

NH CREATES—An In-service STEM Teacher Program – Amato-Wierda, et al. Appendix C. Frequency of PBL Classroom Practices.

Table C1. *Frequency of PBL Classroom Practices Pre-Institute and Post-project Implementation (n=15).*

	Mean, Pre Teacher Institute*	SD	Mean, Post- Implementation*	SD	t(14)	p Value (2-sided)	Cohen's d
Use rubrics to set expectations for projects	3.60	.632	4.00	.000	2.449	.028	.632
Require portfolios as part of PBL assessment process	2.20	1.207	2.60	1.183	1.702	.111	.910
Require that students make presentations in class	3.00	.655	3.33	.617	2.092	.055	.617
Require that students make presentations to business and/or community partners	1.40	.737	2.07	.704	3.162	.007	.816
Use a driving question to frame PBL class projects	2.87	1.060	3.60	.507	2.955	.010	.961
Work in teams with other teachers	2.60	1.121	3.00	1.000	1.382	.189	1.121
Involve community partners in project development	1.67	.967	2.13	.915	1.522	.150	1.187
Intentionally align standards with projects	3.60	.737	3.93	.258	2.092	.055	.617

*On a scale from 1 to 4, with 1 = Never, 2 = Rarely, 3 = Occasionally, and 4 = Frequently.

Table C2. *Teacher Awareness, Interest, and Relevance of RM&B Pre-Institute and Post-project Implementation (n=11).*

	Mean, Retrospective Pretest Teacher Institute Survey*	SD	Mean, Post- Implementation Survey*	SD	t(10)	p Value (2-sided)	Cohen's d
My content knowledge/ understanding of RM&B	2.18	.603	3.45	.522	5.369	<.001	.786
My ability to explain RM&B to my students	2.00	.632	3.45	.522	9.238	<.001	.522
My interest in RM&B	2.36	.809	4.27	.905	5.573	<.001	1.136
My interest in biotechnology in general	2.27	.647	4.36	1.027	6.640	<.001	1.044
My ability to incorporate RM&B into my lesson plans	1.36	.505	3.64	.809	11.656	<.001	.647
My ability to incorporate hands-on activities/labs about RM&B in the classroom	1.64	.674	3.73	.905	7.347	<.001	.944
My understanding of relevance of RM&B to NGSS	1.82	.603	3.91	1.044	8.343	<.001	.831
My ability to teach my students about future jobs in RM&B	1.73	.467	3.73	1.009	6.055	<.001	1.095
My ability to teach students about real-world applications of NGSS related to RM&B	1.82	.751	3.73	.786	9.037	<.001	1.036
My ability to get students engaged with RM&B content and methods	1.64	.674	4.09	.944	7.860	<.001	1.036
My awareness of RM&B partners and resources within NH	1.09	.302	4.18	.874	12.333	<.001	.831

*On a scale from 1 to 5, with 1 = None, 2 = A little, 3 = Moderate, 4 = Quite a bit, and 5 = A lot.