were available for teacher trainings, workshops, and school program visitation.

Results

Results show the number of organizations that provided responses with percentage of organizations in parentheses. Percentages were rounded to the nearest whole number, and therefore do not equal 100%. Some questions did not receive a response from all 18 participants and this is noted. For questions that showed an “other” category. If “other” was specified by the respondent, their answer will be provided, if relevant to the analysis of the question.

Question 1: How would you best describe your organization?

Four (22%) of organizations described themselves as a non-profit nature/environmental center. Three (17%) organizations were a local non-profit organization. This same percentage was shown for aquarium/zoo/museum, and state government agency/program. Two organizations (11%) classified themselves as a federal government agency/program. This same amount was shown for other. Organization types that were clarified in other were “independent state agency/NERR”, “government funded program with local non-profit partner”, and “We are affiliated with national non-profit, but we are a separate non-profit”. University/college affiliated consisted of one (6%) of the organizations surveyed. No organization identified itself as a government funded aquarium/zoo/museum, government funded nature center/environmental education center, municipal agency/department, national non-profit organization, or for profit business. This question received a response from 18 (100%) of participants (Figure 2).

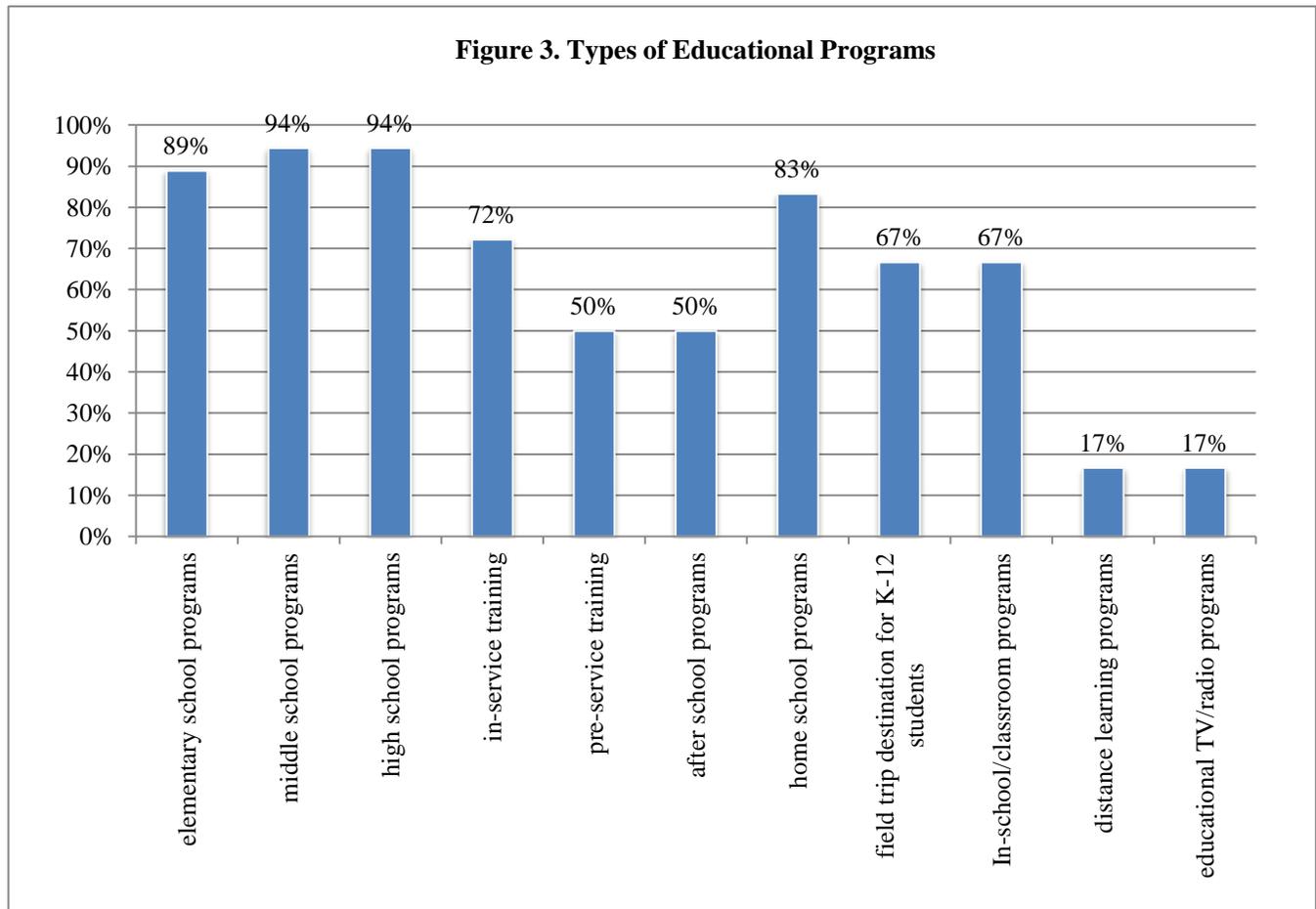


Question 2: Is your organization a NOAA agency or NOAA partner?

Eleven (61%) of organizations surveyed stated that they are not a NOAA agency or partner. Seven (39%) stated that they are a NOAA agency or partner. This question received a response from 18 (100%) of the participants.

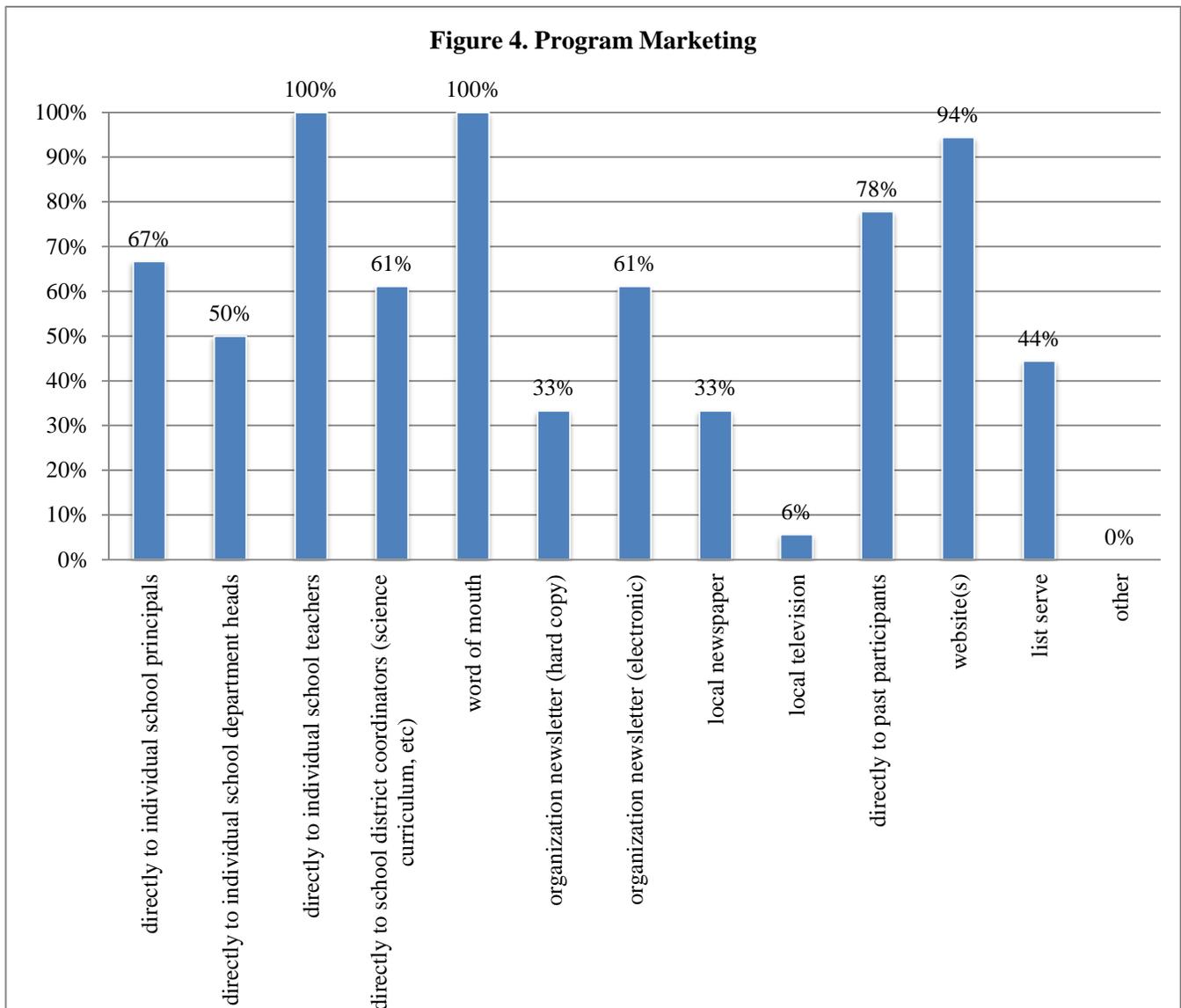
Question 3: What types of education programs does your organization provide?

