UNOLS Vessel Usage Survey Statistics

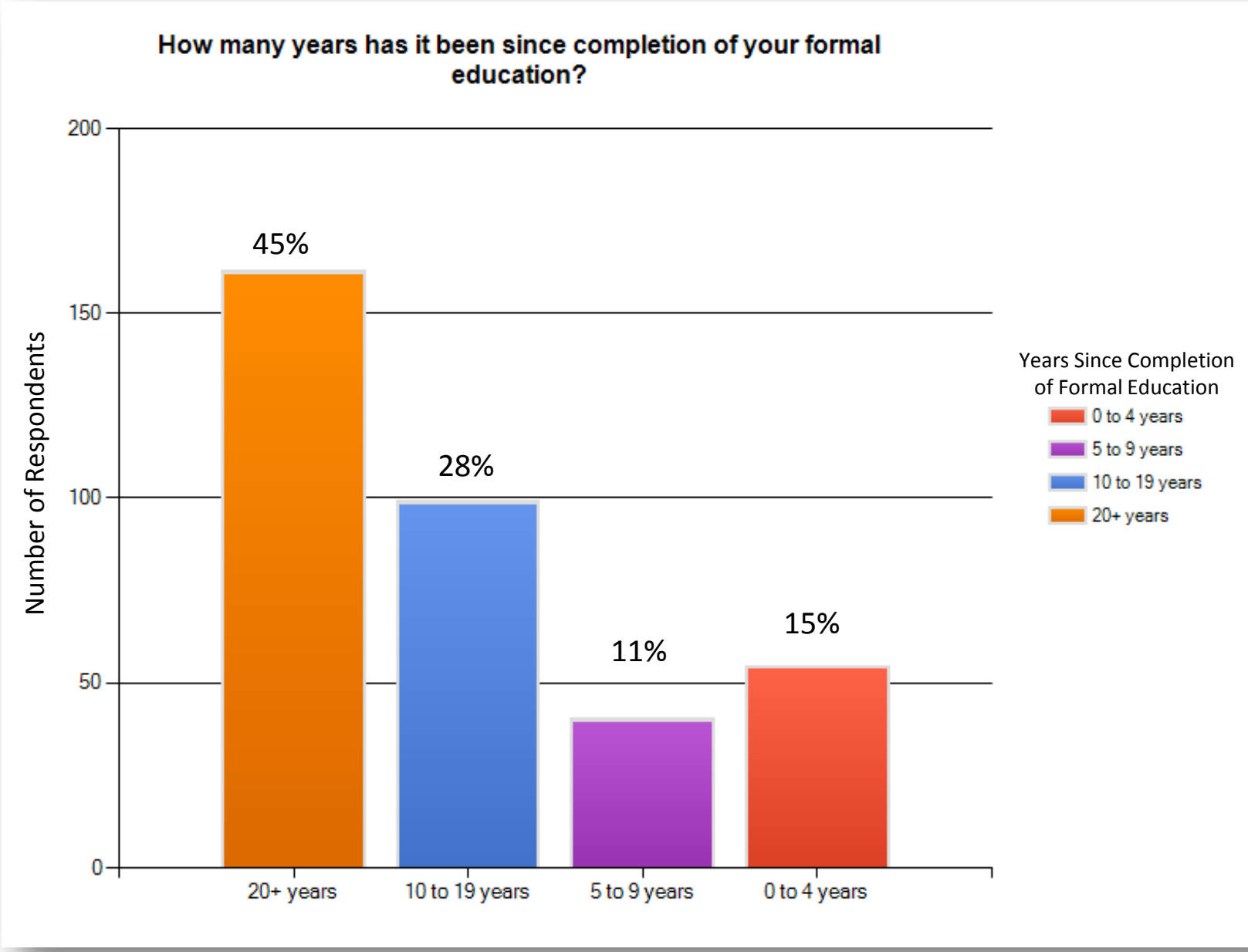
357 Surveys Completed

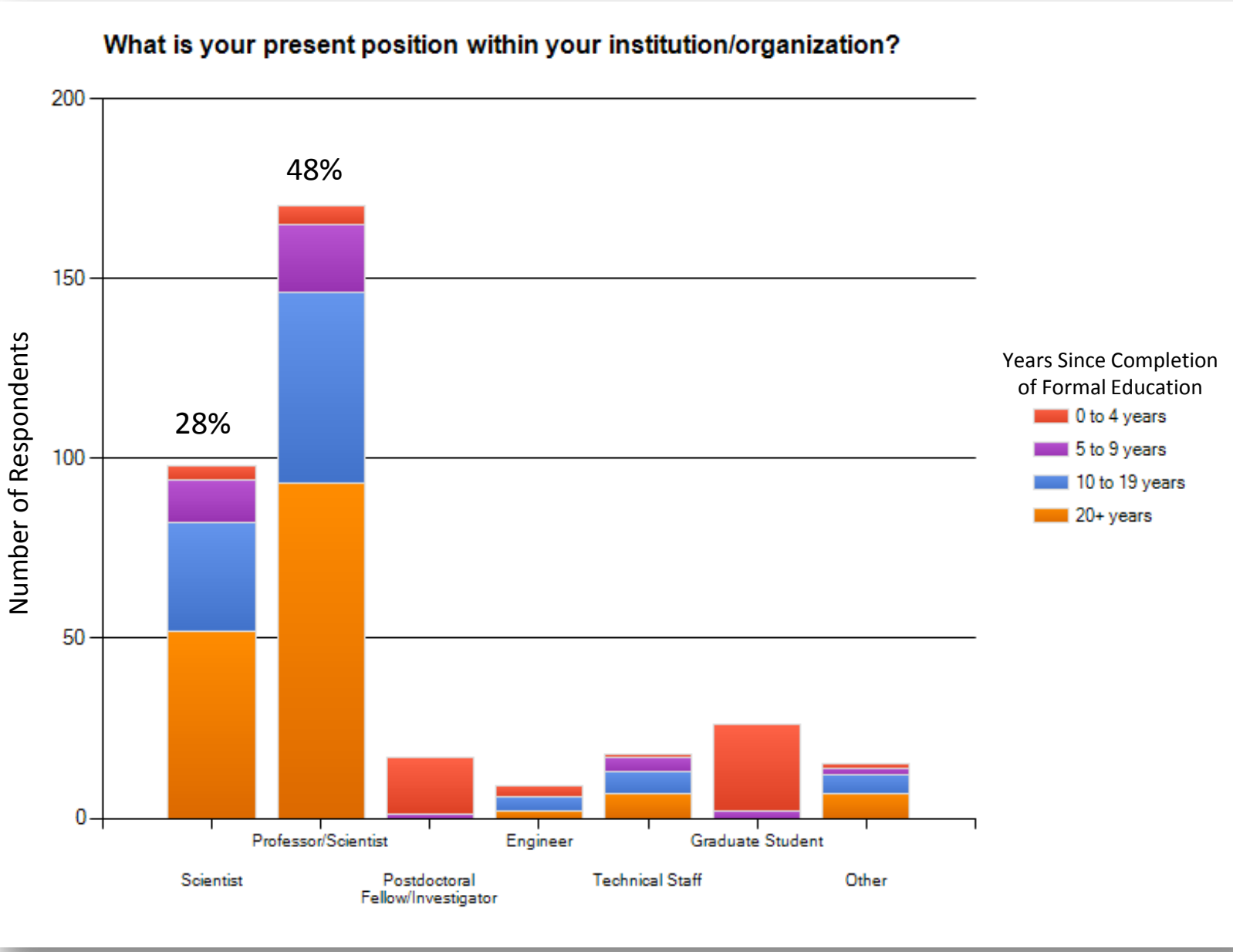
Purpose of the Vessel Usage Survey

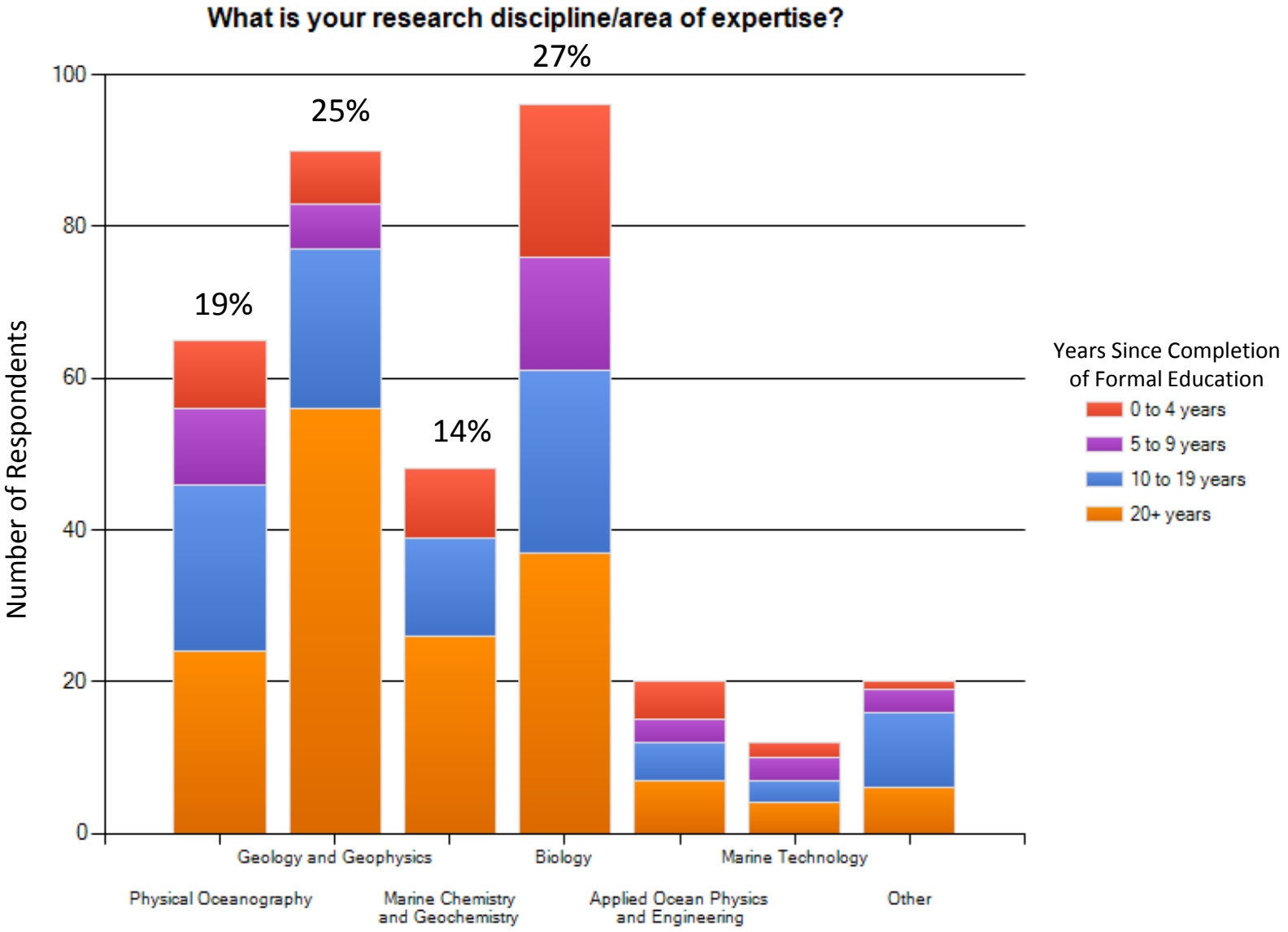
The purpose of this survey was to collect data that will help us to better understand the nature of the ship time demand decline. With the survey results, we wanted to:

- Determine if the decline in ship time demand can be expected as a long-term trend
- Identify any issues or barriers (real or perceived) related to submitting proposals that include ship time requests and work to reduce those barriers
- Develop strategies for reducing any barriers that might be identified and to expand access to UNOLS vessels
- Re-evaluate the future fleet capacity and composition in comparison to anticipated ship time demand

* NOTE: For additional interpretation of results, slides from Dr. Deborah Smith's presentation at the 2013 UNOLS Council Winter/Spring Meeting have been included.


