
Career Connections to Teaching with Technology (CCTT)
Year 5, Interim Evaluation Report

By

Karen C. Cohen, Marcus Lieberman, Jane Coogan, and Toni Rosenberg

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Karen C Cohen and Associates
9 Cliff Road, Weston, MA 02493-1414
Tel: (781) 237-3351; E-mail: Cohenka@aol.com

APPENDIX D: National Digital Library Quantitative Findings

read any background or other reading materials or lab materials?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	61.1	61.1	61.1
	No	14	38.9	38.9	100.0
	Total	36	100.0	100.0	

complete any surveys to assist your skill level, interests, teaching responsibilities or objectives?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	16	44.4	44.4	44.4
	No	20	55.6	55.6	100.0
	Total	36	100.0	100.0	

identify a unit you wanted to develop or other ways you anticipated incorporating project information at your home school?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	36	100.0	100.0	100.0

prepare a project or problem to work on during the course?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	34	94.4	94.4	94.4
	No	2	5.6	5.6	100.0
	Total	36	100.0	100.0	

do any other types of activities?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	35	97.2	100.0	100.0
Missing	System	1	2.8		
Total		36	100.0		

did that include incorporating and synthesizing interdisciplinary content?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	34	94.4	94.4	94.4
	No	2	5.6	5.6	100.0
	Total	36	100.0	100.0	

teaching methods?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	32	88.9	88.9	88.9
	No	4	11.1	11.1	100.0
	Total	36	100.0	100.0	

lab technologies?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	30	83.3	85.7	85.7
	No	5	13.9	14.3	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

new technologies?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	29	80.6	80.6	80.6
	No	7	19.4	19.4	100.0
	Total	36	100.0	100.0	

reading materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	11.1	11.1	11.1
	No	32	88.9	88.9	100.0
	Total	36	100.0	100.0	

lecture notes or other handouts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	8	22.2	22.9	22.9
	No	27	75.0	77.1	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

problem sets, problem descriptions or lab exercises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	13.9	14.3	14.3
	No	30	83.3	85.7	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

other activities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	5.6	5.9	5.9
	No	32	88.9	94.1	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

reading materials

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completed	28	77.8	77.8	77.8
	Needed more work	7	19.4	19.4	97.2
	3	1	2.8	2.8	100.0
Total		36	100.0	100.0	

lecture notes or other handouts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completed	29	80.6	80.6	80.6
	Needed more work	6	16.7	16.7	97.2
	3	1	2.8	2.8	100.0
Total		36	100.0	100.0	

problem sets, project descriptions or lab exercises

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completed	17	47.2	47.2	47.2
	Needed more work	18	50.0	50.0	97.2
	3	1	2.8	2.8	100.0
Total		36	100.0	100.0	

other activities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Completed	19	52.8	54.3	54.3
	Needed more work	15	41.7	42.9	97.1
	3	1	2.8	2.9	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

Did you participate in one or more formal follow-up sessions at scheduled times?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	11	30.6	30.6	30.6
	No	25	69.4	69.4	100.0
	Total	36	100.0	100.0	

Did you participate in one or more informal group get-togethers?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	20	55.6	55.6	55.6
	No	16	44.4	44.4	100.0
	Total	36	100.0	100.0	

Did you participate in any online follow-up?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	27.8	27.8	27.8
	No	25	69.4	69.4	97.2
	3	1	2.8	2.8	100.0
	Total	36	100.0	100.0	

Did you review or site-test any materials or products developed as part of the workshop?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	25	69.4	69.4	69.4
	No	11	30.6	30.6	100.0
	Total	36	100.0	100.0	

Did you receive any technical assistance from the project staff?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	19	52.8	52.8	52.8
	No	17	47.2	47.2	100.0
	Total	36	100.0	100.0	

Did you communicate with the staff and/or other participants by telephone?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	5	13.9	13.9	13.9
	No	31	86.1	86.1	100.0
	Total	36	100.0	100.0	

Did you communicate with the staff and/or other participants by e-mail?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	18	50.0	50.0	50.0
	No	18	50.0	50.0	100.0
	Total	36	100.0	100.0	