The majority of organizations offer programming to elementary, middle, and high school aged students. The offering of elementary school programs is slightly lower than middle and high school programs. Sixteen (89%) organizations offered elementary school programming versus 17 (94%) organizations offered middle or high school programming. For these school programs, 12 (67%) organizations served as field trip destinations, and 12 (67%) organizations offered in school programming. Fifteen (83%) organizations offered home school programming. Nine (50%) organizations offered after school programming identifying a possible needs gap. Three (17%) organizations offered distance learning or educational TV and radio programs. Many of the organizations also offered teacher trainings. Thirteen (72%) organizations offered in-service teacher trainings, and nine organizations offered pre-service teacher trainings. Three (17%) organizations stated that they offer other types of education programs such as preschool programs, summer and vacation camps, birthday parties, large events, and teacher trainings for K-12 using the outdoors as a classroom. Eighteen (100%) participants responded to this question (Figure 3).



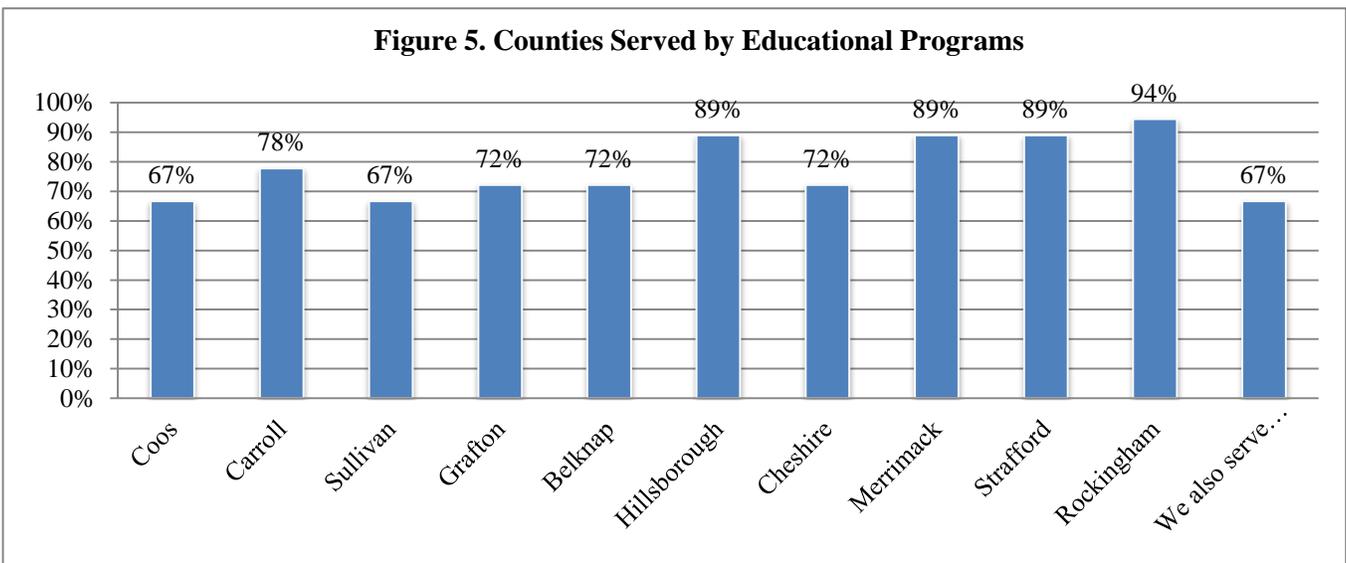
Question 4: How do you market your K-12 programs?

The two most used methods for marketing K-12 programs by organizations were directly to the school teacher, and by word of mouth. For these two methods, 18 (100%) organizations reported use. Websites were used by 17 (94%) of organizations. Marketing directly to past participants was used by 14 (78%) of organizations. Marketing directly to individual school principals (12 organizations or 67%), directly to school district coordinators (11 organizations or 61%), and directly to school department heads (9 organization or 50%) were also used frequently. Electronic notification with an electronic newsletter (11 organizations or 61%), or list serve (8 organizations or 44%) were examples of other frequently used marketing methods. Marketing via print was not as frequently used since hard copy newsletters were used by 6 (33%) organizations, and the local paper was used by the same number or organizations. Marketing with local television was used by one (6%) organization. One (6%) organization specified using Facebook in the other category; however we did not specifically address social media as a specific tool. We recommend that future studies address specific social media outlets such as Facebook, Twitter etc. This question received a response from 18 (100%) of the participants (Figure 4).



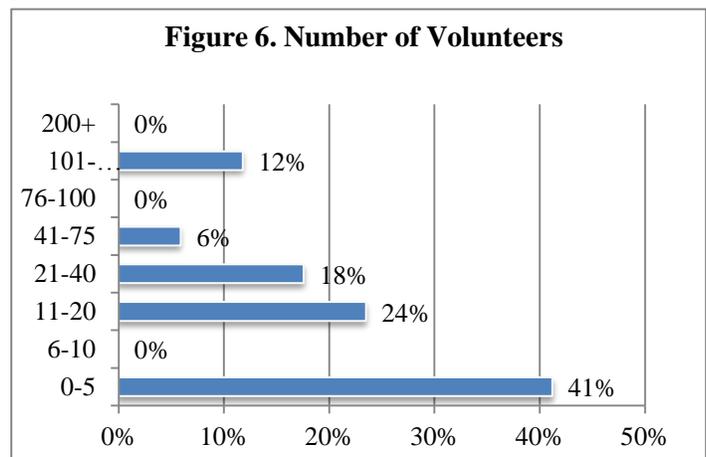
Question 5: Which New Hampshire Communities do you serve?

The most served counties were Rockingham with 17 (94%) organizations providing programs, Merrimack, Hillsborough, and Strafford counties received programming from 16 (89%) of the organizations. Carroll County received programming from 14 (78%) organizations. Thirteen (72%) organizations provided programming to the counties of Grafton, Belknap, and Cheshire. Coos and Sullivan counties received programming from 12 (67%) of the surveyed organizations. Of the ten counties in New Hampshire, all received programming from at least 12 of the organizations surveyed. Twelve (67%) organizations also provided programming to other states. Trends showed that counties closer to the Seacoast area of New Hampshire received more programming than those closer to the Vermont border. This identified the need to expand seacoast programming to the western part of the state or for more distance learning programs to become available. This question received a response from 18 (100%) of the participants (Figure 5).



