

Summary of Response Frequencies and Means
1992 Environmental Education Survey of Wisconsin Teachers

SECTION I

1. How many years have you been teaching in your current district? N=914

1. 1 to 5 years (n=262; 28.6%)	3. 11 to 15 years (n=129; 14.1%)	5. 21 to 25 years (n=147; 16.1%)
2. 6 to 10 years (n=137; 15%)	4. 16 to 20 years (n=137; 15%)	6. Over 25 years (n=102; 11.1%)

2. In total, how many years have you been teaching? N=915

1. 1 to 5 years (n=155; 16.9%)	3. 11 to 15 years (n=139; 15.2%)	5. 21 to 25 years (n=158; 17.3%)
2. 6 to 10 years (n=133; 14.5%)	4. 16 to 20 years (n=170; 18.6%)	6. Over 25 years (n=159; 17.4%)

3. When did you receive your Wisconsin teaching certificate? N=909

1. Before 1985 (n=702; 77.2%)	2. 1985 or after (n=207; 22.8%)
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4. What is your gender? N=915

1. Female (n=629; 68.7%)	2. Male (n=286; 31.3%)
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5. Did you receive pre-service teacher education in environmental education (EE) from a Wisconsin institution? N=896

1. Yes (n=163; 18.2%)	2. No (n=733; 81.8%)
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6. Please write the name of the institution in the space provided. (See page 84 for results)

7. Rate the general value of your pre-service EE course(s) with regard to effectiveness in preparing you to teach about the environment. N=198

1. Very effective (n=47; 23.7%)	2. Somewhat effective (n=86; 43.4%)	3. Undecided (n=35; 17.7%)	4. Not very effective (n=20; 10.1%)	5. Ineffective (n=10; 5.1%)
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8. Have you received in-service education or taken post-graduate courses in Wisconsin relating to environmental education (EE) or teaching about the environment? N=899

1. Yes (n=274; 30.5%)	2. No (n=625; 69.5%)
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9. Fill in the number of courses you have taken. (See page 85 for results)
10. Rate the general value of the EE course(s) with regard to effectiveness in preparing you to teach about the environment. N=284
- | | | | | |
|------------------------------------|---|------------------------------|---------------------------------------|-------------------------------|
| 1. Very effective
(n=93; 32.7%) | 2. Somewhat effective
(n=146; 51.4%) | 3. Undecided
(n=25; 8.8%) | 4. Not very effective
(n=18; 6.3%) | 5. Ineffective
(n=2; 0.7%) |
|------------------------------------|---|------------------------------|---------------------------------------|-------------------------------|
11. What grade level or subject area do you teach? (See page 86 for summary of responses and also grade level/subject area relationships to questions 3, 5, and 14.)
12. Does your school district have a written EE curriculum plan? N=905
- | | | |
|--------------------------|-------------------------------|-------------------------|
| 1. Yes
(n=271; 29.9%) | 2. Not sure
(n=476; 52.6%) | 3. No
(n=158; 17.5%) |
|--------------------------|-------------------------------|-------------------------|
13. Do you have a copy of the plan? N=444
- | | |
|-----------------------|----------------------|
| 1. Yes (n=193; 43.5%) | 2. No (n=251; 56.5%) |
|-----------------------|----------------------|
14. Do you currently infuse education about the environment into your class curriculum? (N=891)
- | | |
|-------------|----------------|
| 1. Yes | (n=595; 66.8%) |
| 2. No | (n=217; 24.4%) |
| 3. Not sure | (n=79; 8.9%) |
15. Please indicate the MAIN reason for not infusing environmental concepts into your classroom teaching. (Choose only one) N=297
1. I do not have the knowledge or background to teach about the environment effectively. n=72; 24.2%
 2. I do not have the class time. n=45; 15.2%
 3. I do not have enough preparation time. n=22; 7.4%
 4. I do not have enough resources or funding. n=12; 4%
 5. Environmental concepts are unrelated to my subject area. n=75; 25%
 6. My school setting is not conducive to teaching about the environment. n=7; 2.4%
 7. Education about the environment is not appropriate for the grade level I teach. n=5; 1.7%
 8. I am not interested in teaching about the environment. n=0
 9. There are things other than EE that are more important to infuse into my teaching. n=20; 6.7%
 10. Other n=39; 13.1%

16. Please indicate which ONE statement best represents the situation which would influence you the most to infuse environmental concepts into your classroom teaching. (Choose only one)
N=289
1. More support from my administration.
n=14; 4.8%
 2. More in-service classes on environmental education teaching methods.
n=89; 30.8
 3. Better access to resources and aids for teaching about the environment.
n=76; 26.3%
 4. More preparation time.
n=51; 17.6%
 5. More funding.
n=2; .7%
 6. Other.
n=57; 19.7%

SECTION II

Environmental Education Attitudes and Practices

The purpose of this section is to assess general attitudes and information regarding your teaching as it relates to environmental education (EE).