Did you collaborate online with any other participants or colleagues?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	16.7	16.7	16.7
	No	30	83.3	83.3	100.0
	Total	36	100.0	100.0	

Was this communication/collaboration ongoing or sporadic?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ongoing	4	11.1	21.1	21.1
	Sporadic	15	41.7	78.9	100.0
	Total	19	52.8	100.0	
Missing	System	17	47.2		
Total		36	100.0		

increased content knowledge

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Some	13	36.1	36.1	36.1
	A lot	23	63.9	63.9	100.0
	Total	36	100.0	100.0	

new or more in-depth perspectives on teaching and learning

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or none	1	2.8	2.8	2.8
	Some	15	41.7	41.7	44.4
	A lot	20	55.6	55.6	100.0
	Total	36	100.0	100.0	

new or improved skills in teaching

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or none	5	13.9	13.9	13.9
	Some	20	55.6	55.6	69.4
	A lot	11	30.6	30.6	100.0
	Total	36	100.0	100.0	

new or improved experimental lab techniques

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or none	7	19.4	19.4	19.4
	Some	18	50.0	50.0	69.4
	A lot	11	30.6	30.6	100.0
	Total	36	100.0	100.0	

new or improved technological skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or none	8	22.2	22.2	22.2
	Some	18	50.0	50.0	72.2
	A lot	10	27.8	27.8	100.0
	Total	36	100.0	100.0	

new or more in-depth knowledge of issues regarding females and minority students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or none	25	69.4	69.4	69.4
	Some	9	25.0	25.0	94.4
	A lot	2	5.6	5.6	100.0
	Total	36	100.0	100.0	

new information about other resources for use in teaching

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Some	12	33.3	33.3	33.3
	A lot	24	66.7	66.7	100.0
	Total	36	100.0	100.0	

new contacts with colleagues from other institutions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or none	14	38.9	38.9	38.9
	Some	17	47.2	47.2	86.1
	A lot	5	13.9	13.9	100.0
	Total	36	100.0	100.0	

increased motivation or stimulation for teaching excellence

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2	16	44.4	44.4	44.4
	3	20	55.6	55.6	100.0
	Total	36	100.0	100.0	

Did you get any benefit out of the program?

		Frequency	Percent
Missing	System	36	100.0

preparation prior to the course

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or no	35	97.2	97.2	97.2
	Moderate	1	2.8	2.8	100.0
	Total	36	100.0	100.0	

content of the sessions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or no	1	2.8	2.8	2.8
	Moderate	10	27.8	27.8	30.6
	Great	25	69.4	69.4	100.0
	Total	36	100.0	100.0	

study materials used during the course

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or no	3	8.3	8.3	8.3
	Moderate	14	38.9	38.9	47.2
	Great	19	52.8	52.8	100.0
	Total	36	100.0	100.0	

the experience of developing products or materials at the course

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or no	1	2.8	2.8	2.8
	Moderate	13	36.1	36.1	38.9
	Great	22	61.1	61.1	100.0
	Total	36	100.0	100.0	

other hands-on learning activities, such as laboratories or computer work

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or no	2	5.6	5.7	5.7
	Moderate	14	38.9	40.0	45.7
	Great	19	52.8	54.3	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

materials from the course that you used in your school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or no	2	5.6	5.6	5.6
	Moderate	17	47.2	47.2	52.8
	Great	17	47.2	47.2	100.0
	Total	36	100.0	100.0	

presentations or practice lessons that you gave

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or no	6	16.7	16.7	16.7
	Moderate	16	44.4	44.4	61.1
	Great	14	38.9	38.9	100.0
	Total	36	100.0	100.0	

interactions with the instructors (both structured and unstructured)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Moderate	10	27.8	28.6	28.6
	Great	24	66.7	68.6	97.1
	4	1	2.8	2.9	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

discussions of how participants would use what was learned in their own courses

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or no	1	2.8	2.8	2.8
	Moderate	14	38.9	38.9	41.7
	Great	21	58.3	58.3	100.0
	Total	36	100.0	100.0	

