#### III. Appendices

#### **Appendix A. Survey Questions**

#### **Employment Type ¶**

#### (first job after graduate school)¶

- 1) Which best describes when you were hired for your FIRST employment after completing your degree at GSO?¶
- 2) At what type of INSTITUTION were you FIRST employed after graduating from GSO? ¶ (select all that apply)¶
- 3) Which SECTOR(S) best describes your FIRST employment after graduating from GSO?¶ (select all that apply)¶
- 4) Which ROLE(S) best describes your FIRST employment after graduating from GSO?¶ (select all that apply)¶
- 5) Which FIELD(S) describes your FIRST employment after graduating from GSO?¶ (select all that apply)¶
- 6) Is your most recent employment institution, sector or field DIFFERENT from your first employment after GSO?¶

#### (most Recent, if different)¶

- 7) At what type of INSTITUTION were you MOST RECENTLY employed?¶ (select all that apply)¶
- 8) Which SECTOR(S) best describes your MOST RECENT employment?¶ (select all that apply)¶
- 9) Which ROLE(S) best describes your MOST RECENT employment?¶ (select all that apply)¶
- 10) Which FIELD(S) describes your MOST RECENT employment?¶ (select all that apply)¶

#### Impacts on Career¶

- 11) Rate the level of positive impact of the following **course-related items** at GSO on your overall career.¶
- 12) Rate the level of positive impact of the following **research-related experiences** at GSO on your overall career.¶
- 13) Rate the level of positive impact of the following **conference-related experiences** while at GSO on your overall career.¶
- 14) Rate the level of positive impact of the following **degree requirements** at GSO on your overall career.¶
- 15) Rate the level of positive impact of the following **informal education events** at GSO on your overall career.¶

#### Advising and Mentoring¶

- 16) Source(s) of Advising?
- 17) Quality of Advising from Primary Advisor for aspects listed?
- 18) Types of **mentoring preferred** from GSO community while a graduate student?¶
- 19) Types of mentoring received from GSO community while a graduate student?¶

- 20) Source(s) of Mentoring?
- 21) Quality of Mentoring from various sources?¶

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#### **Skills**¶

- 22) Rate the **importance** of the following skills on your overall career.
- 23) Rate the opportunities to practice/participate in these skills while at GSO.¶

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#### **Course Designs**¶

24) Rate your preference for the types/formats of courses that would have positively impacted your career.¶

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#### **Student Funding**¶

- 25) Rate your concern for the various funding related issues while a graduate student at GSO.¶
- 26) What were your sources of funding for graduate school at GSO?¶

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#### **Facilities**¶

27) Rate the quality of the various facilities you used while a graduate student at GSO.¶

#### **Demographics**¶

- 28) What was your terminal degree at GSO?¶
- 29) If your terminal degree at GSO was a PhD, did you receive a fellowship or grant for postdoctoral training?¶
- 30) Did you receive multiple graduate degrees from GSO?¶
- 31) Were you a teaching assistant for any graduate or undergraduate courses while at GSO?¶
- 32) Did you receive another graduate degree after GSO? ¶
- 33) When did you graduate with your terminal degree from GSO?¶
- 34) Where did you receive your undergraduate degree?¶
- 35) With which curricular group did you most closely identify? ¶
- 36) Rate your preference for the use of your donations to the GSO Alumni Fund?
- 37) Which components/aspects of GSO's academic program should be retained and/or improved?¶

#### **Appendix B. Survey Monkey Question Format**

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## 1. Employment Type (first job after graduate school)

For this survey, post-doctoral positions would count as a first employment.

If you had employment between multiple graduate degrees, please respond to the job most relevant to your highest GSO degree.

1. Which best describes when you were hired for your FIRST employment after completing your degree at GSO?
Hired prior to completing my degree
Hired upon completing my degree
Hired within 1 year of completing my degree
Continued with the same employer I had while attending GSO
Took planned leave from employment before being hired
O Involved with volunteer work related to my degree instead of employment
Started my own company
○ I have not found employment
O Prefer not to answer
Other (please specify)
<b>\$</b> <b>\$</b>

(select all that apply)
Academic (e.g., university, high school)
Government (e.g., EPA, NOAA, RIDEM)
Military (e.g., NUWC, USCGA)
NGO/non-profit (e.g., Save the Bay, Nature Conservancy)
Private Industry (e.g., RPS/ASA, LEIDOS)
Research Institution (e.g., WHOI, JPL)
Other (please specify)
<b>\$</b> <b>■</b>
3. Which SECTOR(S) best describes your FIRST employment after graduating from GSO?
select all that apply)
select all that apply)
Select all that apply)  Education (e.g., teaching, outreach)
Education (e.g., teaching, outreach)  Financial (e.g., banking, insurance)
Education (e.g., teaching, outreach)   Financial (e.g., banking, insurance)   Health & Safety (e.g., medical, security)
Education (e.g., teaching, outreach)  Financial (e.g., banking, insurance)  Health & Safety (e.g., medical, security)  Information Technology & Data Science (e.g., computer techs., Matlab)
Education (e.g., teaching, outreach)  Financial (e.g., banking, insurance)  Health & Safety (e.g., medical, security)  Information Technology & Data Science (e.g., computer techs., Matlab)  Natural Resource Acquisition (e.g., aquaculture, mining)
Education (e.g., teaching, outreach)   Financial (e.g., banking, insurance)   Health & Safety (e.g., medical, security)   Information Technology & Data Science (e.g., computer techs., Matlab)   Natural Resource Acquisition (e.g., aquaculture, mining)   Science/Engineering (e.g., researchers, engineers)

4. Which ROLE(S) best describes your FIRST employment after graduating from GSO? (select all that apply)
Administration/Management (e.g., Dean, manager, business owner)
Advocacy (e.g., lobbyists, community organizer, activists)
Outreach/Communication (e.g., OMP folks, podcasters)
Practitioner (e.g., lab tech., consultant)
Basic Research (e.g., modelers, instrument user)
Applied Research (e.g., engineers, instrument tester)
Teaching (e.g., college faculty, high school faculty)
Other (please specify)
<b>\$</b> <b>\$</b>
5. Which FIELD(S) describes your FIRST employment after graduating from GSO? (select all that apply)
Science Technology Engineering & MATH (STEM)
Geosciences (Earth, Ocean & Atmosphere)
Life Sciences
Science-based Ocean- or Marine-related
NOT Science-based Ocean- or Marine-related
None of the Above
<b>♥</b>

6. Is your most recent employment institution, sector or field DIFFERENT from your first employment after GSO?
○ Yes
○ No
<b>5</b>
2. Employment Type (most recent)
This page of survey questions are focused on the Institution, Sector, and Role of your most recent job/position.
7. At what type of INSTITUTION were you MOST RECENTLY employed? (select all that apply)
Academic (e.g., university, high school)
Government (e.g., EPA, NOAA, RIDEM)
Military (e.g., NUWC, USCGA)
☐ NGO/non-profit (e.g., Save the Bay, Nature Conservancy)
Private Industry (e.g., RPS/ASA, LEIDOS)
Research Institution (e.g., WHOI, JPL)
Other (please specify)
<b>T</b>

8. Which SECTOR(S) best describes your MOST RECENT employment (select all that apply)
Education (e.g., teaching, outreach)
Financial (e.g., banking, insurance)
Health & Safety (e.g., medical, security)
☐ Information Technology & Data Science (e.g., computer techs., Matlab)
Natural Resource Acquisition (e.g., aquaculture, mining)
Science/Engineering (e.g., researchers, engineers)
Other (please specify)
9. Which ROLE(S) best describes your MOST RECENT employment? (select all that apply)
9. Which ROLE(S) best describes your MOST RECENT employment?
9. Which ROLE(S) best describes your MOST RECENT employment? (select all that apply)
9. Which ROLE(S) best describes your MOST RECENT employment? (select all that apply)  Administration/Management (e.g., Dean, manager, business owner)
9. Which ROLE(S) best describes your MOST RECENT employment? (select all that apply)  Administration/Management (e.g., Dean, manager, business owner)  Advocacy (e.g., lobbyists, community organizer, activists)
9. Which ROLE(S) best describes your MOST RECENT employment? (select all that apply)  Administration/Management (e.g., Dean, manager, business owner)  Advocacy (e.g., lobbyists, community organizer, activists)  Outreach/Communication (e.g., OMP folks, podcasters)
9. Which ROLE(S) best describes your MOST RECENT employment? (select all that apply)  Administration/Management (e.g., Dean, manager, business owner)  Advocacy (e.g., lobbyists, community organizer, activists)  Outreach/Communication (e.g., OMP folks, podcasters)  Practitioner (e.g., lab tech., consultant)
9. Which ROLE(S) best describes your MOST RECENT employment? (select all that apply)  Administration/Management (e.g., Dean, manager, business owner)  Advocacy (e.g., lobbyists, community organizer, activists)  Outreach/Communication (e.g., OMP folks, podcasters)  Practitioner (e.g., lab tech., consultant)  Basic Research (e.g., modelers, instrument user)
9. Which ROLE(S) best describes your MOST RECENT employment? (select all that apply)  Administration/Management (e.g., Dean, manager, business owner)  Advocacy (e.g., lobbyists, community organizer, activists)  Outreach/Communication (e.g., OMP folks, podcasters)  Practitioner (e.g., lab tech., consultant)  Basic Research (e.g., modelers, instrument user)  Applied Research (e.g., engineers, instrument tester)

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10. Which FIELD(S) ( (select all that apply		s your N	OST REC	CENT em	ploymen	t?				
Science Technolo	gy Engine	ering & I	MATH (STI	EM)						
Geosciences (Ear	th, Ocean	& Atmos	sphere)							
Life Sciences										
Science-based Oc	ean- or M	larine-re	lated							
NOT Science-bas	ed Ocean	- or Mari	ne-related							
None of the Abov	е									
				¶ ¶						
<ol><li>Course Imp</li></ol>										
	positive None	impact		lowing o	course-re	lated it	ems at G	SO on y	our over	
11. Rate the level of career.  Curricular Core Course (e.g., PO if you are a PO student)		impact	of the fol	lowing c		elated it		SO on y		
Curricular Core Course (e.g., PO if you are	None	impact	of the fol	lowing c	Moderate	elated it		SO on y		
Curricular Core Course (e.g., PO if you are a PO student)	None	0	of the fol	llowing c	Moderate	0	High	SO on y	Extreme	N/A
Curricular Core Course (e.g., PO if you are a PO student) Other Core Courses	None	0	of the fol	0	Moderate	0	High	0	Extreme	N/A
Curricular Core Course (e.g., PO if you are a PO student) Other Core Courses GSO Electives	None	0	of the fol	0	Moderate	0	High	0	Extreme	N/A
Curricular Core Course (e.g., PO if you are a PO student) Other Core Courses GSO Electives Non-GSO Electives	None	0	of the fol	0	Moderate	0	High	0	Extreme	N/A
Curricular Core Course (e.g., PO if you are a PO student) Other Core Courses GSO Electives Non-GSO Electives	None	0	of the fol	0	Moderate	0	High	0	Extreme	N/A

### 4. Research Experiences on Career

12. Rate the level of positive impact of the following **research-related experiences** at GSO on your overall career.

	None		Slight		Moderate		High		Extreme	N/A
Research Topics	$\circ$	$\circ$	0	$\circ$	$\circ$	$\circ$		0	$\circ$	$\circ$
Research Methods	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\bigcirc$
Research Cruises	0	0	0	0	0	$\circ$	0	0	0	$\circ$
Additional Comments										
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13. Rate the level of positive impact of the following **conference-related experiences** while at GSO on your overall career.

	None		Slight		Moderate		High		Extreme	N/A
Conference Presentation(s)	0	0	0	0	0	0	0	0	0	0
Larger Conference Attendance (e.g., AGU, ASLO, GSO)	0	0	0	0	0	0	0	0	0	0
Smaller Conference Attendance (e.g., Gordon Conference)	0	0	0	0	0	0	0	0	0	0
Regional Conference Attendance (e.g., MABPOM, NEERS)	0	0	0	0	0	0	0	0	0	0
Additional Comments										
				9	-	III.				

## 14. Rate the level of positive impact of the following **degree requirements** at GSO on your overall career.

	None		Slight		Moderate		High		Extreme	N/A
Cruise Requirement	0	$\circ$	$\circ$	$\circ$	0	$\circ$	$\circ$	$\circ$	0	$\circ$
Student Seminar	$\bigcirc$									
Oral Comprehensives	0	0	0	0	0	0	0	0	0	0
Written Comprehensives	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$
Proposal Presentation	0	0	0	0	0	0	0	0	0	0
Thesis/Dissertation Defense	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$
Written Thesis/Dissertation	0	0	0	0	0	0	0	0	0	0
MO Final Project	$\bigcirc$									
Additional Comments										
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## 15. Rate the level of positive impact of the following **informal education events** at GSO on your overall career.

	None		Slight		Moderate		High		Extreme	N/A
"Weekly" Speaker Series (e.g., PO Seminar, Bio at Noon)	0	0	0	0	0	0	0	0	0	0
Special Speaker Series (e.g., Vettlesen, Metcalf)	$\circ$	0	0	0	0	0	0	$\circ$	$\circ$	0
Professional Development Workshops (e.g., pedagogy, diversity, harassment)	0	0	0	0		0	0	0	0	0
Chowder & Marching Outreach Events (e.g., oceanbites, Bay Informed)	0	0	0	0	0	0	0	0	0	0
Social Gatherings (e.g., TGIFs, Boat Burning)	0	0	0	0	0	0	0	0	0	0
Coffee Breaks (e.g., pre-PO Seminar)	$\circ$	0	0	0	$\circ$	0	0	0	0	$\circ$
Lunches	0	0	0	$\circ$	0	$\circ$	0	0	0	$\bigcirc$
Intramurals	$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$						
Additional Comments					li.					
				₫						

## 7. Advising and Mentoring

#### 16. Source(s) of Advising?

Additional Comments

	None		Minor		Some		Most		All	N/A
Primary Advisor(s)	$\circ$	$\circ$	0	$\circ$	0	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
Member of Lab Group	$\circ$	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\bigcirc$
GSO Administrator (e.g., Assoc. Dean, admission advisors)	0	0	0	0	0	0	0	0	0	0
Thesis/Dissertation Committee	$\circ$	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\circ$
Non-committee GSO Faculty	0	0	0	0	0	0	0	0	0	0
Support Staff (e.g., computer, library, aquarium staff)	$\circ$	0	0	0	0	0	0	0	0	0
Marine Research Scientists	0	0	0	0	0	0	0	0	0	0
Non-GSO Faculty	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\bigcirc$
Other?	0	$\circ$	0	0	0	0	0	0	0	$\bigcirc$

#### 17. Quality of Advising from Primary Advisor for aspects listed?

Very I	Low	Low		Average		High		Very High	N/A
Research Activities		0	0	0	0	0	0	0	0
Course Selection		0	0	0	0	0	0	0	0
Publication of Research	0	0	0	0	0	0	0	0	0
Career Decisions/Directions		$\circ$	$\bigcirc$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$
additional Comments									
					,				
			<b>5</b>		III.				
8. Types of <b>mentoring</b> (	preferred	from GS	_	nity whil	e a grad	uate stu	dent?		
	Not Preferred		1inor ference	Somew		Highly Preferred		Very Highly Preferred	N/A
Personal Support	0	0	0 0	) ()	0	0	0	0	0
Career Assistance	0	0	0 0		0	0	0	0	0
Motivation/Encouragemen	t 🔾	0	0 0		0	0	0	0	0
dditional Comments									
			<del></del>		lli.				
			<b>9</b> <b>9</b>						
9. Types of <b>mentoring</b> (	received	from GSO	•	itv while	a gradu	ate stud	lent?		
, ,				,					
	None Received		ome ceived	Modera Amour Receive	nt	Much Received		Very Much Received	N/A
Personal Support	0	0	0 0		0		$\circ$	0	0
Career Assistance	$\bigcirc$	$\bigcirc$	0 0		$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$
Motivation/Encouragemen	t 🔾	0	0 0		0	0	0	0	0
additional Comments									
					lli.				
			<b>9</b>						
			•						

#### 20. Source(s) of Mentoring?

	None		Minor		Some		Most		All	N/A
Primary Advisor(s)	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	0	$\circ$	$\circ$	$\circ$
Member of Lab Group	$\bigcirc$	$\bigcirc$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$	$\circ$
GSO Administrator (e.g., Assoc. Dean, admission advisors)	0	0	0	0	0	0	0	0	0	0
Thesis/Dissertation Committee	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$	$\circ$
Non-committee GSO Faculty	0	0	0	0	0	0	0	0	0	0
Support Staff (e.g., computer, library, aquarium staff)	0	0	0	0	0	0	0	0	0	0
Marine Research Scientists	0	0	0	0	0	0	0	0	0	0
Non-GSO Faculty	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	0	0	0	0
Other?	0	0	0	0	0	0	0	0	0	$\circ$

Additional	Comments
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#### 21. Quality of Mentoring from various sources?

	Very Low		Low		Average		High		Very High	N/A
Primary Advisor(s)		$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	0	$\circ$	$\circ$	$\circ$
Member of Lab Group	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\bigcirc$
GSO Administrator (e.g., Assoc. Dean, admission advisors)	0	0	0	0	0	0	0	0	0	0
Thesis/Dissertation Committee	$\circ$	$\circ$	$\bigcirc$	$\bigcirc$	$\circ$	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\circ$
Non-committee GSO Faculty	0	0	0	0	0	0	0	0	0	0
Support Staff (e.g., computer, library, aquarium staff)	0	0	0	0	0	0	0	0	0	0
Marine Research Scientists	0	0	0	0	0	0	0	0	0	0
Non-GSO Faculty	$\circ$	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\circ$
Other?	0	0	$\circ$	0	0	$\circ$	0	0	0	$\circ$
Additional Comments										

Additional Comments		



## 8. Skills Importance

#### 22. Rate the importance of the following skills on your overall career.

	None		Slight		Moderate		High		Extreme	N/A
Oral Communication	$\circ$	0	0	0	0	$\circ$	0	0	0	$\circ$
Written Communication	$\bigcirc$									
Organization	$\circ$	0	$\circ$	$\circ$	$\circ$	$\circ$	0			$\bigcirc$
Teamwork/Collaboration Skills	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$
Critical Thinking & Problem Solving	0	0	0	0	0	0	0	0	0	0
Creativity	$\bigcirc$	$\circ$	$\bigcirc$							
Interpersonal Skills	0	0	$\circ$	0	0	0	0	0	0	$\bigcirc$
Flexibility/Adaptability	$\circ$	$\circ$	$\circ$	$\circ$		$\circ$	$\circ$	$\circ$	$\circ$	$\bigcirc$
Work Ethic	0	0	0	0	0	0	0	0	0	$\bigcirc$
Time Management	$\circ$									
Diversity, Equity & Inclusion	0	0	0	0	0	0	0	0	0	0
Personal Well Being	$\bigcirc$	$\circ$	$\bigcirc$							
Big Data Analysis Techniques	0	0	0	0	0	0	0	0	0	0
Computer Programming	$\bigcirc$									
Modeling Techniques	0	0	0	0	0	0	0		0	$\bigcirc$
Ocean Instrumentation	$\bigcirc$									
Numerical Methods	0	0	$\circ$	0		$\circ$	0		0	$\circ$
Depth of Expertise in Core Discipline	$\bigcirc$	0	$\circ$	$\bigcirc$						
Systems Thinking	$\circ$	0	0	0	0	0	0	0	0	$\bigcirc$
Project Management	$\circ$	0								
Scientific Process	0	0	0	0	0	0	0	0	0	$\bigcirc$
Additional Comments										

## 9. Skills Availability/Opportunity

#### 23. Rate the opportunities to practice/participate in these skills while at GSO.

	None		Slight		Moderate		High		Extreme	N/A
Oral Communication	$\circ$	0	0	0	$\circ$	0	0	$\circ$	0	0
Written Communication	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\circ$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$
Organization	$\circ$									
Teamwork/Collaboration Skills	$\circ$	$\bigcirc$								
Critical Thinking & Problem Solving	0	0	0	0	0	0	0	0	0	0
Creativity	$\circ$	$\bigcirc$								
Interpersonal Skills	0	0	0	0	0	$\circ$	0	0	0	0
Flexibility/Adaptability	$\bigcirc$									
Work Ethic	0	$\circ$	0	0	0	0	0	0	0	$\bigcirc$
Time Management	$\bigcirc$									
Diversity, Equity & Inclusion	0	0	0	0	0	0	0	0	0	0
Personal Well Being	$\circ$	$\bigcirc$								
Big Data Analysis Techniques	0	0	0	0	0	0	0	0	0	0
Computer Programming	$\bigcirc$									
Modeling Techniques	0	0	0	0	0	0	0		0	0
Ocean Instrumentation	$\bigcirc$									
Numerical Methods	$\circ$	0	$\circ$							
Depth of Expertise in Core Discipline	$\circ$	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\bigcirc$	$\circ$	$\bigcirc$	$\circ$	$\bigcirc$
Systems Thinking	$\circ$	$\circ$	$\circ$	0	$\circ$	0	0	0	0	$\circ$
Project Management	$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$						
Scientific Process	$\circ$	$\circ$	$\circ$	0	$\circ$	$\circ$	0	0	0	$\bigcirc$
Additional Comments										



## 10. Course Designs

24. Rate your preference for the types/formats of courses that would have positively impacted your career.

	None		Slight		Moderate		High		Extreme	N/A
Lecture only	0	$\circ$	0	0	0	0	0	0	0	$\circ$
Lecture with lab	0	0	0	0	0	0	0	0	0	0
Paper/book discussions	0	0	0	0	0	0	0	0	0	0
Practicum (hands-on practice)	$\circ$	$\circ$	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\bigcirc$	$\bigcirc$
Skill-based within sub-discipline	0	0	0	0	0	0	0	0	0	0
Skill-based across disciplines	$\circ$	$\bigcirc$	$\circ$	$\circ$	0	$\circ$	0	$\circ$	$\circ$	$\bigcirc$
Content-based within sub-discipline	0	0	0	0	0	0	0	0	0	0
Content-based across disciplines	0	$\circ$	$\circ$	$\circ$	0	$\circ$	0	$\circ$	$\circ$	$\circ$
Instrument-based within sub-discipline	0	0	0	0	0	0	0	0	0	0
Instrument-based across disciplines	0	$\circ$	0	$\circ$	0	$\circ$	0	$\circ$	$\circ$	$\circ$
Field Collection of Data	0	0	0	0	0	0	0	0	0	0
Lab Collection of Data	0	$\circ$	0	$\circ$	0	0	0	0	$\circ$	0
Oral Communication Emphasis	0	0	0	0	0	0	0	0	0	0
Written Communication Emphasis	0	0	0	$\circ$	0	$\circ$	0	0	0	$\circ$
Other Formats (please	specify)									
						fi.				
					+	-///				

## 11. Student Funding

25. Rate your concern for the various funding related issues while a graduate student at GSO.

	N		Oll-I-				111-6		F	
Tuition Funding	None	0	Slight	0	Moderate	0	High	0	Extreme	N/A
Stipend Funding	0	0	0	0	0	0	0	0	0	0
Student Fees	0	0	0	0	0	0	0	0	0	0
Research Activities/Supplies	0	$\circ$	0	0	0	$\circ$	0	0	$\circ$	0
Conference Support	0	0	0	0	0	0	0	0	0	$\circ$
Workshop Support	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$
Other Formats (please	specify)									
						fh.				
				•						
				•						
26. What were your	sources (	of fund	ing for g	raduate	school a	at GSO?				
	٨	lone		Some			Most		All	
Self funded		lone		Some			Most		All	
Self funded Employer funded										
		0		0			0			
Employer funded Teaching		0		0			0			
Employer funded Teaching Assistantship Research		0		0			0			
Employer funded Teaching Assistantship Research Assistantship Graduate		0		0			0 0 0			
Employer funded Teaching Assistantship Research Assistantship Graduate Fellowships		0		0			0 0 0			
Employer funded Teaching Assistantship Research Assistantship Graduate Fellowships		0		0			0 0 0			
Employer funded Teaching Assistantship Research Assistantship Graduate Fellowships		0		0 0		lii.	0 0 0			
Employer funded Teaching Assistantship Research Assistantship Graduate Fellowships		0		0		<i>f</i>	0 0 0			

#### 12. Facilities

27. Rate the quality of the various facilities you used while a graduate student at GSO.

	Very Low		Low		Average		High		Very High	N/A
Pell Library	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	0	$\circ$	0	$\circ$
Computer Facilities	$\bigcirc$									
Aquarium Facility	$\circ$	$\circ$	0	$\circ$	0	$\circ$	0	$\circ$	$\circ$	$\circ$
Classroom & Lecture Halls	$\circ$	$\circ$	$\bigcirc$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\circ$	$\bigcirc$
Small Boats	0	0	0	0	0	0	0	0	0	$\circ$
Curricular Group Labs	$\circ$	$\circ$	$\bigcirc$	$\circ$		$\bigcirc$	$\circ$	$\circ$	$\circ$	$\bigcirc$
Primary Advisor Labs	0	0	0	0	0	0	0	0	0	0
Student Offices	$\bigcirc$	$\bigcirc$	$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\circ$	$\circ$	$\bigcirc$
Shipping & Receiving	0	0	0	0	0	0	0	0	0	$\circ$
Dining	$\bigcirc$									
Recreational	0	0	0	0	0	0	0	0	0	$\circ$
Inner Space Center	$\bigcirc$									
Equipment Development	0	0	0	0	0	0	0	0	0	0
Other Formats (pleas	e specify)									
						fi.				