How many years has it been since completion of your formal education?
Number of Respondents
200
150
100
50
0
45%
28%
11%
15%
20+ years
10 to 19 years
5 to 9 years
0 to 4 years
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years


What is your present position within your institution/organization?
Number of Respondents
200
150
100
50
0
48%
28%
Scientist
Professor/Scientist
Postdoctoral Fellow/Investigator
Engineer
Technical Staff
Graduate Student
Other
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years


What is your research discipline/area of expertise?
Number of Respondents
100
80
60
40
20
0
19%
25%
14%
27%
Geology and Geophysics
Biology
Marine Technology
Physical Oceanography
Marine Chemistry and Geochemistry
Applied Ocean Physics and Engineering
Other
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years

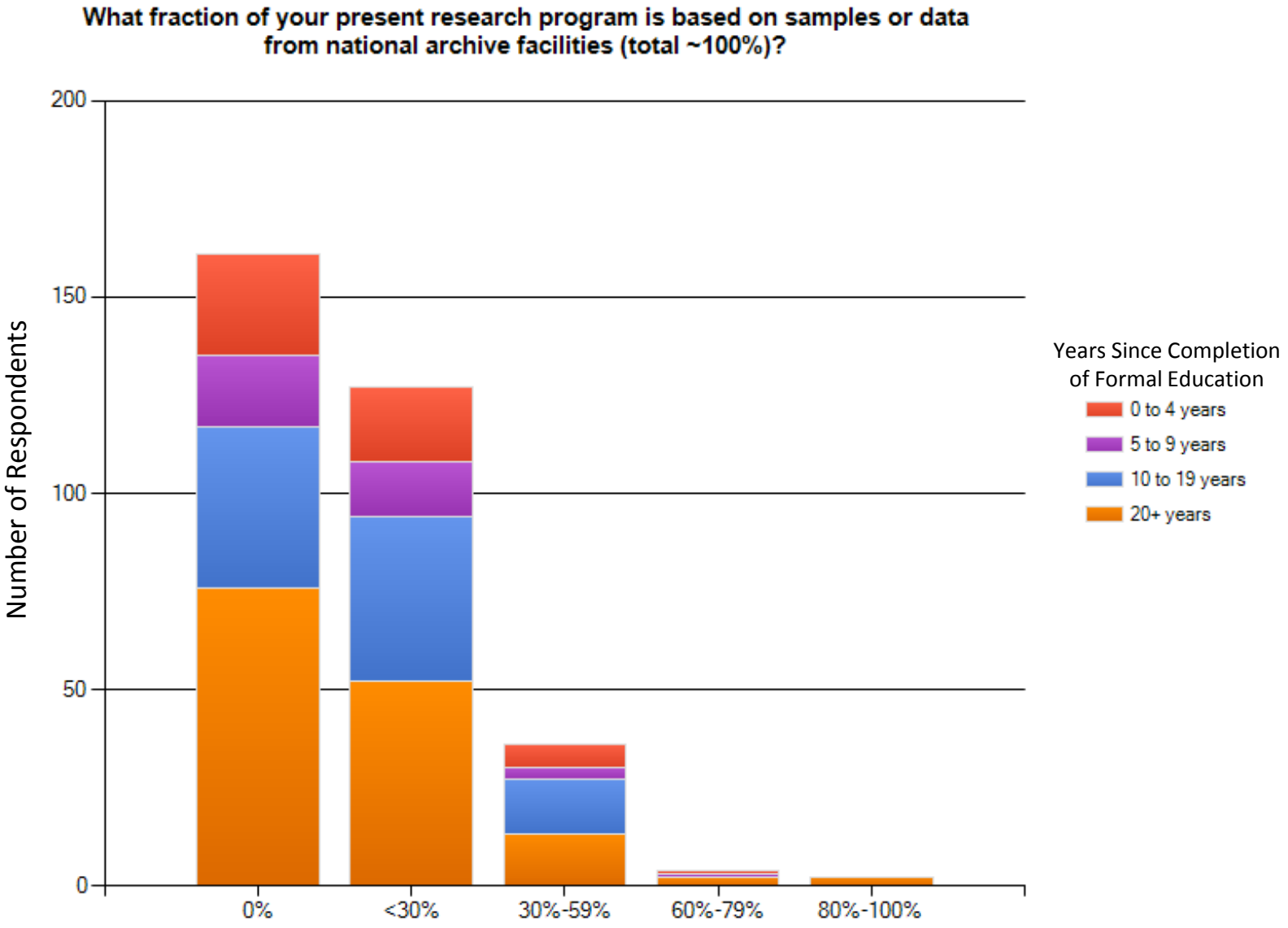
What fraction of your seagoing work is associated with (total ~100%):

Percentage	0%	<30%	30%-59%	60%-79%	80%-100%	Response Count
Global-Multinational Programs (eg. CLIVAR, etc.)	152	62	32	9	13	268
National Programs	92	58	58	30	30	268
ONR-Directed Research Initiatives	161	23	27	10	8	229
State or Regional Programs	148	53	29	6	6	242
"Monitoring" vs. "Exploratory Research"	107	72	44	9	5	237
Process Studies (not associated with the Global-Multinational, National, ONR-Directed, State or Regional programs mentioned above)	81	45	65	39	41	271
Instrument Testing/Development	99	127	23	3	2	254

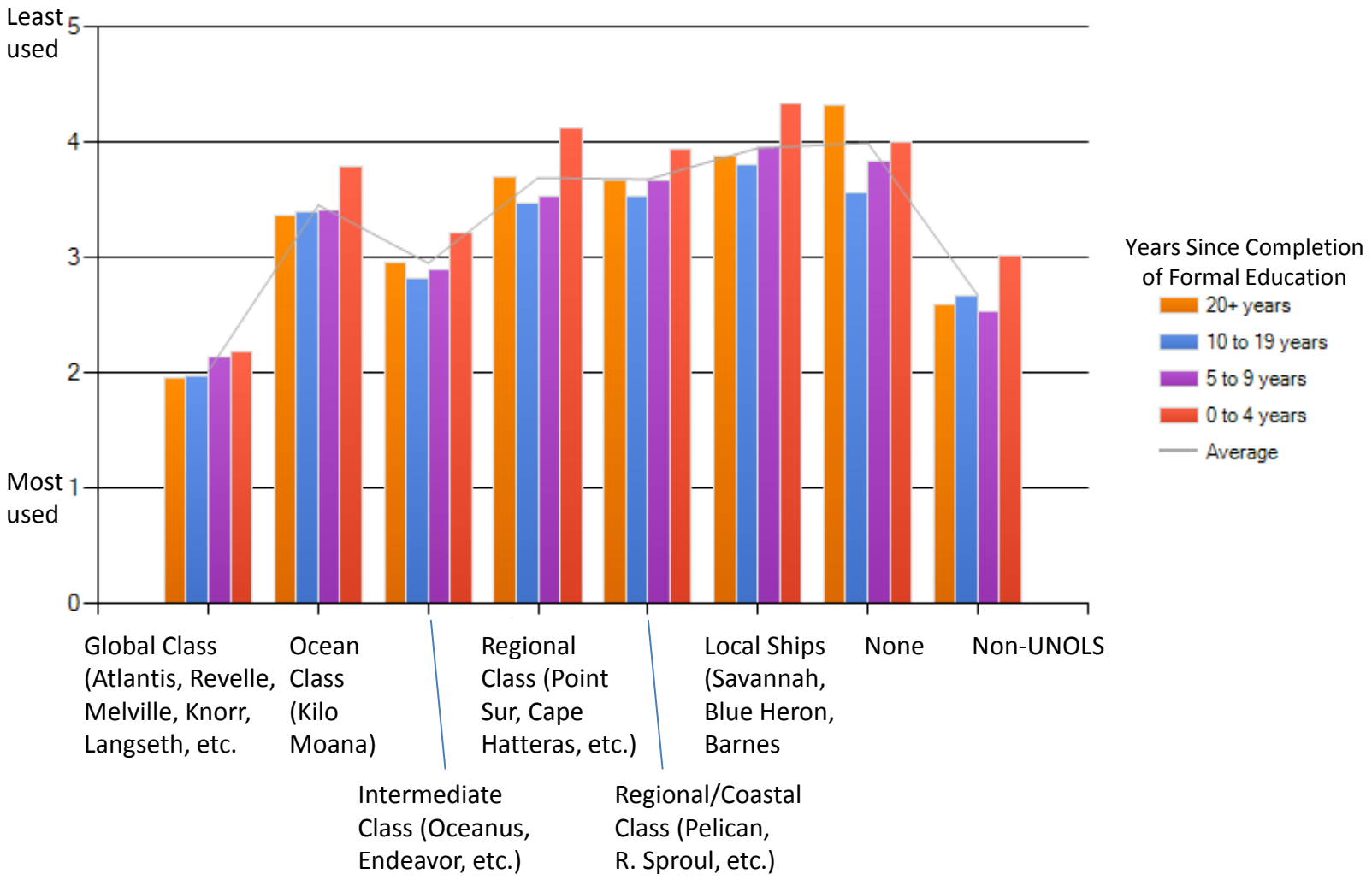
What fraction of your present research program is based on samples or data collected personally (total ~100%):

Percentage	0%	<30%	30%-59%	60%-79%	80%-100%	Response Count
In a shore-side laboratory?	129	75	37	9	11	261
From high latitude cruises?	173	61	37	9	12	292
From coastal cruises (excluding high latitude cruises)?	94	81	64	25	20	284
From open ocean cruises (excluding high latitude cruises)?	66	76	77	56	44	319
From space-based sensors?	207	37	6	1	0	251

What fraction of your present research is based on samples or data collected by others (total ~100%):						
Percentage	0%	<30%	30%-59%	60%-79%	80%-100%	Response Count
In a shore-side laboratory?	207	53	10	3	3	276
From high latitude cruises?	195	63	16	4	2	280
From coastal cruises (excluding high latitude cruises)?	175	75	27	9	5	291
From open ocean cruises (excluding high latitude cruises)?	132	109	48	14	9	312
From space-based sensors?	188	71	10	2	2	273


What fraction of your present research program is based on samples or data from national archive facilities (total ~100%)?
Number of Respondents
200
150
100
50
0
0%
<30%
30%-59%
60%-79%
80%-100%
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years

What types of UNOLS research vessels do you use? Please prioritize with 1 being the most used for your research and 5 being the least. Items can be given the same priority.

