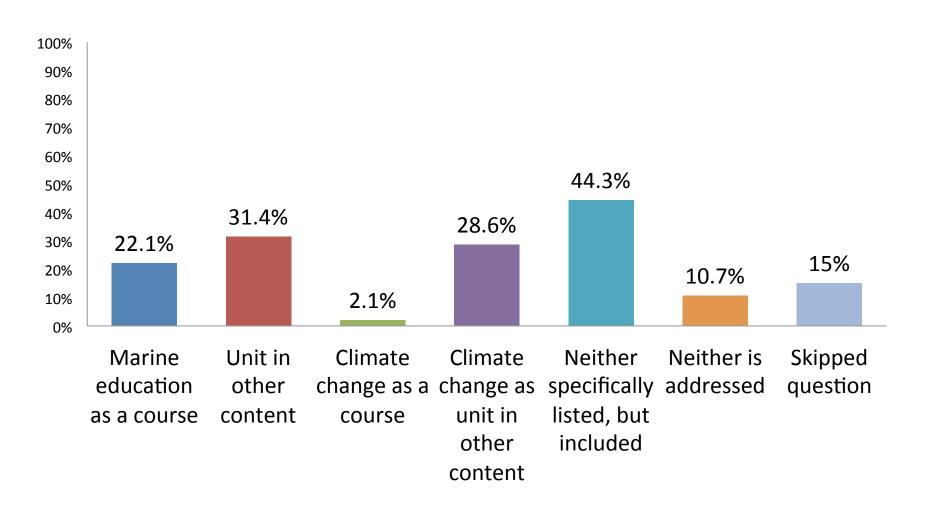
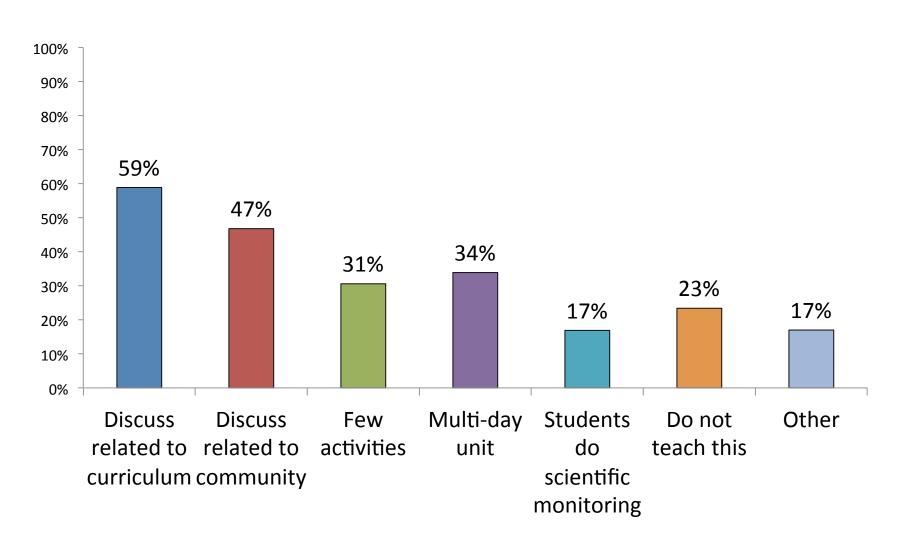


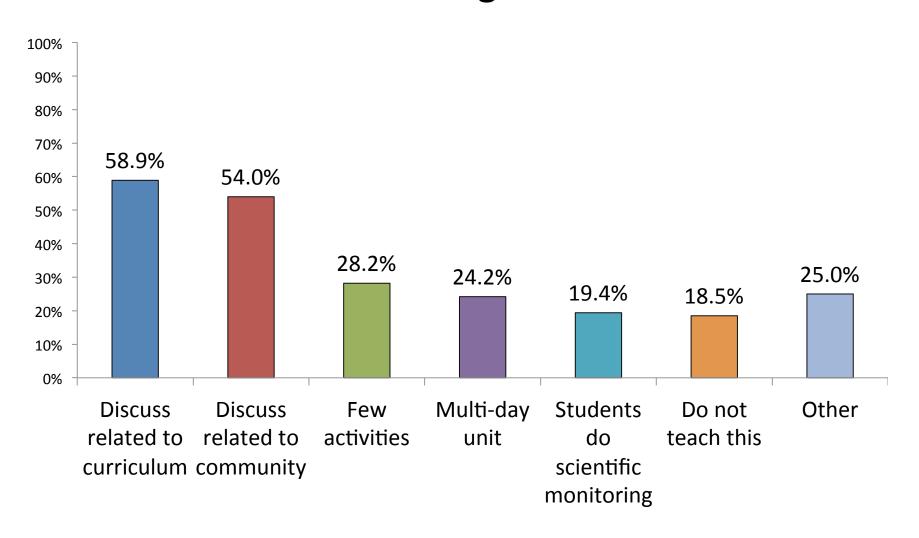
How marine science or climate change is included in curriculum.