## 13. Demographics

28. What was your terminal degree at GSO?

Masters of Oceanography (MO)
Masters of Oceanography (Blue MBA)
Masters of Science (MS)
O Doctorate (PhD)

•

29. If your terminal degree at GSO was a PhD, did you receive a fellowship or grant for post-doctoral training?
○ No
○ Yes
○ N/A
O Prefer Not to Answer
¶ ¶
30. Did you receive multiple graduate degrees from GSO?
○ No
○ Yes
In the process of second degree from GSO
O Prefer Not to Answer
¶ ¶
31. Were you a teaching assistant for any graduate or undergraduate courses while at GSO?
○ No
Yes, undergraduate course(s)
Yes, graduate course(s)
Yes, both undergraduate and graduate courses
O Prefer Not to Answer
¶ ¶

32. Did you receive another graduate degree after GSO?
○ No post-GSO degree
○ мва
○ Law Degree (JD)
○ Medical Degree (MD/DMD)
○ Another MS
○ Another PhD
O Prefer Not to Answer
Other (please specify)
¶ ¶
33. When did you graduate with your terminal degree from GSO?
O 2016-2000
O 2011-2015
O 2006-2010
O 2001-2005
O Prior to 2001
Prefer Not to Answer
¶ ¶
34. Where did you receive your undergraduate degree?
At a U.S. Institution
At a non-U.S. Institution
O Prefer Not to Answer
$\P$

35. With which curricular group did you most closely identify?										
Masters of Oceanography (MO or Blue MBA)										
○ Biological Oceanography										
Chemical Oceano	graphy or	Marine (	& Atmosp	heric Ch	emistry					
Geological Oceano	ography o	or Marine	Geology	& Geoph	nysics					
O Physical Oceanog	raphy									
O Prefer Not to Ansv	wer									
				9						
36. Rate your prefe	rence fo	or the u	se of yo	our dona		o the GS	O Alum	ni Func	i?	
	Lowest		Low		Moderate		High		Highest	N/A
Science conference attendance (e.g., AGU, ASLO)	0	0	0	0	0	0	0	0	0	0
Professional development trainings (e.g., field courses)	0	0	0	0	0	0	0	0	0	0
Student tuition	0	0	0	0	0	0	0	0	0	0
Research cruise participation (e.g., travel, hotel)	0	0	0	0	0	0	0	0	$\circ$	$\circ$
Supplies/analyses for student research projects	0	0	0	0	0	0	0	0	0	0
Journal publication costs	0	0	$\circ$	0	0	0	0	0	0	0
Student needs at the discretion of the award committee	0	0	0	0	0	0	0	0	0	0
Other (please specify)										

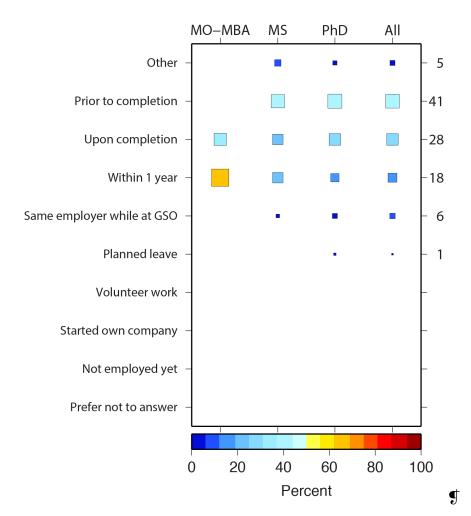
37. Which components/aspects of GSO's academic program should be retained and/or improved?
<b>J</b>

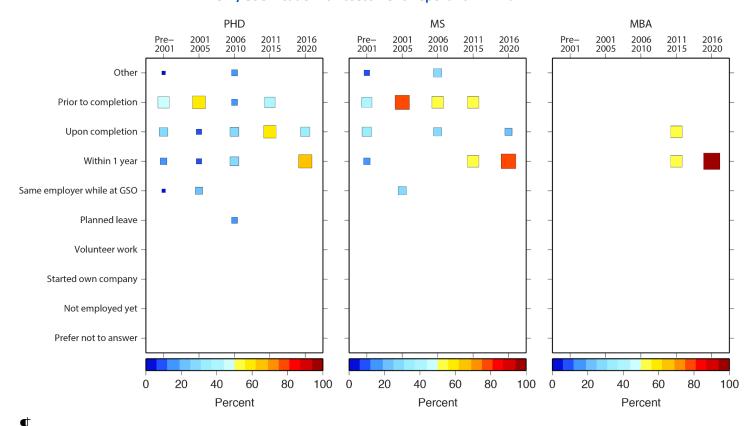
#### Appendix C. Data Plots

#### **Employment**

9

1) Which best describes when you were hired for your FIRST employment after completing your degree at GSO?  $\P$ 



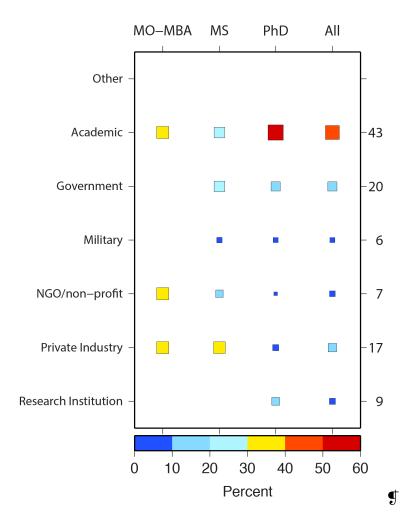


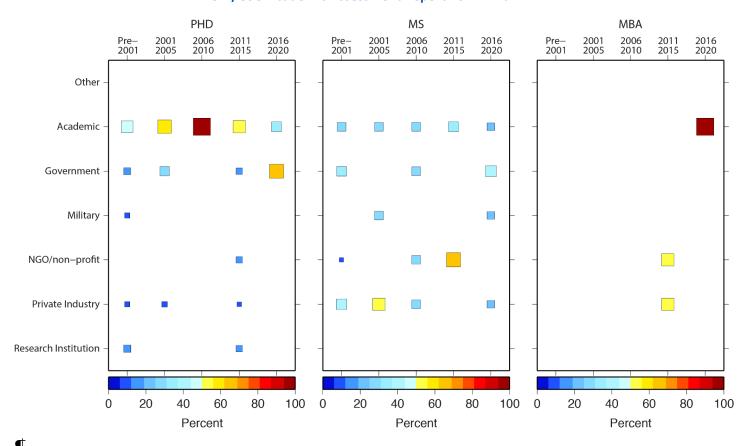
Comments:¶

MS¶	2006-2010¶	BO¶	I started a doctorate at another university after receiving my masters at GSO but then I was hired as a visiting assistant professor within 1 year of completing my PhD.¶
MS¶	pre-2001¶	BO¶	Earned MS at GSO then went for PhD in a different field. Hired within one year of completing PhD.¶
MS¶	pre-2001¶	BO¶	Went to SIO to get my PhD in marine biology¶
PHD¶	2006-2010¶	BO¶	Found a job within 4 months but not related to science¶
PHD¶	pre-2001¶	BO¶	I was a research associate on self-generated soft money grant funding for 2 years before getting my first full time non-tenure track research position¶
PHD¶	pre-2001¶	CO¶	Finished in 1984 just as oil prices dropped dramatically. Oil companies with whom I had interviewed stopped hiring. Worked as a home handyman in RI for a year then moved to DC area with my wife when she got a post doc. Hired 21 months after graduation as an EPA contractor.¶
•	\$	\$	I was hired as a teacher while awaiting a job opportunity to open¶

 $\mathbb{P}^{\sharp}\mathbb{P}^{\sharp}\mathbb{P}^{\sharp}$ 

2) At what type of INSTITUTION were you FIRST employed after graduating from GSO?  $\P$  (select all that apply)  $\P$ 



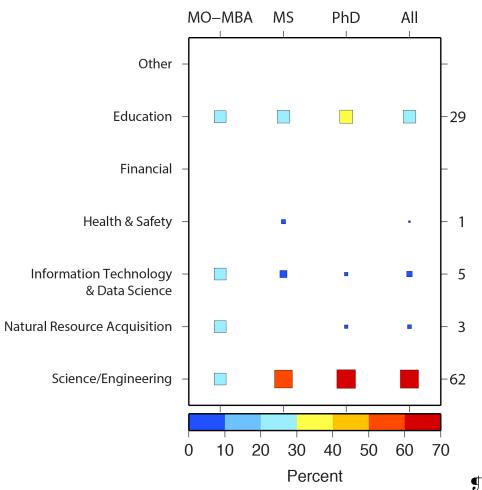


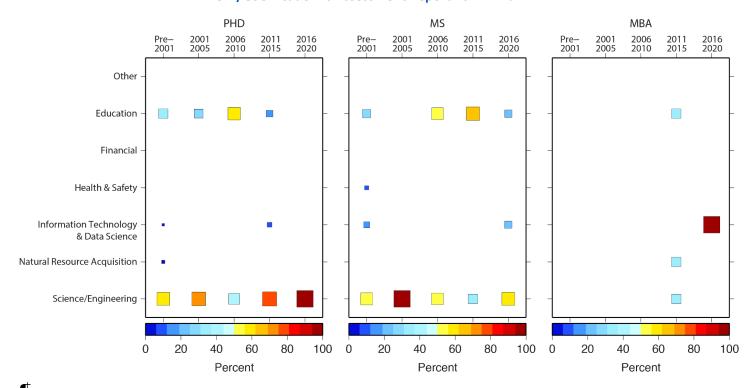
Comments:¶

MS¶	pre-2001¶	BO¶	After I did my MS at the GSO (1964) I did my PhD at Dalhousie (1968). Immediately took up an academic position at the University of Hawaii¶	
MS¶	pre-2001¶	BO¶	esearch lab at the Texas Medical Center Houston TX¶	
PHD¶	2006-2010¶	BO¶	Government contractor¶	
PHD¶	2006-2010¶	BO¶	Kayak shop¶	
PHD¶	pre-2001¶	BO¶	Australian Govt. Research Institute¶	
PHD¶	pre-2001¶	BO¶	Oak Ridge National Laboratory¶	
•	\$	•	Federal instrumentality - New England Fishery Management Council¶	

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# 3) Which SECTOR(S) best describes your FIRST employment after graduating from GSO? $\P$ (select all that apply) $\P$



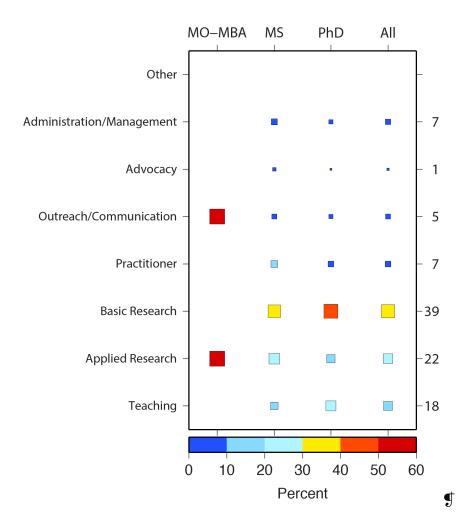


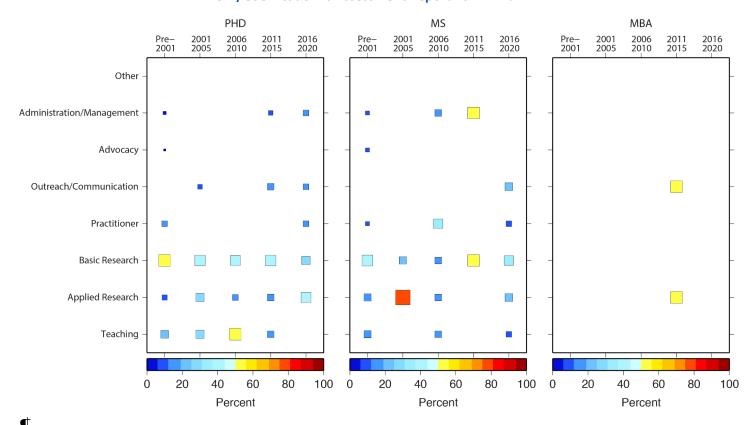
Comments:¶

MS¶	2006-2010¶	BO¶	Environmental policy¶	
MS¶	2016-2020¶	BO¶	Regulatory¶	
MS¶	pre-2001¶	BO¶	Federal Employee - mostly program/project management¶	
MS¶	pre-2001¶	BO¶	Public policy¶	
MS¶	pre-2001¶	BO¶	Following my PhD at SIO in 1992 went into teaching at USD¶	
MS¶	pre-2001¶	CO¶	Oil Exploration¶	
MS¶	pre-2001¶	GO¶	Mechanical engineering¶	
MS¶	pre-2001¶	GO¶	DoD contractor¶	
PHD¶	2001-2005¶	BO¶	Boundary spanner¶	
PHD¶	2006-2010¶	BO¶	Retail¶	
PHD¶	2016-2020¶	BO¶	Natural resource management¶	
PHD¶	pre-2001¶	BO¶	U.S. marine policy¶	
PHD¶	pre-2001¶	CO¶	Environmental protection¶	
•	<b>5</b>	•	Energy Sector: Oil and Gas¶	

# 4) Which ROLE(S) best describes your FIRST employment after graduating from GSO?¶ (select all that apply)¶

¶
n = 131+BO-54+ CO-20+ GO-21+ PO-14¶
+ MO-0+ MBA-8+ MS-31+ PhD-76¶
+ Pre2001-62+ 2001/2005-14+ 2006/2010-11+ 2011/2015-16+ 2016/2020-9¶
¶





### Comments:¶

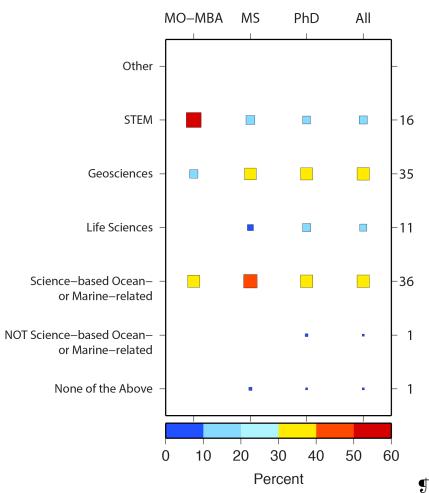
Commen	.tS. ]			
MBA¶	2016-2020¶	MO-MBA¶	Technician project manager facility manager¶	
MS¶	2006-2010¶	BO¶	Knauss fellowship for House of Representatives Committee¶	
MS¶	2011-2015¶	GO¶	Part time low pay entry level¶	
MS¶	2016-2020¶	GO¶	Warfare Analysis Systems Engineering Defense Acquisition¶	
MS¶	pre-2001¶	BO¶	Program/project management for Federal Government¶	
MS¶	pre-2001¶	GO¶	Data entry¶	
MS¶	pre-2001¶	GO¶	Abstracted nuclear science articles to be entered into a searchable database.¶	
PHD¶	2006-2010¶	BO¶	Sales/tour guide¶	
PHD¶	2011-2015¶	BO¶	Data synthesizer and communicator; managed scientific programs and projects;¶	
PHD¶	2011-2015¶	BO¶	Executive Director of Research Programs¶	
PHD¶	2011-2015¶	GO¶	Research Scientist/Lab Manager¶	
PHD¶	pre-2001¶	BO¶	Sabbatical Replacement for Natural Science Position teaching non-science majors - only lasted 1 yr - Invited to teach single courses	

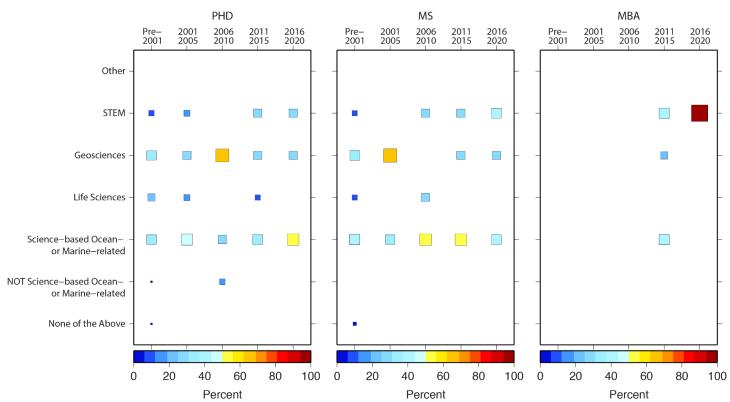
			by semester contract after this . Could not make a living as an itinerant teacher.¶
PHD¶	pre-2001¶	BO¶	Federal legislative policy¶
PHD¶	pre-2001¶	BO¶	Research associate¶
PHD¶	pre-2001¶	CO¶	Government contractor¶
•	Ţ	\$	Oil and gas exploration¶

•

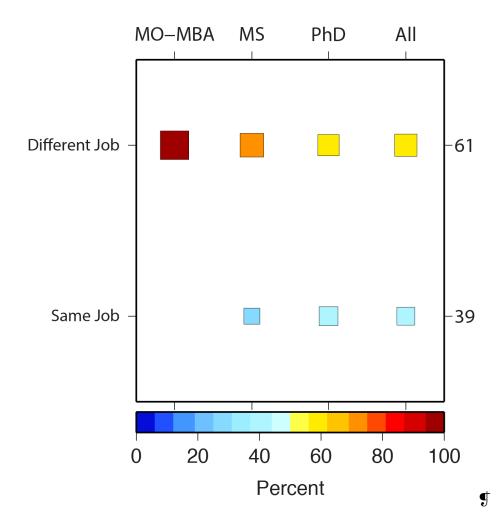
 $P \neq P \neq P \neq$ 

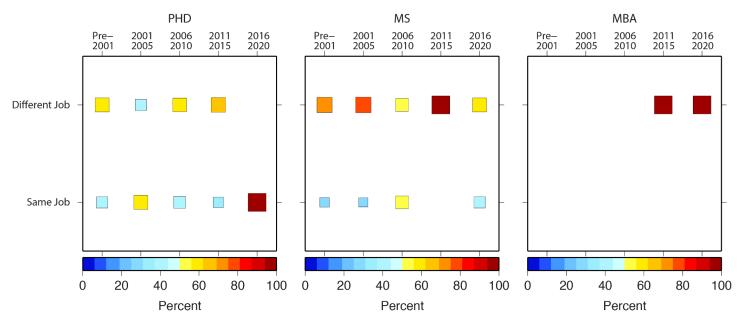
## 5) Which FIELD(S) describes your FIRST employment after graduating from GSO?¶ (select all that apply)¶





6) Is your most recent employment institution, sector or field DIFFERENT from your first employment after GSO?  $\P$ 