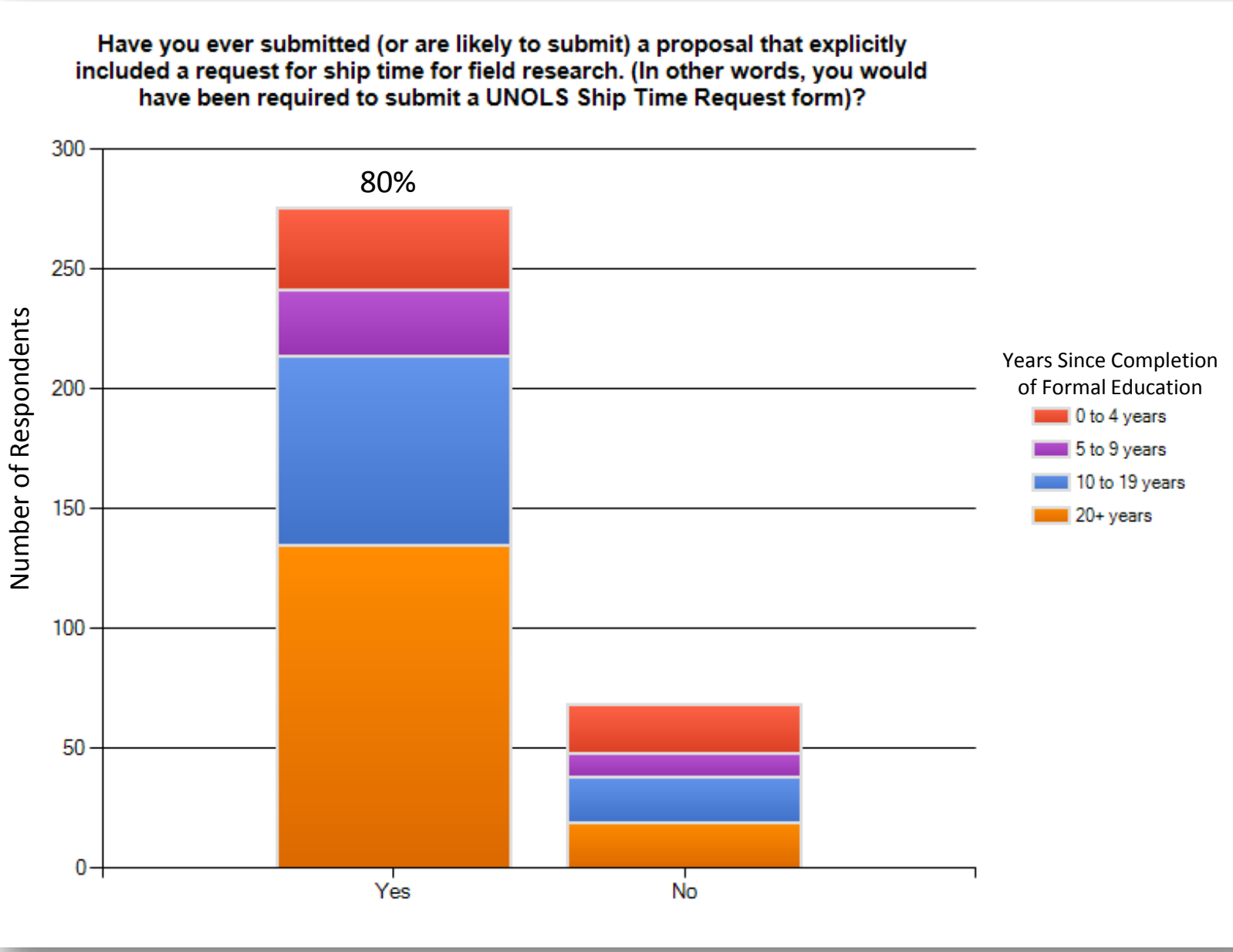


What types of UNOLS research vessels do you use?
1 = most used;
5 = least used.

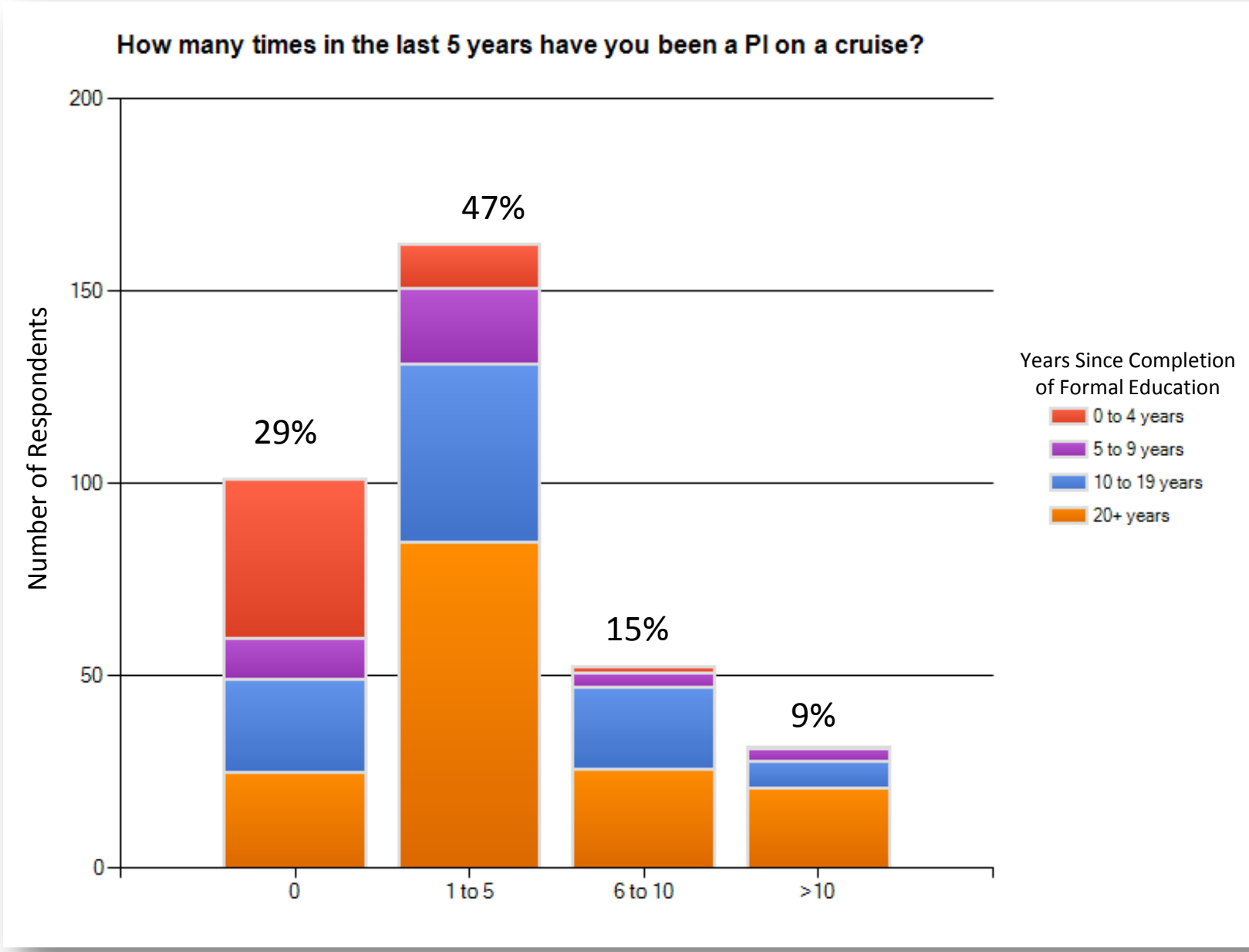
9. What types of UNOLS research vessels do you use? Please prioritize with 1 being the most used for your research and 5 being the least. Items can be given the same priority.

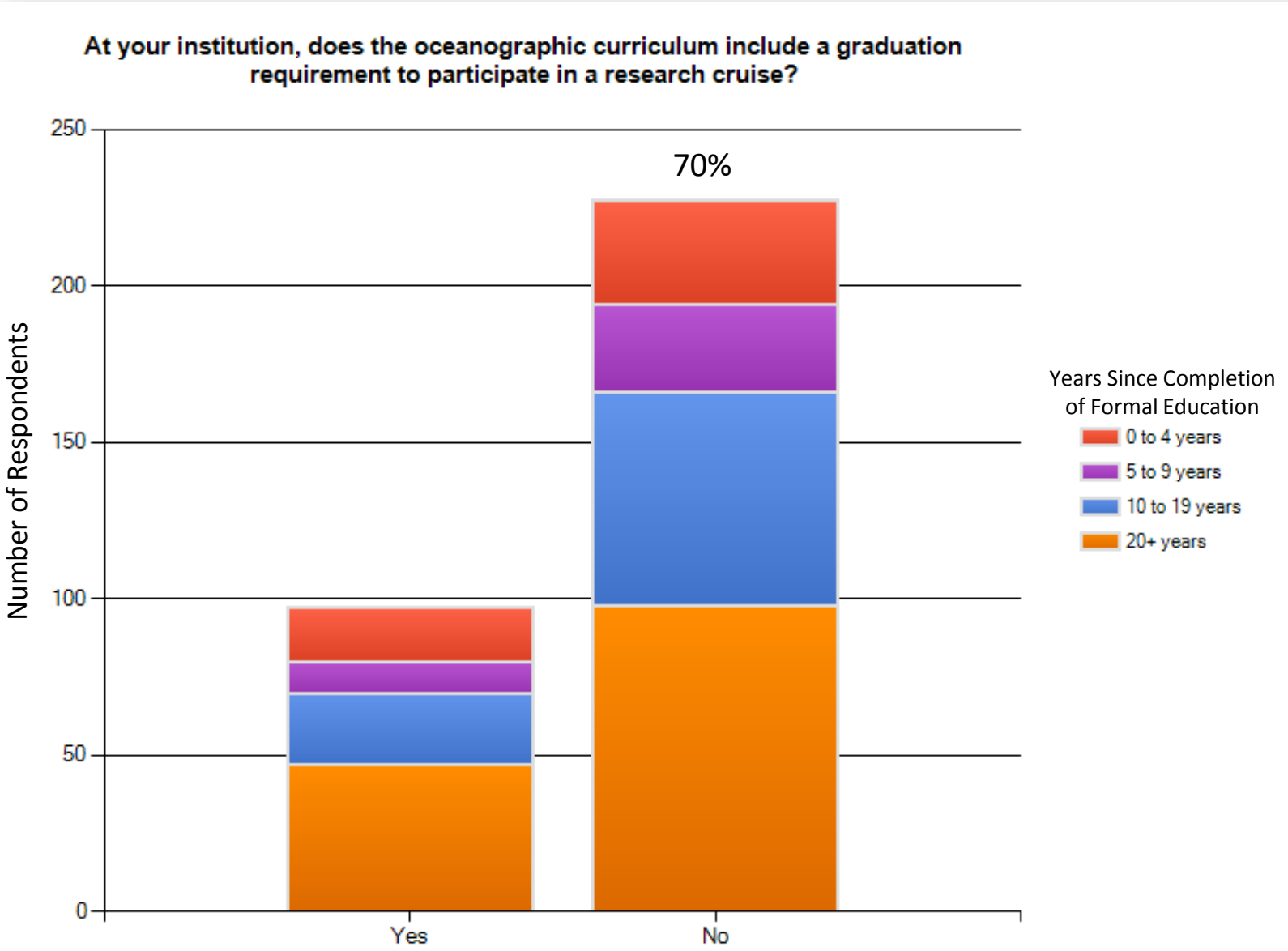
	1	2	3	4	5	Rating Average	Rating Count
	Most used				Least used		
Global Class Ships (*Atlantis, R. Revelle, Melville, Knorr, Langseth, T.G. Thompson*)	**58.0% (171)**	15.6% (46)	6.1% (18)	7.1% (21)	13.2% (39)	2.02	295
Ocean Class (*Kilo Moana*)	10.7% (22)	27.8% (57)	8.8% (18)	10.7% (22)	**42.0% (86)**	3.45	205
Intermediate Class (*Endeavor, Oceanus, New Horizon, Wecoma*)	21.3% (54)	22.4% (57)	22.0% (56)	7.9% (20)	**26.4% (67)**	2.96	254
Regional Class (*Point Sur, Cape Hatteras, Atlantic Explorer*)	14.5% (31)	14.0% (30)	9.3% (20)	11.7% (25)	**50.5% (108)**	3.70	214
Regional/Coastal Class (*Pelican, R. Sproul, Hugh R. Sharp, Walton Smith*)	13.7% (28)	11.7% (24)	14.6% (30)	12.7% (26)	**47.3% (97)**	3.68	205
Local Ships (*Savannah, Blue Heron, Barnes*)	12.0% (24)	8.0% (16)	12.0% (24)	8.5% (17)	**59.5% (119)**	3.96	200
Non-UNOLS vessels (Commercial, NOAA, Foreign, etc.)	**34.3% (94)**	20.4% (56)	12.4% (34)	9.5% (26)	23.4% (64)	2.67	274
None	20.5% (18)	2.3% (2)	4.5% (4)	2.3% (2)	**70.5% (62)**	4.00	88
					answered question		**348**
					skipped question		**9**