informal interactions with other participants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Moderate	18	50.0	50.0	50.0
	Great	18	50.0	50.0	100.0
	Total	36	100.0	100.0	

follow-up activities (formal or informal)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Little or no	15	41.7	41.7	41.7
	Moderate	16	44.4	44.4	86.1
	Great	5	13.9	13.9	100.0
	Total	36	100.0	100.0	

did you develop or redesign a major or a program of studies?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	19	52.8	52.8	52.8
	No	17	47.2	47.2	100.0
	Total	36	100.0	100.0	

did you develop one or more new units?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	24	66.7	66.7	66.7
	No	12	33.3	33.3	100.0
	Total	36	100.0	100.0	

did you revise one or more existing units?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	23	63.9	63.9	63.9
	No	13	36.1	36.1	100.0
	Total	36	100.0	100.0	

did you develop one or more proposals requesting permission or funding to revise or develop materials or units?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	1	2.8	2.8	2.8
	No	35	97.2	97.2	100.0
	Total	36	100.0	100.0	

All in all, how many units did you develop and/or revise?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	3	8.3	8.6	8.6
	1.0	16	44.4	45.7	54.3
	2.0	6	16.7	17.1	71.4
	3.0	4	11.1	11.4	82.9
	4.0	3	8.3	8.6	91.4
	5.0	1	2.8	2.9	94.3
	9.0	1	2.8	2.9	97.1
	20.0	1	2.8	2.9	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

Did you develop or revise these units in collaboration with one or more colleagues?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	19	52.8	57.6	57.6
	No	13	36.1	39.4	97.0
	3	1	2.8	3.0	100.0
	Total	33	91.7	100.0	
Missing	System	3	8.3		
Total		36	100.0		

How many of the units that you developed-revised were interdisciplinary?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	5.6	10.0	10.0
	1	7	19.4	35.0	45.0
	2	3	8.3	15.0	60.0
	3	3	8.3	15.0	75.0
	4	3	8.3	15.0	90.0
	5	1	2.8	5.0	95.0
	9	1	2.8	5.0	100.0
	Total	20	55.6	100.0	
Missing	System	16	44.4		
Total		36	100.0		

Were the units that you developed or revised interdisciplinary?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	17	47.2	89.5	89.5
	No	2	5.6	10.5	100.0
	Total	19	52.8	100.0	
Missing	System	17	47.2		
Total		36	100.0		

Did these units receive formal departmental or program approval?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	6	16.7	18.2	18.2
	Some did and some did not	1	2.8	3.0	21.2
	No or not applicable	26	72.2	78.8	100.0
	Total	33	91.7	100.0	
Missing	System	3	8.3		
Total		36	100.0		

Did you introduce new content that you learned?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	25	69.4	73.5	73.5
	No	8	22.2	23.5	97.1
	3	1	2.8	2.9	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

How important was the change in content to the courses?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of moderate importance	17	47.2	65.4	65.4
	Of major importance	9	25.0	34.6	100.0
	Total	26	72.2	100.0	
Missing	System	10	27.8		
Total		36	100.0		

Did you change the content to focus on key issues or "big ideas"?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	58.3	61.8	61.8
	No	13	36.1	38.2	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

How important was new focus to the courses?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of moderate importance	11	30.6	52.4	52.4
	Of major importance	10	27.8	47.6	100.0
	Total	21	58.3	100.0	
Missing	System	15	41.7		
Total		36	100.0		

Did you introduce new experimental or lab techniques?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	23	63.9	67.6	67.6
	No	11	30.6	32.4	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

How important were the new techniques to the courses?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of little or no importance	1	2.8	4.3	4.3
	Of moderate importance	14	38.9	60.9	65.2
	Of major importance	8	22.2	34.8	100.0
	Total	23	63.9	100.0	
Missing	System	13	36.1		
Total		36	100.0		

Did you introduce new equipment, materials or computer software that you learned?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	16	44.4	47.1	47.1
	No	18	50.0	52.9	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