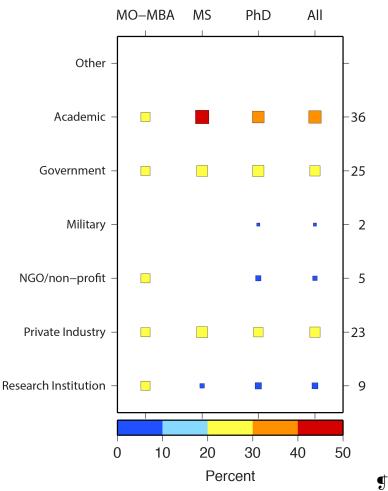


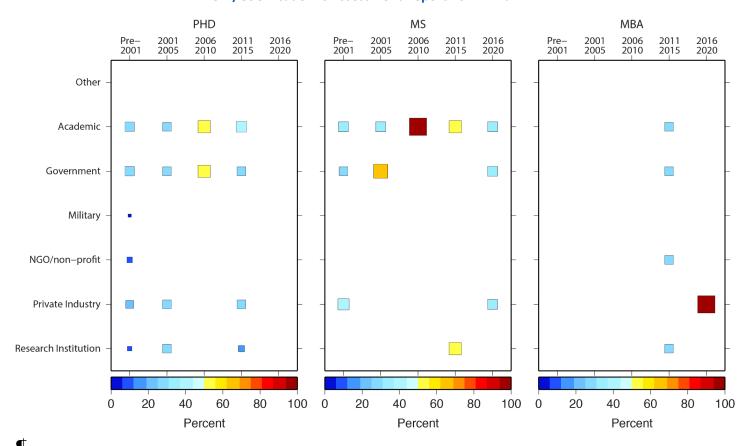
¶
Comments:¶
¶
No comments

No comments provided.  $\P$ 

 $\P = \P$ 

## 7) At what type of INSTITUTION were you MOST RECENTLY employed?¶ (select all that apply)¶





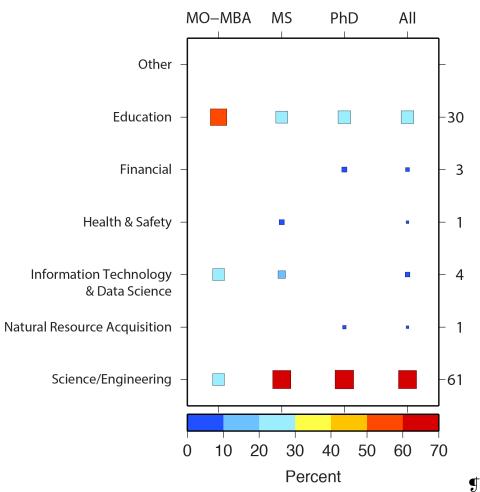
Comments:¶

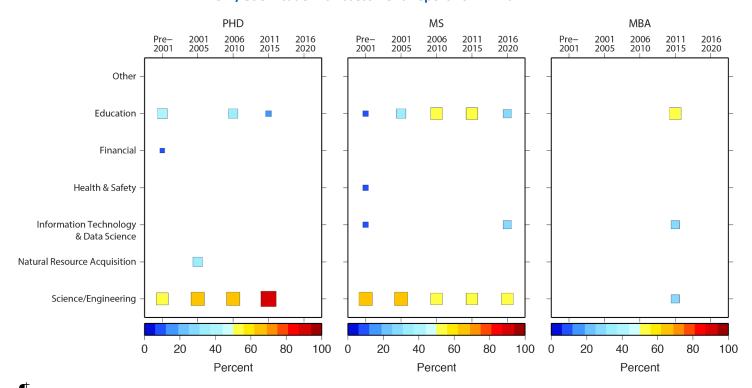
MS¶ pre-2001¶ BO¶ Self-employed translator of scientific publications (from Polish into English)¶

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\*¶**\***¶**\***¶

## 8) Which SECTOR(S) best describes your MOST RECENT employment? $\P$ (select all that apply)





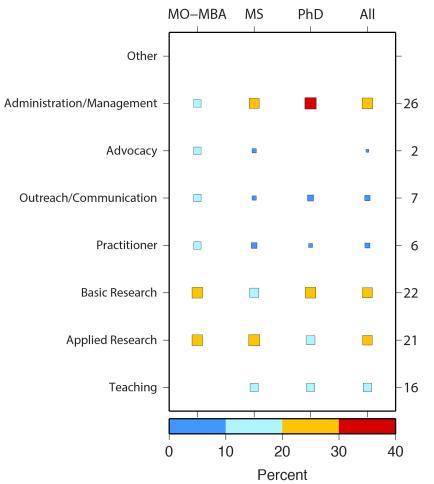
Commen	tS.		
MBA¶	2011-2015¶	MO-MBA¶	Policy¶
MBA¶	2016-2020¶	MO-MBA¶	Seafloor mapping¶
MS¶	pre-2001¶	BO¶	Supporting scientists with proper translation of publications into English¶
MS¶	pre-2001¶	BO¶	Municipal government policy¶
MS¶	pre-2001¶	BO¶	Intellectual Property bus. develop. contracting on behalf of UC San Diego¶
MS¶	pre-2001¶	PO¶	Science policy¶
PHD¶	2001-2005¶	BO¶	I am the department head of a national oceanographic laboratory in Europe¶
PHD¶	2011-2015¶	BO¶	Non-profit conservation & environment research & education¶
PHD¶	pre-2001¶	BO¶	Science communications¶
PHD¶	pre-2001¶	BO¶	Natural resource govt. regulation and environmental protection (RIDEM)¶
PHD¶	pre-2001¶	BO¶	Environmental State Agency Management¶
PHD¶	pre-2001¶	BO¶	Professional society¶

### URI/GSO Academic Assessment Report 2021 - Alumni

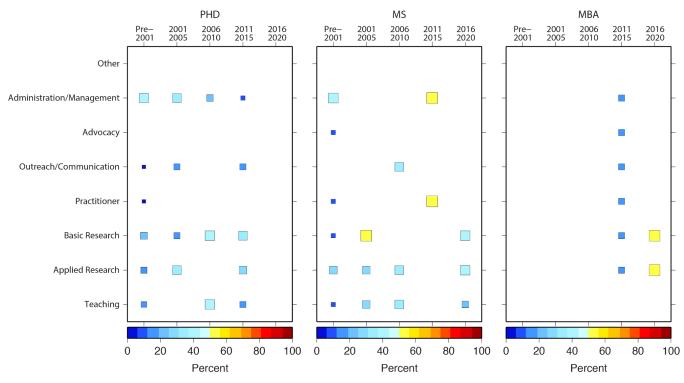
PHD¶	pre-2001¶	BO¶	Environmental consulting¶
PHD¶	pre-2001¶	GO¶	Consultant¶
PHD¶	pre-2001¶	PO¶	Military (Coast Guard)¶
•	<b>♣</b>	•	Technology development and testing for water treatment wastewater reclamation¶

**5** \*¶\*¶\*¶

# 9) Which ROLE(S) best describes your MOST RECENT employment? $\P$ (select all that apply)



•

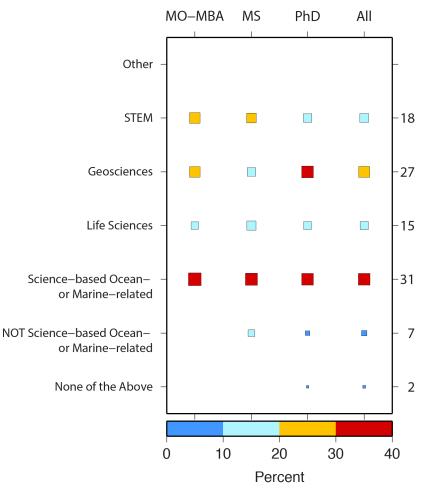


Comments:¶

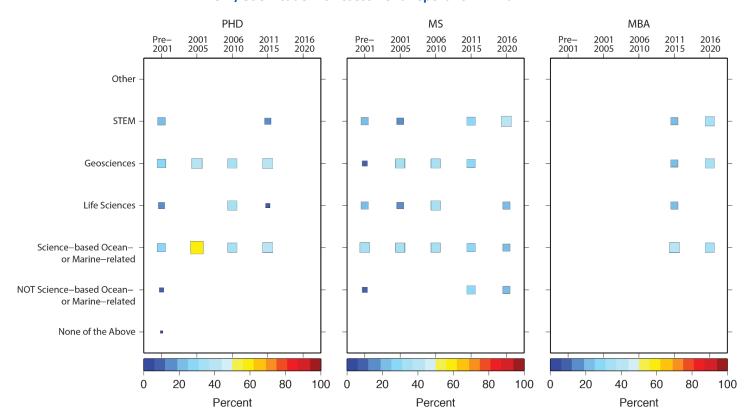
Commen	ts:		
MBA¶	2016-2020¶	MO-MBA¶	Coordinate mapping surveys acquisition processing data management GIS¶
MS¶	2006-2010¶	GO¶	Student¶
MS¶	pre-2001¶	BO¶	Translator and consultant¶
MS¶	pre-2001¶	GO¶	GIS manager¶
MS¶	pre-2001¶	GO¶	Technical writer¶
MS¶	pre-2001¶	PO¶	Advisory consulting¶
PHD¶	2001-2005¶	BO¶	A mixture of research and administration as a department head¶
PHD¶	2011-2015¶	GO¶	Lab Manager¶
PHD¶	pre-2001¶	BO¶	Field environmental scientist + supervisor¶
PHD¶	pre-2001¶	CO¶	Subject Matter Expert¶
PHD¶	pre-2001¶	CO¶	Environmental groundwater contamination investigation and remediation¶
PHD¶	pre-2001¶	GO¶	Research funding agency¶
PHD¶	pre-2001¶	GO¶	Consulting¶

 $\boxed{ \mathbb{P}^{*}\mathbb{P}^{*}\mathbb{P}^{*}}$ 

## 10) Which FIELD(S) describes your MOST RECENT employment?¶ (select all that apply)¶



•



¶ Comments:¶

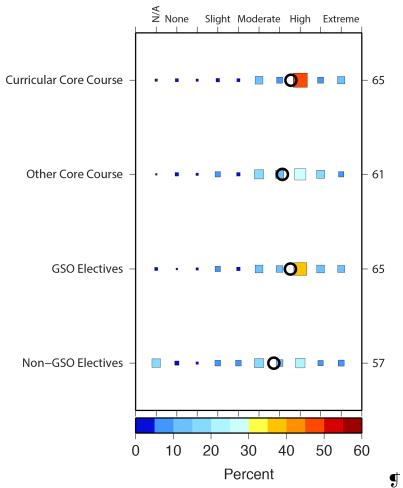
No comments provided.¶

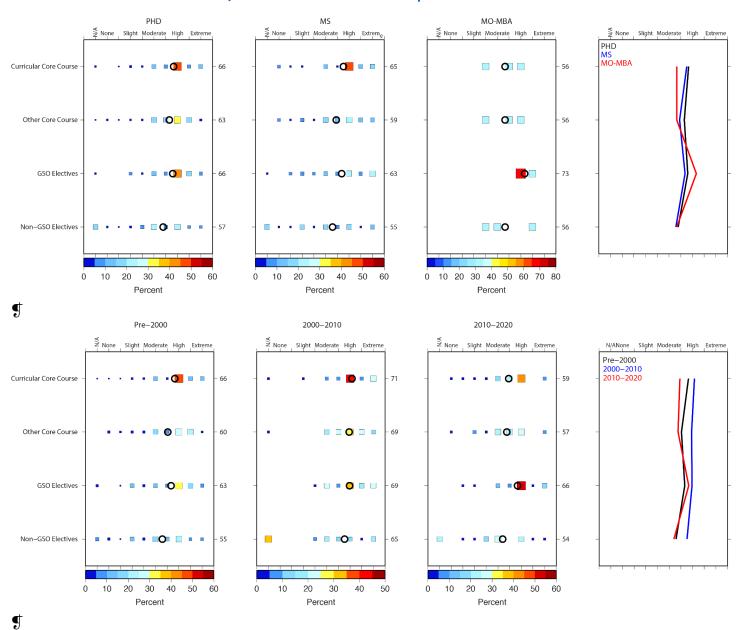
⊁¶⊁¶⊁ ¶

P\*P\*P\*

### **Career Impacts**

11) Rate the level of positive impact of the following course-related items at GSO on your overall career.  $\P$ 





MS¶	2016-2020¶	·	I took a notional MGG track however working in the Kincaid lab I was exposed to many other courses. In my day to day I generally do basic environmental analysis related to underwater acoustics as well as sonar performance prediction which I gained some exposure from GEO and OCE courses.¶
MS¶	pre-2001¶		I left biological oceanography and earned a PhD in terrestrial ecology for many reasons. But non-GSO electives had a lot to do with that change.¶
MS¶	pre-2001¶	GO¶	My very first job and my current job are not directly related to my GSO

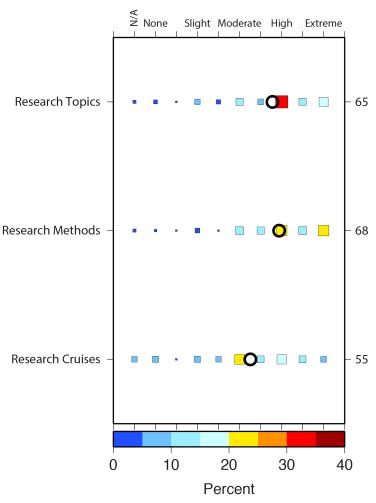
			studies but in between I had 2 jobs that were.¶
PHD¶	2001-2005¶	BO¶	The core and advanced courses at GSO and the limited courses I took on the Kingston campus cannot be overstated in their importance. The core is critical for educating well-rounded oceanography professionals giving them breadth of knowledge across our diverse field and illustrating the interdisciplinary nature of that field. The advanced electives are critical for providing depth in more focused areas of study that will form the backbone of one's own professional pursuits. Having worked on similar interdisciplinary curricula at my marine science institution I have great appreciation for the value these types of curricula have in preparing our students for impactful careers. They clearly impacted my own immensely.¶
PHD¶	2001-2005¶	BO¶	The subjects I teach most often are not oceanography related.¶
PHD¶	2001-2005¶	BO¶	I benefited from taking statistics courses in the psychology department - as well as from the core and elective courses at GSO¶
PHD¶	2001-2005¶	GO¶	GIS at the main campus was very important. More fisheries would have helped.¶
PHD¶	2011-2015¶	BO¶	The Curricular Core Courses and my electives were very important to my job. It's because of those electives where I got to drill down on my research topic that I was hired.¶
PHD¶	2011-2015¶	BO¶	All classes were highly variable in quality depending on the professor. But the content was largely applicable to my career.¶
PHD¶	2011-2015¶	BO¶	Geo. Oce. was a complete waste of time but the other core courses have proved useful.¶
PHD¶	2011-2015¶	BO¶	The interdisciplinary nature of being forced to take all 4 core courses has been invaluable. If not forced to do so I would not have done so but they have ALL been helpful You might think you know what you want to do when you graduate but you never really know when something you've done will turn out to be really helpful¶
PHD¶	2011-2015¶	BO¶	I think it would be great to integrate the 4 core courses more. This might have improved from my tenure (2008-2013).¶
PHD¶	2016-2020¶	BO¶	Multi-disciplinary (Coastal Institute IGERT) and technical courses (e.g. stable isotope ecology) were the most significant¶
PHD¶	pre-2001¶	BO¶	I took core courses, of course, and selected bio ecosystems and stats/modeling courses. They and some understanding of core disciplines including chem geo and phys oceanogr ALL were instrumental and relevant in my development and skills from all fields were used in my research and publications. Because

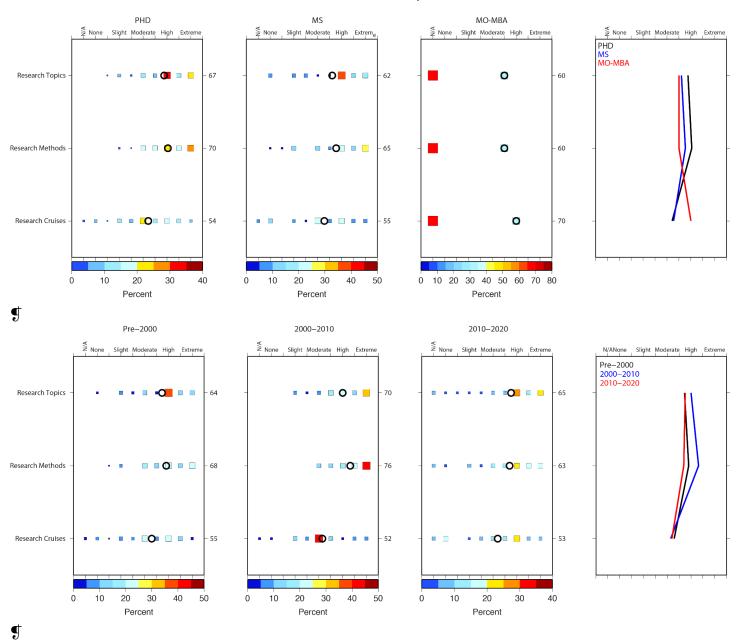
đ	1		I
<b>\$</b>	•	•	I continued to work at WHOI while attending GSO¶
PHD¶	pre-2001¶	GO¶	Not sure what the core courses are these days and how they have changed in the last 45 years.¶
PHD¶	pre-2001¶	BO¶	Actually the research that was the basis for my thesis was of greater significant benefit than the course work itself¶
PHD¶	pre-2001¶	BO¶	My background in math and statistics prior to GSO was also critically important!¶
PHD¶	pre-2001¶	BO¶	I found the Monday afternoon graduate student seminar series a real broadening teaching tool. Every Monday 4 students from different disciplines presented to the whole GSO community so every student got exposed to cutting edge research in fields other than their own. Knauss was always in the front row asking questions of every student no matter the discipline. Faculty participation was high (maybe because Knauss would know who was there). It was held in the time slot right after faculty meetings so at least once / month faculty went from that meeting to the seminar. I don't know if GSO still has this seminar series. If you don't you should consider reimplementing it.¶
PHD¶	pre-2001¶	BO¶	Having background in chem PO and geology in addition to my degree in biol ocg was HUGE in getting me my first job and my then in the door to what became my career¶
PHD¶	pre-2001¶	BO¶	I think the core courses were extremely helpful to develop a well rounded understanding of ocean sciences. Please keep them.¶
PHD¶	pre-2001¶	BO¶	RIDEM and other state of RI agencies have minimal education requirements (college degree in a science or (any) bachelor- engineering degree - engineers are higher on civil service salary levels vs scientists) due to civil service and union requirements to allow union members to have 1st access to lower tech openings. I took a low-level undergraduate position (Fisheries Biologist) which allowed me to be on the "inside" govt list for position openings.¶
			my interest and knowledge/skill bases were broad I easily moved to and thrived leading Great Lakes freshwater research in my last 15 years of work.¶

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12) Rate the level of positive impact of the following research-related experiences at GSO on your overall career.  $\P$ 





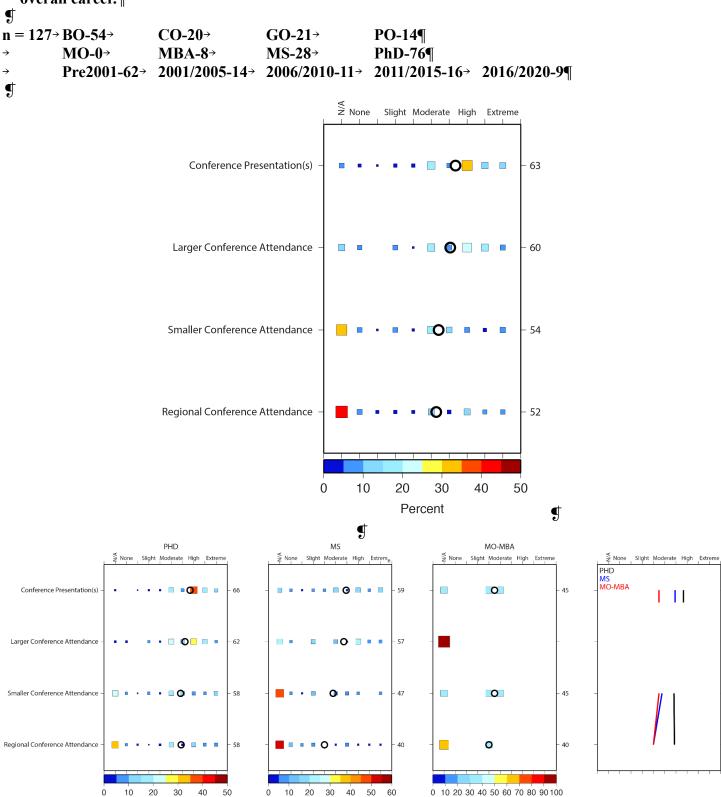
MBA¶	2011-2015¶	MO-MBA¶	No Cruises as a Student at GSO (Blue MBA)¶
MS¶	2016-2020¶		I am one of the few people in my department who has actually been to sea for an extended period of time (besides the retirees / active duty Navy folks) and understand the challenges of getting things done in the ocean environment.¶
MS¶	pre-2001¶	BO¶	Cruises were a great experience - I went on 6 - and I loved being at sea. But they aren't terribly relevant to what I do now.¶

PHD¶	2001-2005¶	BO¶	As a coastal ecologist the cruise requirement was less impactful and a little frustrating to have to do at the time. However it has proved to be a very valuable experience nonetheless and I am grateful for it.¶
PHD¶	2001-2005¶	BO¶	Laboratory ecophysiology was the focus - but most of my research was independent and not related to specific courses taken at GSO.¶
PHD¶	2011-2015¶	BO¶	I was hired based on my research topic and knowledge of that topic/field. The methods I used and cruises I took were secondary to the breadth of knowledge.¶
PHD¶	2011-2015¶	BO¶	My PhD research led directly to my first postdoc and to my current research.¶
PHD¶	2011-2015¶	BO¶	I am in favor of the cruise requirement. I did not "fancy" myself as a "cruise going" oceanographer but the experience is 1) insightful about how the process works and 2) Has given me confidence to sign up for subsequent cruises.¶
PHD¶	pre-2001¶	BO¶	I wish I came along about 10-15 years later because the technological advances were growing very fast in that period (and I feel like I missed some tech skills I could have benefited from) but I always found other partners to couple with and thus keep advancing the scope of my studies even lacking some of the skill bases in work I did. The last two sets of studies I directed were focused on application of molecular barcoding to detection of aquatic invasive species use of very high resolution remote sensing of watersheds applied to spatial analyses of watershed attributes key to ecological processes. My point is: never had I expected to work in these areas nor did I have any formal training in the technologies necessary for these studies but the broad oceanographic and other training I had set me up for how to tackle and address different problems and even bring new insights to them.¶
PHD¶	pre-2001¶	BO¶	The training allowed me to apply basic oceanographic and ecological principles to the investigation of environmental issues in Narragansett Bay and prove that ignored/ non-monitored environmental stressors (hypoxia) were seriously impacting the benthic communities over large areas of the Bay. It had no effect on the movement upward of my career under most past politically-appointed directors. Engineers were always chosen for higher levels of oversight. At times there was a somewhat negative attitude by higher level engineers concerning my research background with the US EPA (2nd job-3yrs contractor scientist) as it related to my arguments for greater monitoring needs in the Bay. My last 4 yrs as Sup Environmental Scientists in the Marine Fisheries Lab at