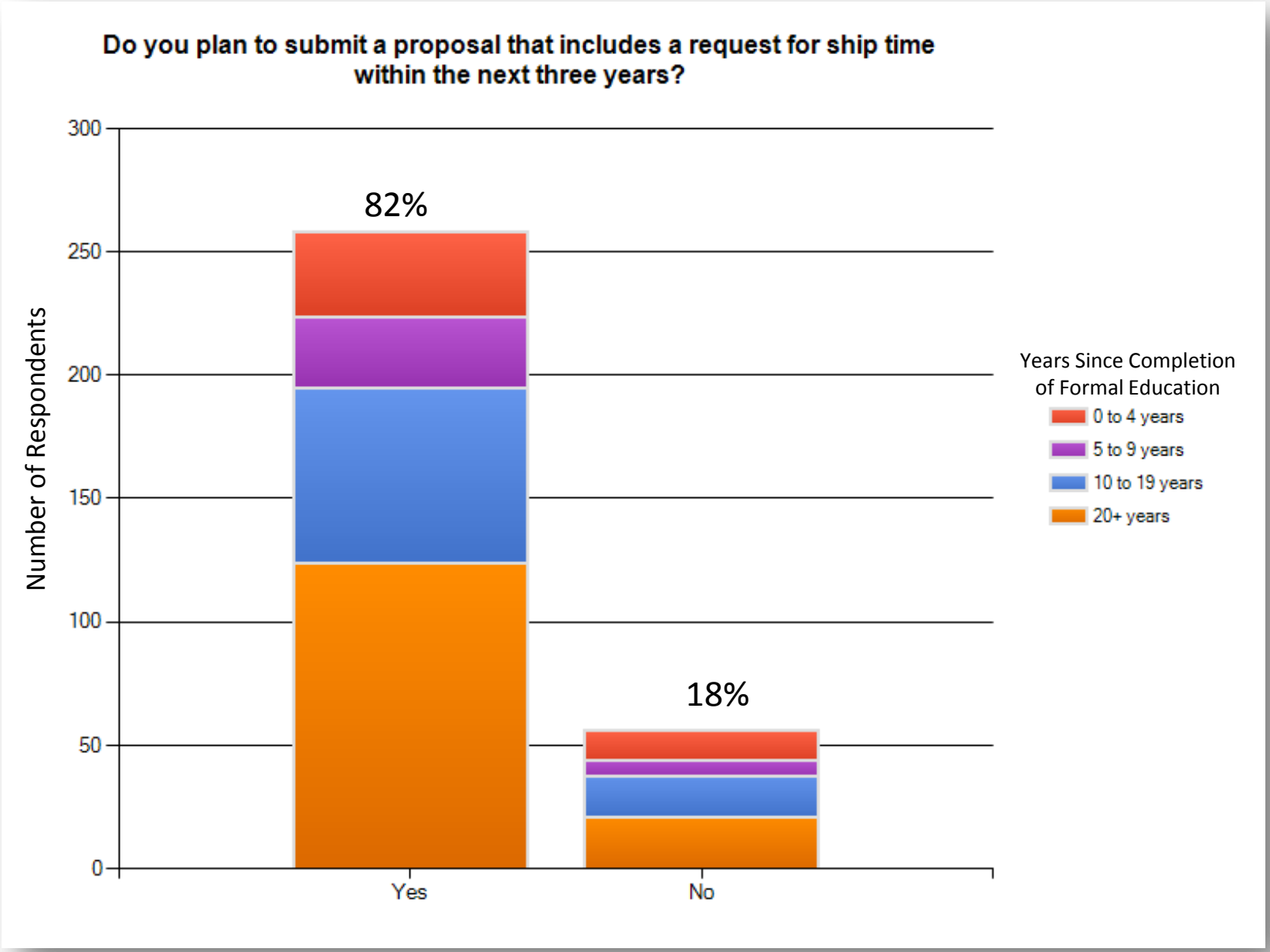
Over the last five years, on average how many days per year did you spend at sea? (Any part of a day at sea constitutes a full sea day.)						
Number of Days	0	<10	10 to 30	31 to 60	> 60	Response Count
On UNOLS vessels	61	53	136	54	18	322
On Non-UNOLS (Commercial, NOAA, Foreign, etc)	67	69	81	52	21	290

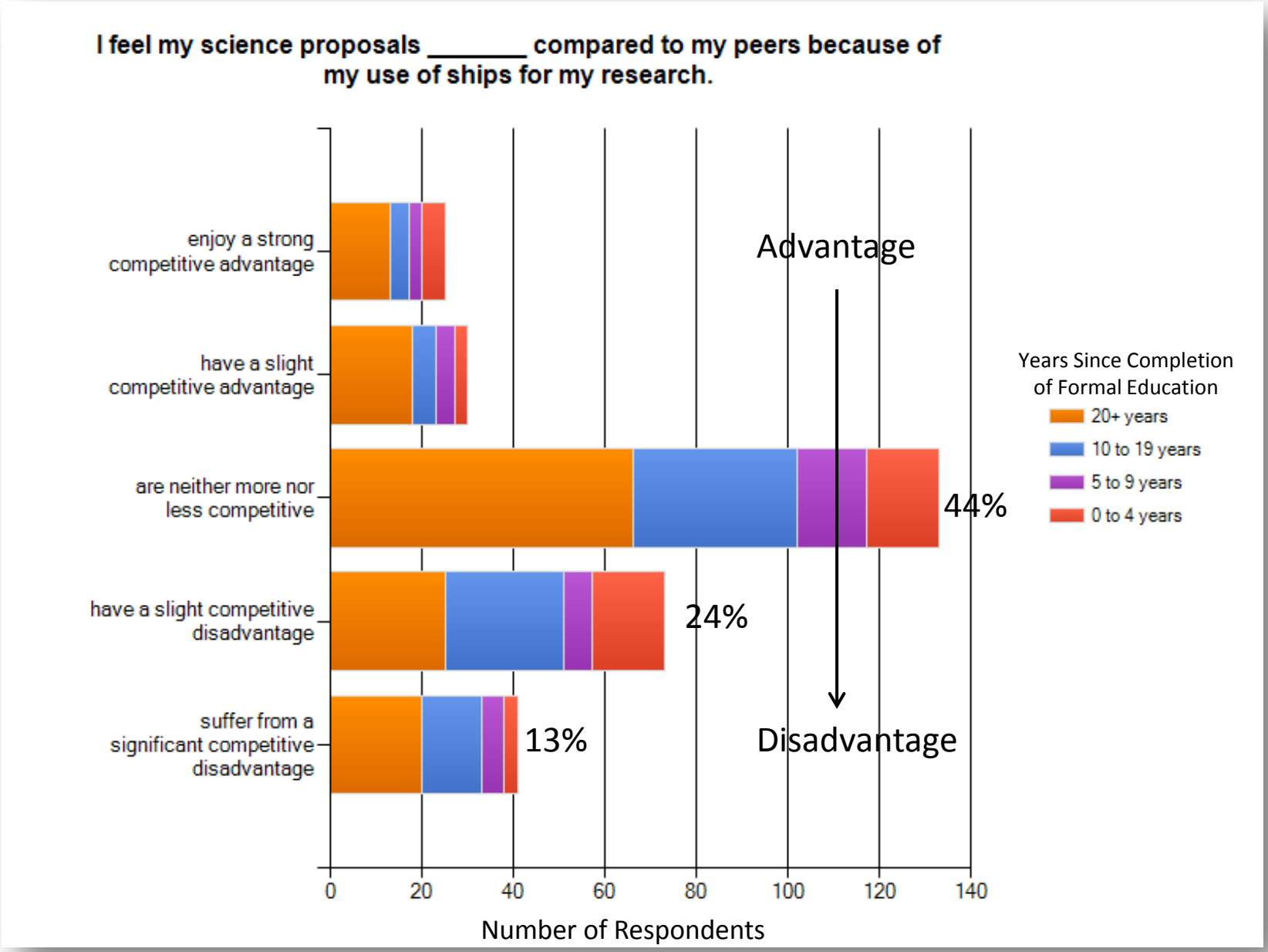

Have you ever submitted (or are likely to submit) a proposal that explicitly included a request for ship time for field research. (In other words, you would have been required to submit a UNOLS Ship Time Request form)?
Number of Respondents
300
250
200
150
100
50
0
80%
Yes
No
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years