How important was the equipment, materials or software to the courses?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of little or no importance	1	2.8	6.3	6.3
	Of moderate importance	7	19.4	43.8	50.0
	Of major importance	8	22.2	50.0	100.0
	Total	16	44.4	100.0	
Missing	System	20	55.6		
Total		36	100.0		

Did you change teaching methods in any other way?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	14	38.9	41.2	41.2
	No	20	55.6	58.8	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

How important was the change in teaching methods to the courses?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Of moderate importance	9	25.0	64.3	64.3
	Of major importance	5	13.9	35.7	100.0
	Total	14	38.9	100.0	
Missing	System	22	61.1		
Total		36	100.0		

Have you taught one or more of the courses or units you developed or revised as a result of your participation?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	28	77.8	82.4	82.4
	No	6	16.7	17.6	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

How many?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	9	25.0	39.1	39.1
	2.0	7	19.4	30.4	69.6
	3.0	2	5.6	8.7	78.3
	4.0	1	2.8	4.3	82.6
	5.0	2	5.6	8.7	91.3
	15.0	1	2.8	4.3	95.7
	45.0	1	2.8	4.3	100.0
	Total	23	63.9	100.0	
Missing	System	13	36.1		
Total		36	100.0		

Have you team taught this material?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	11	30.6	39.3	39.3
	No	14	38.9	50.0	89.3
	3	3	8.3	10.7	100.0
	Total	28	77.8	100.0	
Missing	System	8	22.2		
Total		36	100.0		

In all, approximately how many students have completed this material?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6.00	1	2.8	3.6	3.6
	12.00	2	5.6	7.1	10.7
	17.00	1	2.8	3.6	14.3
	19.00	1	2.8	3.6	17.9
	20.00	3	8.3	10.7	28.6
	24.00	2	5.6	7.1	35.7
	27.00	1	2.8	3.6	39.3
	28.00	1	2.8	3.6	42.9
	50.00	1	2.8	3.6	46.4
	60.00	2	5.6	7.1	53.6
	84.00	1	2.8	3.6	57.1
	90.00	2	5.6	7.1	64.3
	100.00	1	2.8	3.6	67.9
	120.00	2	5.6	7.1	75.0
	140.00	1	2.8	3.6	78.6
	150.00	2	5.6	7.1	85.7
	160.00	1	2.8	3.6	89.3
	200.00	1	2.8	3.6	92.9
	300.00	1	2.8	3.6	96.4
	350.00	1	2.8	3.6	100.0
	Total	28	77.8	100.0	
Missing	System	8	22.2		
Total		36	100.0		

Approximately what percentage of these students are female?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12.00	1	2.8	3.7	3.7
	40.00	2	5.6	7.4	11.1
	43.00	1	2.8	3.7	14.8
	48.00	1	2.8	3.7	18.5
	50.00	10	27.8	37.0	55.6
	55.00	3	8.3	11.1	66.7
	60.00	3	8.3	11.1	77.8
	65.00	2	5.6	7.4	85.2
	75.00	1	2.8	3.7	88.9
	80.00	1	2.8	3.7	92.6
	85.00	1	2.8	3.7	96.3
	90.00	1	2.8	3.7	100.0
	Total	27	75.0	100.0	
Missing	System	9	25.0		
Total		36	100.0		

Are these courses or units still being offered?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	16	44.4	61.5	61.5
	No	8	22.2	30.8	92.3
	3	2	5.6	7.7	100.0
	Total	26	72.2	100.0	
Missing	System	10	27.8		
Total		36	100.0		

In-depth knowledge of subject area

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difference	3	8.3	11.1	11.1
	Somewhat better	14	38.9	51.9	63.0
	Substantially better	5	13.9	18.5	81.5
	No valid comparison possible	5	13.9	18.5	100.0
	Total	27	75.0	100.0	
Missing	System	9	25.0		
Total		36	100.0		

Problem solving skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difference	4	11.1	14.8	14.8
	Somewhat better	8	22.2	29.6	44.4
	Substantially better	7	19.4	25.9	70.4
	No valid comparison possible	8	22.2	29.6	100.0
	Total	27	75.0	100.0	
Missing	System	9	25.0		
Total		36	100.0		