•	•	•	MO student did not participate in research intensive effort¶
PHD¶	pre-2001¶	GO¶	Did key parts of my dissertation research as a pre-doc at Carnegie Institution¶
PHD¶	pre-2001¶	CO¶	Learned that research is not quick and easy and that Murphy was an optimist!¶
PHD¶	pre-2001¶	BO¶	My work was mostly related to natural resources and environmental impacts but fresh and estuarine so not ocean-related. So the many cruises were fun but useful mainly for experiencing study procedures.¶
PHD¶	pre-2001¶	BO¶	Not quite sure what is being asked for here but I am answering this question from the perspective of a grad student searching for a research topic for dissertation or thesis. The largest difficulty for me was finding good mentoring on choosing a research topic.¶
PHD¶	pre-2001¶	BO¶	Never had a chance to go on a GSO research cruise.¶
PHD¶	pre-2001¶	BO¶	I didn't end up doing much research with fish ecology like I had for my dissertation but research methods/stats work across the board including the educational research I got into eventually¶
PHD¶	pre-2001¶	BO¶	This is a difficult question to answer mid-career.¶
			Jamestown were the best years I ever had in my career. That part of the agency is starting to place greater emphasis on adequate graduate education in pertinent areas. I wish I had been moved there earlier in my career before my retirement. All in all GSO helped me to apply my scientific knowledge in a useful manner and I do not regret anything about my career. I just wish the state agencies brought the minimum educational requirements for civil service technical positions outside of engineering into the late 20th (or even 21st) century !¶

 $P \neq P \neq P \neq$ 

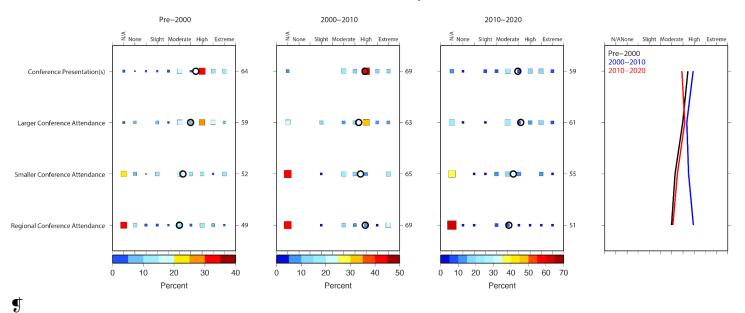
13) Rate the level of positive impact of the following conference-related experiences while at GSO on your overall career.  $\P$ 



Percent

Percent

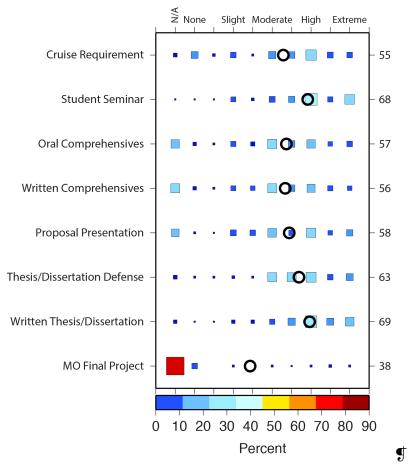
Percent

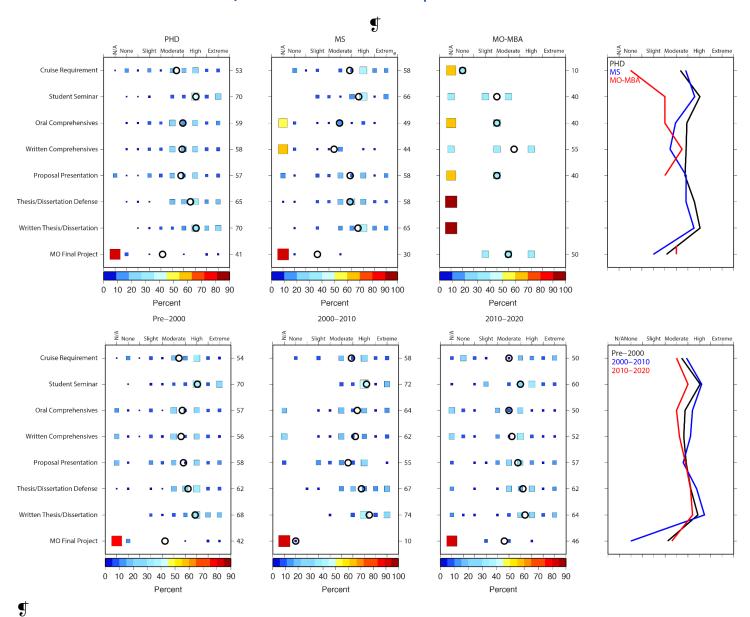


Comme	nts:¶	_	
MS¶	2011-2015¶	GO¶	I only attended one small conference.¶
MS¶	2016-2020¶	BO¶	I actually did not attend or present at any conferences while I was working on my M.S. at GSO.¶
MS¶	2016-2020¶	GO¶	I went to AGU 3 times (1 poster, 1 invited talk and 1 talk). Those experiences in addition to student seminar helped me learn to listen to talks as well as give better talks. I have sat through so many painful talks by people who do not have experience / are scared that I feel real benefit from the emphasis on communication at GSO.¶
PHD¶	2001-2005¶	BO¶	Affiliation with regional research groups allowed me to build a strong network. Large conferences are important but often do not allow the same level of interaction.¶
PHD¶	2011-2015¶	ВО¶	I have a regional job. Therefore the network I have based on regional conferences is extremely important. Because of the network my job has nationally national conferences play a strong part as well.¶
PHD¶	2011-2015¶	BO¶	I found direct collaborations with small groups more impactful than conferences or general networking.¶
PHD¶	2011-2015¶	ВО¶	Presenting a poster at ASLO of my MS research was really key I think in helping me see my place in research. Other people, like not my advisor, were genuinely interested in my work! Later conferences were really useful for staying in touch with the people I know collaborate with on grant proposals.¶
PHD¶	2011-2015¶	BO¶	Networking is important but I feel like that's the primary benefit of

			conferences and there's got to be a better way.¶
PHD¶	2016-2020¶	BO¶	These experiences depended on whether a mentor was available to help as a guide and provide network opportunities.¶
PHD¶	pre-2001¶	BO¶	Always good experiences and useful to meet and discuss with other scientists.¶
PHD¶	pre-2001¶	BO¶	Most of my experience attending conferences only occurred once I was in a sup. environmental position with the Narr Bay Estuary Program that was associated with URI even though I was still employed by RIDEM. Previous work in the water resources regulatory section frowned on regular attendance at expensive large scientific meetings (one argument was it makes other employees jealous if they aren't tech enough + one engineer told me his experience was that attendees at national State-mgrs + environmental engineer mtgs only spent 2-3 hrs in at actual talks and spent the majority of their time playing golf or going to DisneyWorld etc). Most engineers did not understand how exciting and interesting talks are at CERF etc for scientists like myself.¶
PHD¶	pre-2001¶	BO¶	Sounds silly but those weekly GSO seminars taught me the art of public speaking more than anything else I did. I was useless at first and those seminars gave me confidence.¶
PHD¶	pre-2001¶	BO¶	Friday lunch seminars were probably the most useful training for the real world of all GSO training.¶
PHD¶	pre-2001¶	BO¶	Making presentations was an excellent experience for consulting. Networking at meetings proved invaluable in my career.¶
PHD¶	pre-2001¶	CO¶	Had only one conference opportunity while at GSO.¶
PHD¶	pre-2001¶	CO¶	Student seminars were a great help in getting started making scientific paper presentations to an academic audience. Made great progress from year to year.¶
PHD¶	pre-2001¶	CO¶	I graduated before the world wide web made networking easy. The regional conferences filled that role then.¶
PHD¶	pre-2001¶	PO¶	Student seminar was very useful.¶
PHD¶	pre-2001¶	PO¶	Loved the Roving PO Seminars between GSO MIT WHOI Harvard Yale and UNH back ~1990. Got to meet students and PD from other institutions and see what other places looked like.¶

14) Rate the level of positive impact of the following degree requirements at GSO on your overall career.  $\P$ 



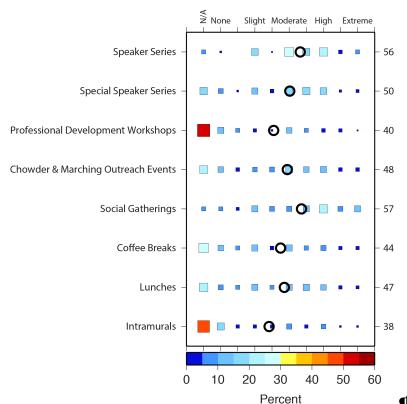


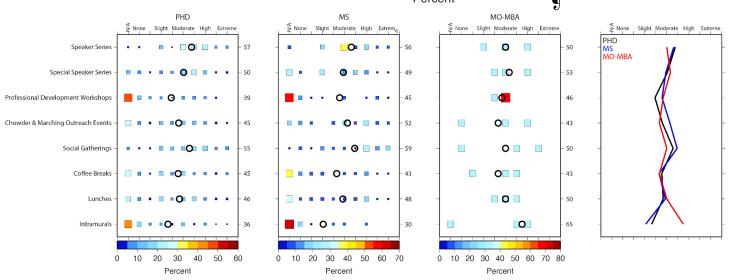
	onments.					
MS¶	2016-2020¶	GO¶	I literally make hundreds of PPT slides per year and present them internally and externally. Also usually write or collaborate on a few technical papers per year. The style and delivery are different for my industry but the skills learned at GSO are essential.¶			
MS¶	pre-2001¶	BO¶	I earned an MS which had no requirements for comprehensives at the time.  The preparation and learning necessary for student seminars, proposal presentation, and the written thesis were extremely helpful for my entire career path. Those skills are applicable almost anywhere in academia.¶			

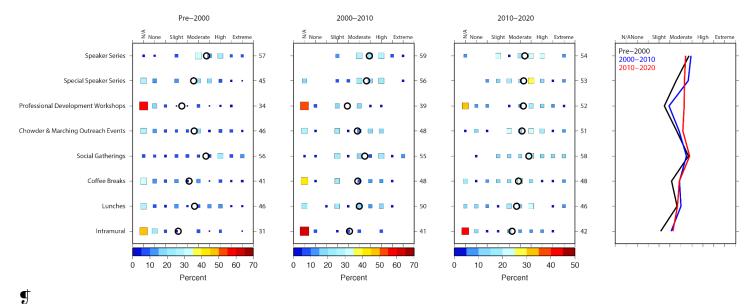
MS¶	pre-2001¶	GO¶	What is an MO final project?¶
PHD¶	2001-2005¶	BO¶	Seeing numerous student presentations at conferences since my graduation and having a student seminar at my own institution that was modeled after GSO's I am continually reminded of how valuable the GSO student seminars are in preparing students and setting them apart at meetings.¶
PHD¶	2001-2005¶	BO¶	Months preparing for my comprehensive exams were a turning point in my educational / professional trajectory - taking the time needed to be up to date on current broad research topics. I regret that European programs often do not have this requirement.¶
PHD¶	2011-2015¶	BO¶	My ability to communicate effectively is very important to my job.¶
PHD¶	2011-2015¶	ВО¶	The Cruise requirement wasn't really applicable to me. I was out at sea over 5 months during my MS & PhD. My Dissertation was just my first 3 publications stuck together with one paragraph of intro - so obviously it was great to have those ready to submit. I think comps were useful when I later had to teach broad undergrad courses. Although possibly not as useful as the amount of time I spent studying for them could have been on my research.¶
PHD¶	2011-2015¶	BO¶	I really feel like comprehensive exams are antiquated. It almost at this point feels like a terrible hazing ritual.¶
PHD¶	2011-2015¶	PO¶	Publication of written dissertation chapters was very important but the dissertation itself is not.¶
PHD¶	2016-2020¶	BO¶	Most important skill is writing. I think GSO seminars are critical but could be managed better to provide more meaningful analysis and growth opportunities. (Bring in Metcalf to provide communication training).¶
PHD¶	pre-2001¶	BO¶	Having all the papers in my dissertation published before or soon after my defense had an extremely positive impact on my overall career.¶
PHD¶	pre-2001¶	BO¶	See previous comments on minimal civil service requirements in RI. Many other states are more selective and have careers better honed towards graduate-degree level scientists.¶
PHD¶	pre-2001¶	BO¶	Again difficult to assess in the "overall career" context.¶
PHD¶	pre-2001¶	BO¶	No cruise requirement when I was a student 1975-1980.¶
PHD¶	pre-2001¶	BO¶	Define MO?¶

PHD¶	pre-2001¶		Good writing and presentation skills were very important in consulting¶
		$BO\P$	
PHD¶	pre-2001¶		What is MO final project?¶
		GO¶	
PHD¶	pre-2001¶	PO¶	Harpoon Seminar? JK. Don't know what MO Final Project means.¶

## 15) Rate the level of positive impact of the following informal education events at GSO on your overall career.¶







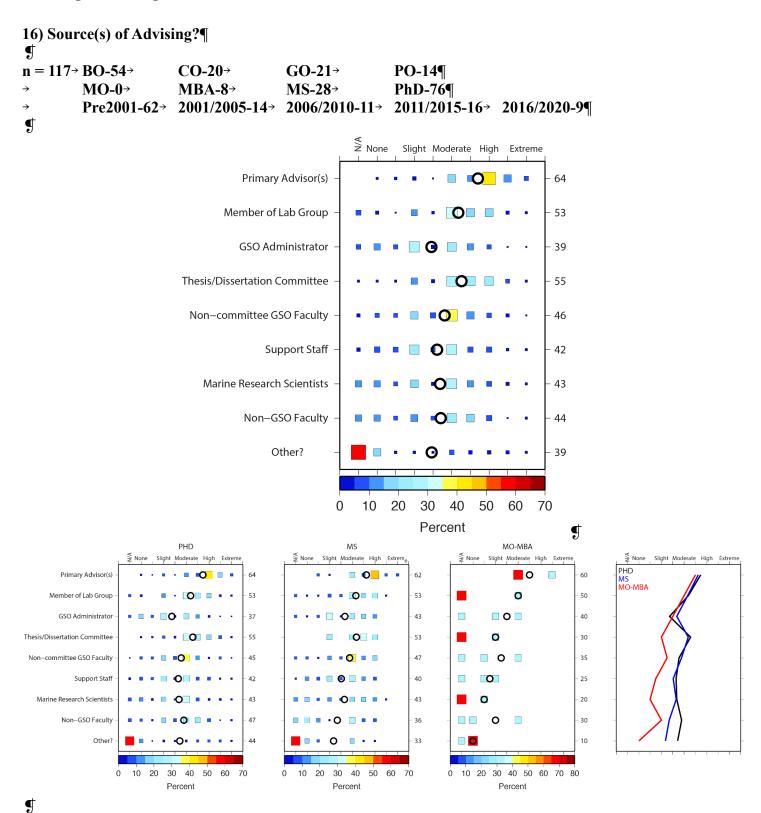
Commer	its:	•	
MBA¶	2011-2015¶	MO-MBA¶	The community building was great. Additional "outsiders" i.e. industry other universities regulatory mingling etc. is always good though. ie. NOAA across the street was almost unknown.¶
MS¶	2006-2010¶	GO¶	Networking is more important than sitting¶
MS¶	2016-2020¶	GO¶	I attended as many non-course related events as possible while at GSO even if not related to my field of study. I am lucky that my organization also offers those opportunities. Continual growth and exposure to new ideas from different areas is super important for both my personal and professional growth.¶
MS¶	pre-2001¶	BO¶	I was at GSO over 30 years ago. I remember workshops on pedagogy but none on diversity or harassment. The pedagogy workshops were helpful. The social aspect of GSO was extremely important. Those events and the cruises created a sense of community and togetherness that made graduate school more meaningful and easier to survive.¶
PHD¶	2001-2005¶	BO¶	It is really the whole package of informal events that build a community. Feeling part of the GSO community is important for one's degree progress (at least that is my opinion). In retrospect, having formal mentoring programs / opportunities with advanced students (about to finish their degrees) would have benefitted me as a first-year student at GSO.¶
PHD¶	2001-2005¶	GO¶	Hard to judge the importance of social events but I think they were very important; networking and community has been crucial to my career.¶
PHD¶	2006-2010¶	BO¶	Several of the above were not offered when I was at GSO.¶

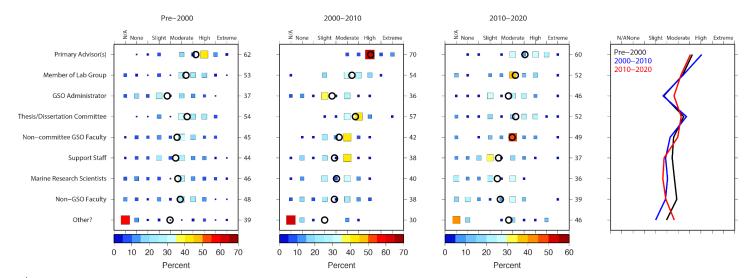
PHD¶	2006-2010¶	BO¶	I ran the Bio at Noon series for 1.5 years. Not many opportunities for Professional Development and C&M Outreach events when I was at GSO (2002-2009). I wish there had been more back then.¶
PHD¶	2006-2010¶	BO¶	There were not many professional development opportunities during the time that I was a student. Chowder and Marching was also not very active at the time.¶
PHD¶	2011-2015¶	BO¶	I liked seminars both bio and PO (although I was usually the only biologist who went to PO seminars). I would add to this list going to other people's defenses. I thought that was very useful both to learn from their research and to see what was expected of me. Also attending the interview talks of job candidates I think was very useful when it came time for me to give these talks myself.¶
PHD¶	2011-2015¶	BO¶	Networking is useful and "extracurriculars" are required for that.¶
PHD¶	2016-2020¶	BO¶	Many of these events benefit students who are more naturally extroverted. I am not so going to a lunch or event was like walking into a panic attack. I would do it though which in itself was a good learning experience.¶
PHD¶	2016-2020¶	PO¶	We didn't have any workshops at GSO while I was there (2010-2017). Or I must have missed them.¶
PHD¶	pre-2001¶	BO¶	My lab had weekly coffee breaks which were useful for discussing topics and getting to know people better. Also lunches with seminar speakers were useful.¶
PHD¶	pre-2001¶	BO¶	Obviously I am an older alumnus and many of these opportunities were not available in my days at GSO!¶
PHD¶	pre-2001¶	BO¶	Other than personal relationships developed I don't recall any of these activities.¶
PHD¶	pre-2001¶	BO¶	The informal science stuff was highly influential for me because seeing those led to my interest in informal science education generally and I've spent a lot of my career on that in various capacities. I learned back then that ""translating"" science to folks was really important.¶
PHD¶	pre-2001¶	BO¶	Strongest impacts for me at GSO were the strong social bonds and camaraderie developed through the non-science activities. To this day my GSO friends are my most supportive.¶
PHD¶	pre-2001¶	BO¶	Networking resulted in lifetime useful contacts.¶
PHD¶	pre-2001¶	CO¶	Wish we had those activities back in that day¶

PHD¶	pre-2001¶	CO¶	If anything the social gatherings probably set back my career¶
PHD¶	pre-2001¶	,	All these are really important. In addition I got some important media training while at GSO since the public TV station would often come down to interview students for science shows. I think these played after midnight. It felt low risk. The interviewer would coach us on how to speak to the camera what to wear/not wear make a sound byte it was invaluable.¶

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#### **Advising/Mentoring**





Commer	113:	1	
MBA¶	2011-2015¶	MO-MBA¶	David Smith is awesome. Incredibly helpful, approachable, knowledgeable. Some of the other faculty were hard to pull knowledge from. ie. Pilson just read his book.¶
MS¶	2006-2010¶	BO¶	This question is confusingly worded?¶
MS¶	2011-2015¶	GO¶	Other = non faculty members around GSO that work in the adjacent institutions - NOAA EPA OET ISS etc¶
MS¶	2016-2020¶	GO¶	The small close-knit community of GSO allows you to talk to lots of different people and bounce things off of those with a different perspective. I clicked "some" for most of the applicable categories because nothing came from a single source."
MS¶	pre-2001¶	BO¶	I don't know what the question is here so I guessed ?¶
MS¶	pre-2001¶	BO¶	Other - fellow grad students from beyond my lab group.¶
MS¶	pre-2001¶	BO¶	What about mentoring from other students¶
PHD¶	2001-2005¶	CO¶	Advice from collaborators at other institutions.¶
PHD¶	2011-2015¶	BO¶	I sought out non-academic mentors as well knowing that I was not likely going to stay in academia. These mentors included people in government positions non-profits or NGOs¶
PHD¶	2011-2015¶	BO¶	Collaborators from other institutions and in fishing community¶
PHD¶	2011-2015¶	BO¶	Eileen Hughes was the most helpful person during my time at GSO.¶
PHD¶	2011-2015¶	BO¶	Slightly older students outside my lab group (my lab group was quite small) were really important guides/mentors. I think that culture of helping each other and especially being "big sisters/brothers" to

			younger students was something really special about my GSO experience.¶
PHD¶	2016-2020¶	BO¶	Shout-out to non GSO faculty who keep students afloat. Library staff IT staff. I interacted with the EPA staff who gave me a lot of insight.¶
PHD¶	2016-2020¶	CO¶	David Smith and Meredith Clark were very valuable assets to make sure I got out the door!¶
PHD¶	pre-2001¶	BO¶	Older grad students in my lab were very helpful from advice to critiquing papers to discussions. Colleagues I met through conferences have been helpful.¶
PHD¶	pre-2001¶	BO¶	I was funded by the US EPA for my MS and PhD research and my 7 yrs working with a large number of scientists at the EPA lab had a huge impact on my development and career as a scientist !¶
PHD¶	pre-2001¶	BO¶	More senior graduate students and peers¶
PHD¶	pre-2001¶	BO¶	NEARBY EPA AND NMFS PEOPLE WERE HELPFUL¶
PHD¶	pre-2001¶	BO¶	With a very few exceptions it seemed to me that I earned my degree in spite of faculty and staff "advising" ¶
PHD¶	pre-2001¶	BO¶	Thesis and dissertation advisors were very weak back in my time (late 80's to mid-nineties). The approach taken by many GSO professors was 'sink or swim' which is perhaps not a bad way to select for the best scientists. I was one of a large cohort that entered GSO in the late 80's so the campus was flush with new students and perhaps this contributed to the hands-off approach by many faculty. I can't help wonder though with a better mentoring attitude how much better my dissertation experience could have been.¶
PHD¶	pre-2001¶	BO¶	Wife under other¶
PHD¶	pre-2001¶	BO¶	None¶
PHD¶	pre-2001¶	CO¶	Interestingly I had very little direct support from the administration and Dean and full professional staff at times when engagement was warranted.¶
PHD¶	pre-2001¶	CO¶	Final major professor was at the Main Campus. Let's never forget Eileen Hughes as a resource in those days.¶
PHD¶	pre-2001¶	GO¶	My major professor left for industry leaving four grad students with only four weeks warning; the other GSO faculty member on my dissertation committee was effectively my advisor in completing my PhD.¶