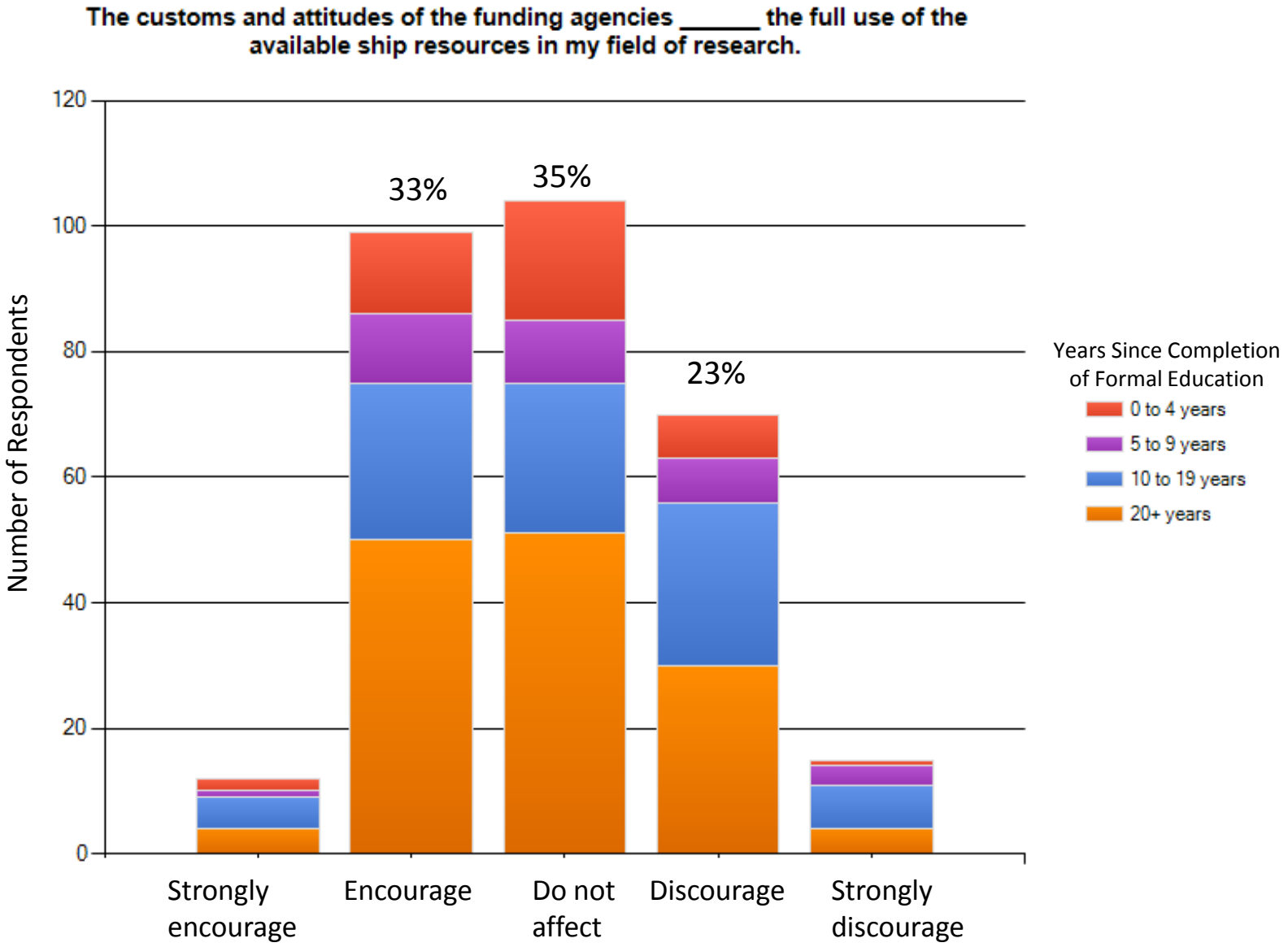
If "yes" to question 11, how many proposals with ship time have you submitted for cruises during the following periods?					
Number of Proposals	0	1 to 5	6 to 10	>10	Response Count
1995 to 2000	94	123	26	5	248
2001 to 2005	68	150	32	6	256
2006 to 2010	55	176	31	7	269
2011 and beyond	62	168	13	8	251


How many times in the last 5 years have you been a PI on a cruise?
Number of Respondents
200
150
100
50
0
29%
47%
15%
9%
0
1 to 5
6 to 10
>10
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years

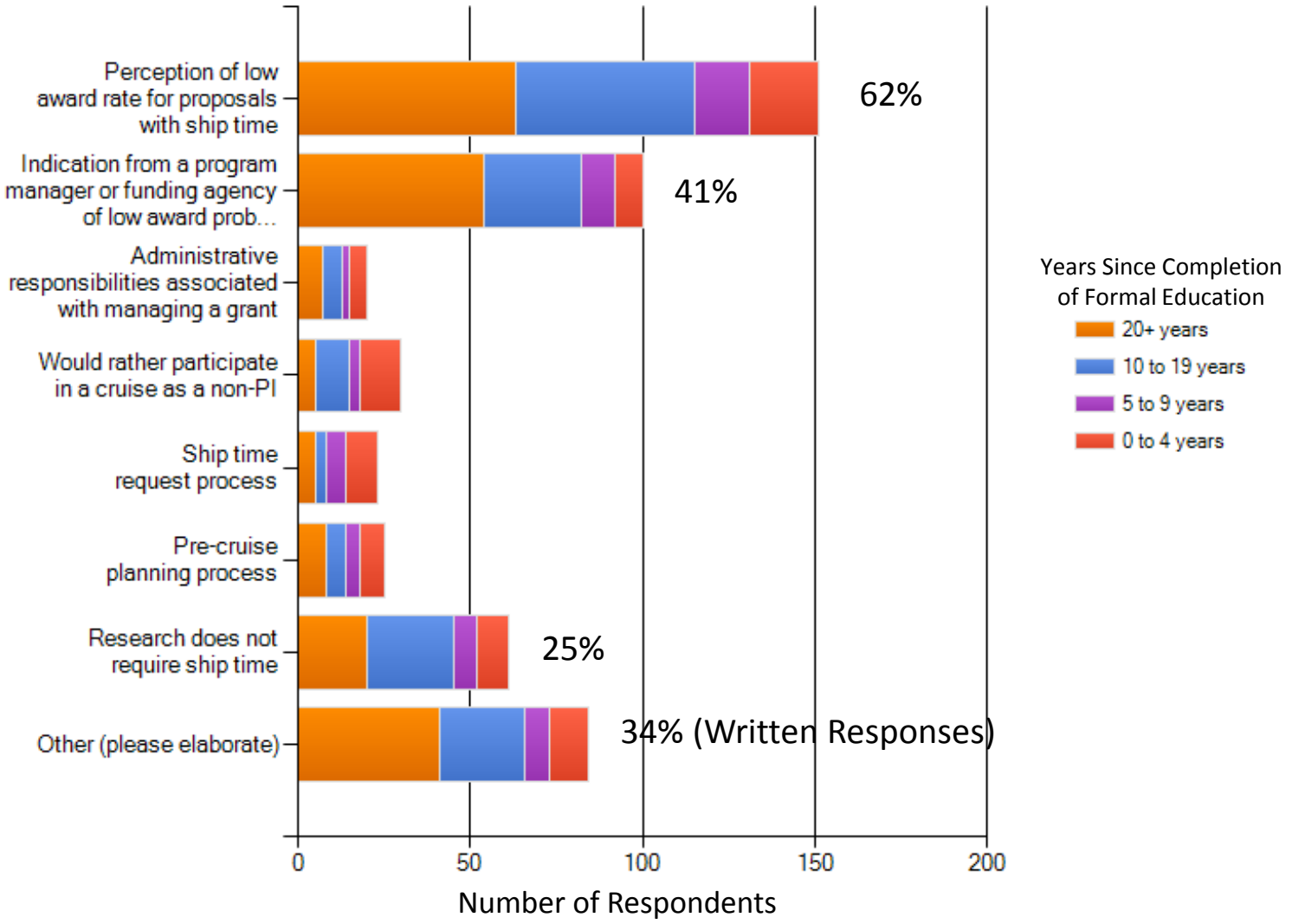

At your institution, does the oceanographic curriculum include a graduation requirement to participate in a research cruise?
Number of Respondents
250
200
150
100
50
0
70%
Yes
No
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years


Do you plan to submit a proposal that includes a request for ship time within the next three years?
Number of Respondents
300
250
200
150
100
50
0
82%
18%
Yes
No
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years

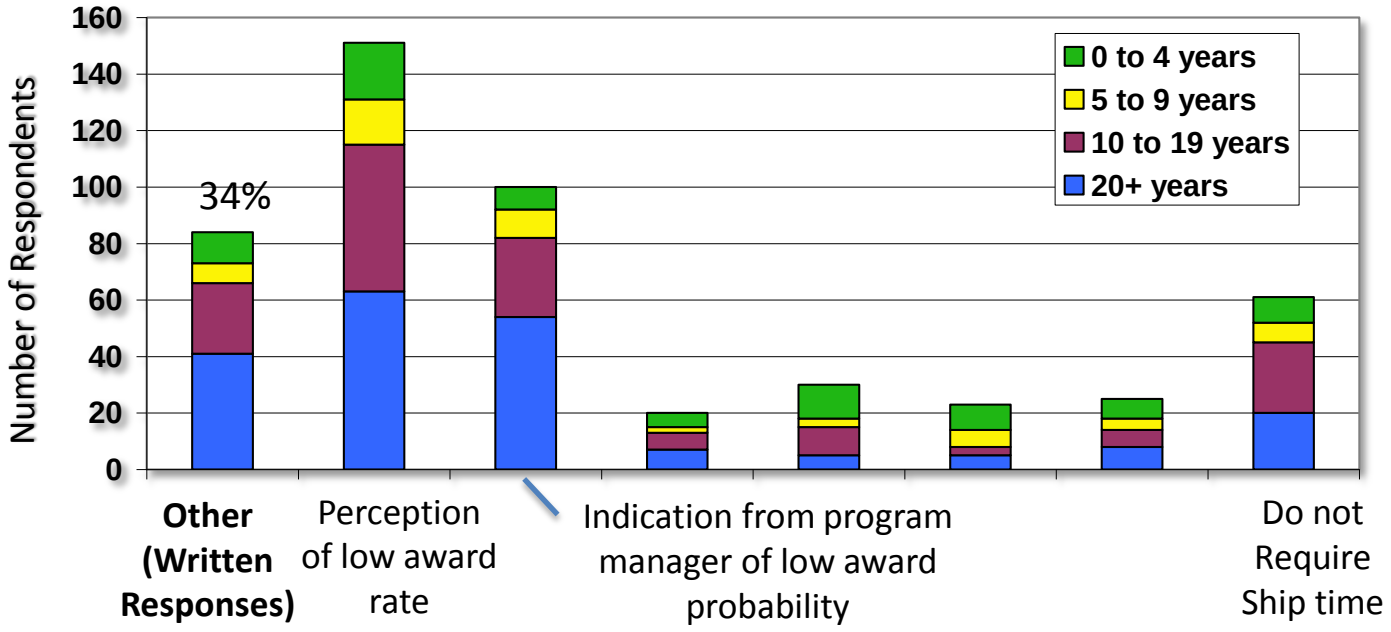

I feel my science proposals _____ compared to my peers because of my use of ships for my research.
enjoy a strong competitive advantage
have a slight competitive advantage
are neither more nor less competitive
have a slight competitive disadvantage
suffer from a significant competitive disadvantage
Advantage
Disadvantage
44%
24%
13%
Years Since Completion of Formal Education
20+ years
10 to 19 years
5 to 9 years
0 to 4 years
0
20
40
60
80
100
120
140
Number of Respondents


The customs and attitudes of the funding agencies _____ the full use of the available ship resources in my field of research.
Number of Respondents
120
100
80
60
40
20
0
33%
35%
23%
Strongly encourage
Encourage
Do not affect
Discourage
Strongly discourage
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years

Have you ever been reluctant to submit a ship time proposal for any of the following reasons (check all that apply):