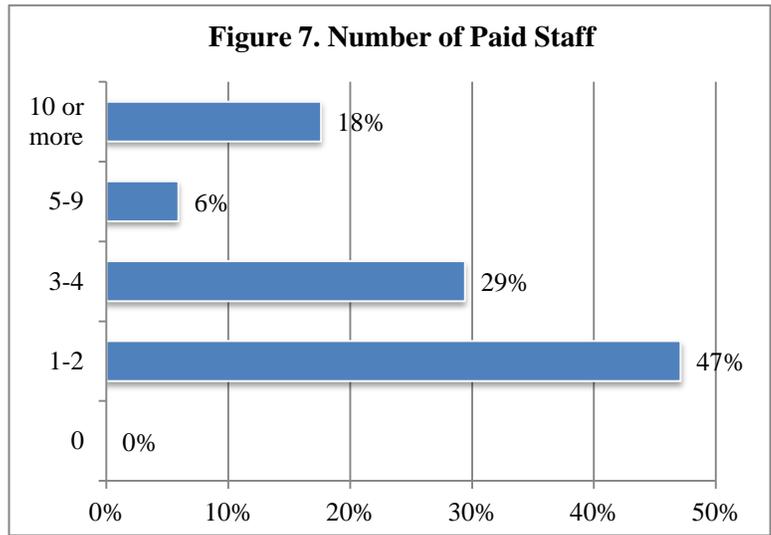
Question 6: How many volunteers does your organization utilize to conduct K-12 education programming?

Most of the organizations used less than 40 volunteers to conduct their K-12 programming. Seven (41%) of the organizations used 0-5 volunteers, four (24%) used 11-20 volunteers, and 3 (18%) used 21-40 volunteers. One organization used 41-75 volunteers to conduct their programming. Two (12%) organizations used 101-200 volunteers to conduct their programming. This is the greatest number used by any of the organizations that responded to this question. Seventeen organizations responded to this question allowing for a response rate of 94% (Figure 6). Overall, it seemed like volunteers are important to the implementation of education programs for the organizations surveyed.



Question 7: How many paid staff members does your education department utilize for K-12 education programs?

All the organizations had at least one paid staff member implementing the K-12 education program. Eight (47%) organizations had 1-2 persons working with the K-12 education programming, five (29%) organizations utilized 3-4 paid staff members, one (6%) organization had 5-9 paid staff members, and three (18%) organizations had 10 or more paid staff members being utilized for K-12 education programming. Seventeen organizations responded to this question allowing for a response rate of 94% (Figure 7). Overall, it seemed as if at least one paid staff member is being utilized by these organizations to implement K-12 education programming.

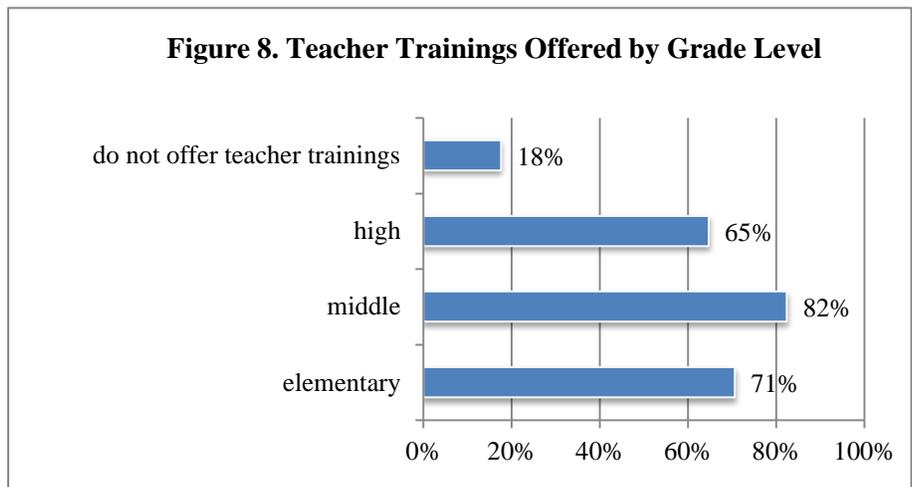


Question 8: Do you offer teacher trainings?

The majority of the organizations (13 or 72%) offered teaching trainings. The organizations (5 or 28%) that did not offer teacher trainings currently have plans to offer them in the future. This question received a response from 18 (100%) of the participants.

Question 9: If you offer teacher trainings, what grade level teacher or educators do your programs target?

The majority of organizations surveyed offered teacher trainings. Most or 14 (82%) organizations offered teacher training aimed at middle school teachers. Twelve (71%) organizations offered elementary teacher trainings, and 11 (65%) organizations offered high school teacher trainings. Three (18%) organizations did not offer teacher trainings. Two organizations specified that they also offer home school and preschool teacher trainings. Seventeen organizations responded to this question allowing for a response rate of 94% (Figure 8).



Seventeen organizations responded to this question allowing for a response rate of 94% (Figure 8).

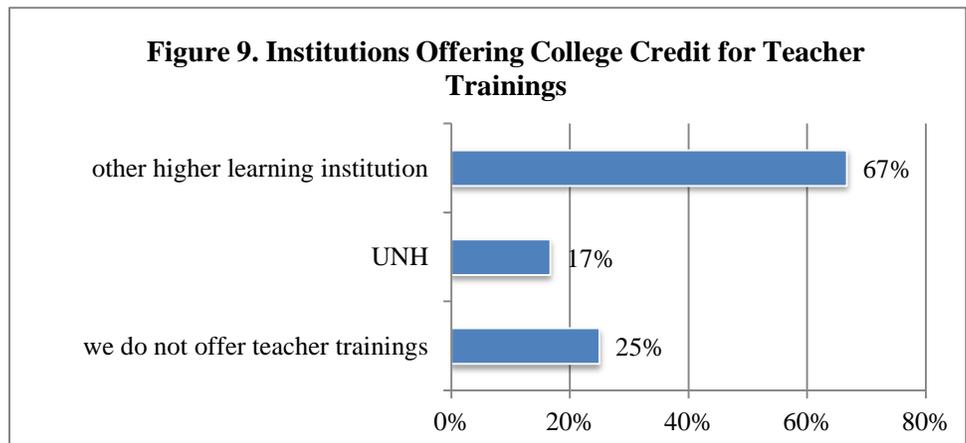
Note: A discrepancy occurs in the data for questions 8 and 9. In question 8, 5 organizations responded that they do not offer teacher trainings. However, in question 9, four organizations responded that they do not offer teacher trainings. This was most likely caused by respondent oversight when taking the survey.

Question 10: If you offer teacher trainings, do you offer Continuing Education Units (CEU's)/ professional development credits for them?

The majority of organizations (11 or 79%) that offer teacher trainings provided Continuing Education Units (CEU's) or professional development credits for those attending the teacher trainings. Three (21%) that offer teacher trainings did not offer CEU's or professional development credits. This question received responses from 14 of the 18 organizations for a response rate of 78%.