PHD¶	pre-2001¶	GO¶	Predoctoral fellowship in Washington DC¶
PHD¶	pre-2001¶		I should have said in the previous window that being a PO seminar organizer as a student was excellent training for me to meet interesting scientists and have some time to talk with them about my research. GSO also arranged for me to take a class at WHOI where I would also go talk to scientists about my work. I have always valued that openness GSO had to encourage me to talk with scientists beyond my primary mentor.¶



#### URI/GSO Academic Assessment Report 2021 - Alumni 17) Quality of Advising from Primary Advisor for aspects listed?¶ $n = 117 \rightarrow BO-54 \rightarrow$ **CO-20**→ **GO-21**→ PO-14¶ **PhD-76**¶ **MO-0**→ MBA-8→ **MS-28**→ Pre2001-62→ 2001/2005-14→ 2006/2010-11→ 2011/2015-16→ 2016/2020-9¶ • ₹ None Slight Moderate High Extreme Research Activities **O** 66 **Course Selection** - 57 O . . **Publication of Research** - 59 Career Decisions/Directions 50 0 10 20 30 40 Percent 9 PHD MO-MBA MS Slight Moderate High Extreme ≸ None Slight Moderate High Extrem<sub>e</sub> ≸ None Slight Moderate High Extreme None Slight Moderate High Extreme PHD MS MO-MBA Research Activities Course Selection - 57 Publication of Research 61 54 50 Career Decisions/Directions - 52 45 46

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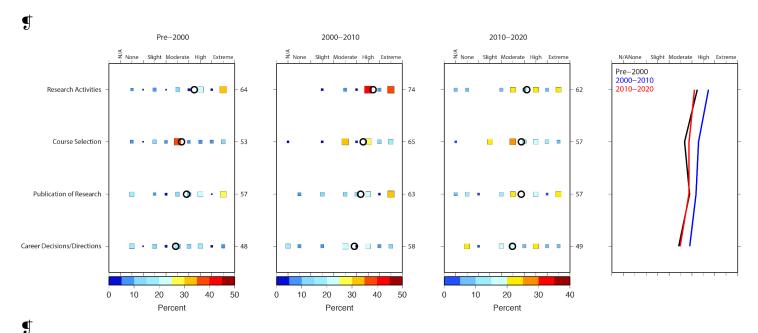
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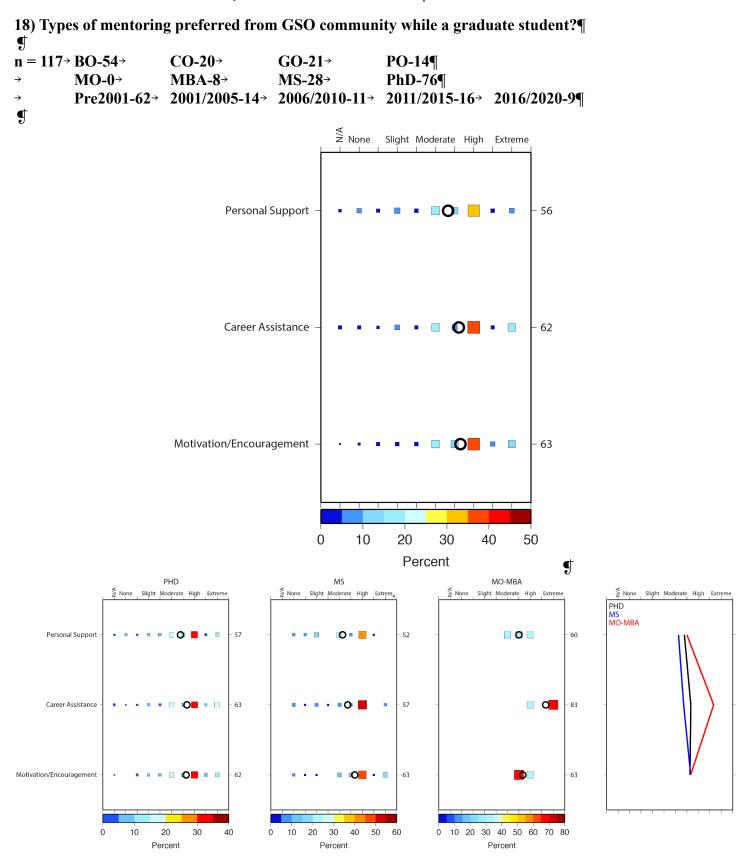
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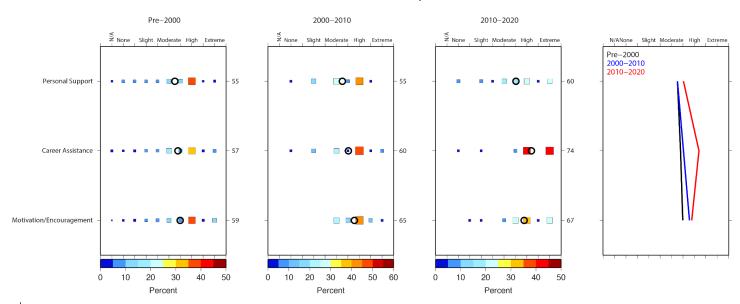
Percent



Comme	118.]		
MS¶	2006-2010¶	GO¶	Not advisors fault I wandered off instead of publishing a MSc¶
MS¶	2016-2020¶	BO¶	There was a lack of support for students who had a poor relationship with the primary advisor and very few resources for improving a poor lab environment.¶
MS¶	2016-2020¶	CO¶	In all honesty I regret working with the adviser I did. I feel like I would have done a PhD (instead of a masters) if I had a better adviser.¶
PHD¶	2001-2005¶	BO¶	I was in a somewhat unique situation doing my research at the US EPA laboratory. I wrote my own grant that funded my PhD research so I was somewhat independent. My advisors were extremely supportive and provided strong professional mentoring learning from their good example¶
PHD¶	2006-2010¶	BO¶	My advisor is a wonderful person and scientist but was not the best match for me as an advisor.¶
PHD¶	2011-2015¶	BO¶	I had great advisors who addressed my thoughts about leaving academia.  Many do not. GSO should provide more resources for students interested in leaving academia.  ¶
PHD¶	2011-2015¶	BO¶	My major prof Howard Winn fully tenured was not all that helpful.¶
PHD¶	2011-2015¶	BO¶	I didn't get much advice on career directions but I was also so focused on my research I wouldn't have paid any attention anyway.¶
PHD¶	2016-2020¶	BO¶	The right advisor sets the whole course. I wish holistic student advising was more strongly valued along with grants and publications. At GSO you have

			fantastic mentors as well as advisors who haven't yet learned how to connect and lead. There is lost potential caused by an advisor who isn't able to mentor effectively. Maybe the student enters a good postdoc but s/he could be burned out in a few years. Build strong mentorship through training opportunities and feedback.¶
PHD¶	pre-2001¶	BO¶	My major professor suggested me for my first job after my degree.¶
PHD¶	pre-2001¶	BO¶	See above. Most advising in these areas came from US EPA scientists.¶
PHD¶	pre-2001¶	BO¶	What advising?¶
PHD¶	pre-2001¶	BO¶	See my comments on the prior question.¶
PHD¶	pre-2001¶	BO¶	Saul Saila was great!¶
PHD¶	pre-2001¶	BO¶	Nonetheless¶
PHD¶	pre-2001¶	BO¶	I graduated in 1985 so this does not reflect current faculty mentors¶
PHD¶	pre-2001¶	CO¶	Working through GSO was primarily a self directed event beginning to end.¶
PHD¶	pre-2001¶	CO¶	I wanted to be an educator and took education courses on the main campus. I got the feeling from my advisor that I should keep quiet about that.¶
PHD¶	pre-2001¶	GO¶	See previous comment¶



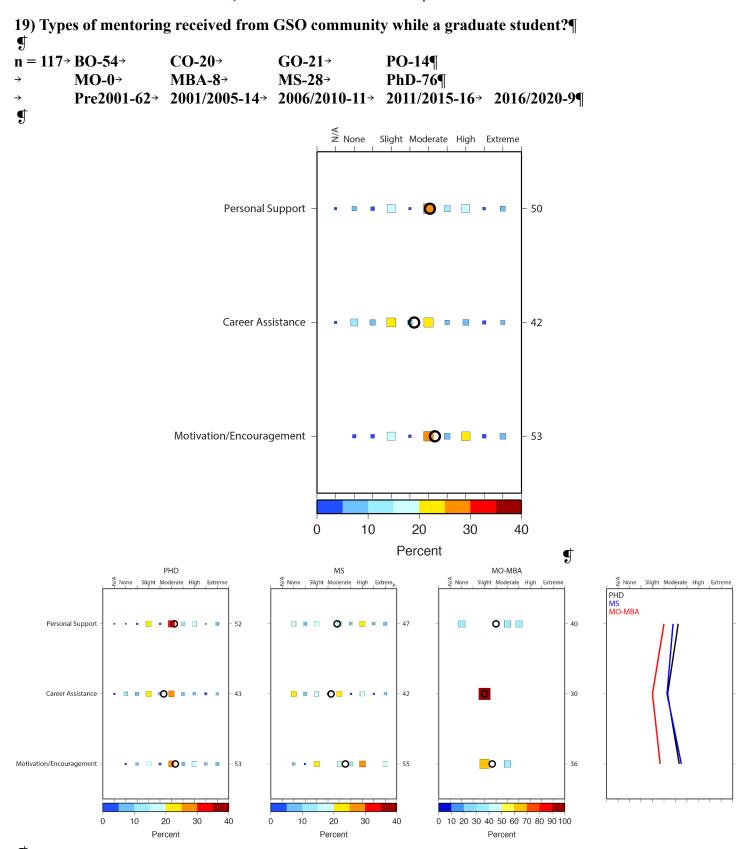


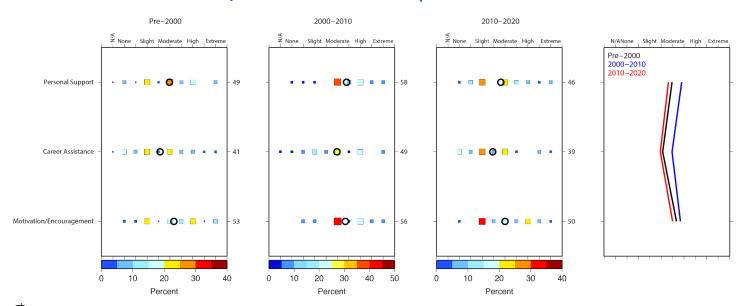
# **♥**Comments:¶

Commen	its:		
MBA¶	2011-2015¶	MO-MBA¶	GSO feels very cozy and welcoming. It's a great place if you're going to stay. But as a student there's not enough opportunities and the opportunities to network outside of GSO felt few and far between. At the time we did not have connections to Electric Boat Orsted or the fishing industries here in Rhode Island. Perhaps that's changed - it was almost a decade ago¶
MS¶	pre-2001¶	BO¶	Some of my best mentoring came from an associate dean not my PI.  More experienced graduate students from all across GSO were extremely helpful at the beginning of my career and then my cohort developed strong support for each other. That was vital during my time at GSO.¶
MS¶	pre-2001¶	BO¶	I don't understand the question¶
PHD¶	2011-2015¶	BO¶	What I have learned is that the missing aspect of my education was business & accounting grant writing sales & marketing interaction with agencies and people skills. I learned a great deal of this after GSO and from life experience.¶
PHD¶	pre-2001¶	BO¶	Hard to say: Didn't ask for much and definitely wasn't asked much if I needed anything.¶
PHD¶	pre-2001¶	BO¶	See above. Most help came from mentors at the US EPA lab.¶
PHD¶	pre-2001¶	BO¶	Not on this list: scientific support/knowledge which would be highly preferred.¶
PHD¶	pre-2001¶	BO¶	I did not receive this support.¶

PHD¶	pre-2001¶	BO¶	None¶
PHD¶	pre-2001¶	CO¶	Would have been highly preferred but was absent and not available.¶
PHD¶	pre-2001¶	CO¶	I was so highly motivated to complete the PhD that very little else mattered. I was singularly focused. I felt I had lost 4 years in the military during VietNam that it hurt me when I restarted grad school. It was not until years later that I understood both experiences made a positive impact on my post grad career.¶
PHD¶	pre-2001¶	GO¶	Mentoring by main campus professor was most valuable¶
PHD¶	pre-2001¶	PO¶	Networking.¶

**P**\***P**\***P**\*





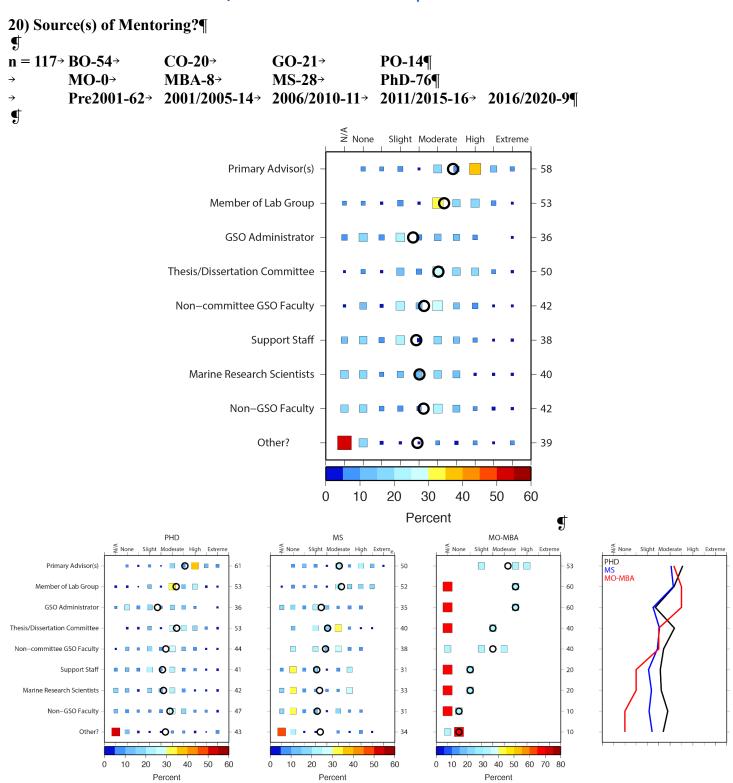
# Comments:¶

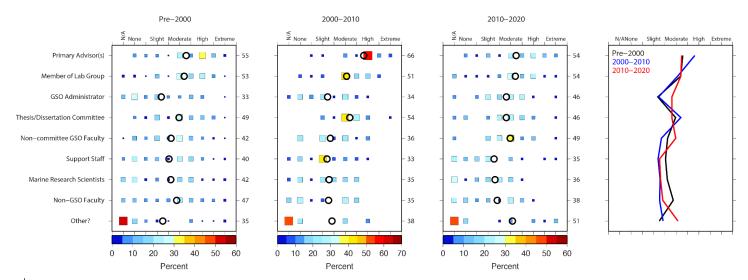
Comme	nts.¶		
MS¶	2016-2020¶	BO¶	The URI career center was helpful with career support but I wasn't aware of career assistance services from GSO for students who were not continuing in the academy. Most of the career information and personal support came from fellow students.¶
MS¶	pre-2001¶	BO¶	As above much of the encouragement I received was from an associate dean and fellow graduate students.¶
PHD¶	2001-2005¶	BO¶	I was self motivated. The network of my advisors (I had two of them) was very helpful in my career path.¶
PHD¶	2011-2015¶	BO¶	I understand that in this career one must be self-motivated etc. but a bit more mentoring would have helped.¶
PHD¶	2011-2015¶	BO¶	We need to do a better job with career support. Many of my peers have very expensive useless framed pieces of paper. We really shouldn't be giving Ph.D.'s to people that are following "path of least resistance". They become overqualified for the Lab Tech and MRS jobs they want and end up working in other fields. We need to encourage those people to take Masters degrees¶
PHD¶	2016-2020¶	ВО¶	Great education. Well-meaning faculty. Really rough go of things. I felt like I was carrying other students through even handling a sexual assault by one student of another. Admin wasn't there for us. I was calling shelters and crisis support. We didn't have support to handle our lives and losses; it felt like school was the only thing we were allowed to bear. But life doesn't give us that option.¶
PHD¶	pre-2001¶	BO¶	Fellow grad students members of whole GSO and related EPA/NOAA campuses¶

#### URI/GSO Academic Assessment Report 2021 - Alumni

PHD¶	pre-2001¶	BO¶	See above. A different time at GSO and a diff graduate student experience.¶
PHD¶	pre-2001¶	BO¶	There was very little information about careers or options outside of academia when I was a graduate student. I felt adequately supported with a strong peer group. there was not a lot of personal support at the time (which fortunately I did not need). I felt supported scientifically.¶
PHD¶	pre-2001¶	BO¶	My major prof was self-centered and biased.¶
PHD¶	pre-2001¶	BO¶	None¶
PHD¶	pre-2001¶	CO¶	Any support received came from one sector of the employed academic community. the marine scientists. Friendships were solid throughout.¶
PHD¶	pre-2001¶	CO¶	I did not need motivation. I was singularly strong in that area. However I am deeply indebted to several dissertation committee members for their course correction and support as I neared completion. And I knew what I was going to do after grad school. Just needed time to accomplish my plans.¶

**g g** \*¶\*¶\*¶

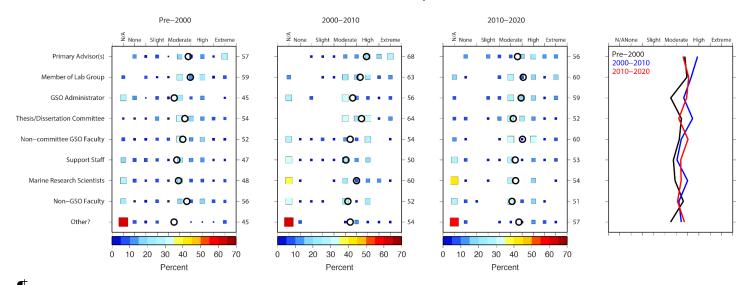




*⊍* Comments:¶

Commer	nts:¶		
MBA¶	2016-2020¶	MO-MBA¶	NOAA staff OET staff¶
MS¶	2001-2005¶	PO¶	Coursework and interaction with Ocean Engineering faculty made a big difference for me in addition to my major professor¶
MS¶	2011-2015¶	GO¶	Other = non faculty members around GSO that work in the adjacent institutions - NOAA EPA OET ISS etc¶
MS¶	2016-2020¶	GO¶	Not sure how to differentiate between mentoring and advising at this point¶
PHD¶	2001-2005¶	BO¶	Friends¶
PHD¶	2001-2005¶	BO¶	I took advantage of the community (from marine research scientists to members of the lab group etc.) for mentoring. Not just one source. I was also at the NOAA lab a lot¶
PHD¶	2001-2005¶	CO¶	Mentoring from faculty collaborators at other institutions¶
PHD¶	2001-2005¶	GO¶	Government employees EPA National Park Service NOAA¶
PHD¶	2011-2015¶	BO¶	Collaborators at other institutions and in fishing industry¶
PHD¶	2011-2015¶	BO¶	Eileen Hughes was most helpful.¶
PHD¶	pre-2001¶	BO¶	Fellow students¶
PHD¶	pre-2001¶	BO¶	See above comments.¶
PHD¶	pre-2001¶	BO¶	More senior graduate students¶
PHD¶	pre-2001¶	BO¶	None¶
PHD¶	pre-2001¶	CO¶	My Mom.¶
		•	

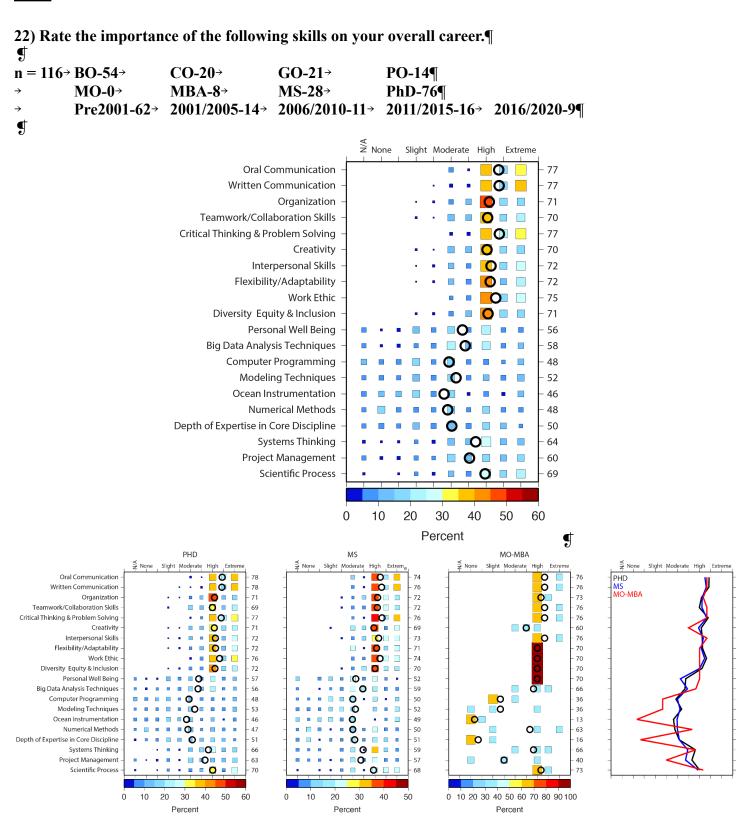
#### 21) Quality of Mentoring from various sources?¶ $n = 117 \rightarrow BO-54 \rightarrow$ **CO-20**→ **GO-21**→ PO-14¶ MS-28→ **PhD-76**¶ **MO-0**→ MBA-8→ $Pre2001-62 \rightarrow 2001/2005-14 \rightarrow 2006/2010-11 \rightarrow 2011/2015-16 \rightarrow 2016/2020-9$ 9 ¥ None Slight Moderate High Extreme Primary Advisor(s) 59 Member of Lab Group 60 **GSO Administrator** 51 Thesis/Dissertation Committee 0 56 Non-committee GSO Faculty 54 Support Staff 49 Marine Research Scientists 52 Non-GSO Faculty 54 Other? 0 10 20 30 40 50 60 70 Percent 9 MO-MBA Slight Moderate High Extreme Slight Moderate High Extreme None Slight Moderate High Extreme PHD Primary Advisor(s) 0 60 MS MO-MBA Member of Lab Group O 70 GSO Administrator 60 O Thesis/Dissertation Committee 51 40 0 Non-committee GSO Faculty 55 53 10 O 30 Support Staff 50 48 47 O Marine Research Scientists 54 30 Non-GSO Faculty - 55 50 O 70 0 10 20 30 40 50 60 70 80 90 100 10 20 30 40 50 60 70 0 10 20 30 40 50 60 70 80 Percent Percent