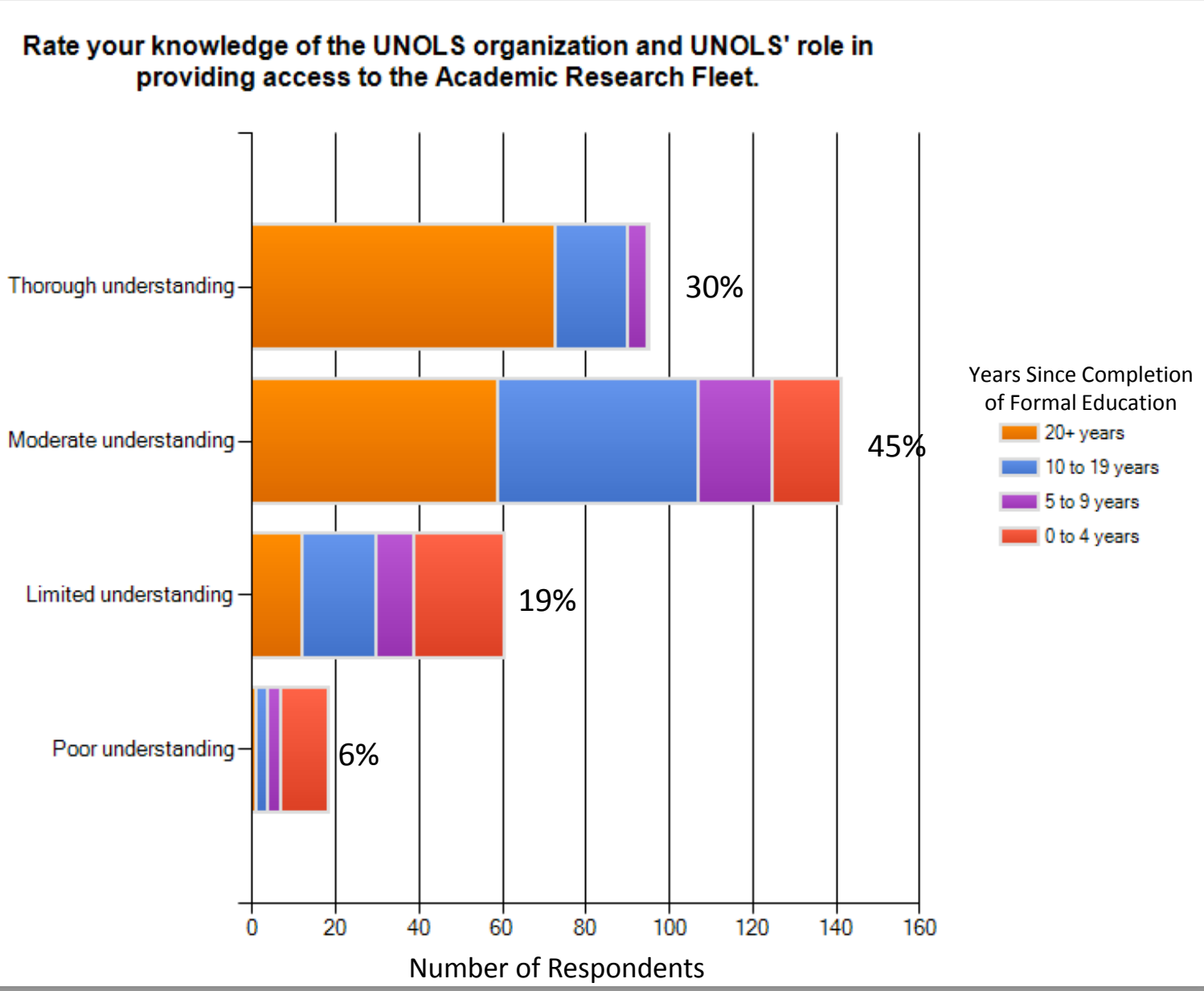


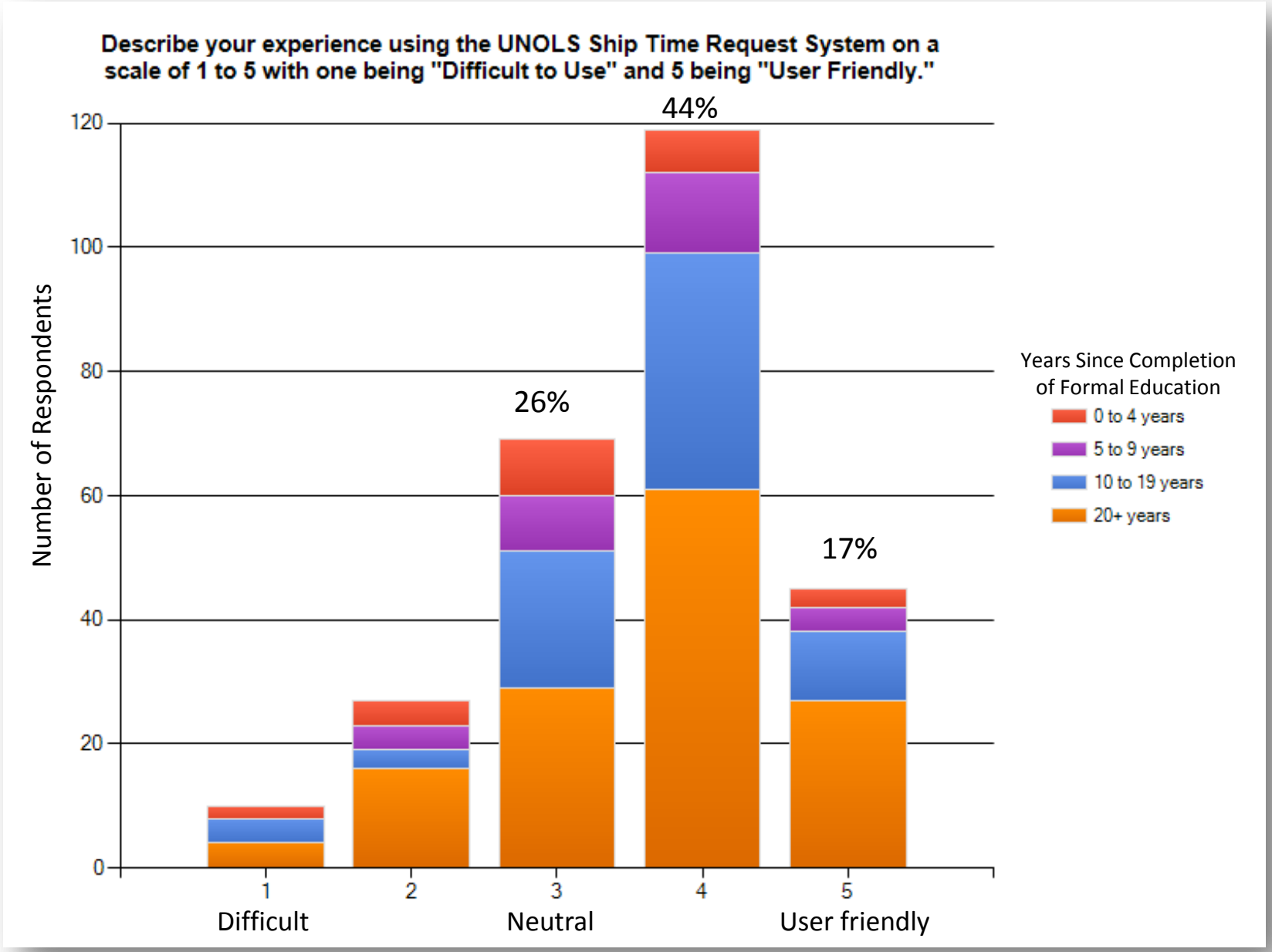
Written Responses: Have you ever been reluctant to submit a ship time proposal for any of the following reasons (check all that apply).



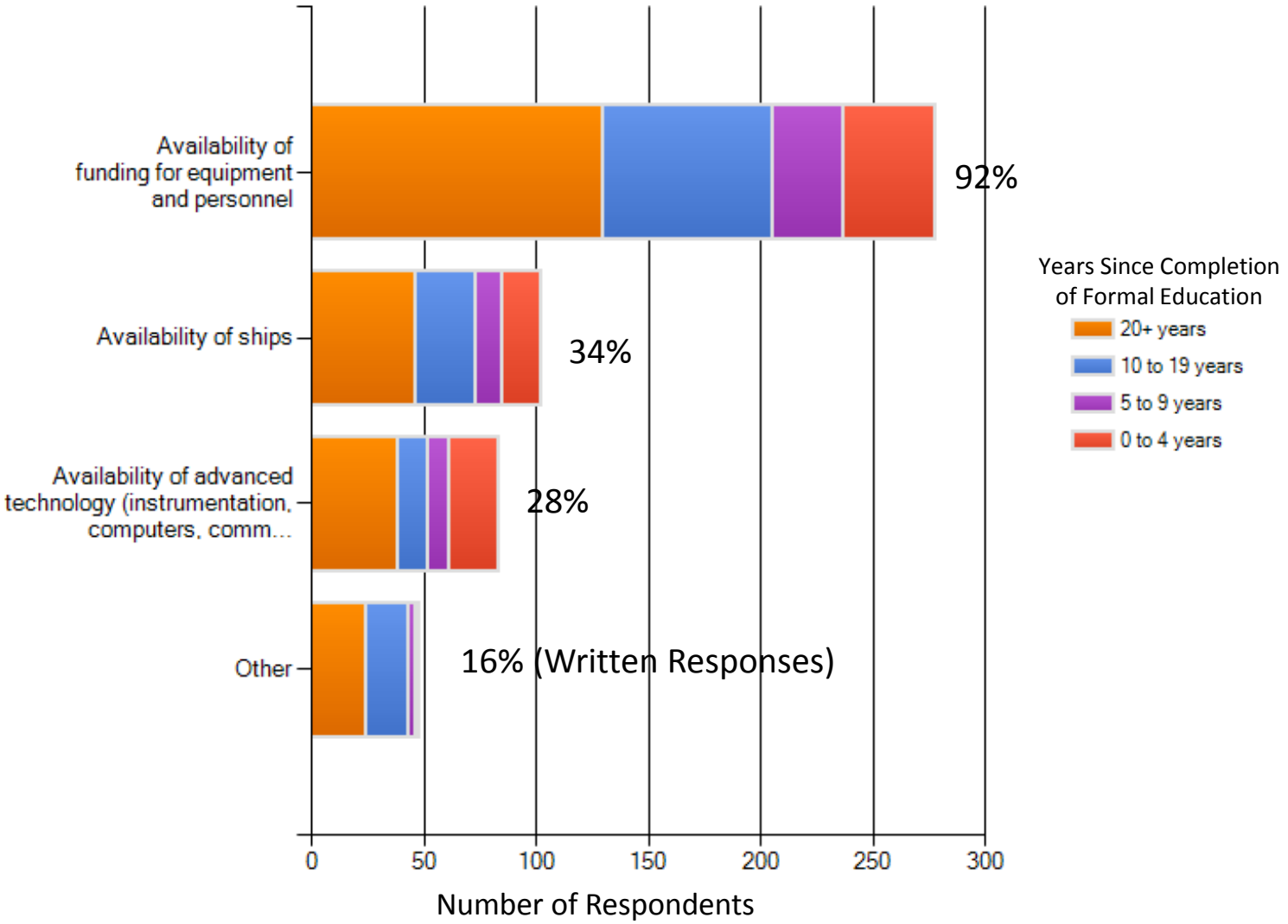
84 written responses, which fall into 2 main categories.