	SA	A	U	D	SD	
1. The main reason I teach students about the environment is because it is mandated. N = 625; M (mean) = 4.2; SD = 0.85	15 2.4	21 3.4	23 3.7	330 52.8	236 37.8	(n) (%)
2. EE should be considered a priority in our K-12 educational system. N = 623; M = 4.05; SD = 0.92	208 33.4	298 47.8	68 10.9	38 6.1	11 1.8	
3. I believe it is important . . . to integrate environmental concepts and issues . . . into my teaching. N = 625; M = 4.31; SD = 0.78	269 43	319 51	15 2.4	8 1.3	14 2.2	
4. Pre-service teachers should be required to take an EE methods class. N = 624; M = 3.71; SD = 1.07	155 24.8	242 38.8	142 22.8	60 9.6	25 4	
5. I am effective at infusing the study of environmental concepts and issues into my subject... N = 628; M = 3.78; SD = 0.84	101 16.1	344 54.8	141 22.3	30 4.8	12 1.9	

6.	A goal of my teaching is to increase students' level of environmental responsibility. N = 625; M = 4.16; SD = 0.83	215 34.4	345 55.2	27 4.3	28 4.5	10 1.6
7.	Teachers should provide students with opportunities to gain actual experience in resolving environmental issues. N = 626; M = 4.14; SD = 0.71	179 28.6	374 59.7	61 9.7	5 0.8	7 1.1
8.	Teachers should help students develop a set of values and feelings of concern for the environment. N = 627; M = 4.43; SD = 0.68	315 50.2	286 45.6	15 2.4	4 0.6	7 1.1
9.	I am/was actively involved in helping to implement my...district's EE curriculum plan. N = 617; M = 2.38; SD = 1.28	46 7.5	109 17.7	62 10	216 35	184 29.8
10.	It is a good idea to mandate that school districts develop and implement an EE curriculum plan. N = 624; M = 3.74; SD = 1.03	143 22.9	283 45.4	116 18.6	58 9.3	24 3.8
11.	I am pleased with the quality of my school district's EE curriculum plan. N = 608; M = 3.07; SD = 0.96	37 6.1	139 22.9	307 50.5	77 12.7	48 7.9
12.	How often do you refer to your school district EE curriculum plan? N=608; M = 3.07; SD = .96					
	1 = Never (n=358; 58.9%)	2 = Yearly (n=140; 23%)	3 = Monthly (n=64; 10.5%)	4 = Twice a month (n=25; 4.1%)	5 = Weekly (n=21; 3.5%)	

For questions 13 through 15, choose the answer that best fits your teaching situation.

13. What percentage of your instructional time includes infusion of environmental concepts? N=608
1. Less than 5% (n=227; 36.3%)
 2. 5% to 14% (n=252; 40.3%)
 3. 15% to 24% (n=93; 14.9%)
 4. 25% to 49% (n=40; 6.4%)
 5. 50% or more (n=14; 2.2%)

14. For each subject that you teach, approximately how much time per week do you spend teaching about the environment? N=620

- | | | |
|----|----------------------------|----------------|
| 1. | Less than 30 minutes | (n=461; 74.4%) |
| 2. | 31 minutes to 60 minutes | (n=119; 19.2%) |
| 3. | 61 minutes to 90 minutes | (n=23; 3.7%) |
| 4. | 91 minutes to 120 minutes | (n=7; 1.1%) |
| 5. | 121 minutes to 150 minutes | (n=6; 1%) |
| 6. | 151 minutes to 180 minutes | (n=1; 0.2%) |
| 7. | 181 minutes to 210 minutes | (n=1; 0.2%) |
| 8. | 211 minutes to 240 minutes | (n=1; 0.2%) |
| 9. | Over 240 minutes | (n=1; 0.2%) |

15. For all subjects that you teach combined, approximately how much time per week do you spend teaching about the environment? N=618