Communication skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difference	6	16.7	22.2	22.2
	Somewhat better	12	33.3	44.4	66.7
	Substantially better	4	11.1	14.8	81.5
	No valid comparison possible	5	13.9	18.5	100.0
	Total	27	75.0	100.0	
Missing	System	9	25.0		
Total		36	100.0		

Ability to apply new knowledge

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difference	1	2.8	3.8	3.8
	Somewhat better	10	27.8	38.5	42.3
	Substantially better	9	25.0	34.6	76.9
	No valid comparison possible	6	16.7	23.1	100.0
	Total	26	72.2	100.0	
Missing	System	10	27.8		
Total		36	100.0		

Critical thinking skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difference	2	5.6	7.7	7.7
	Somewhat better	12	33.3	46.2	53.8
	Substantially better	6	16.7	23.1	76.9
	No valid comparison possible	6	16.7	23.1	100.0
	Total	26	72.2	100.0	
Missing	System	10	27.8		
Total		36	100.0		

Ability to collaborate with others

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difference	2	5.6	7.7	7.7
	Somewhat better	9	25.0	34.6	42.3
	Substantially better	6	16.7	23.1	65.4
	No valid comparison possible	9	25.0	34.6	100.0
	Total	26	72.2	100.0	
Missing	System	10	27.8		
Total		36	100.0		

Ability to use advanced technology

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difference	3	8.3	11.1	11.1
	Somewhat better	12	33.3	44.4	55.6
	Substantially better	5	13.9	18.5	74.1
	No valid comparison possible	7	19.4	25.9	100.0
	Total	27	75.0	100.0	
Missing	System	9	25.0		
Total		36	100.0		

Understanding of the scientific method

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No difference	1	2.8	3.7	3.7
	Somewhat better	12	33.3	44.4	48.1
	Substantially better	2	5.6	7.4	55.6
	No valid comparison possible	12	33.3	44.4	100.0
	Total	27	75.0	100.0	
Missing	System	9	25.0		
Total		36	100.0		

Have you participated in any further professional development activities or workshops designed to change the content of courses or units or to improve instruction?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	26	72.2	72.2	72.2
	No	10	27.8	27.8	100.0
	Total	36	100.0	100.0	

Amount of impact

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	6	16.7	24.0	24.0
	A little	4	11.1	16.0	40.0
	Moderate	11	30.6	44.0	84.0
	Great	3	8.3	12.0	96.0
	5	1	2.8	4.0	100.0
	Total	25	69.4	100.0	
Missing	System	11	30.6		
Total		36	100.0		

Have you begun any new communication or continued existing communication with experts in one or more disciplines?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	14	38.9	38.9	38.9
	No	22	61.1	61.1	100.0
	Total	36	100.0	100.0	

Amount of impact

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	1	2.8	7.1	7.1
	A little	6	16.7	42.9	50.0
	Moderate	4	11.1	28.6	78.6
	Great	3	8.3	21.4	100.0
	Total	14	38.9	100.0	
Missing	System	22	61.1		
Total		36	100.0		

Have you established any new research or teaching collaborations with colleagues?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	18	50.0	50.0	50.0
	No	18	50.0	50.0	100.0
	Total	36	100.0	100.0	

Amount of impact

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	3	8.3	15.8	15.8
	A little	6	16.7	31.6	47.4
	Moderate	7	19.4	36.8	84.2
	Great	3	8.3	15.8	100.0
	Total	19	52.8	100.0	
Missing	System	17	47.2		
Total		36	100.0		

Have you attended any professional meetings, seminars or workshops?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	30	83.3	85.7	85.7
	No	5	13.9	14.3	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

Amount of impact

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	15	41.7	50.0	50.0
	A little	7	19.4	23.3	73.3
	Moderate	6	16.7	20.0	93.3
	Great	2	5.6	6.7	100.0
	Total	30	83.3	100.0	
Missing	System	6	16.7		
Total		36	100.0		

