

## Evaluation data: student experience and confidence in conducting their own research

On the pre-survey we asked: How much experience have you had conducting your own research projects? On the post-survey we asked: How would you rate your confidence in your ability to conduct your own research project in the future?

Before the unit, 62% of students have had at least a little experience conducting their own research, including 32% who have had some or a lot. Afterwards 85% are at least somewhat confident, including 46% who are confident or very confident.

Pre-unit student survey: "How much experience have you had conducting your own research projects?"						
	Not much		A little		A lot	Not Answered
Total PRE survey responses	16	21	34	23	14	5
Percentage	14%	19%	30%	20%	12%	4%
Post-unit student survey: "How would you rate your confidence in your ability to conduct your own research project in the future?"						
	Not confident		Somewhat confident		Very confident	Not Answered
Total PRE survey responses	8	7	39	29	21	4
Percentage	7%	6%	36%	27%	19%	4%
Percentage Differentials	-7%	-13%	6%	7%	7%	0%

## Improving students' ability to design and carry out research

Two teachers provided data on their students' success in carrying different aspects of research design. Both teachers agreed, or agreed strongly that: their students were mostly very engaged in conducting the research project, their students were more engaged than they typically are for science-related projects, the experience of designing and conducting a research project positively impacted their overall enthusiasm for and interest in science, and their students generated additional question from their research they were interesting in pursuing.

Proportion of student in two classrooms who successfully carried out five aspects of research project before and after their teachers worked with the Montshire's SEPA project				
	Teacher 1's Students		Teacher 2's Students	
	Before work with the Montshire	After work with the Montshire	Before work with the Montshire	After work with the Montshire
Form a testable research question	Few if any	All or almost all	About half	Many
Collect data	About half	All or almost all	About half	Many
Analyze/interpret data	Few if any	Many	About half	Many
Draw conclusions for data	Many	All or almost all	About half	Many
Represent data	Few if any	Many	About half	Many