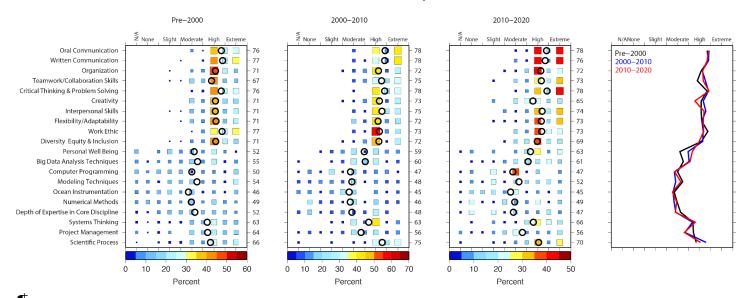


Comments:¶

Commi	باالئ. <sub> </sub>		
MS¶	2011-2015¶	GO¶	Other = non faculty members around GSO that work in the adjacent institutions - NOAA EPA OET ISS etc¶
MS¶	pre-2001¶	BO¶	Other - graduate students from beyond my lab group.¶
MS¶	pre-2001¶	GO¶	I really received almost nothing that I could describe as mentoring.¶
PHD¶	2001-2005¶	BO¶	Friends¶
PHD¶	2001-2005¶	BO¶	I wanted a career with teaching as the focus and research as secondary so there were few people at GSO who could really relate to that career path.¶
PHD¶	2001-2005¶	GO¶	Very hard to answer looking back also not sure I was exactly open to mentorship I was definitely of the mind that I had to prove myself and do everything myself. A regret of mine that I didn't understand that I would learn more if I was trying less to prove myself.¶
PHD¶	2011-2015¶	BO¶	I took non-GSO statistics and computer courses that were helpful.¶
PHD¶	2016-2020¶	BO¶	I am so lucky to continue my connection with my advisor and a few key people. Their mentorship had grown since I've graduated.¶
PHD¶	pre-2001¶	BO¶	See above comments.¶
PHD¶	pre-2001¶	BO¶	I felt well supported by fellow graduate students.¶
PHD¶	pre-2001¶	BO¶	None¶
PHD¶	pre-2001¶	PO¶	rah rho. This is the third time I've answered this question.¶

#### **Skills**

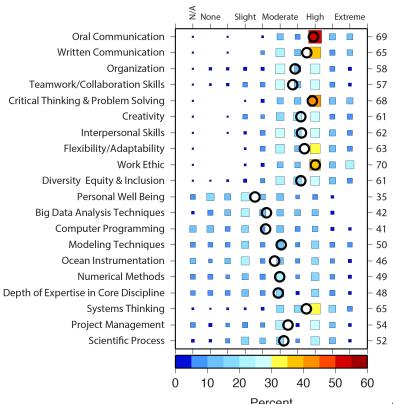


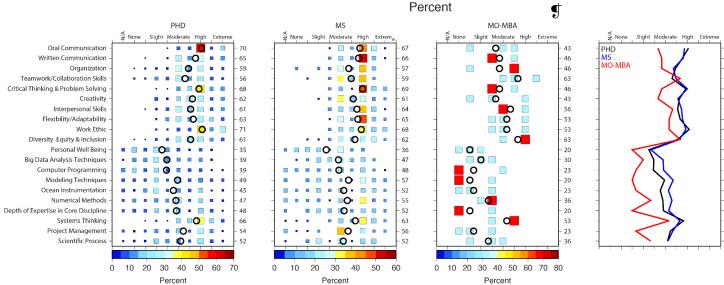


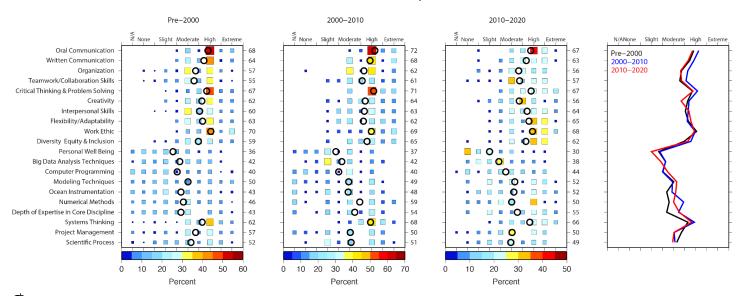
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Cc	mr	ner	its:	$\P$

Comme	ents.		
MS¶	2016-2020¶	GO¶	I use every single item on this list daily.¶
PHD¶	2011-2015¶	BO¶	This area should be included as the "meat" of a GSO education.¶
PHD¶	2016-2020¶	BO¶	Everyone has a different path. I may not be using all the different technical details I learned but the process of learning was valuable. I probably would have benefited by trading some of the required core classes (e.g. geological oce) for more statistics or modeling classes.¶
PHD¶	pre-2001¶	BO¶	I was from the "steam powered"era of oceanography. Things were pretty rough and tumble then. Much has changed for the better. Wish I'd had more data analysis experience but things were more rudimentary then (e.g. stats classes without calculators for exams)¶
PHD¶	pre-2001¶	BO¶	Please encourage writing skills and collaborative/interpersonal skills as part of the GSO experience.¶
PHD¶	pre-2001¶	BO¶	Some of these skills would have been helpful if I had had them. (e.g. project management).¶
PHD¶	pre-2001¶	CO¶	Personal Well being is N/A because it is a factor that is extremely important but one I personally ignore consistently. Organization and work habits would be useful additions to graduate curriculum because they are critical to every aspect of work/life balance. They were not readily available as part of my graduate experience but the mentoring was also generally absent and this is traditionally where that would emanate from.¶
PHD¶	pre-2001¶	PO¶	Should include ""budget formation and execution"¶

# 23) Rate the opportunities to practice/participate in these skills while at GSO.¶ ¶ n = 115→ BO-54→ CO-20→ GO-21→ PO-14¶ → MO-0→ MBA-8→ MS-28→ PhD-76¶ → Pre2001-62→ 2001/2005-14→ 2006/2010-11→ 2011/2015-16→ 2016/2020-9¶ ¶







*o* Comments∙¶

Comme	ents:¶		
MS¶	2011-2015¶	GO¶	The project I was given did not have very good controls so it was not easy to come to conclusions with so many factors to account for in the experiment.¶
MS¶	pre-2001¶	BO¶	There were problems at GSO with the scientific method. A number of professors thought that the scientific method was no longer applicable. Including my first major professor which is part of the reason I went and found a different major professor.¶
PHD¶	2011-2015¶	BO¶	There is room for improvement in this area. Goes back to support and mentoring.¶
PHD¶	2016-2020¶	BO¶	I designed and managed my own project. This built important skills that I had to learn through trial and error. Also I learned how to manage my own budgets. That should be a key part here.¶
PHD¶	pre-2001¶	BO¶	Grad school is what you make of it. My major professor encouraged us all to write proposals and publish papers while still a grad student and those were great skills to learn while one had a lot of mental support. Also I choose to become involved in a professional society and I learned the associated organization and leadership skills while climbing the ranks of the society.¶
PHD¶	pre-2001¶	BO¶	There was no emphasis on Diversity & inclusion when I attended GSO (1979-1985)in fact I experienced hostile workplace situations many times and unwanted sexual advances too. I was a victim in probably one of the first cases of sexual misconduct that was dealt with at GSO and it wasn't dealt with very well at all. Yes it was the early 1980s but the behaviors I observed were out of line/offensive/abusive.¶
PHD¶	pre-2001¶	CO¶	Time management and organization were self directed but critical to the work

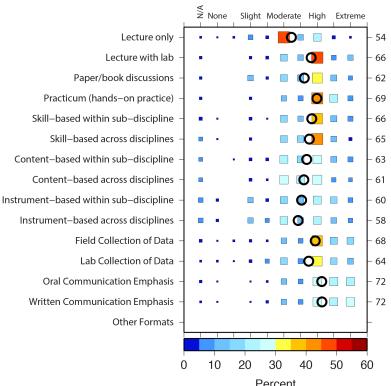
			and projects I conducted and participated in. Despite being high on opportunity there were no direct resources in support.¶
PHD¶	pre-2001¶	PO¶	At time did not have much modeling expertise at GSO.¶

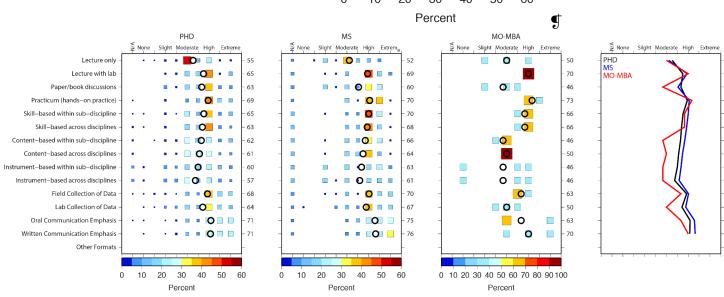
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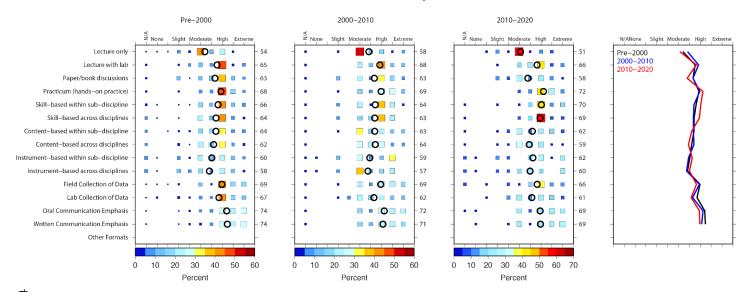
#### **Course Designs**

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# 24) Rate your preference for the types/formats of courses that would have positively impacted your career.¶







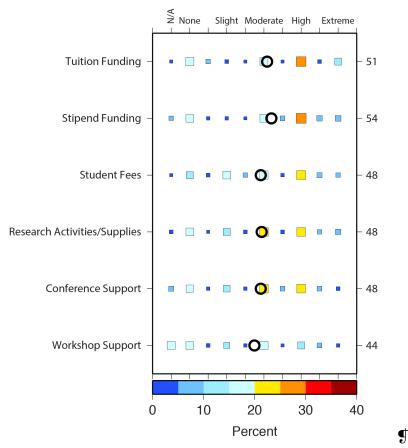
Comments:¶

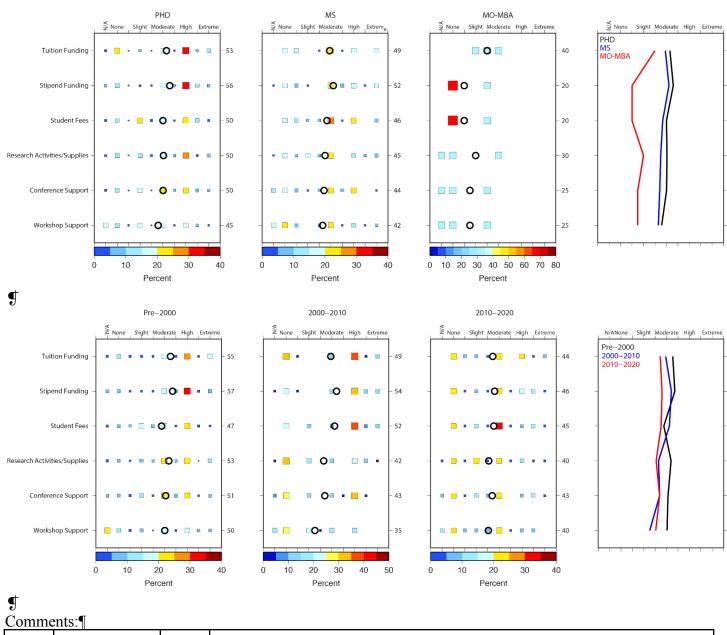
Comme	ents:		
MS¶	2006-2010¶	GO¶	Some of each at different times.¶
MS¶	2011-2015¶	GO¶	A more concentrated MatLab course that addressed specific research being actually done by the students rather than a general few model runs would have been more helpful to basically everyone in my class.¶
MS¶	pre-2001¶	CO¶	Honestly it's been almost 25 years since I graduated and I don't feel like I remember enough specifics to answer course-related questions.¶
PHD¶	2001-2005¶	CO¶	Labs are very discipline specific. In my sub discipline yes but in the others not as much.¶
PHD¶	pre-2001¶	BO¶	Format depends on the course. Everything now computer-based with online resources that were beyond our wildest dreams in the day ('70's)¶
PHD¶	pre-2001¶	BO¶	Not sure what is meant by several of these questions¶
PHD¶	pre-2001¶	BO¶	Critical thinking is very important and discussion - based classes helped that IF the leader was skilled at making you think and question.
PHD¶	pre-2001¶	BO¶	I wish I had received more experience with modern (at that time) environmental data collection with continuous environmental monitoring devices.¶
PHD¶	pre-2001¶	BO¶	Team building¶
PHD¶	pre-2001¶	CO¶	More model data design analysis and computational focused education and tools would have been beneficial. More cross connection with OE is something I always saw as lacking when I went through.¶

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#### **Student Funding**

25) Rate your concern for the various funding related issues while a graduate student at GSO.  $\P$ 





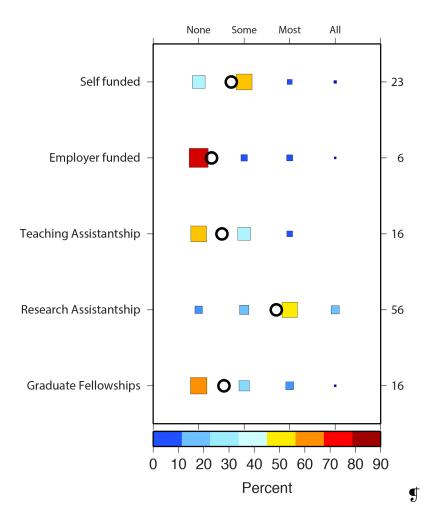
Commi	ones.		<u> </u>
MS¶	2006-2010¶	$\mathrm{BO}\P$	I was fortunate to be fully funded by my advisor.¶
MS¶	2016-2020¶		I was graciously fully-funded by my advisor / assistantships (teaching and research) and am extremely grateful for that opportunity. I was a broke grad student but never worried about whether the money would come in.¶
MS¶	pre-2001¶	BO¶	Had full tuition covered¶
MS¶	pre-2001¶	BO¶	Research money was very tight when I was at GSO and put constraints on what I was able to do.¶
MS¶	pre-2001¶	BO¶	Question is unclear. Am I rating the concern I felt while a student or my concern today?¶

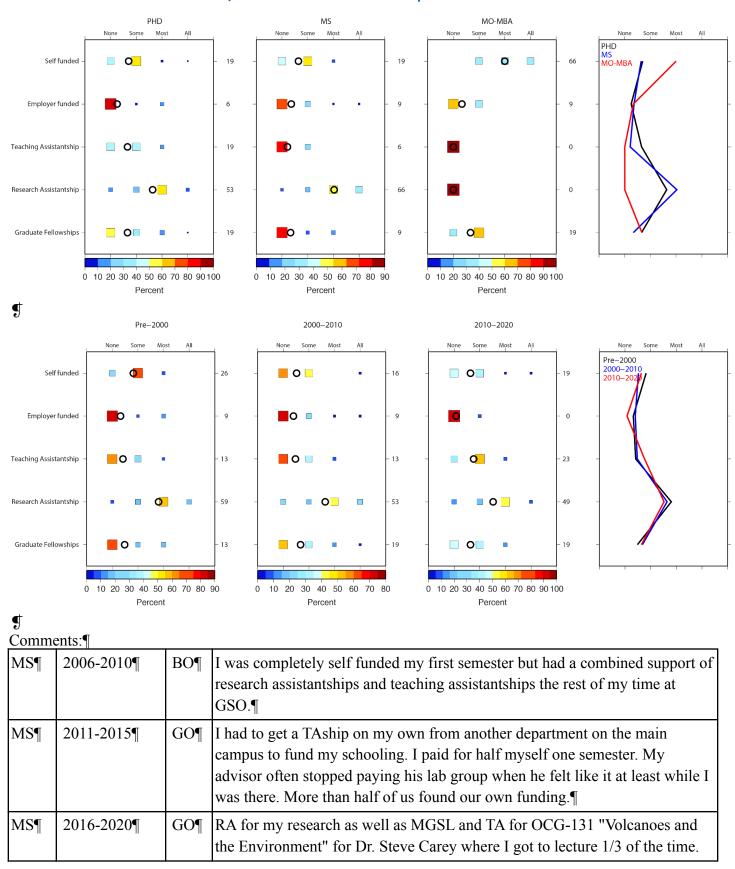
MS¶	pre-2001¶	CO¶	I was lucky in that I was fully funded by my advisor so none of these issues were of concern¶
MS¶	pre-2001¶	GO¶	I am taking this to mean: were you worried? I was not worried. GSO fully supported these.¶
PHD¶	2001-2005¶	BO¶	Only concern with tuition and stipend was right at the end while I was finishing up and taking longer than expected but the grants had ended.¶
PHD¶	2001-2005¶	CO¶	My advisor was well-funded.¶
PHD¶	2001-2005¶	GO¶	Hard to answer my concern was extreme but I ended up being fully funded and receiving scholarships when needed.¶
PHD¶	2006-2010¶	BO¶	Student fees were unaffordable to me at the time I had to ask my parents to pay for these expenses.¶
PHD¶	2011-2015¶	BO¶	During my time student support wasn't too bad. It got more difficult in the years following.¶
PHD¶	2011-2015¶	BO¶	My first couple of years we rarely had money for anything and I never knew what would be possible. Then my advisor got an NSF grant and didn't have to worry for the rest of my time at GSO.¶
PHD¶	2016-2020¶	CO¶	I was grateful to the alumni fund to help me attend conferences! Also for the multiple opportunities to TA so I could finish my degree and still be paid.¶
PHD¶	pre-2001¶	BO¶	I usually had a research assistantship that covered tuition and fees and a stipend. Always had to look for other sources for my own research supplies conference or workshop support and travel.¶
PHD¶	pre-2001¶	BO¶	I was mainly supported by a US EPA graduate student stipend which allowed me to afford URI but I had no funds for scientific conferences etc. unless it linked directly to final results in my EPA-funded research.¶
PHD¶	pre-2001¶	BO¶	I was lucky to have a combination of grant-based fellowship TA and other (NOAA research assistantship) support. My advisor was a strong advocate for me and that was invaluable.¶
PHD¶	pre-2001¶	BO¶	I honestly never had reason to worry about this. Somehow it was all sufficiently covered as far as I was concerned.¶
PHD¶	pre-2001¶	BO¶	Saul Sails had support for me during my time at GSO, including travel to meetings!¶
PHD¶	pre-2001¶	CO¶	Funding was where I could get it and there was little to no institutional support. In state residence application and designation and student loans were supported as well as out of discipline RA jobs on the main campus. I worked on a number of collaborative proposals for support but an average of 50% of

			my time or less was funding relative to my dissertation research.¶
PHD¶	pre-2001¶	CO¶	VA Bill¶
PHD¶	pre-2001¶		Everything was provided and needs were simple. No such thing as a laptop or home computer. Would go into work at night to finish up homework or research. Rent was reasonable relative to stipend.¶



## 26) What were your sources of funding for graduate school at GSO? $\P$





			Had to pay out of pocket for continuous registration for summer/fall after defending in spring and making revisions¶
MS¶	pre-2001¶	GO¶	Can't remember if it was called an RA or a Graduate Fellowship.¶
PHD¶	2001-2005¶	BO¶	I wrote a CMER project that was funded for 3 years (this was the former funding scheme between NOAA and GSO).¶
PHD¶	2001-2005¶	CO¶	I think one semester part of my tuition/stipend was funded by an alumni award¶
PHD¶	2006-2010¶	CO¶	Friends of Oceanography Scholarship¶
PHD¶	pre-2001¶	BO¶	I wrote a grant that was funded.¶
PHD¶	pre-2001¶	BO¶	US EPA funded.¶
PHD¶	pre-2001¶	BO¶	I had an NIH predoctoral traineeship for 3 years and then was on my own.¶
PHD¶	pre-2001¶	CO¶	I took a "sabbatical" and ran a commercial lab for 6-12 months to make enough to complete my dissertation. I was still doing research but it was a full-time job. Self-funded equals student loans.¶
PHD¶	pre-2001¶	CO¶	VA Bill¶
PHD¶	pre-2001¶	CO¶	Part-time teaching at another college.¶
PHD¶	pre-2001¶	GO¶	No support my first year except GI Bill and active reserves USNR¶
PHD¶	pre-2001¶	PO¶	Stipend was only funding I had though the family did buy me a car and I didn't have school loans.¶

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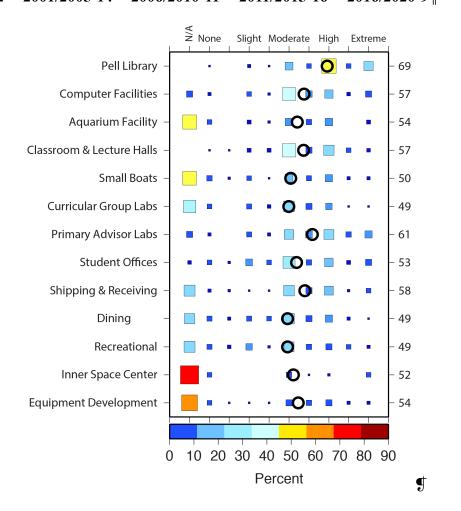
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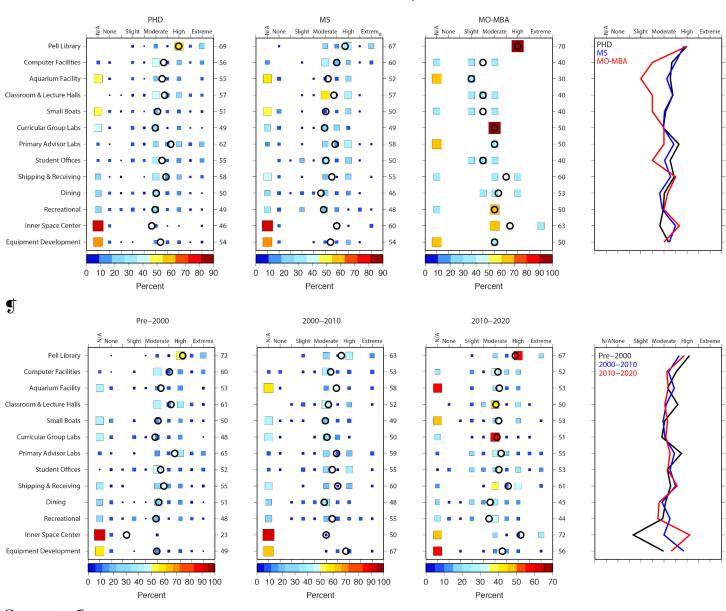
#### **Facilities**