Have you delivered one or more papers at a professional meeting?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	11.1	11.1	11.1
	No	32	88.9	88.9	100.0
	Total	36	100.0	100.0	

Amount of impact

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	1	2.8	33.3	33.3
	Moderate	2	5.6	66.7	100.0
	Total	3	8.3	100.0	
Missing	System	33	91.7		
Total		36	100.0		

Have you made one or more presentations to local campuses or community organizations?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	14	38.9	38.9	38.9
	No	22	61.1	61.1	100.0
	Total	36	100.0	100.0	

Amount of impact

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	3	8.3	21.4	21.4
	A little	5	13.9	35.7	57.1
	Moderate	4	11.1	28.6	85.7
	Great	2	5.6	14.3	100.0
	Total	14	38.9	100.0	
Missing	System	22	61.1		
Total		36	100.0		

lave you shared any information or skills you learned with colleagues either in your institution or in other institutions?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	31	86.1	96.9	96.9
	No	1	2.8	3.1	100.0
	Total	32	88.9	100.0	
Missing	System	4	11.1		
Total		36	100.0		

Have you shared any information or skills you learned through informal discussions with one or more colleagues?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	32	88.9	91.4	91.4
	No	3	8.3	8.6	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

lave you shared any information or skills you learned through presentations to one more colleagues?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	61.1	62.9	62.9
	No	13	36.1	37.1	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

Have you shared any information or skills you learned through observation of your class or laboratory by one or more colleagues?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	25.0	25.7	25.7
	No	26	72.2	74.3	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

Have you shared any information or skills you learned through participation in any department or school committees on curricular change and or reform?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	25.0	27.3	27.3
	No	24	66.7	72.7	100.0
	Total	33	91.7	100.0	
Missing	System	3	8.3		
Total		36	100.0		

Have you shared any information or skills you learned through any other activities?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	9	25.0	26.5	26.5
	No	25	69.4	73.5	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

As a result of what you shared, have any of your colleagues modified the content of a unit or program of study?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	21	58.3	60.0	60.0
	No	14	38.9	40.0	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

As a result of what you shared, have any of your colleagues developed a new unit or program of study?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	7	19.4	20.0	20.0
	No	28	77.8	80.0	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

As a result of what you shared, have any of your colleagues attended or joined the project?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	12	33.3	34.3	34.3
	No	23	63.9	65.7	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

As a result of what you shared, have any of your colleagues made any other changes?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	2	5.6	5.9	5.9
	No	32	88.9	94.1	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

Did you encounter any barriers to implementing what you learned from your involvement with this course?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	16	44.4	44.4	44.4
	No	20	55.6	55.6	100.0
	Total	36	100.0	100.0	

When you took the program, did you INTEND to develop any new materials-units or modify any existing materials or units?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	20	55.6	57.1	57.1
	No	15	41.7	42.9	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

Number of hours in preparation before the course

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	32	88.9	94.1	94.1
	4.0	1	2.8	2.9	97.1
	15.0	1	2.8	2.9	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

Number of hours during the course

		Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	5.0	1	2.8	2.8	2.8	
	6.0	1	2.8	2.8	5.6	
	8.0	1	2.8	2.8	8.3	
	10.0	4	11.1	11.1	19.4	
	12.0	1	2.8	2.8	22.2	
	14.0	3	8.3	8.3	30.6	
	16.0	5	13.9	13.9	44.4	
	20.0	2	5.6	5.6	50.0	
	21.0	1	2.8	2.8	52.8	
	24.0	1	2.8	2.8	55.6	
	30.0	1	2.8	2.8	58.3	
	32.0	1	2.8	2.8	61.1	
	35.0	5	13.9	13.9	75.0	
	40.0	5	13.9	13.9	88.9	
	42.0	1	2.8	2.8	91.7	
	45.0	1	2.8	2.8	94.4	
	56.0	1	2.8	2.8	97.2	
	99.0	1	2.8	2.8	100.0	
	Total		36	100.0	100.0	