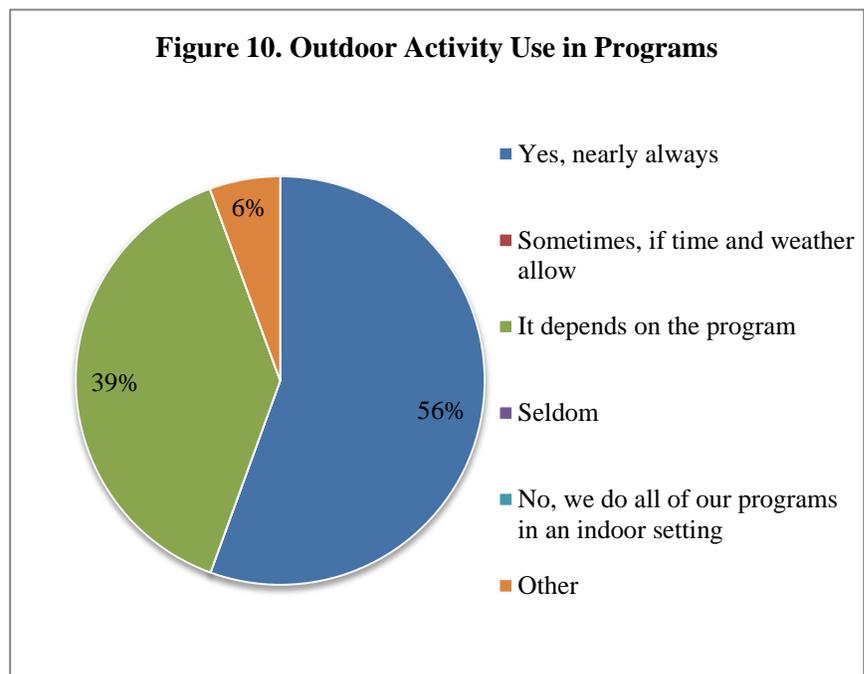
Question 11: If you offer teacher trainings, do you work with the University of New Hampshire or other colleges to offer college credit?

Of the organizations that offer teacher trainings, eight (67%) worked with a higher learning institution. Two (17%) worked with the University of New Hampshire located in Durham, New Hampshire, and three (25%) did not offer teacher trainings. This question received a response from 12 of the 18 participants for a 67% response rate (Figure 9).



Question 12: Do your K-12 programs directly involve outdoor activities with your students?

The majority of organizations involved outdoor activities in their programs. Ten (56%) organizations nearly always used outdoor activities in their programming. For seven (39%) organizations the program type determined whether or not outdoor activities will be used. One (6%) organization specified that they use a field investigation tool for teachers as this is their primary program participant. Organizations did not report the infrequent use of outdoor activities in programs. This question received a response from 18 participants for a 100% response rate (Figure 10).



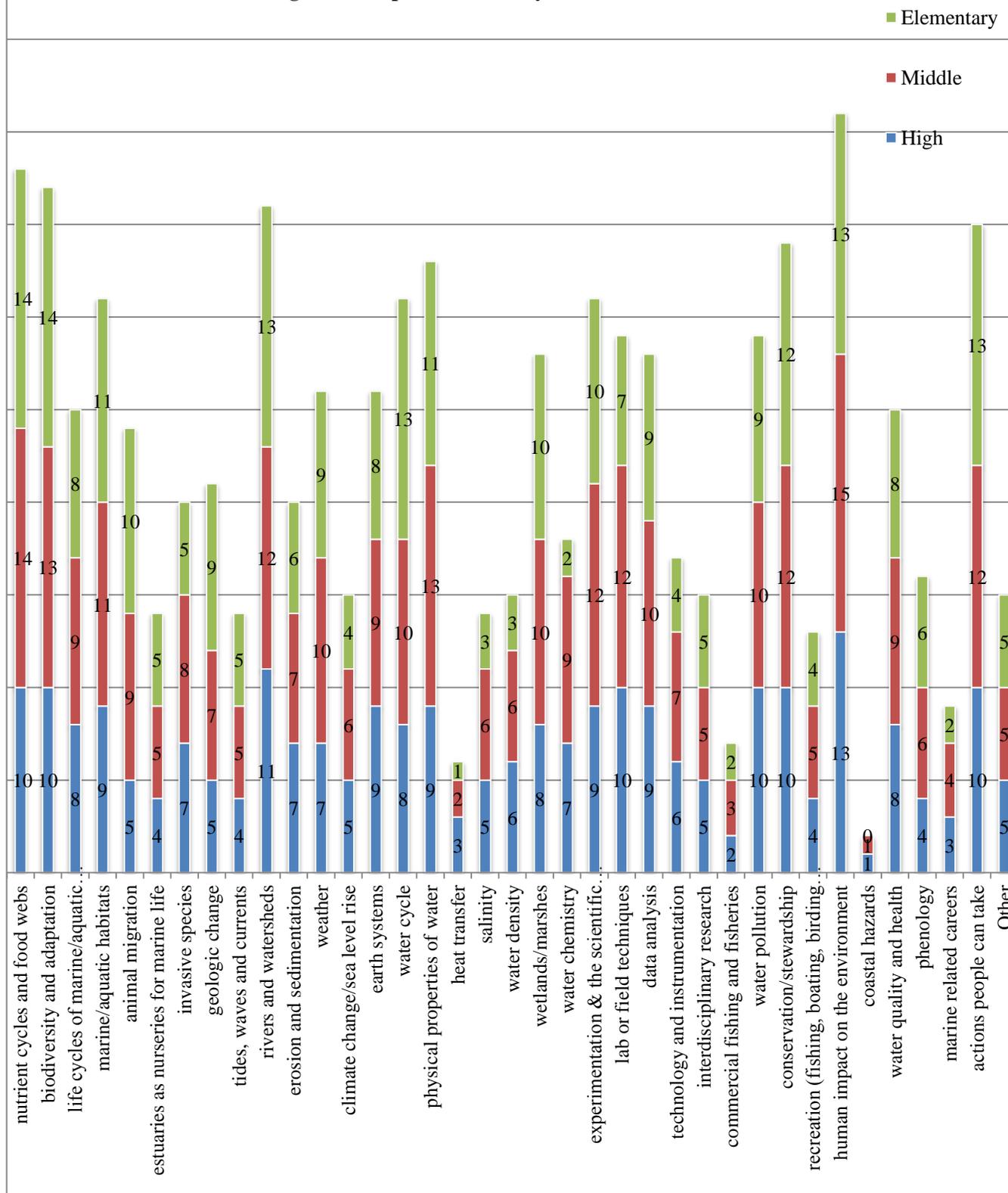
Question 13: Which of the following topics are addressed by your K-12 programs and for what grade levels?

Nutrient cycles and food webs, biodiversity and adaptation, rivers and watersheds, and human impact on the environment were the most frequent topics addressed in the K-12 programs at a variety of grade levels. Heat transfer, commercial fishing and fisheries, and coastal hazards were the topics addressed the least. Elementary and middle school programming make up the majority of grade levels at which these topics were addressed by the organizations. High school programming did address the same topics, but through fewer organizations (Figure 11). Eight organizations specified their response in the other section. Responses below include other topics addressed or other audiences addressed.

- “New Hampshire reptiles and amphibians, seasonal changes, invertebrates, tracking etc.”
- “trees, forests, forest water connection”
- “Careers in Forest Service”
- “We also provide JOINT workshops and trainings for teachers on other content areas listed above – we typically focus on teacher trainings but sometimes coordinate and offer programming to students when resources and time allows.”
- “maritime heritage; environmental change over time”
- “primary focus on habitat, adaptation, populations and interrelationships”
- “We offer the majority of these topics to teachers. Our main connection is to use the forest as a focus for teaching environmental concepts. We do not address commercial fishing and fisheries, coastal hazards, tides.”