27) Rate the quality of the various facilities you used while a graduate student at GSO.¶  $\P$  n = 113 $^{\circ}$  BO-54 $^{\circ}$  CO-20 $^{\circ}$  GO-21 $^{\circ}$  PO-14¶

→ MO-0→ MBA-8→ MS-28→ PhD-76¶
 → Pre2001-62→ 2001/2005-14→ 2006/2010-11→ 2011/2015-16→ 2016/2020-9¶

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#### Comments:¶

Commi	comments.			
MS¶	2011-2015¶	GO¶	Horn roof regularly leaked causing office flooding. Constant fear of mold-related health issues¶	
MS¶	pre-2001¶	BO¶	My office was a trailer; I barely used it for anything except storage.¶	
PHD¶	2001-2005¶	BO¶	My research took place at EPA and NOAA so I depended on their support staff and not the staff at GSO.¶	
PHD¶	2006-2010¶	BO¶	New Pell Library/ISC opened at the very end of my time at GSO.¶	
PHD¶	2011-2015¶	BO¶	The Inner Space Center was very exclusive when I attended. There was little opportunity for GSO students to benefit from its presence on campus.¶	
PHD¶	2011-2015¶	BO¶	The student affairs office with Eileen Hughes helped untangle quagmires and	

			paperwork.¶
PHD¶	2011-2015¶	BO¶	Facilities really were a mess but I learned that great work can be done in collapsing facilities (MERL)¶
PHD¶	2016-2020¶	BO¶	I worked primarily at external facilities¶
PHD¶	2016-2020¶	CO¶	I marked the computer slightly above average not because of the computers but because Bob Sand is there!¶
PHD¶	pre-2001¶	BO¶	There was no Inner Space Center when I was a grad student! The only recreational facilities were the beach and the volleyball court - both were great¶
PHD¶	pre-2001¶	BO¶	Inner Space Center??¶
PHD¶	pre-2001¶	CO¶	Mosbys was the only dining. It was good but limited. Mainly brought my lunch and dinner. Coat factory as well.¶
PHD¶	pre-2001¶	GO¶	What is the inner space center?¶
PHD¶	pre-2001¶	PO¶	R/V Endeavor cruises Trident room (for donut hour TGIF pingpong small group meetings) beach potlucks¶

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#### **Demographics**

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28) What was your terminal degree at GSO?¶

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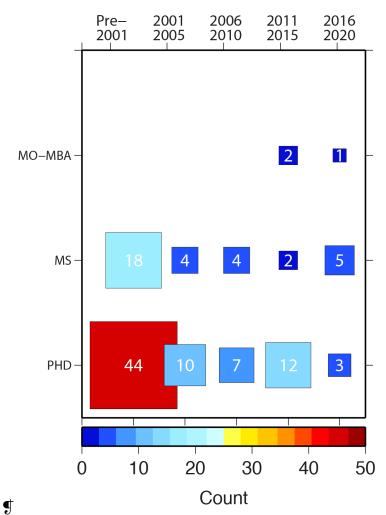
n = 112+BO-54+ CO-20+ GO-21+ PO-14¶

+ MO-0+ MBA-3+ MS-33+ PhD-76¶

- Pro-2001 (2) 2001/2005 14 2006/2010 11 2011/2015 1

→ Pre2001-62→ 2001/2005-14→ 2006/2010-11→ 2011/2015-16→ 2016/2020-9¶

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Comments:¶

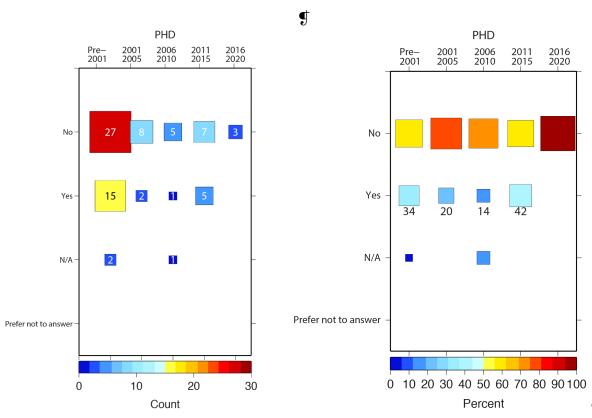
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No comments provided.¶

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# 29) If your terminal degree at GSO was a PhD, did you receive a fellowship or grant for postdoctoral training? $\P$

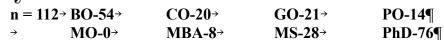


 $Comments:\P$ 

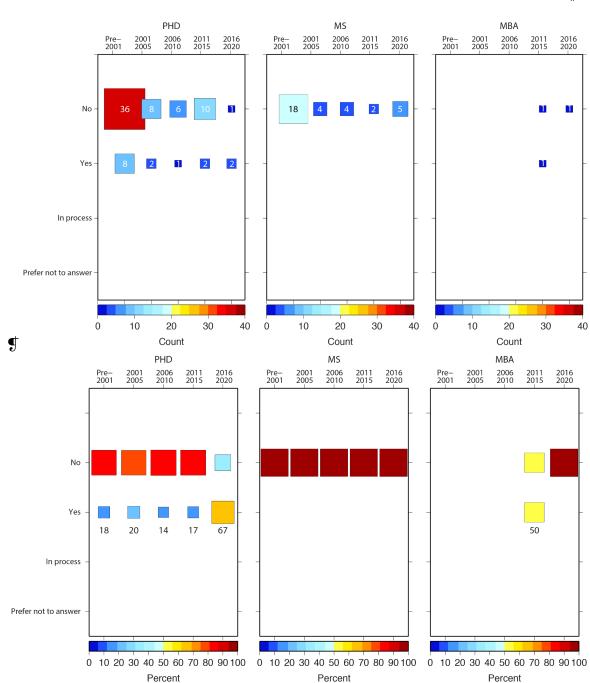
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## 30) Did you receive multiple graduate degrees from GSO?¶

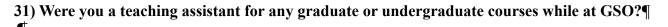


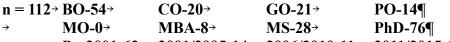
 $\rightarrow$  Pre2001-62 $\rightarrow$  2001/2005-14 $\rightarrow$  2006/2010-11 $\rightarrow$  2011/2015-16 $\rightarrow$  2016/2020-9¶



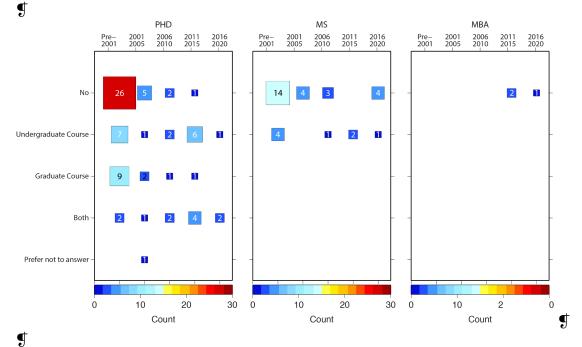
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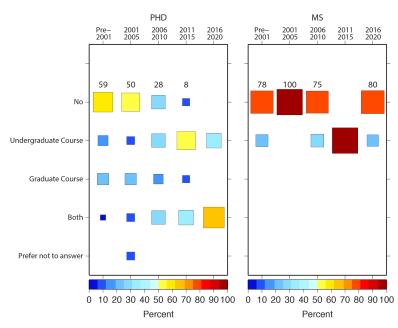
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→ Pre2001-62→ 2001/2005-14→ 2006/2010-11→ 2011/2015-16→ 2016/2020-9¶

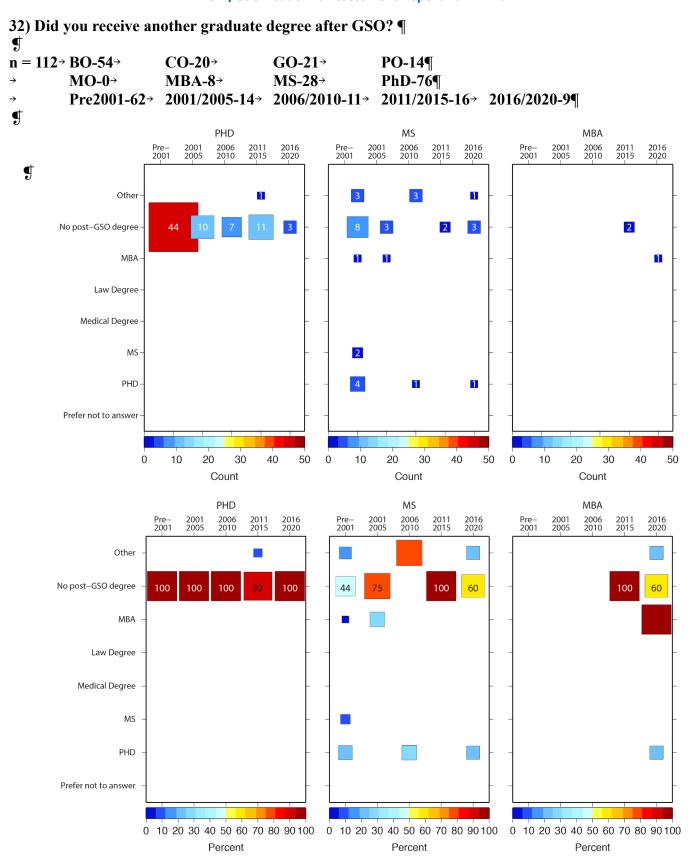




#### Comments:¶

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No comments provided.¶



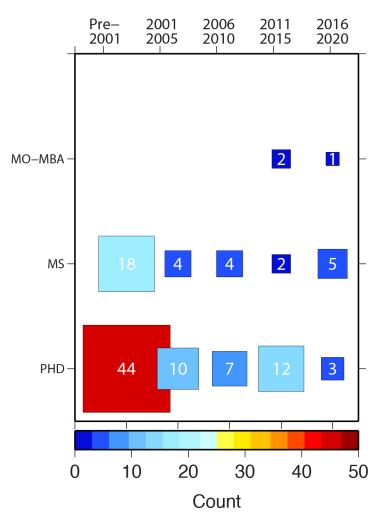
#### URI/GSO Academic Assessment Report 2021 - Alumni

## Comments:¶

MS¶	2006-2010¶	BO¶	Ph.D.¶
MS¶	2006-2010¶	BO¶	PhD¶
MS¶	2006-2010¶	GO¶	currently a Phd student¶
MS¶	2016-2020¶	CO¶	MEd (masters of education)¶
MS¶	pre-2001¶	BO¶	Master of Public Health (USA) PhD in fishery science (Poland)¶
MS¶	pre-2001¶	BO¶	Certificate in mediation and other skills¶
MS¶	pre-2001¶	BO¶	A single PhD after GSO¶
PHD¶	2011-2015¶	BO¶	concurrent M.Ma (URI)¶

**\$ \$**¶**\$**¶

## 33) When did you graduate with your terminal degree from GSO? $\P$



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Comments:¶

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No comments provided.¶

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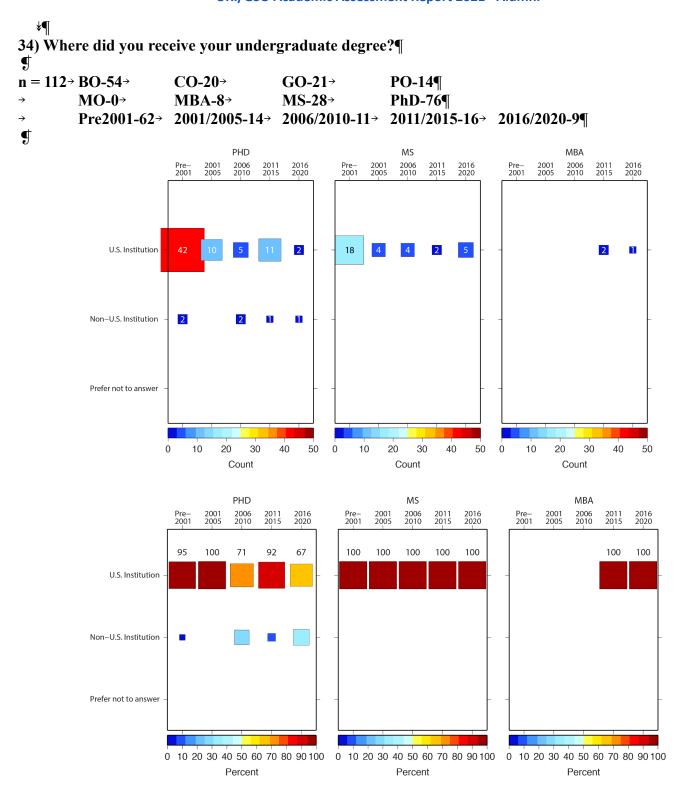
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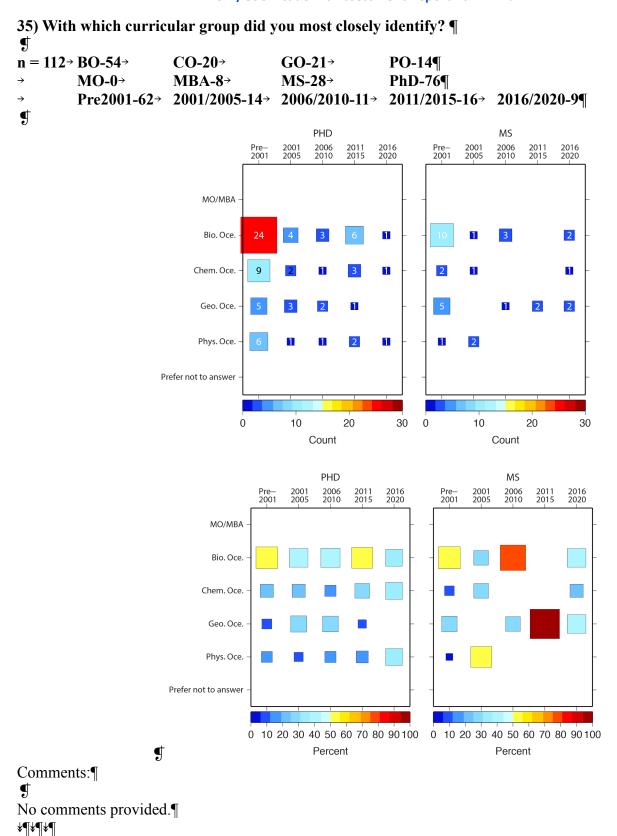


Comments:¶

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No comments provided.¶

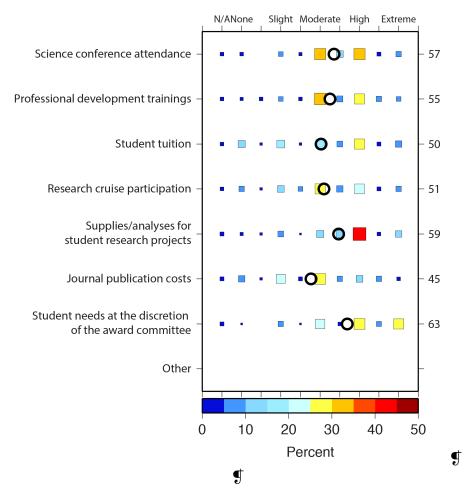
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# 36) Rate your preference for the use of your donations to the GSO Alumni Fund? $\P$

 $n = 112 \rightarrow BO-54 \rightarrow CO-20 \rightarrow GO-21 \rightarrow PO-14\P$  $\rightarrow MO-0 \rightarrow MBA-8 \rightarrow MS-28 \rightarrow PhD-76\P$ 

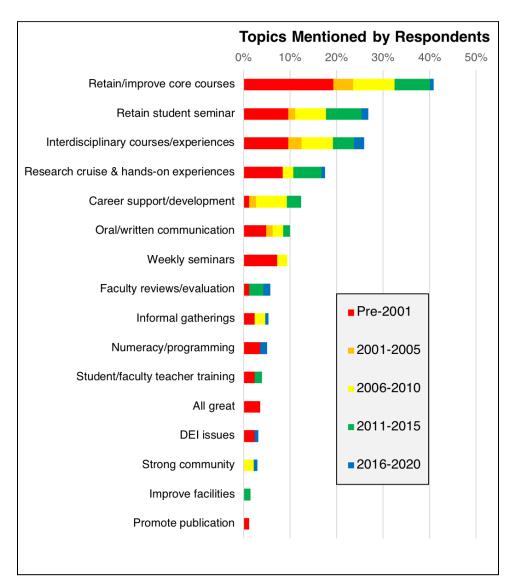
→ Pre2001-62→ 2001/2005-14→ 2006/2010-11→ 2011/2015-16→ 2016/2020-9¶



#### Comments:¶

Commi	iits.		·	
MS¶	2016-2020¶	BO¶	For this question I use lower scores for costs that I think should be paid for by the university or the advisor not because they are less important.¶	
PHD¶	2001-2005¶	BO¶	Research grants should cover many of these aspects. GSO alumni funds should be earmarked for professional development and other aspects not necessarily covered on research grants (e.g. increasing the quality of education and opportunities for students) - at least that is my opinion.¶	
PHD¶	2011-2015¶	BO¶	There are other small grants out there for most things except tuition.	
PHD¶	2016-2020¶	BO¶	To promote DEI I think there should be a housing stipend for underrepresented students¶	
PHD¶	pre-2001¶	BO¶	I would hope they could get tuition covered by other means (assistantship)¶	

# 37) Which components/aspects of GSO's academic program should be retained and/or improved? $\P$



#### Comments:¶

MBA¶	2011-2015¶	MO-MBA¶	Alumni career support would be so valuable both to strengthening the
			GSO network and for graduates.¶
MBA¶	2011-2015¶	MO-MBA¶	GSO is a great place with a strong sense of community and

			internetworked sciences. This should be retained and built upon. Conversely with so many internal connections it feels like operating in a bubble at the end of the degree without enough connections being built to career or research opportunities outside GSO.¶	
MBA¶	2016-2020¶	MO-MBA¶	It was challenging to feel part of a cohort as is the experience of many graduate students particularly those who are around for a while (2-5 years for Masters or PhD). The MO degree had me splitting time between main campus and GSO so I was not in very many classes with the same people. Taking MBA classes while working on the MO at the same time meant that I went to a third campus again with different people. Juggling three campuses for two programs made it hard to develop a sense of community. I don't think it would have been much more successful if I had done one program at a time because the MO students come in and leave so quickly. I think the online students will feel even less a part of the campus. If I did not work on campus between classes I would have felt even less a part of the community. I would recommend finding jobs for MO students on the GSO campus whenever possible to keep them connected and engaged.¶	
MS¶	2001-2005¶	BO¶	Keep core curriculum more elective courses¶	
MS¶	2001-2005¶	CO¶	Core courses¶	
MS¶	2001-2005¶	PO¶	One aspect of my experience that I felt was a little lacking was in the preparation of manuscripts. Although I did not continue for a PhD I had essentially zero experience on how to write a manuscript for publication when I graduated nor did I know anything about how journals differ in their content and format. A formal paper discussion group would have been helpful as well in this regard.	
MS¶	2006-2010¶	BO¶	Core curriculum annual seminar presentation¶	
MS¶	2006-2010¶	BO¶	I had just an EXCELLENT experience at GSO. Great student community awesome advising great location/facilities happy people. I got my master's at GSO before going to get my PhD at Brown and would repeat my GSO experience in a heartbeat. I recommend GSO to anyone who will listen!¶	
MS¶	2006-2010¶	BO¶	Boat burnings and weekly seminars!¶	
MS¶	2006-2010¶	GO¶	Multidisciplinary seminar 4 core courses fieldwork focus¶	
MS¶	2011-2015¶	GO¶	Feedback on professors/teachers and advisors should become a bigger part of the overall running of GSO and evaluation of faculty.¶	