Number of hours after the course developing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	4	11.1	11.4	11.4
	1.0	1	2.8	2.9	14.3
	2.0	2	5.6	5.7	20.0
	3.0	3	8.3	8.6	28.6
	4.0	2	5.6	5.7	34.3
	5.0	4	11.1	11.4	45.7
	7.0	2	5.6	5.7	51.4
	8.0	1	2.8	2.9	54.3
	10.0	9	25.0	25.7	80.0
	12.0	1	2.8	2.9	82.9
	20.0	1	2.8	2.9	85.7
	24.0	1	2.8	2.9	88.6
	40.0	1	2.8	2.9	91.4
	99.0	3	8.3	8.6	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

Number of hours after the course implementing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	1	2.8	3.7	3.7
	1.0	1	2.8	3.7	7.4
	2.0	2	5.6	7.4	14.8
	3.0	3	8.3	11.1	25.9
	4.0	1	2.8	3.7	29.6
	5.0	4	11.1	14.8	44.4
	8.0	1	2.8	3.7	48.1
	9.0	1	2.8	3.7	51.9
	10.0	3	8.3	11.1	63.0
	12.0	1	2.8	3.7	66.7
	15.0	2	5.6	7.4	74.1
	25.0	1	2.8	3.7	77.8
	30.0	1	2.8	3.7	81.5
	99.0	5	13.9	18.5	100.0
	Total	27	75.0	100.0	
Missing	System	9	25.0		
Total		36	100.0		

Number of hours after the course - other?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	.0	2	5.6	11.8	11.8
	1.0	1	2.8	5.9	17.6
	2.0	3	8.3	17.6	35.3
	3.0	1	2.8	5.9	41.2
	5.0	2	5.6	11.8	52.9
	10.0	3	8.3	17.6	70.6
	20.0	4	11.1	23.5	94.1
	50.0	1	2.8	5.9	100.0
	Total	17	47.2	100.0	
Missing	System	19	52.8		
Total		36	100.0		

Approximate total number of hours

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10.0	1	2.8	2.9	2.9
	14.0	1	2.8	2.9	5.9
	15.0	1	2.8	2.9	8.8
	16.0	1	2.8	2.9	11.8
	19.0	1	2.8	2.9	14.7
	20.0	1	2.8	2.9	17.6
	21.0	1	2.8	2.9	20.6
	23.0	1	2.8	2.9	23.5
	24.0	2	5.6	5.9	29.4
	31.0	1	2.8	2.9	32.4
	34.0	1	2.8	2.9	35.3
	37.0	2	5.6	5.9	41.2
	38.0	2	5.6	5.9	47.1
	40.0	1	2.8	2.9	50.0
	48.0	1	2.8	2.9	52.9
	50.0	2	5.6	5.9	58.8
	54.0	1	2.8	2.9	61.8
	55.0	1	2.8	2.9	64.7
	58.0	1	2.8	2.9	67.6
	60.0	2	5.6	5.9	73.5
	62.0	1	2.8	2.9	76.5
	70.0	1	2.8	2.9	79.4
	71.0	1	2.8	2.9	82.4
	75.0	1	2.8	2.9	85.3
	80.0	1	2.8	2.9	88.2
	99.0	4	11.1	11.8	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

At the time you participated in the project, how many years had you been at the school where you were teaching at that time?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	4	11.1	11.4	11.4
	2.0	3	8.3	8.6	20.0
	3.0	2	5.6	5.7	25.7
	4.0	3	8.3	8.6	34.3
	5.0	3	8.3	8.6	42.9
	6.0	1	2.8	2.9	45.7
	7.0	2	5.6	5.7	51.4
	8.0	3	8.3	8.6	60.0
	9.0	1	2.8	2.9	62.9
	10.0	2	5.6	5.7	68.6
	13.0	1	2.8	2.9	71.4
	14.0	1	2.8	2.9	74.3
	15.0	2	5.6	5.7	80.0
	16.0	1	2.8	2.9	82.9
	17.0	1	2.8	2.9	85.7
	19.0	1	2.8	2.9	88.6
	22.0	1	2.8	2.9	91.4
	23.0	2	5.6	5.7	97.1
	25.0	1	2.8	2.9	100.0
	Total	35	97.2	100.0	
Missing	System	1	2.8		
Total		36	100.0		