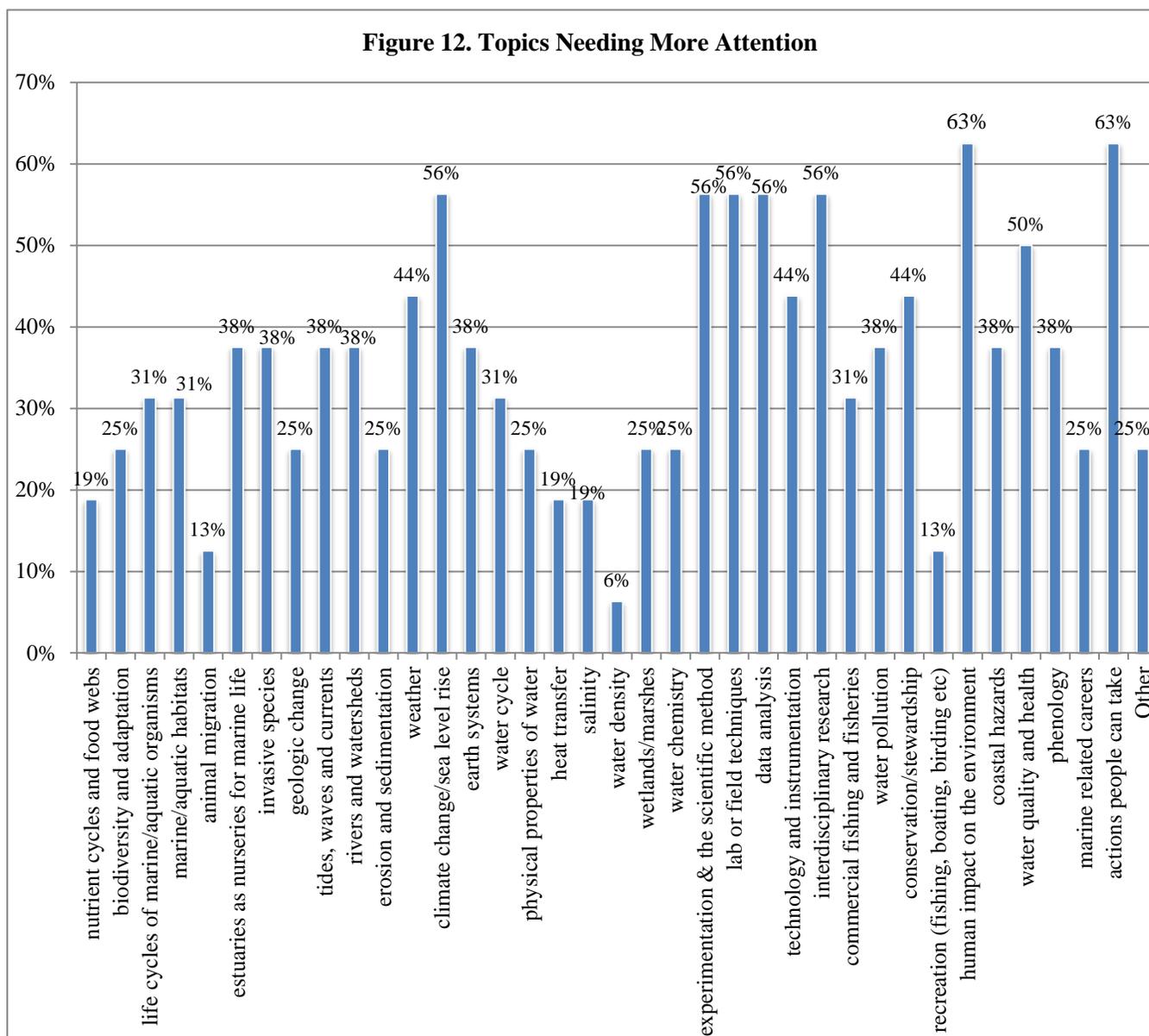
Seventeen of the 18 organizations answered parts of this question for a response rate of 94%.

Figure 11. Topic Addressed by Grade Level



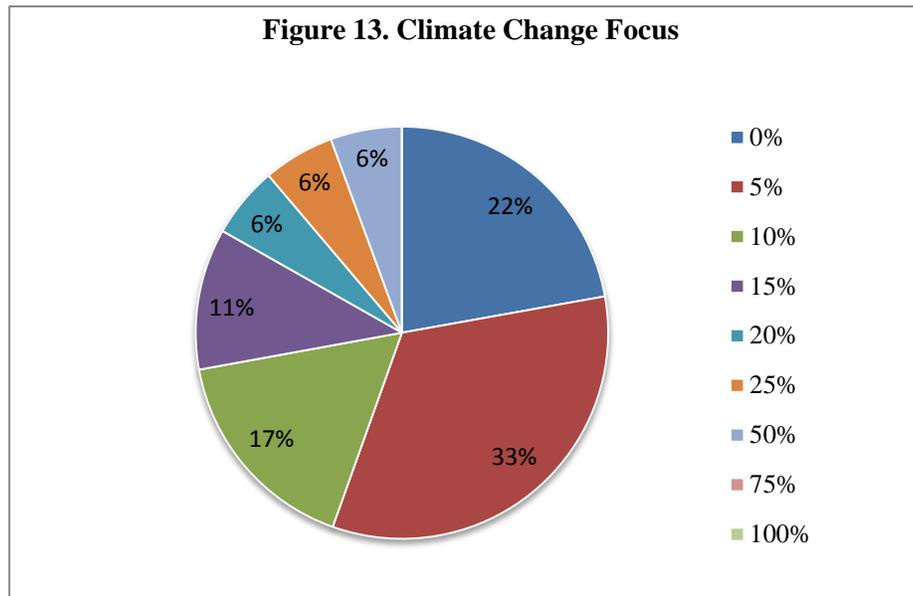
Question 14: Which of these same topics does your organization feel needs more attention in the K-12 community?

Two topics that showed the greatest need for more attention were human impact on the environment, and actions people can take. Ten (63%) organizations addressed this concern. Other topics that were of concern by 9 (56%) of the organizations were climate change/sea level rise, experimentation and scientific method, lab or field techniques, data analysis, and interdisciplinary research. The three topics of least concern were water density with concern shown by one (6%) organization, and animal migration, and recreation with concern shown by two (13%) organizations. Five (32%) organizations specified their choice of other. Of these responses three are relevant to this analysis. Two (13%) organizations stated that “all of the above” are topics needing more attention. One (6%) organization stated that “Working with others; decision making; urban connections” was a topic that requires more attention in programming. This question received a response from 16 of the 18 participants for a response rate of 89% (Figure 12).



Question 15: Approximately what percent of your K-12 education programs focus on climate change?

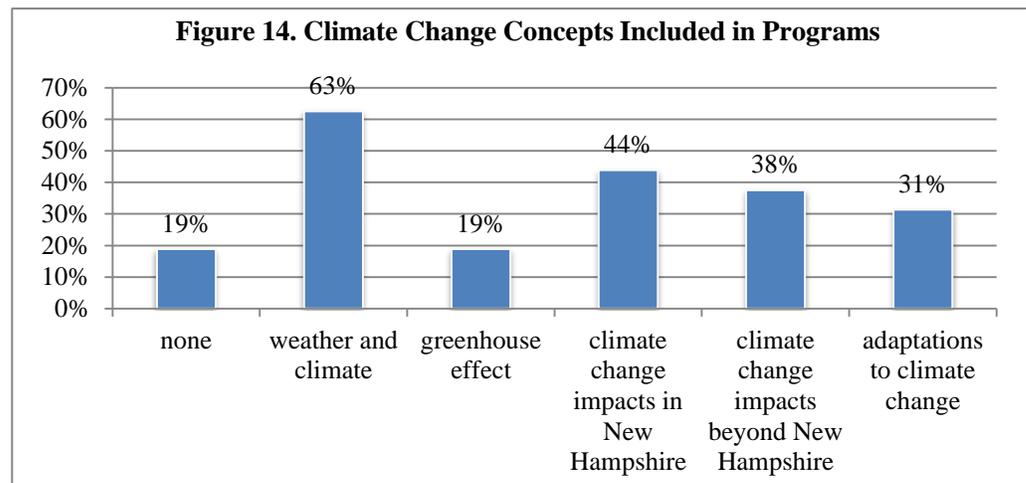
The majority of programs offered little to no focus on climate change. Four (22%) organizations did not offer programming that focused on climate change. Six (33%) organizations offered programs that have a 5% focus on climate change. Three (17%) organizations offered programs that focused 10% on climate change. Two (11%) organizations offered programs that focused 15% on climate change. Three organizations (18%) focused 20%-50% of their programs on climate change. No programs



focused more than 50% of their programs on climate change. This question received a response from 18 participants for a response rate of 100% (Figure 13). Lack of focus on climate change identified another programming gap that can be filled with new program creation or program alteration.