MS¶	2016-2020¶	BO¶	The weekly student seminar was extremely valuable for me. I remember a strong encouragement to attend and review talks. I wish more grad schools had a similar opportunity. I remember that the faculty consistently attended and were generally very engaged at the weekly seminar and other weekly/periodic seminars and discussions. I think that is important to encourage a culture of participation among students. When I was there getting food on campus was definitely a challenge. I understand that is better now. I think the non-core GSO electives both the quantity available and the diversity of excellent classes was one of the most valuable things for me as well.¶	
MS¶	2016-2020¶	GO¶	More focus on interdisciplinary research/projects. Disciplines seemed very siloed (even by building!) - this hasn,Äôt been my experience in my career many interdisciplinary projects. More focus on diversity / inclusion. Balancing research with coursework was a challenge. Was very dependent on advisor priorities - rather than needs/goals of student. Activities like seminar and boat burning might not have helped me in my career but they did help with my mental health / sense of community while at GSO. this was very important - particularly given siloed disciplines mentioned above.¶	
MS¶	2016-2020¶	GO¶	The cruise requirement is a must. I also think that a coastal / small boat project would be a great addition. My first project upon arriving at GSO was an upper bay circulation study where the students in our lab group prepared the instruments locations, trailered the boat to EG deployed (with help from RWU divers) and recovered 31/32 instruments. This was super enlightening as to how oceanography actually gets done. I also think all students regardless of major concentration should take a programming / numerical methods / data processing course. These are probably the most important skills for any career field these days.¶	
MS¶	pre-2001¶	BO¶	Core courses participation in cruises and giving seminars on research.¶	
MS¶	pre-2001¶	BO¶	I'm not familiar with the recent program thus I'll not voice my opinion.¶	
MS¶	pre-2001¶	BO¶	My experience at GSO was great!¶	
MS¶	pre-2001¶	BO¶	GSO has a serious culture problem in terms of learning to embrace justice equity diversity and inclusion. Focusing this survey solely on academics will not help GSO uncover major issues and work to mitigate issues and improve.¶	
MS¶	pre-2001¶	BO¶	A broad interdisciplinary basis is essential as is attending student seminars in other areas, social (TGIF) events, spaces for people to meet	

			and converse across disciplines.¶	
MS¶	pre-2001¶	BO¶	Interdisciplinary¶	
MS¶	pre-2001¶	BO¶	I'm sure it has changed a lot since I was there. But I think the emphasis on oral presentation, written communication and critical thinking will be helpful in any field and are absolutely essential to a graduate degree.¶	
MS¶	pre-2001¶	BO¶	Cross-disciplinary afternoon lecture series¶	
MS¶	pre-2001¶	CO¶	Making sure people are well rounded in all the core science disciplines and numeracy.¶	
MS¶	pre-2001¶	GO¶	I've been out of school so long that I cannot answer that question.¶	
MS¶	pre-2001¶	GO¶	I found them all valuable and would not change a thing.¶	
PHD¶	2001-2005¶	BO¶	It's been a long time since I was a student at GSO so I don't have a lot to say about this. However from what I've heard GSO's academic program is in need of a refresh that would emphasize interdisciplinarity beyond the oceanographic sub-disciplines to include social science and engineering. Students need the practice of working in teams with diverse skill sets, goals and competencies.¶	
PHD¶	2001-2005¶	BO¶	The interdisciplinary nature of oceanography is of great value so I'd keep that aspect of the overall program. I was focused on teaching in my future career not research but while my advisor was supportive of this GSO didn't have a lot of opportunities for students like me to explore and learn about non-research focused career options.¶	
PHD¶	2001-2005¶	BO¶	As a biological oceanographic student having all four core courses was important for breadth of knowledge. The student seminar was important. Flexibility in taking courses on the main campus is also important.	
PHD¶	2001-2005¶	CO¶	Working in academia, multidisciplinary coursework has been incredibly valuable to me. I hope that GSO is doing a better job along with the URI graduate school to help people finish. I watched too many bright hard working ABD people get hurt by the way the URI system works, in particular if an advisor was awful there was NO support. My advisor was wonderful and the others in the curricular group were supportive and therefore my experience was positive.¶	
PHD¶	2001-2005¶	GO¶	Retain: seminar participation exposure to all core courses (I still refer back to my core course material and the field experiences I got in bio oce). I loved and highly valued the research cruise requirement but it might make sense to provide other options for a practicum (like a modeling internship at NOAA for those who don't like boats). ¶	

			Improve: promoting publication of thesis exposure to non-academic career options better training regarding potential post-degree progressions add debate/elocution public speaking options.¶	
PHD¶	2001-2005¶	GO¶	I have no complaints about my experience at GSO. Overall I had a great experience.¶	
PHD¶	2001-2005¶	PO¶	The core courses should be retained. Improvement could be made to cross disciplinary courses.¶	
PHD¶	2006-2010¶	BO¶	More professional and career development.¶	
PHD¶	2006-2010¶	BO¶	I would have liked to have access to more professional development workshops which are much more prevalent now. I like that every student needs to take all of the core courses - that should definitely stay as a requirement.	
PHD¶	2006-2010¶	BO¶	Communication was not an emphasis when I was a student but has grown to become a critical component of my work. I had to invest a lot into learning these aspects post graduation. There was also very little exposure to different career choices beyond academia at the time. I found a lot of value in the core courses and have had to lean on that material in my own teaching. The students should be receiving more oral communication training as part of the student seminar experience.¶	
PHD¶	2006-2010¶	GO¶	Interdisciplinary work is always a good thing.¶	
PHD¶	2006-2010¶	PO¶	Combination between science and engineering.¶	
PHD¶	2011-2015¶	BO¶	The core courses are important and need to be retained. However they were not created equal when I took them (albeit a long time ago). I feel they should be treated the same with similar intensity and requirements. I do like the variety of courses URI offers and would encourage GSO students to look at the main campus for varied offerings. The best experience is Student Seminar and I think that should remain.¶	
PHD¶	2011-2015¶	BO¶	Small boat facilities for hands-on experiences cross-institution collaborations interactions with ocean users applied science more emphasis on fisheries and human-dimensions of oceanography¶	
PHD¶	2011-2015¶	BO¶	Core courses were good. Student seminars had value but could be improved with constructive comment. Business finance accounting proposal writing agency interaction could be improved. Some system for evaluating faculty members/mentoring might be helpful.¶	
PHD¶	2011-2015¶	BO¶	I thought Chem & PO were very interesting and useful to my further career (I am in Bio). The bio core course was for me just not	

			challenging or new material and geo. was an unmitigated disaster (no relevance to my work or the other courses, zero coordination between the four instructors, tedious and meaningless labs/field that felt designed to waste your time). But I think I was also lucky to have been taught by Pilson & Wimbush. I think student seminar is useful - I was surprised when I started going to conferences just how bad some students from schools that don't have this were! The fisheries courses I took just to fill up the required course credits also turned out to be quite useful to my career. I think the seminar series could be better integrated - to encourage people to attend the seminars outside their discipline.¶	
PHD¶	2011-2015¶	BO¶	Core courses and cruise requirement should be maintained. Facilities need improvement¶	
PHD¶	2011-2015¶	BO¶	Cruise requirement is an excellent idea. I think more integration between the sub-disciplines.¶	
PHD¶	2011-2015¶	CO¶	Student seminar should definitely be retained and also cruise requirement should be kept¶	
PHD¶	2011-2015¶	CO¶	There needs to be an increased emphasis placed on teaching by the GSO faculty and teacher training for graduate students. Teaching classes often seemed to be an afterthought for many professors and TAs received minimal (if any) training. This meant both that the classroom experience was suboptimal for many GSO students and that there was little opportunity for graduate students to engage in teaching-related professional development. The Monday grad student talks are a valuable way for students to hone their oral communication skills.¶	
PHD¶	2011-2015¶	GO¶	The hands-on aspects of the courses should be retained. While I did not fully appreciate the need for the core courses I have found myself appreciative of being exposed to all areas of oceanography while a graduate student.¶	
PHD¶	2016-2020¶	BO¶	Increased emphasis on interdisciplinary collaboration and solutions-focused work.¶	
PHD¶	2016-2020¶	CO¶	The core courses could use a revamp to make sure all students take the same intro work and the faculty know what is actually taught in the intro courses. Students should leave with basic coding skills an idea of what goes on in the other disciplines and knowing how to work with diverse groups. I loved GSO and am happy with my time there but it would be nice to have systems in place to help students trapped in bad advising situations or those without any funding. David and Meredith definitely helped me with the latter but a system should not be dependent on 2	

			people for success. I have great hopes for what Dean Bontempi will do to bring GSO fully into the 21st Century and beyond!!¶
PHD¶	2016-2020¶	PO¶	Please hold your colleagues accountable when you see them abuse students. Put them on notice and tend to the students. Make sure to only admit students you can support financially throughout the program, especially international students. No student should have to live on their savings for an entire semester while the advisor is trying to delay the completion of their degree. Do not let professors pass the students at their comps to then fail them afterwards. Make sure communication is well established with Main Campus (Grad School office AND Counseling Center) to support the students.¶
PHD¶	pre-2001¶	BO¶	Core courses!!! cruise requirement numerical methods and data analysis training¶
PHD¶	pre-2001¶	BO¶	Core courses¶
PHD¶	pre-2001¶	BO¶	Cruise research student seminars guest lectures¶
PHD¶	pre-2001¶	BO¶	Retained: student seminar diverse research opportunities Improve: more proposal writing more exposure to new technology and new ways of examining data¶
PHD¶	pre-2001¶	BO¶	Core courses possibly improving on interdisciplinarity¶
PHD¶	pre-2001¶	BO¶	No idea what today's course structure is like. I do feel that the core courses were a positive influence and should be retained after all it is Oceanography and we are supposed to know how all aspects of ocean biology physics geology and chemistry influence our objective.¶
PHD¶	pre-2001¶	BO¶	Not familiar enough with current to comment¶
PHD¶	pre-2001¶	BO¶	Bio-optics¶
PHD¶	pre-2001¶	BO¶	Very broad statement! I believe the core requirements are very important if the student intends to pursue work in an oceanographic field. If the person was actually intending to get into marine environmental fields I think greater emphasis on basic physical/chem/geol + bio ocg and more hands-on experience with use of modern environmental monitoring instruments is needed. Maybe an MS in marine environmental science? I was very interested in animal behavior and spent most of my elective courses in that area. Although I delighted in what I learned I used very little of that knowledge area during my career as an environmental scientist. More practical applied experience would have helped + potentially helped in job applications to

			environmental state and federal agencies. Also- please don't publish the details I have given you concerning RI state agencies weaknesses as I see them. I still have lots of friends there and do not mean my comments to be a condemnation of hard-working civil servants. I believe it's just RI politics that holds the state back !¶	
PHD¶	pre-2001¶	BO¶	Please keep the core courses.¶	
PHD¶	pre-2001¶	BO¶	The graduate student seminar series all disciplines combined¶	
PHD¶	pre-2001¶	BO¶	Weekly seminars, cruises (more than one) pre-graduation publication improve collaboration in thesis project development and vastly improve placement help.¶	
PHD¶	pre-2001¶	BO¶	Some emphasis on teaching should be factored in on faculty hiring.¶	
PHD¶	pre-2001¶	BO¶	I am so long graduated that I have no valid opinion¶	
PHD¶	pre-2001¶	BO¶	Require Core courses PO BO CO GO for ALL STUDENTS!!!!!¶	
PHD¶	pre-2001¶	BO¶	Improve mentoring by advisors.¶	
PHD¶	pre-2001¶	BO¶	Core courses still relevant!¶	
PHD¶	pre-2001¶	BO¶	Too old a dog to have good advice for you guys.¶	
PHD¶	pre-2001¶	BO¶	My experience was so long ago (1974) that is certainly irrelevant today¶	
PHD¶	pre-2001¶	BO¶	Core courses student seminar cruise requirement¶	
PHD¶	pre-2001¶	CO¶	The CORE of oceanography. Foundation for interdisciplinary science. Could be expanded. Student seminar oral and written presentation. It has been 21 years since I departed. I hope that mentoring and personal support diversity and inclusion have developed over that time. It was a critical gap in my experience at GSO. There were issues that leadership should have addressed head on that was either kept under the table or deemed unimportant/inconsequential. Disparity between the professors and marine scientists was also an issue back then that needed to be addressed.¶	
PHD¶	pre-2001¶	CO¶	It's all good!¶	
PHD¶	pre-2001¶	CO¶	Please keep the seminar requirement, the cruise requirement, and the core course requirement at a minimum. Do not feel I can comment on other requirements after almost 40 years.¶	
PHD¶	pre-2001¶	CO¶	I am too far removed in time from graduation with my Ph.D. to offer useful advice.¶	
PHD¶	pre-2001¶	CO¶	While at GSO I realized that in the aggregate the chemistry GSO	
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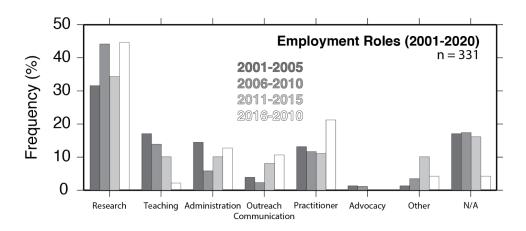
#### URI/GSO Academic Assessment Report 2021 - Alumni

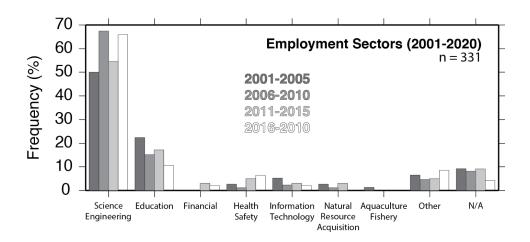
			professorial core was about the best anywhere. I don,Äôt think you can duplicate my experiences now. All were at the top of their various disciplines. I consider myself to be extremely fortunate to have had the opportunity to study with Drs. Duce Kester Quinn and Pilson. Also I took full advantage of the main campus chemistry resources taking every Main Campus chemistry course I could get. The two-fold academic approach of GSO/Main Campus approach served me in good stead after my degree. As I said I was highly motivated to complete my PhD degree in record time and get on with my career. Now over 40 years later I realize what a monumental task I set for myself and how singularly important the combined GSO/Main campus approach benefitted me. I would encourage all incoming students to take full advantage of ALL academic resources available through GSO. GSO should emphasize such opportunities to all incoming students.¶
PHD¶	pre-2001¶	CO¶	A focus on problem-solving and good written and oral communication should continue to serve every graduate well!¶
PHD¶	pre-2001¶	GO¶	Core courses and student seminar¶
PHD¶	pre-2001¶	GO¶	4 Core courses Cruise requirement¶
PHD¶	pre-2001¶	GO¶	Retain broad array of core courses weekly student seminars.¶
PHD¶	pre-2001¶	PO¶	The mixers where everyone across disciplines are hanging out talking getting to know each other are really important for creating community and learning about the big world outside of the student's particular research focus. I also valued the leadership roles GSO gave students (running seminars, SURFO program TAing). I look back on time at GSO very fondly. What a great education.¶
PHD¶	pre-2001¶	PO¶	Not sure how the curriculum has changed since 1989! Core courses were excellent training.¶
PHD¶	pre-2001¶	PO¶	As a 1995 graduate I'm out of touch with the current program.¶

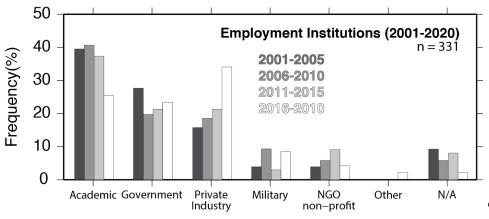
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#### Appendix D. Employment Trends (2001-2020)¶

#### **Temporal Trends**



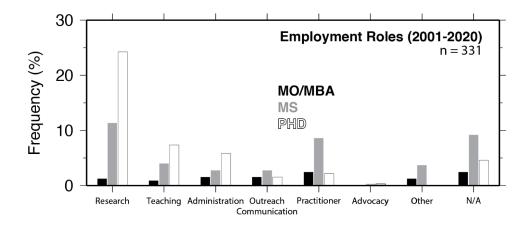


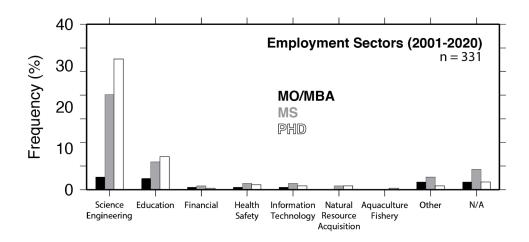


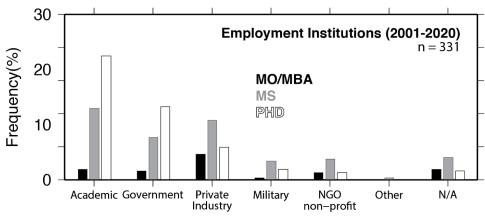
**Figure D1.** Breakdown of current listed employment institutions, sectors, and roles for URI/GSO graduates from 2001 to 2020 and disaggregated by year span of graduation. Original data are provided by Alumni Relations Coordinator Veronica Berounsky on December 10, 2020 in a file named "Alumni Information Spreadsheet as of 11-15-20 - for alum speaker series.xlsx."

## **Degree Trends**



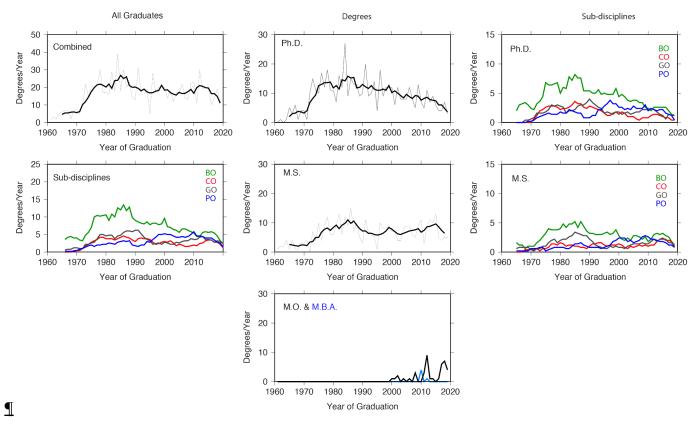






**Figure D2.** Breakdown of current listed employment institutions, sectors, and roles for URI/GSO graduates from 2001 to 2020 and disaggregated terminal degree obtained. Original data are provided by Alumni Relations Coordinator Veronica Berounsky on December 10, 2020 in a file named "Alumni Information Spreadsheet as of 11-15-20 - for alum speaker series.xlsx." ■

# Appendix E. Graduation Trends (1961-2020)¶



**Figure E1.** Plots of temporal patterns of URI/GSO graduates based on sub-discipline and terminal degrees from URI/GSO.

#### Appendix F. Methodology

#### **Assessment Development**

The development of the academic assessment tool required several steps including,¶

- choosing a survey mechanism, ¶
- recruiting a development team, ¶
- creating a list of assessed topics, and ¶
- $\bullet$  designing the survey. $\P$

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After exploring several free online survey tools (e.g., Google Forms), we ultimately chose the SurveyMonkey<sup>TM</sup> (https://www.surveymonkey.com) paid service, as this application provided more flexibility and logic/redirection capabilities. Our 7-person development team consisted of 4 URI/GSO faculty ranging from assistant to full professors, 1 emeritus URI/GSO faculty member, 1 marine research scientist, and 1 alumni relations coordinator (Table II). One of the faculty members is also the Associate Dean of Academic Affairs at URI/GSO. Five of the team members received their doctorate degrees in oceanography at GSO/URI.¶

**Table II.** Names and positions of development team members who assisted in the design of the alumni assessment survey ¶

Team Members ¶	<b>Position</b> ¶
Berounsky, Veronica ¶	Alumni Relations Coordinator¶
Donohue, Kathy ¶	Professor of Oceanography¶
Mouw, Colleen¶	Associate Professor of Oceanography¶
Pockalny, Rob¶	Associate Marine Research Scientist¶
Smith, David¶	Professor of Oceanography¶ Associate Dean of Academic Affairs, URI/GSO¶
Wei, Matt¶	Assistant Professor of Oceanography¶
Yoder, Jim¶	Emeritus Professor of Oceanography¶

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The assessment team lead (Pockalny) created and placed an initial list of potential assessment topics as a Google document and requested asynchronous input from development team members. Comments and suggestions from team members were incorporated into the evolving survey draft, and the results were shared during a follow-up teleconference. A near-final draft was shared, and final comments from team members were incorporated. The final draft of the survey was reviewed by all team members and given approval.¶

#### **Survey Design**

A total of 37 assessment items was then transmogrified into the SurveyMonkey<sup>TM</sup> format (Table III). Built-in survey assistance tools predicted the survey would take 19 minutes to complete with a completion rate of 83%. A full list of the survey questions is available in Appendix A, and the images of questions in SurveyMonkey<sup>TM</sup> format are available in Appendix B.¶

**Table III.** List of general topics for the alumni program assessment.

Primary Topics ¶	Secondary Topics¶
Employment Type (first & most recent)¶	when hired, institution, sector, role, field¶
Impacts on Career ¶	courses, research activities, requirements, social¶
Advising and Mentoring¶	sources, types, quality¶
Skills¶	importance, availability¶
Course Designs¶	formats, topics¶
Student Funding¶	concerns, sources¶
Facilities¶	use, quality¶
Demographics¶	degree, sub-discipline, graduation date, other degrees ¶
Alumni Funds¶	preferred allocation¶
Open-ended Comments¶	retained or improved curriculum program components¶

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A significant amount of demographic information was requested in the surveys to identify potential degree, sub-discipline, and/or temporal trends. We wanted to assure the anonymity of respondents, while at the same time providing important information for disaggregation of the results. Therefore, we requested graduation dates with a time range of at least 5 years. We used one survey question to redirect graduates to questions about more recent employment if the characteristics of their first hire were significantly different. We requested information about the location of alumni's undergraduate degree (i.e. U.S. versus non-U.S.) to explore potential differences in the population and the graduate experience for U.S.- and non-U.S.-educated alumni. For all respondents, the recording of the IP Address was disengaged within the SurveyMonkey<sup>TM</sup> application, and only a time-progressive, 11-digit Respondent ID number was recorded.¶

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The majority of survey items requested ratings of multiple parameters on an expanded Lykert scale to increase dynamic range of responses. In all rating systems, numerical values were assigned. There was one major open response item at the end of the survey, and most all other survey items allowed for additional comments. All of the questions and responses are represented in graphical and text-based form in Appendix C. ¶

### **Data Analysis Approach**

Analysis of the survey results combined graphical and statistical representations of the response data with the review of open responses and additional comment contributions. These approaches required:¶

- downloading and extracting data from SurveyMonkey<sup>TM</sup> platform,¶
- converting extracted data to comma-delimited values with Unix line feeds, and ¶
- creating Unix shell scripts with Generic Mapping Tool functions to process and plot the numerical data and parse/group text responses.¶

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Data extraction from SurveyMonkey<sup>TM</sup> was very straightforward with the assistance of the "SAVE AS" tab and the "Export file | All individual responses" options. Additional options

allowed for the selection of the CSV (comma-separated value) file format with "Condensed Columns" and "Numerical Value" preferences. A zip file was created for download. The zip file was then unzipped and opened with Excel <sup>TM</sup> v. 16.30, all commas were removed, and then saved as a CSV file. This resulting file was opened with text editing software Textwrangler<sup>TM</sup> v.4.5.12 and saved in Unicode (UTF-8) format with Unix line feeds.¶

Unix shell scripts combined with Generic Mapping Tools functions were generated to create heat maps of each question by binning and displaying frequency of responses by color and size of symbol (see Appendix C). The scripts calculated the mean response and scaled this value to the full range of possible selections to create a normalized rating from 1-100. For example, a question with 8 possible ranking choices would have a lowest possible survey value of 0 and a highest possible survey value set to 7. The mean of all values would then be divided by the highest possible value and then multiplied by 100 (e.g., 100\*mean/7). Any "N/A" responses were removed from this list of responses prior to this analysis. The survey results were also disaggregated by degree sought (MO-MBA, MS, PHD), curricular group (BO, CO, GO, PO), and graduation date range (e.g., pre-2001, 2001-2005, 2006-2010, 2011-2015, 2016-2020).

In addition, we analyzed data from the alumni mailing list provided by Veronica Berounsky (e.g., "Alumni Information Spreadsheet as of 11-15-20 - for alum speaker series.xlsx") to explore a broader pool of employment trends over time and by degree for comparison with our survey results (see Appendix D).