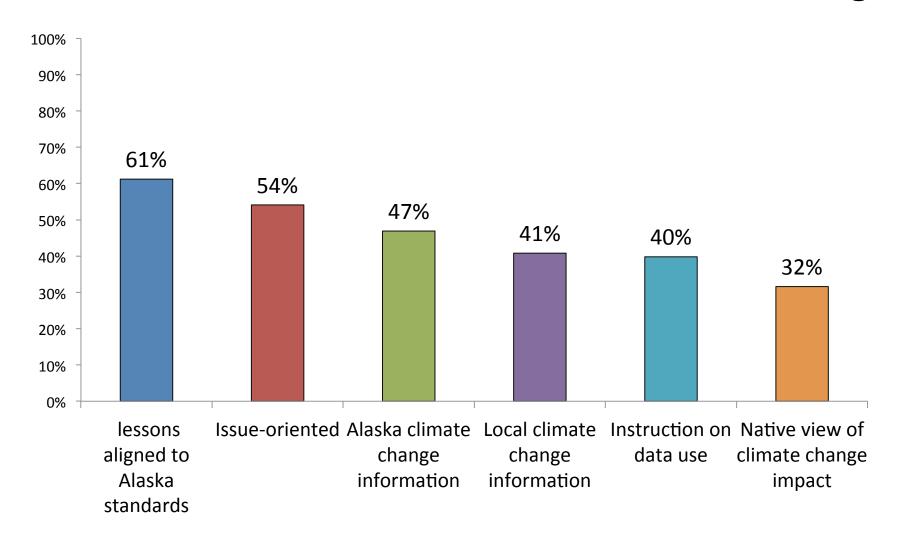
Current approaches to teaching about marine environment



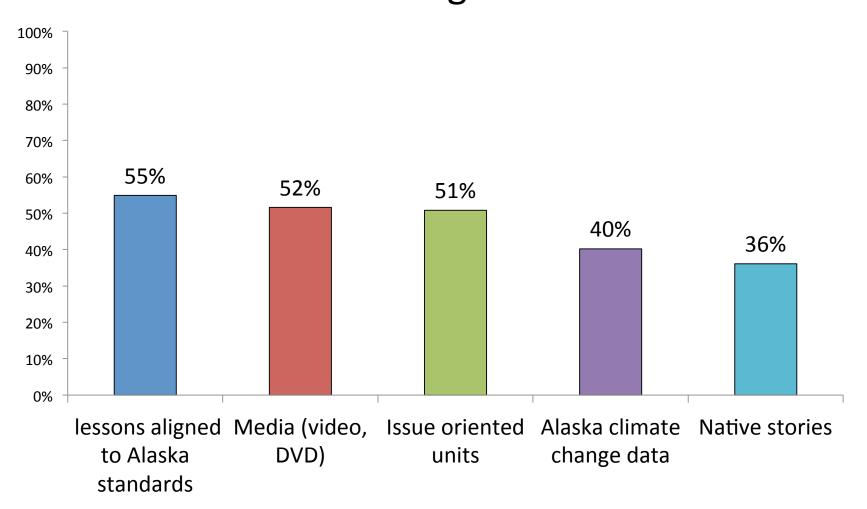
Current approaches to teaching about climate change