Which of the following best describes the school where you were employed when you took the course?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Elementary school	9	25.0	25.0	25.0
	Middle school	3	8.3	8.3	33.3
	High school	20	55.6	55.6	88.9
	Other	4	11.1	11.1	100.0
	Total	36	100.0	100.0	

What is your gender?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	8	22.2	22.2	22.2
	Female	28	77.8	77.8	100.0
	Total	36	100.0	100.0	

What is your birth month?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	January	3	8.3	8.8	8.8
	February	2	5.6	5.9	14.7
	March	1	2.8	2.9	17.6
	April	1	2.8	2.9	20.6
	May	8	22.2	23.5	44.1
	June	1	2.8	2.9	47.1
	July	2	5.6	5.9	52.9
	August	2	5.6	5.9	58.8
	September	2	5.6	5.9	64.7
	October	6	16.7	17.6	82.4
	November	3	8.3	8.8	91.2
	December	3	8.3	8.8	100.0
	Total		34	94.4	100.0
Missing	System	2	5.6		
Total		36	100.0		

What is your birth day?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.0	2	5.6	5.9	5.9
	4.0	1	2.8	2.9	8.8
	6.0	1	2.8	2.9	11.8
	7.0	3	8.3	8.8	20.6
	8.0	2	5.6	5.9	26.5
	9.0	1	2.8	2.9	29.4
	10.0	1	2.8	2.9	32.4
	11.0	1	2.8	2.9	35.3
	12.0	1	2.8	2.9	38.2
	13.0	1	2.8	2.9	41.2
	15.0	2	5.6	5.9	47.1
	17.0	1	2.8	2.9	50.0
	18.0	1	2.8	2.9	52.9
	20.0	1	2.8	2.9	55.9
	23.0	1	2.8	2.9	58.8
	24.0	3	8.3	8.8	67.6
	26.0	1	2.8	2.9	70.6
	27.0	2	5.6	5.9	76.5
	28.0	3	8.3	8.8	85.3
	30.0	3	8.3	8.8	94.1
	31.0	2	5.6	5.9	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

What is your birth year?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	39.0	1	2.8	2.8	2.8
	41.0	2	5.6	5.6	8.3
	46.0	2	5.6	5.6	13.9
	47.0	2	5.6	5.6	19.4
	48.0	3	8.3	8.3	27.8
	49.0	2	5.6	5.6	33.3
	50.0	2	5.6	5.6	38.9
	51.0	1	2.8	2.8	41.7
	52.0	1	2.8	2.8	44.4
	53.0	2	5.6	5.6	50.0
	54.0	1	2.8	2.8	52.8
	55.0	3	8.3	8.3	61.1
	57.0	3	8.3	8.3	69.4
	58.0	1	2.8	2.8	72.2
	60.0	2	5.6	5.6	77.8
	62.0	1	2.8	2.8	80.6
	68.0	1	2.8	2.8	83.3
	69.0	1	2.8	2.8	86.1
	71.0	1	2.8	2.8	88.9
	72.0	2	5.6	5.6	94.4
	75.0	1	2.8	2.8	97.2
	76.0	1	2.8	2.8	100.0
Total		36	100.0	100.0	

Are you Hispanic or Latino or NOT Hispanic or Latino?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Hispanic or Latino	2	5.6	5.9	5.9
	Not Hispanic or Latino	32	88.9	94.1	100.0
	Total	34	94.4	100.0	
Missing	System	2	5.6		
Total		36	100.0		

Please choose one or more categories that best indicate your race

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid American Indian or Alaskan Native	2	5.6	5.9	5.9
Asian	1	2.8	2.9	8.8
Caucasian	31	86.1	91.2	100.0
Total	34	94.4	100.0	
Missing System	2	5.6		
Total	36	100.0		

What was your citizenship when you participated in the project?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid U.S. citizen	36	100.0	100.0	100.0

Do you have an impairment or some other type of disability?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid No impairment or disability	36	100.0	100.0	100.0