- | | | |
|----|----------------------------|----------------|
| 1. | Less than 30 minutes | (n=261; 42.2%) |
| 2. | 31 minutes to 60 minutes | (n=206; 33.3%) |
| 3. | 61 minutes to 90 minutes | (n=79; 12.8%) |
| 4. | 91 minutes to 120 minutes | (n=34; 5.5%) |
| 5. | 121 minutes to 150 minutes | (n=14; 2.3%) |
| 6. | 151 minutes to 180 minutes | (n=8; 1.3%) |
| 7. | 181 minutes to 210 minutes | (n=8; 1.3%) |
| 8. | 211 minutes to 240 minutes | (n=2; 0.3%) |
| 9. | Over 240 minutes | (n=6; 1%) |

SECTION III

Cognitive Education Methods

This section refers to the use of cognitive education methods which can be used to encourage awareness of environmental concepts and problems, to increase knowledge of ecological foundations and environmental issues, and to develop skills which can be used to help resolve environmental issues.

Questions 16 and 17 refer to cognitive education methods which could include but are not limited to:

- | | | | |
|-----|------------------------------------|-----|--|
| 1. | Outdoor teaching strategies | 11. | Simulations |
| 2. | Guided discovery | 12. | Self-directed learning |
| 3. | Lectures | 13. | Cooperative learning |
| 4. | Experiments | 14. | Computer-oriented activities |
| 5. | Role playing and dramatizations | 15. | Writing, art, and music |
| 6. | Problem-solving/critical thinking | 16. | Independent or group projects |
| 7. | Case studies | 17. | Community resource use |
| 8. | Data gathering and analysis | 18. | Observations (field trips, demonstrations, bulletin boards/displays, guest speakers, etc.) |
| 9. | Audiovisuals | | |
| 10. | Environmental issue investigations | | |

16. Indicate how many of the above methods you feel are valuable for teaching about the environment. N=620

- 1. Less than 3 (n=5; 0.8%)
- 2. 3 - 5 (n=34; 5.5%)
- 3. 6 - 8 (n=60; 9.7%)
- 4. 9 - 11 (n=82; 13.2%)
- 5. 12 - 14 (n=117; 18.9%)
- 6. 15 - 18 (n=322; 51.9%)

17. For question 17, please do the following two things:

- a. On the answer sheet, please put a check by each of the methods you have used effectively to teach students about the environment.

Tabulations of methods perceived used effectively: (N=588)

- | | |
|--|---|
| 1. Outdoor teaching strategies (n=350) | 11. Simulations (n=134) |
| 2. Guided discovery (n=294) | 12. Self-directed learning (n=236) |
| 3. Lectures (n=397) | 13. Cooperative learning (n=364) |
| 4. Experiments (n=343) | 14. Computer-oriented activities (n=106) |
| 5. Role playing and dramatizations (n=244) | 15. Writing, art, and music (n=355) |
| 6. Problem-solving/critical thinking (n=390) | 16. Independent or group projects (n=299) |
| 7. Case studies (n=115) | 17. Community resource use (n=202) |
| 8. Data gathering and analysis (n=198) | 18. Observations (n=479) |
| 9. Audiovisuals (n=407) | (field trips, demonstrations, bulletin boards/displays, guest speakers, etc.) |
| 10. Environmental issue investigations (n=206) | |

- b. Total the number of methods you checked and using the following key, place the total in the space provided for question 17. (n=610)

- 1 = Less than 3 (n=48; 7.9%)
- 2 = 3 - 5 (n=113; 18.5%)
- 3 = 6 - 8 (n=148; 24.3%)
- 4 = 9 - 11 (n=124; 20.3%)
- 5 = 12 - 14 (n=104; 17%)
- 6 = 15 - 18 (n=73; 12%)

For questions 18 through 23, use the following key to indicate your opinion.