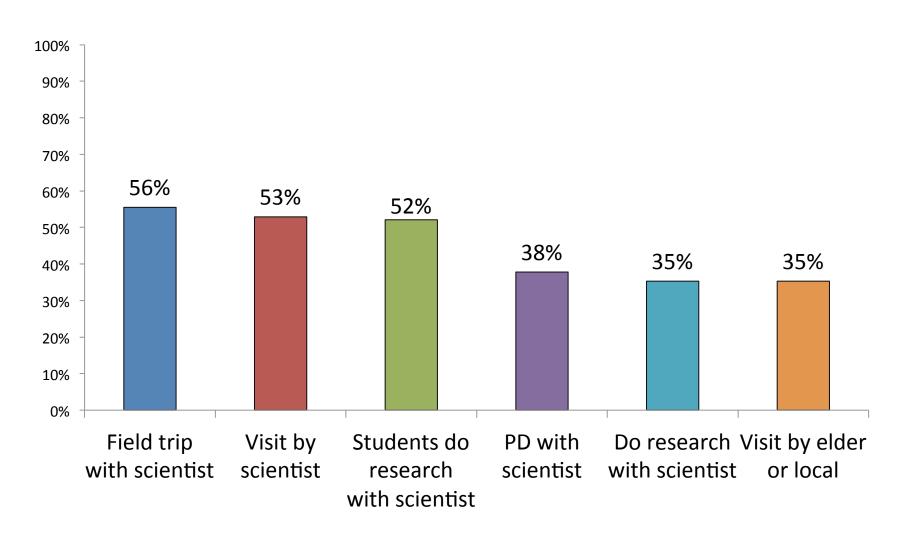
Instructional materials teachers <u>use</u> to teach about the marine environment or climate change



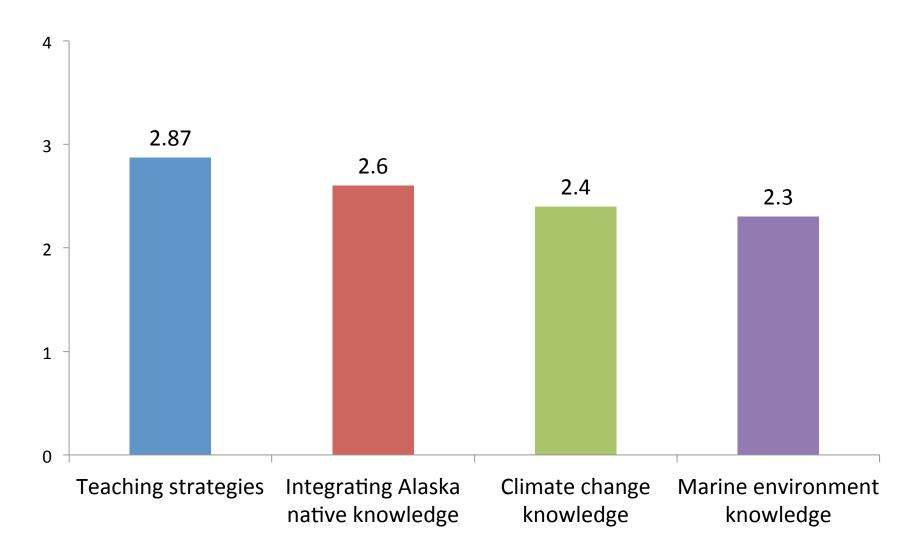
Teaching materials teachers <u>need</u> to teach about the marine environment or climate change



What teachers need to support teaching about the marine environment or climate change



Teachers rated areas of need for professional development



Another view of how teachers rated areas of need for professional development

Professional Development Needed	Lowest	Lower	Higher	Highest
	Need	Need	Need	Need
Teaching strategies related to climate change or marine environments.	17.2% (20)	16.4% (19)	28.4% (33)	37.9% (44)
Integrating Alaskan Native knowledge within the topics.	19.5%	23.6%	35.0%	22.0%
	(24)	(29)	(43)	(27)
Climate change content knowledge.	21.9%	36.8%	19.3%	21.9%
	(25)	(42)	(22)	(25)
Marine environment content knowledge.	33.6%	22.1%	25.7%	18.6%
	(38)	(25)	(29)	(21)

Conclusions

 Teachers need lessons and materials in marine environment and climate change that align with the Alaska State Standards

 Teachers need and want scientists to help with content and to support learning experiences for students

 Teachers would like help integrating traditional ecological knowledge with western science in regards to climate change and the marine environment