Question 16: What climate change concepts do you include in your K-12 programs?

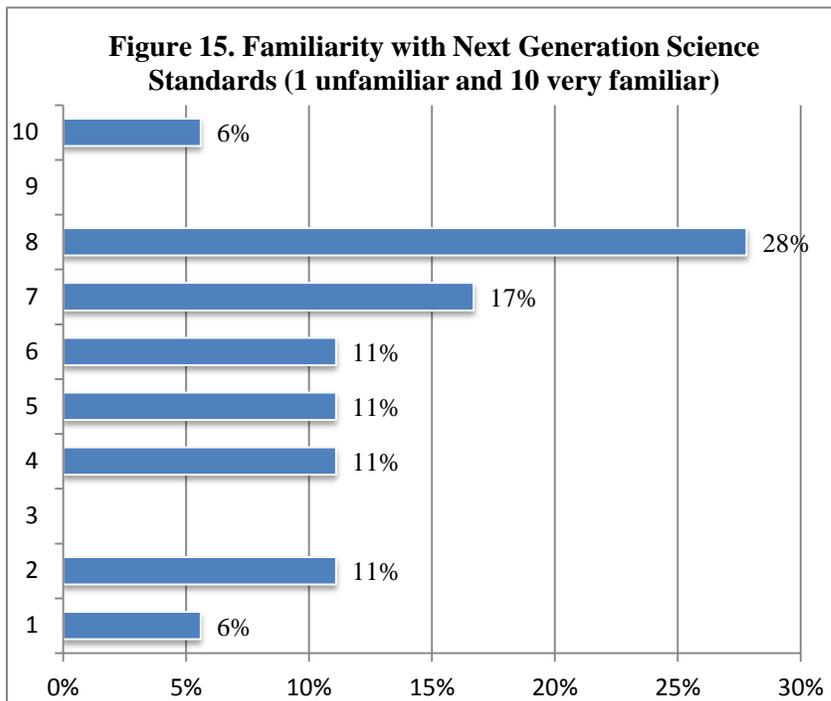
Most organizations included climate change concepts in their programming. However, three (19%) organizations reported that they do not include any climate change concepts in their programming. The most common climate change concept included was “weather and climate”



with 10 (63%) organizations including this topic in programming. Seven (44%) organizations include “climate change impacts in New Hampshire”, and six (38%) organizations included “climate change impacts beyond New Hampshire” in programming. Five (31%) organizations included the topic of “adaptations for climate change in programming” with “greenhouse effect” being the least common topic to be included (3 organizations or 19%). Three (19%) organization clarified their responses and of these one is relevant to this question. One organization also addressed “cycles, data analysis, longevity field studies” in their programming. This question received a response from 16 participants for a response rate of 89% (Figure 14).

Question 17: On a scale of 1 to 10, how familiar are you with the Next Generation Science Standards? (1 being “I have never heard of them” and 10 being “I am extremely knowledgeable”)

Some of the organizations were very familiar with the Next Generation Science Standards (NGSS) whereas others were not. One (6%) organization was very familiar with NGSS and responded with a 10 rating. Most commonly organizations reported having a moderately high understanding of the NGSS with five (28%) organizations who gave a rating of 8 and three (17%) organizations gave a rating of 7. Three (33%) organizations were spread around the middle (ratings 3-6) with their understanding of the NGSS, and three (17%) organizations rated their understanding as low (ratings 1-2). This question received a response of 18 (100%) participants (Figure 15).



Question 18: Are you addressing the Next Generation Science Standards in any of your programs?

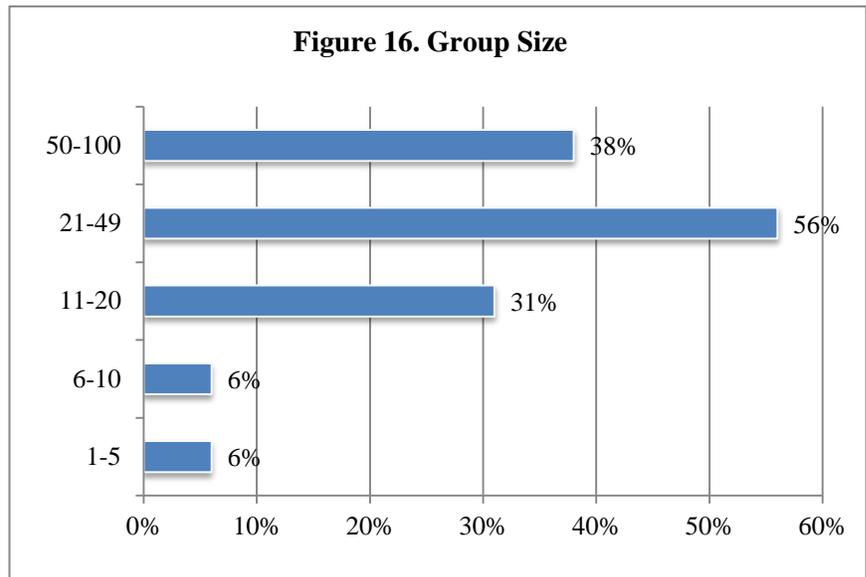
Most of the organizations were currently or plan to address the Next Generation Science Standards (NGSS) in their programs. Seven (39%) were currently addressing NGSS in their programs. Two (11%) did not address NGSS in their programs, and nine (50%) that do not currently address NGSS plan to in the future. This question received a response of 18 (100%) participants.

Question 19: Have you developed any materials that teachers can use to address the Next Generation Science Standards?

Few organizations (3 or 17%) provided teachers with materials that they can use to address the Next Generation Science Standards (NGSS). The majority (11 or 61%) did not currently provide teachers with materials to address NGSS standards, but plan to in the future. Four (22%) organizations did not provide teachers with materials to address NGSS. This question received a response of 18 (100%) participants.