- Limited funding/costs of going to sea/waste of time to write a proposal - **52% (44)**
- Ship issues (e.g., ROIs, clearance, scheduling, tech support) - **23% (19)**
- Too junior/not familiar with UNOLS - 7% (6)
- No problem - 8% (7)
- Miscellaneous - 10% (8)

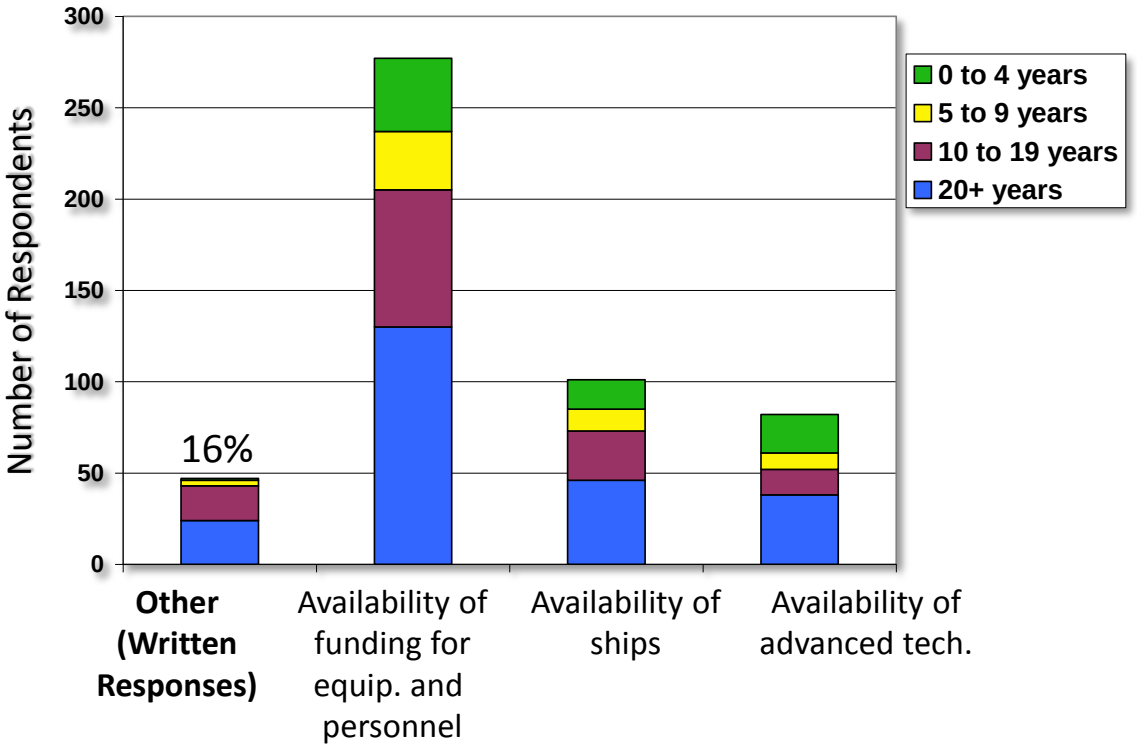

Rate your knowledge of the UNOLS organization and UNOLS' role in providing access to the Academic Research Fleet.
Thorough understanding
Moderate understanding
Limited understanding
Poor understanding
30%
45%
19%
6%
0
20
40
60
80
100
120
140
160
Number of Respondents
Years Since Completion of Formal Education
20+ years
10 to 19 years
5 to 9 years
0 to 4 years


Describe your experience using the UNOLS Ship Time Request System on a scale of 1 to 5 with one being "Difficult to Use" and 5 being "User Friendly."
Number of Respondents
120
100
80
60
40
20
0
44%
26%
17%
1
2
3
4
5
Difficult
Neutral
User friendly
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years

Which of these factors limit the type of science questions you are able to address today? Indicate all which apply.



Which of these factors limit the type of science questions you are able to address today?



47 written responses, which fall into the following categories:

- Costs of going to sea - **34% (16)**
- Equipment and its availability – **30% (14)**
- Ship availability/schedules – 15% (7)
- Personnel/tech support – 13% (6)
- Miscellaneous – 13% (6)

In maintaining and expanding your field research program, you are challenged to locate the resources that you need, raise the funds to secure these resources, and administer the overall program. Please rate the magnitude of the challenge 1-10, with 1 signifying "no problem" and 10 being extremely daunting.

Resource Availability

	No problem 1	2	3	4	Average 5	6	7	8	9	Extremely daunting 10	Response Count
Shore-side laboratory space	**49.4% (116)**	17.4% (41)	10.6% (25)	4.7% (11)	7.7% (18)	3.8% (9)	1.7% (4)	3.0% (7)	0.0% (0)	1.7% (4)	235
Shared-use machine shops and lab support facilities	**39.0% (90)**	14.3% (33)	16.0% (37)	3.9% (9)	11.3% (26)	2.6% (6)	3.5% (8)	4.8% (11)	3.0% (7)	1.7% (4)	231
Dedicated shore-side tech support group	**25.1% (58)**	7.8% (18)	17.7% (41)	7.8% (18)	13.4% (31)	5.6% (13)	8.7% (20)	4.8% (11)	3.5% (8)	5.6% (13)	231
Access to ships and ship time	14.6% (38)	11.5% (30)	**17.7% (46)**	10.0% (26)	14.2% (37)	6.5% (17)	7.7% (20)	6.9% (18)	5.4% (14)	5.4% (14)	260
Access to shared-use ship board instruments/facilities (multi-beam, ROVs, isotope ions, etc.)	**26.3% (61)**	15.5% (36)	14.7% (34)	9.5% (22)	13.8% (32)	4.3% (10)	7.3% (17)	1.7% (4)	3.0% (7)	3.9% (9)	232
Access to at-sea technical support	**30.4% (73)**	20.0% (48)	16.7% (40)	9.2% (22)	10.8% (26)	3.3% (8)	4.2% (10)	3.3% (8)	0.8% (2)	1.3% (3)	240
Other	6.3% (1)	0.0% (0)	6.3% (1)	0.0% (0)	12.5% (2)	0.0% (0)	6.3% (1)	6.3% (1)	6.3% (1)	**56.3% (9)**	16

Most respondents indicate average to no problems for locating the resources listed.

In maintaining and expanding your field research program, you are challenged to locate the resources that you need, raise the funds to secure these resources, and administer the overall program. Please rate the magnitude of the challenge 1-10, with 1 signifying "no problem" and 10 being extremely daunting.

Access to support funds

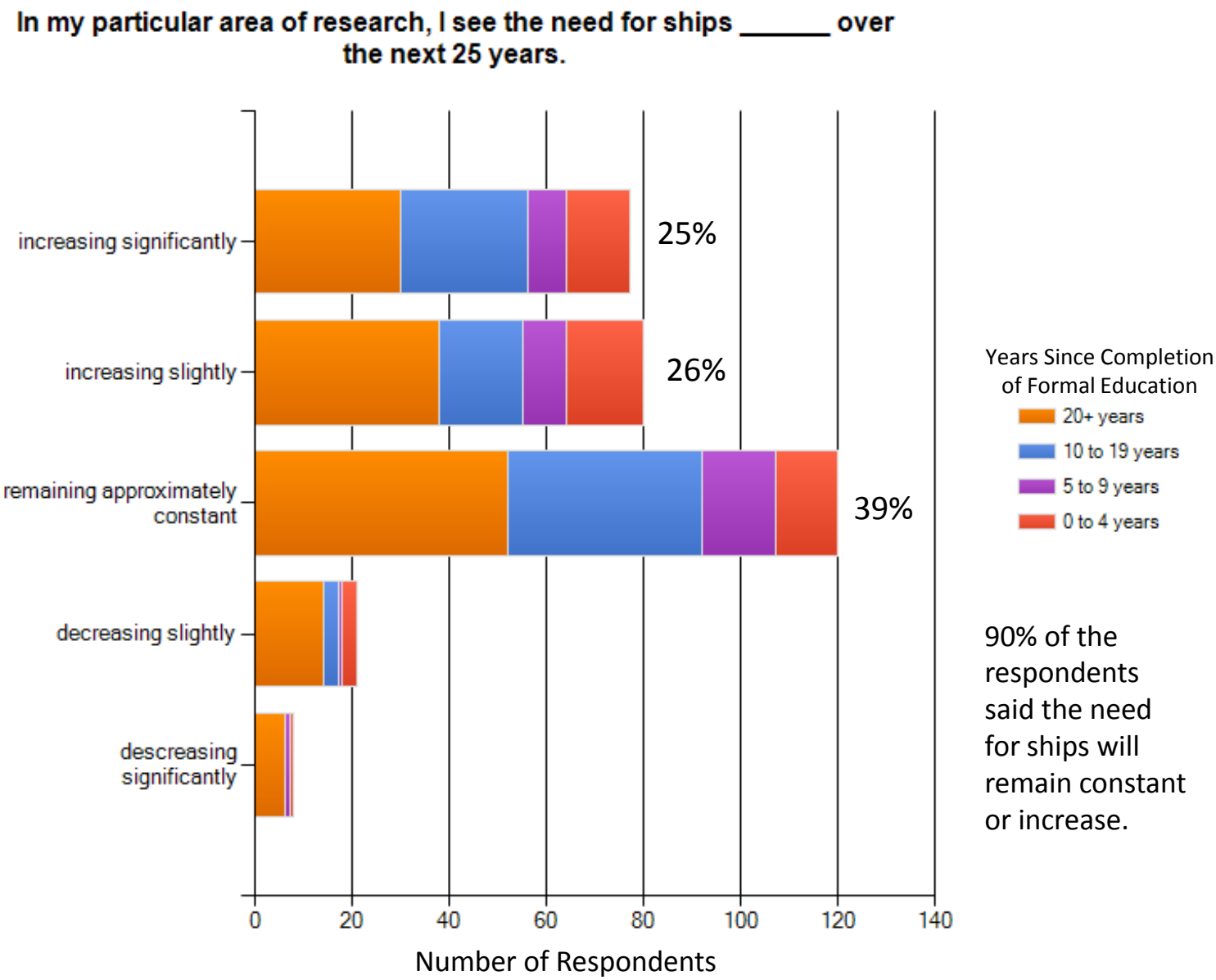
	No problem 1	2	3	4	Average 5	6	7	8	9	Extremely daunting 10	Response Count
Shore-side laboratory space	14.0% (31)	6.8% (15)	11.7% (26)	7.7% (17)	17.1% (38)	4.1% (9)	8.6% (19)	**18.5% (41)**	4.5% (10)	7.2% (16)	222
Shared-use machine shops and lab support facilities	12.9% (28)	6.5% (14)	10.1% (22)	10.1% (22)	**18.0% (39)**	5.5% (12)	10.1% (22)	14.3% (31)	5.5% (12)	6.9% (15)	217
Dedicated shore-side tech support group	8.4% (18)	4.7% (10)	10.7% (23)	6.5% (14)	**16.4% (35)**	6.1% (13)	8.4% (18)	14.0% (30)	8.4% (18)	**16.4% (35)**	214
Access to ships and ship time	4.9% (12)	3.7% (9)	5.7% (14)	4.9% (12)	11.8% (29)	4.9% (12)	15.9% (39)	13.9% (34)	13.1% (32)	**21.2% (52)**	245
Access to shared-use ship board instruments/facilities (multi-beam, ROVs, isotope ions, etc.)	12.5% (27)	8.3% (18)	10.2% (22)	5.6% (12)	**18.1% (39)**	7.4% (16)	10.6% (23)	7.9% (17)	6.9% (15)	12.5% (27)	216
Access to at-sea technical support	**15.5% (34)**	10.9% (24)	11.8% (26)	8.6% (19)	**15.5% (34)**	5.9% (13)	5.5% (12)	11.8% (26)	4.1% (9)	10.5% (23)	220
Other	11.8% (2)	5.9% (1)	0.0% (0)	5.9% (1)	0.0% (0)	0.0% (0)	11.8% (2)	11.8% (2)	5.9% (1)	**47.1% (8)**	17