1 = Strongly disagree 2 = Disagree 3 = Undecided 4 = Agree 5 = Strongly agree

		SA	A	U	D	SD
18.	As a result of attending my class, students are more aware of environmental concepts and problems. N= 624; M (mean) =3.87; SD = .76	92 14.7	401 64.3	100 16	20 3.2	11(n) 1.8(%)

19.	As a result of attending my class, students are more knowledgeable of ecological foundations and environmental issues. N = 624; M = 3.65; SD = .85	70 11.2	337 54	163 26.1	38 6.1	16 2.6
20.	I am effective at teaching students the skills needed to resolve environmental issues. N = 619; M = 3.39; SD = .80	40 6.5	241 38.9	270 43.6	59 9.5	9 1.5
21.	As a result of attending my class, students are more aware of the impact their individual behaviors have on the environment. N = 603; M = 3.98; SD = .82	117 19.4	386 64	80 13.3	13 2.2	7 1.2
22.	My pre-service teacher education effectively prepared me in using cognitive education methods to teach students about the environment. N = 157; M = 3.19; SD = 1.09	10 6.4	70 44.6	27 17.2	39 24.8	11 7
23.	My in-service or post-graduate courses effectively prepared me in using cognitive education methods to teach students about the environment. N = 251; M = 3.63; SD = .89	29 11.6	135 53.8	56 22.3	26 10.4	5 2

SECTION IV

Affective Education Methods

This section refers to the use of affective education methods which can be used to examine attitudes and values related to environmental issues.

Questions 24 through 26 refer to the following environmental values education (EVE) methods:

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|------------------------------------|-------------------------|
| 1. Sensory or awareness activities | 5. Inculcation |
| 2. Action learning | 6. Values clarification |
| 3. Behavior modification | 7. Values analysis |
| 4. Moral development activities | |

24. Indicate how many of the above approaches you feel are valuable for helping students examine attitudes and values pertaining to environmental issues. N=578

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|----|----------|----------------|
| 1. | 1 | (n=9; 1.5%) |
| 2. | 2 | (n=21; 3.6%) |
| 3. | 3 | (n=65; 11.1%) |
| 4. | 4 | (n=99; 17%) |
| 5. | 5 | (n=81; 13.9%) |
| 6. | 6 | (n=57; 9.8%) |
| 7. | 7 | (n=123; 21.1%) |
| 8. | Not sure | (n=123; 21.1%) |

25. For question 25, please do the following two things:

- a. On the answer sheet, please put a check by each of the methods you have used effectively to help students examine attitudes and values pertaining to environmental issues.

Tabulation of methods perceived used effectively: N=503

- | | |
|--|---------------------------------|
| 1. Sensory or awareness activities (n=424) | 5. Inculcation (n=65) |
| 2. Action learning (n=350) | 6. Values clarification (n=261) |
| 3. Behavior modification (n=166) | 7. Values analysis (n=219) |
| 4. Moral development activities (n=242) | |

- b. Total the number of methods that you checked and place the total in the space provided for question 25. N=543

- | | | |
|----|------------|----------------|
| 1. | 1 | (n=35; 6.4%) |
| 2. | 2 | (n=106; 19.5%) |
| 3. | 3 | (n=100; 18.4%) |
| 4. | 4 | (n=99; 18.2%) |
| 5. | 5 | (n=78; 14.4%) |
| 6. | 6 | (n=33; 6.1%) |
| 7. | 7 | (n=14; 2.6%) |
| 8. | do not use | (n=38; 7.0%) |
| 9. | not sure | (n=40; 7.4%) |

26. Please indicate the MAIN reason you have not used or are not sure if you have used any of the above environmental values education (EVE) approaches. (Choose only one) N=334

- | | | |
|----|--|---------------|
| 1. | It is not my responsibility to teach EVE. | (n=12; 3.7%) |
| 2. | I do not feel comfortable teaching EVE. | (n=3; 0.9%) |
| 3. | I feel it is unethical to teach EVE. | (n=2; 0.6%) |
| 4. | Many of the methods are inappropriate for the grade level I teach. | (n=43; 13.3%) |
| 5. | EVE is unrelated to my subject. | (n=16; 4.9%) |
| 6. | I do not know enough about these methods to use them. | (n=65; 20.1%) |

7. I may have used these methods, but do not know them by these names. (n=111; 34.3%)
 8. My school district doesn't allow values education. (n=4; 1.2%)
 9. None of the above. (n=68; 21%)

	SA	A	U	D	SD
27. As a result of being in my class, students better understand the roles that values play in environmental issues. N = 599; M (mean) = 3.52; SD = .82	42 7	302 50.4	202 33.7	37 6.2	16(n) 2.7(%)
28. I believe students are more sensitive toward the environment as a result of attending my class. N = 605; M = 3.80; SD = .73	68 11.2	387 64	125 20.7	14 2.3	11 1.8
29. Students have a better understand about their beliefs, attitudes, and values regarding environmental issues as a result of attending my class. N = 603; M = 3.53; SD = .77	37 6.1	298 49.4	232 38.5	22 3.6	14 2.3
30. (Leave blank if did not receive pre-service education in EE) My pre-service teacher education effectively prepared me to use affective education methods to help students examine values relating to environmental issues. N = 169; M = 3.03; SD = 1.07	9 5.3	58 34.3	45 26.6	43 25.4	14 8.3
31. (Leave blank if have not taken any in-service or post-graduate courses in EE) My in-service or post-graduate courses effectively prepared me to use affective education methods to help students examine values relating to environmental issues. N = 243; M = 3.18; SD = 1.09	25 10.3	86 35.4	70 28.8	44 18.1	18 7.4