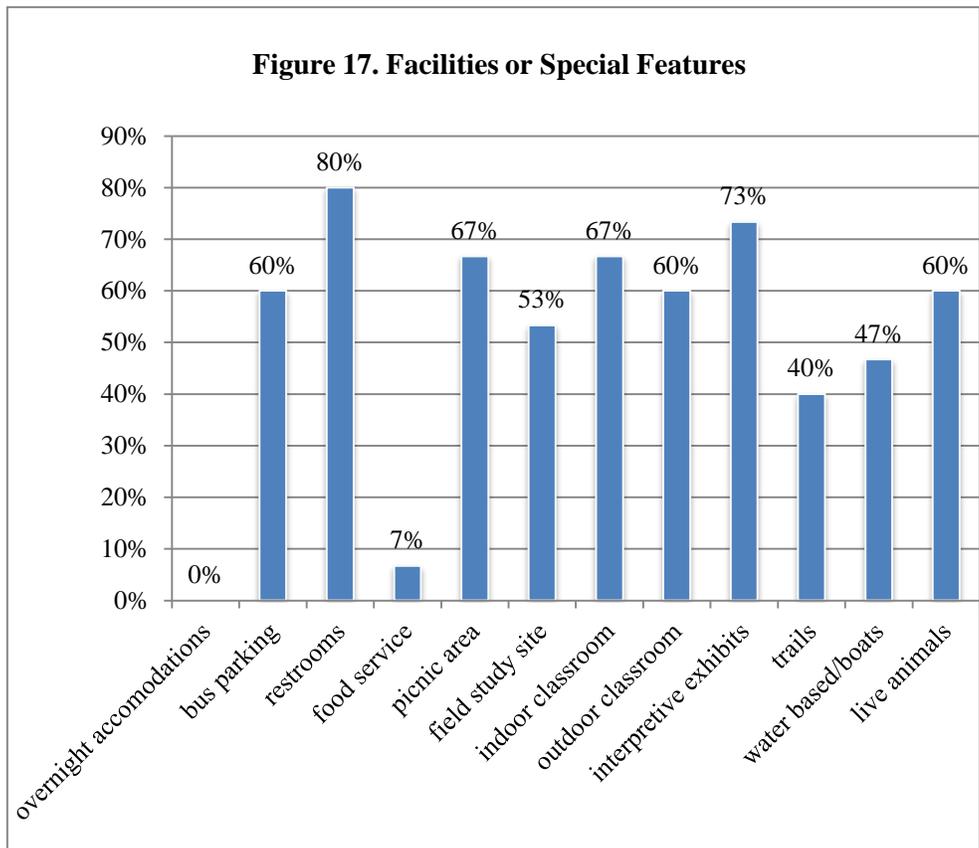
Question 20: What size group is your organization willing to accommodate during a typical k-12 program?

Organizations were able to accommodate a wide variety of group sizes. The majority (9 or 56%) were willing to accommodate groups of 21-49. Six (38%) organizations were willing to accommodate a group size of 50-100. Five (31%) organizations were willing to accommodate group sizes of 6-10. Few (2 or 12%) organizations were willing to accommodate groups with 10 or less participants. This question received a response from 16 participants for a response rate of 89% (Figure 16).



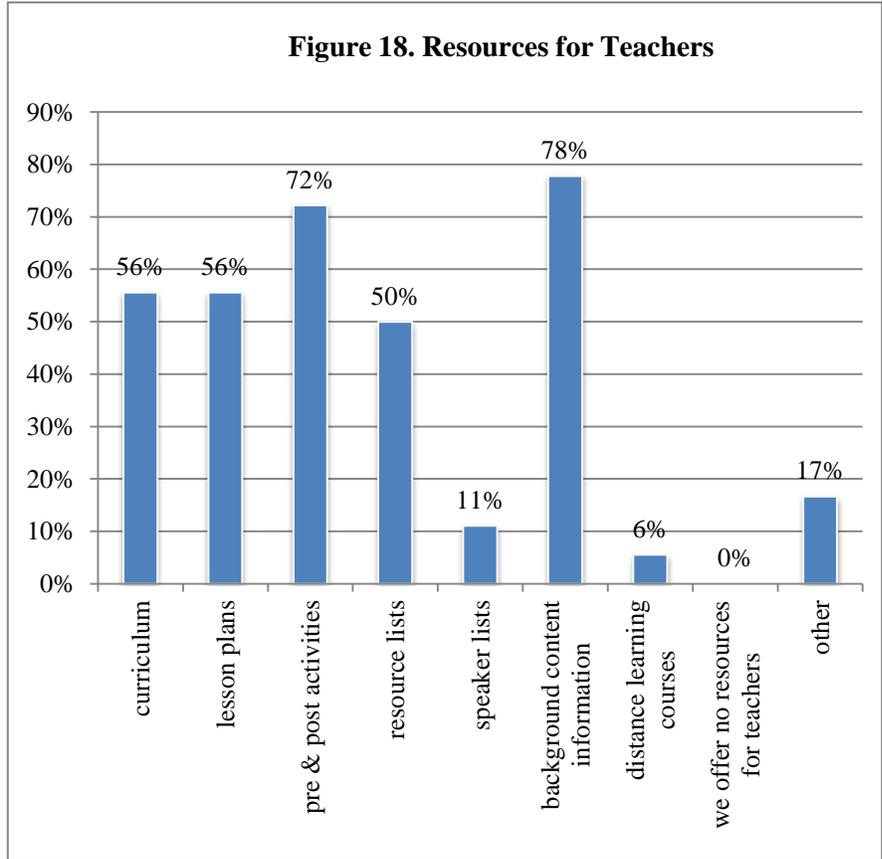
Question 21: What facilities/special features does your organization offer for K-12 school groups?

The most common facility or feature offered by an organization was a restroom with 12 (80%) organizations who offered this amenity. Other facilities or special features offered by the majority of organizations were interpretive exhibits (11 or 74%), picnic area (10 or 67%), indoor classroom (10 or 67%), bus parking (9 or 60%), outdoor classroom (9 or 60%), live animals (9 or 60%), and a field study site (8 or 53%). Water based activities or boats were offered by seven (47%) organizations, and trails were offered by six (40%) organizations. Food service was offered by one (7%) organization, and no organization offered overnight accommodations (Figure 17). Fifteen organizations responded to this question for a response rate of 83%.



Question 22: Which resources do you make available to teachers?

All organizations offered some resources for teachers. The most prevalent resource offered was background content and information. This was offered by 14 (78%) of the organizations. Thirteen (72%) organizations offered pre and post activities, 10 (56%) organizations offered curriculum resources, lesson plans, and nine (50%) organizations offered resource lists. Few (2 or 11%) organizations offered speaker lists. and one (6%) organization offered distance learning courses (Figure 18). Of the responses that were given to clarify, one is relevant in terms of resources offered and this organization stated that it offered “teacher-only sails”. This question received a response of 18 (100%) participants.



Summary

Great Bay National Estuarine Research Reserve (GBNERR) conducted a market analysis survey in Spring 2014. The survey collected information on types of educational organizations in the New Hampshire Seacoast area, and select organizations in Maine and Massachusetts. Information was collected on types of programs offered, grade levels taught, topics addressed in programs, use of climate change programming, use of Next Generation Science Standards in programming, collaboration with higher level institutions, program resources and counties served within New Hampshire.

Data gathered showed that a wide variety of programs were offered to a diversity of grade levels. The most common programming focused on middle to elementary school offerings, with some being offered to the high school age group. Of this programming offered, outdoor activities were prevalent in K-12 education programming. Climate change was being addressed by some organizations. However, the need for more focus on climate change was revealed. Marketing was most commonly targeted directly to the school, with some being conducted through electronic sources. This showed a gap in the amount of social media being used to conduct marketing; however this gap is misleading as we did not specifically list social media as an option. It seemed like this is an area in which marketing can grow for the K-12 programming sector. Teacher trainings were offered through a variety of organizations with many providing college credits for participation; however no organizations surveyed offered housing for teachers. This may be an area the Reserve pursues in the future, in order to offer more extended teacher trainings. Many organizations also offered teacher resources to help prepare for or review material addressed in a program. Lack of familiarity with the Next Generation Science Standards may indicate the varying stages of adoption by schools and administrations. This information may be more relevant once data from the Teacher Needs Assessments are analyzed. Topics needing more attention include experimentation and the scientific method, lab and field techniques and data analysis, as well as human dimensions such as impact to the environment and stewardship activities. All of these are aligned with Reserve goals and objectives. Again, GNER staff will correlate the Teacher Needs Assessment with these topics to inform future program directions.

Information gathered from this needs assessment has helped to identify the current state of K-12 education programming in the New Hampshire Seacoast Region, information gaps, program overlap, and possible collaboration efforts for future K-12 programming.