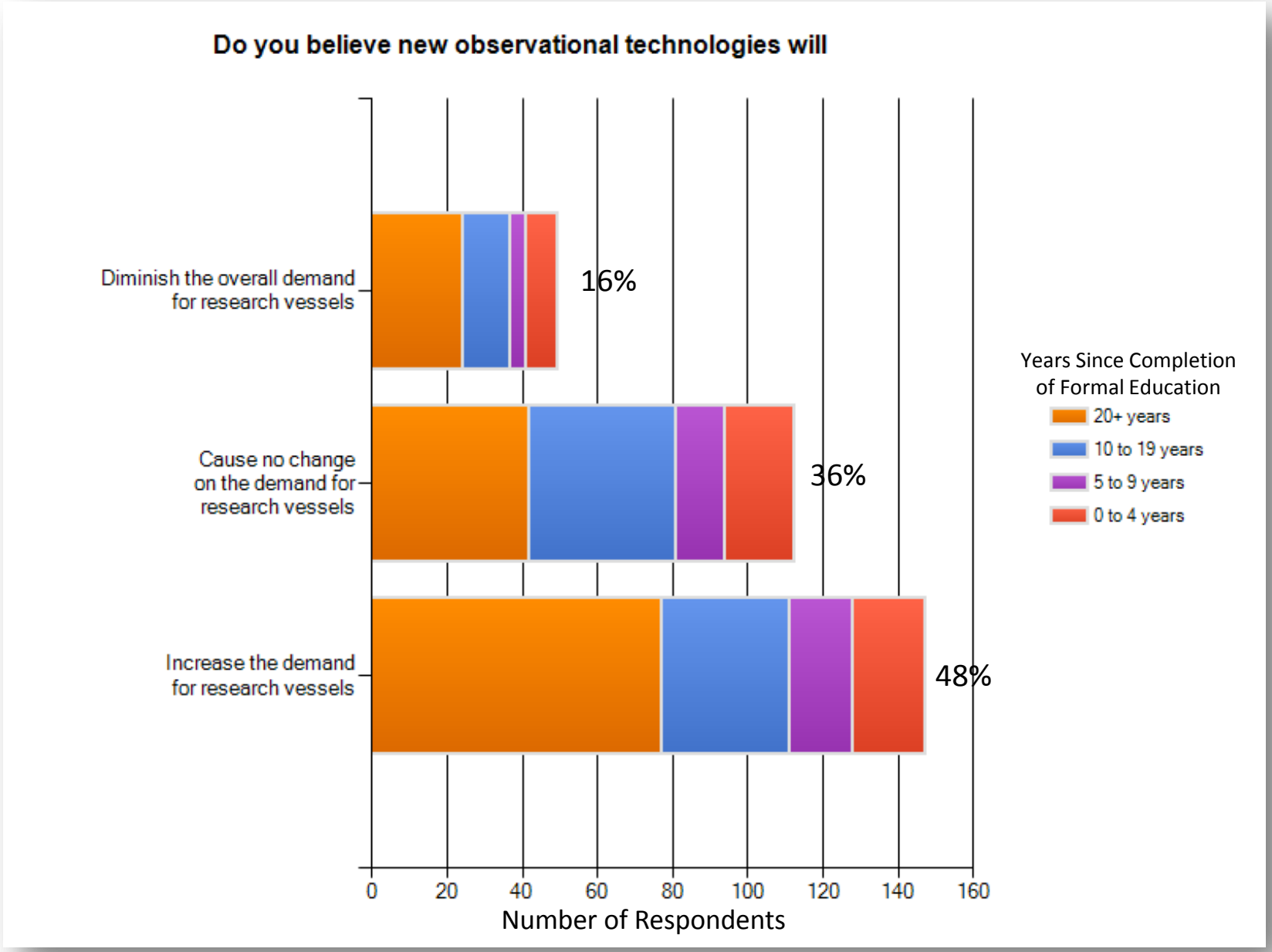
In maintaining and expanding your field research program, you are challenged to locate the resources that you need, raise the funds to secure these resources, and administer the overall program. Please rate the magnitude of the challenge 1-10, with 1 signifying "no problem" and 10 being extremely daunting.

Administrative burden

	No problem 1	2	3	4	Average 5	6	7	8	9	Extremely daunting 10	Response Count
Shore-side laboratory space	**31.2% (67)**	20.9% (45)	14.0% (30)	7.0% (15)	12.1% (26)	2.8% (6)	4.7% (10)	5.1% (11)	1.9% (4)	0.5% (1)	215
Shared-use machine shops and lab support facilities	**33.8% (70)**	22.7% (47)	15.9% (33)	5.8% (12)	12.6% (26)	2.4% (5)	2.9% (6)	1.4% (3)	1.9% (4)	0.5% (1)	207
Dedicated shore-side tech support group	**25.5% (52)**	20.1% (41)	15.2% (31)	8.8% (18)	13.7% (28)	4.4% (9)	3.9% (8)	4.4% (9)	2.5% (5)	1.5% (3)	204
Access to ships and ship time	15.2% (35)	**21.2% (49)**	17.7% (41)	5.6% (13)	19.9% (46)	4.3% (10)	4.8% (11)	6.5% (15)	2.2% (5)	2.6% (6)	231
Access to shared-use ship board instruments/facilities (multi-beam, ROVs, isotope ions, etc.)	19.6% (41)	**20.6% (43)**	**20.6% (43)**	7.7% (16)	17.2% (36)	5.3% (11)	1.9% (4)	2.9% (6)	2.9% (6)	1.4% (3)	209
Access to at-sea technical support	**31.3% (66)**	25.6% (54)	11.4% (24)	8.5% (18)	12.3% (26)	2.8% (6)	3.3% (7)	2.8% (6)	0.5% (1)	1.4% (3)	211
Other	**27.8% (5)**	11.1% (2)	11.1% (2)	0.0% (0)	11.1% (2)	0.0% (0)	11.1% (2)	5.6% (1)	0.0% (0)	22.2% (4)	18

Most respondents indicate average to no problems with administering the whole program.

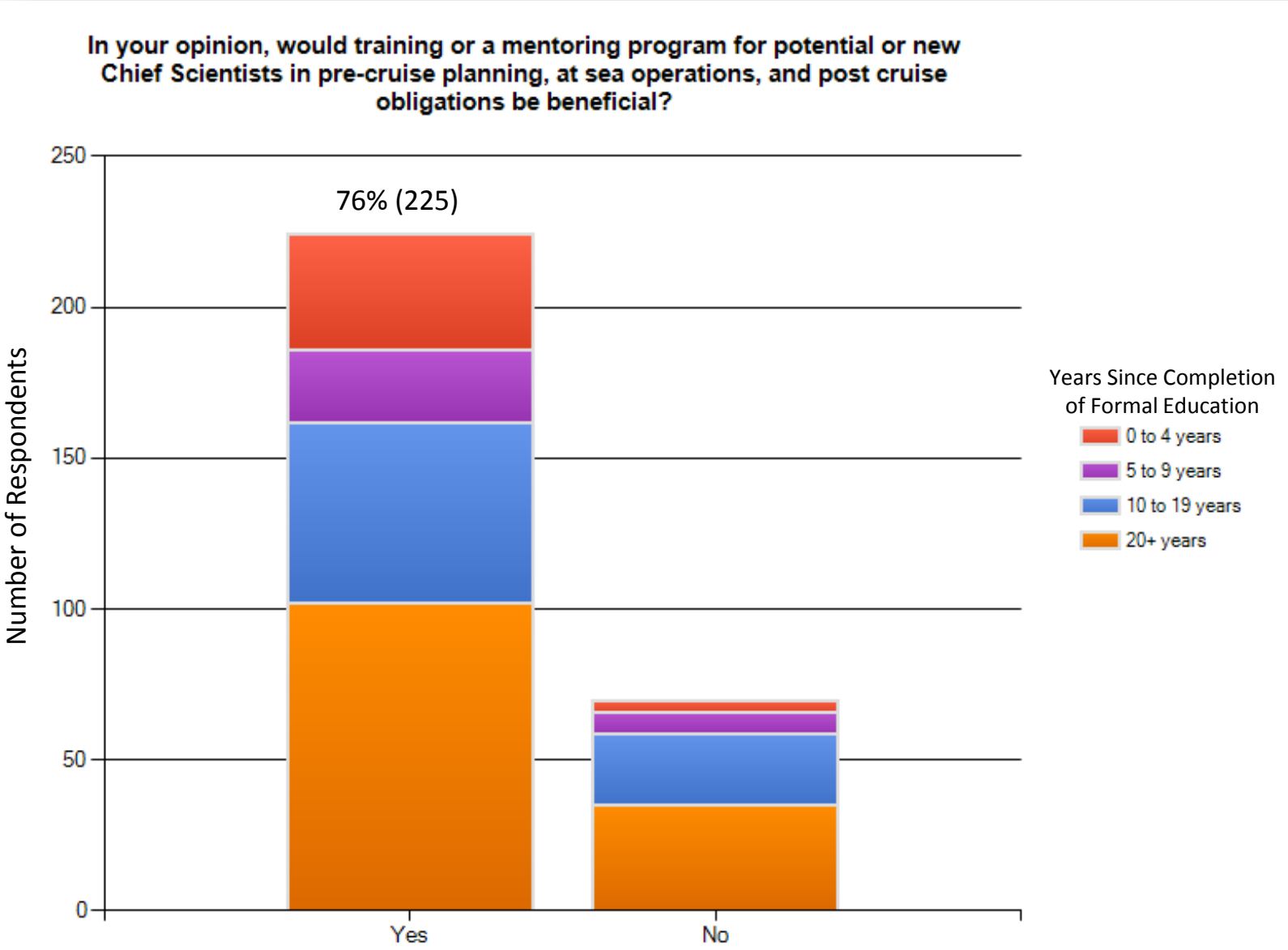

In my particular area of research, I see the need for ships _____ over the next 25 years.
increasing significantly
increasing slightly
remaining approximately constant
decreasing slightly
descreasing significantly
25%
26%
39%
0
20
40
60
80
100
120
140
Number of Respondents
Years Since Completion of Formal Education
20+ years
10 to 19 years
5 to 9 years
0 to 4 years
90% of the respondents said the need for ships will remain constant or increase.


Do you believe new observational technologies will
Diminish the overall demand for research vessels
16%
Cause no change on the demand for research vessels
36%
Increase the demand for research vessels
48%
0
20
40
60
80
100
120
140
160
Number of Respondents
Years Since Completion of Formal Education
20+ years
10 to 19 years
5 to 9 years
0 to 4 years

What factors would positively influence your desire to request ship time for field work in the future? **- Written responses only**.

There were 227 written responses, 86% fell into the following two categories:

- Availability of funds/Agency support– **63% (144)**
- Ships and asset availability/scheduling and getting to ROIs - **23% (53)**


In your opinion, would training or a mentoring program for potential or new Chief Scientists in pre-cruise planning, at sea operations, and post cruise obligations be beneficial?
76% (225)
Number of Respondents
250
200
150
100
50
0
Yes
No
Years Since Completion of Formal Education
0 to 4 years
5 to 9 years
10 to 19 years
20+ years

Written Responses - In your opinion, would training or a mentoring program for potential or new Chief Scientists in pre-cruise planning, at sea operations, and post cruise obligations be beneficial?

There were 128 written responses categorized as

- *Good idea* – 41% (53); most of the early career (0-4 yr) respondents are in this category.
- *Maybe*.. – 17% (22)
- *Probably not* – 17% (22)
- *Not the problem* – 16% (20)
- *Miscellaneous* – 7% (9)

Additional suggestions or comments that would help to improve access to the sea for oceanographic research are welcome (Answered question: 115; 242 skipped this question).

This was the last question and the written responses primarily reiterated the same issues as in prior questions:

- Funding problems/proposal success/agency efforts
- UNOLS operations
- Mentoring
- Other agency scientist's comments