Appendix A

Participating Organizations

1. Amoskeag Fishways Learning and Visitors Center
2. Blue Ocean Society for Marine Conservation
3. Gundalow Company
4. Let's Go fishing Program
5. Massabesic Audubon Center
6. New Hampshire Audubon
7. New England Aquarium
8. New Hampshire Department of Environmental Services- Drinking Water Bureau
9. New Hampshire Fish and Game Department Watershed Education Program
10. New Hampshire Project Learning Tree
11. North Country Education Services New Hampshire GLOBE Partnership-GLOBE Program
12. Seacoast Science Center
13. Squam Lakes Natural Science Center
14. Strawberry Banke Museum
15. United States Department of Agriculture Forest Service Northeastern Area
16. United States Department of Agriculture Forest Service, White Mountains
17. University of New Hampshire Cooperative Extension, Sea Grant Marine Docents
18. Wells National Estuarine Research Reserve

Appendix B

Market Analysis Survey Tool

The Great Bay National Estuarine Research Reserve is conducting a market analysis of K-12 environmental education providers currently serving school districts in several New Hampshire counties. We are sending this survey to you because your program is a highly recognized and respected part of New Hampshire's environmental education landscape. This market analysis will help the Reserve better understand the extent of existing programs in our region, foster collaborations with other regional education providers, identify gaps in our K-12 programming and specific niches we may be able to fill. Your help with this survey is greatly appreciated and will help us better provide quality education programming for our audiences. Survey results will be summarized and made available to respondents. Thank you for your time!

1. How would you best describe your organization?

- non-profit aquarium/zoo/museum
- government funded aquarium/zoo/museum
- non-profit nature/environmental education center
- government funded nature/environmental education center
- federal government agency/program
- state government agency/program
- municipal agency/department
- university/college affiliated
- national non-profit organization
- local non-profit organization
- for profit business
- other

Other (please specify)

2. Is your organization a NOAA agency or a NOAA partner?

- No
- Yes

3. What types of education programs does your organization provide? Please check all that apply.

- elementary school programs
- middle school programs
- high school programs
- in-service training
- pre-service training
- after school programs
- home school programs
- field trip destination for K-12 students
- In-school/classroom programs
- distance learning programs
- educational TV/radio programs

Other (please specify)

4. How do you market your K-12 programs? Please check all that apply.

- directly to individual school principals
- directly to individual school department heads
- directly to individual school teachers
- directly to school district coordinators (science curriculum, etc)
- word of mouth
- organization newsletter (hard copy)
- organization newsletter (electronic)
- local newspaper
- local television
- directly to past participants
- website(s)
- list serve
- other

Other (please specify)

5. Which New Hampshire counties do you serve?

- Coos
- Carroll
- Sullivan
- Grafton
- Belknap
- Hillsborough
- Cheshire
- Merrimack
- Strafford
- Rockingham
- We also serve other states

6. How many volunteers does your organization utilize to conduct K-12 education programming?

- 0-5
- 6-10
- 11-20
- 21-40
- 41-75
- 76-100
- 101-200
- 200+

7. How many paid staff members does your education department utilize on K-12 education programs?

- 0
- 1-2
- 3-4
- 5-9
- 10 or more

8. Do you offer teacher trainings?

- yes
- no
- not now, but plan to in the future

9. If you offer teacher trainings, what grade level teachers or educators do your programs target? Check all that apply.

- elementary
- middle
- high
- do not offer teacher trainings

Other (please specify)

10. If you offer teacher trainings, do you offer Continuing Education Units (CEU's)/ professional development credits for them?

- yes
- no
- don't know

11. If you offer teacher trainings, do you work with the University of New Hampshire or other college to offer college credit?

- we do not offer teacher trainings
- UNH
- other higher learning institution

Other (please specify)

12. Do your K-12 programs directly involve outdoor activities with your students?

- Yes, nearly always
- Sometimes, if time and weather allow
- It depends on the program
- Seldom
- No, we do all of our programs in an indoor setting
- Other

Other (please specify)

YOU ARE HALF WAY THERE!

13. Which of the following topics are addressed by your K-12 programs and for what grade levels? Please check all that apply.

	Elementary	Middle	High
nutrient cycles and food webs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
biodiversity and adaptation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
life cycles of marine/aquatic organisms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
marine/aquatic habitats	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
animal migration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
estuaries as nurseries for marine life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
invasive species	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
geologic change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tides, waves and currents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rivers and watersheds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
erosion and sedimentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
climate change/sea level rise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
earth systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
water cycle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
physical properties of water	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
heat transfer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
salinity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
water density	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
wetlands/marshes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
water chemistry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
experimentation & the scientific method	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
lab or field techniques	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
data analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
technology and instrumentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
interdisciplinary research	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
commercial fishing and fisheries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
water pollution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
conservation/stewardship	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
recreation (fishing, boating, birding etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
human impact on the environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
coastal hazards	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

water quality and health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
phenology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
marine related careers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
actions people can take	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please specify)

14. Which of these same topics does your organization feel needs more attention in the K-12 community? Please check all that apply.

- nutrient cycles and food webs
- biodiversity and adaptation
- life cycles of marine/aquatic organisms
- marine/aquatic habitats
- animal migration
- estuaries as nurseries for marine life
- invasive species
- geologic change
- tides, waves and currents
- rivers and watersheds
- erosion and sedimentation
- weather
- climate change/sea level rise
- earth systems
- water cycle
- physical properties of water
- heat transfer
- salinity
- water density
- wetlands/marshes
- water chemistry
- experimentation & the scientific method
- lab or field techniques
- data analysis
- technology and instrumentation
- interdisciplinary research

- commercial fishing and fisheries
- water pollution
- conservation/stewardship
- recreation (fishing, boating, birding etc)
- human impact on the environment
- coastal hazards
- water quality and health
- phenology
- marine related careers
- actions people can take
- Other

Other (please specify)

15. Approximately what % of your K-12 education programs focus on climate change?

- 0%
- 5%
- 10%
- 15%
- 20%
- 25%
- 50%
- 75%
- 100%

16. What climate change concepts do you include in your K-12 programs?

- none
- weather and climate
- greenhouse effect
- climate change impacts in New Hampshire
- climate change impacts beyond New Hampshire
- adaptations to climate change

Other (please specify)

17. On a scale of 1 to 10, how familiar are you with the Next Generation Science Standards? (1 being I have never heard of them, 10 being I am extremely knowledgeable)

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

18. Are you addressing the Next Generation Science Standards in any of your programs?

- yes
- no
- not yet, but plan to address in the future
- no, do not plan to address in the future

19. Have you developed any materials that teachers can use to address the Next Generation Science Standards?

- yes
- no
- not yet, but plan to

20. What size group is your organization willing to accommodate during a typical k-12 program?

	1-5	6-10	11-20	21-49	50-100
number of students	<input type="checkbox"/>				

21. What facilities/special features does your organization offer for K-12 school groups?

- overnight accommodations
- bus parking
- restrooms
- food service
- picnic area
- field study site
- indoor classroom
- outdoor classroom
- interpretive exhibits
- trails
- water based/boats
- live animals

22. Which resources do you make available to teachers? Check all that apply.

- curriculum
- lesson plans
- pre & post activities
- resource lists
- speaker lists
- background content information
- distance learning courses
- we offer no resources for teachers
- other

Other (please specify)

23. Organization Information

Organization	<input type="text"/>
Address	<input type="text"/>
City	<input type="text"/>
County	<input type="text"/>
State	<input type="text"/>
Zip code	<input type="text"/>
Telephone number	<input type="text"/>
Email address	<input type="text"/>
Website address	<input type="text"/>

Phew...you're done... Thank you once again!