SECTION V

Environmental Action Strategies

This section refers to categories of action strategies which individuals or groups can use to help resolve environmental issues. Descriptions of each category are provided.

Persuasion The process of trying to convince others that a certain source of action is correct. Examples include letter-writing, debates, posters, etc.

Economic action The process of using economic pressure to support or oppose a business or industry. Examples include buying environmentally friendly products, boycotting, raising funds for an environmental group, etc.

Political action Any action that brings pressure on political or governmental agencies. Examples include writing letters to representatives, lobbying, voting, etc.

Ecomanagement The process of taking physical action toward the environment for the purpose of either maintaining a good environment or improving a weakened environment. Examples include picking up litter, conserving energy, planting trees, etc.

Legal action This action involves using legal processes to alter the behavior of an individual or a business or industry that is damaging the environment. Examples include reporting environmental offenses, bringing suit against polluters, etc.

32. Have you involved students in action strategies, such as those described above, to provide them with opportunities to gain experience in the resolution of environmental issues? N=589

1. Yes (n=363; 61.5%)
2. No (n= 206; 34.9%)
3. I don't know (n=20; 3.4%)

33. For question 33, please do the following two things:

- a. On the answer sheet, please put a check by each of the strategies you have used effectively to provide students with experiences they can use to help resolve environmental issues.

Tabulations of methods perceived used effectively: (N=354)

1. Persuasion (n=238)
2. Economic Action (n=106)
3. Political Action (n=57)
4. Ecomanagement (n=271)
5. Legal Action (n=12)

- b. Total the number of methods that you checked and place the total in the space provided for question 33.

1. 1 (n=134; 36.5%)
2. 2 (n=129; 35.1%)
3. 3 (n=67; 18.3%)
4. 4 (n=26; 7.1%)
5. 5 (n=4; 1.1%)

Note: 7 teachers (1.9%) chose '0'.

34. Please indicate the MAIN reason you have not involved your students in one or more of the above actions. (Choose only one)

- | | | |
|----|--|---------------|
| 1. | There is no time | (n=70; 21.9%) |
| 2. | It is inappropriate for of the grade level | (n=79; 24.8%) |
| 3. | I do not have the knowledge | (n=63; 19.7%) |
| 4. | These actions are not related to subject | (n=49; 15.4%) |
| 5. | My administration does not support | (n=3; 0.9%) |
| 6. | None of the above. | (n=55; 17.2%) |

		SA	A	U	D	SD
35.	After attending my class, students are aware of the need to become involved in resolving environmental issues. N = 602; M (mean) = 344; SD = .85	39 6.5	275 45.7	212 35.2	62 10.3	14 (n) 2.3(%)
36.	As a result of taking my class, students have gained actual experience in resolving environmental issues. N = 599; M = 3.14; SD = 1.03	35 5.8	229 38.2	156 26	144 24	35 5.8
37.	I am effective at teaching students how to use action strategies to resolve environmental issues. N = 591; M = 2.95; SD = .92	20 3.4	140 23.7	255 43.1	141 23.9	35 5.9
38.	My pre-service teacher education was effective at providing me with strategies I can use to give students experience in resolving environmental issues. N = 161; M = 2.86; SD = 1.09	5 3.1	51 31.7	42 26.1	42 26.1	21 13
39.	My in-service or post-graduate courses were effective at providing me . . . N = 247; M = 3.18; SD = 1.03	19 7.7	88 35.6	72 29.1	55 22.3	13 5.3
40.	I believe my instruction contributes to the development of environmentally literate citizens. N = 582; M = 3.84; SD = .87	99 17	351 60.3	92 15.8	19 3.3	21 3.6

Name of University where rec'd EE training (Results of question #6)		Does Infuse			Doesn't Infuse		
		n/%	Pr 85*	Po 85*	n/%	Pr 85	Po 85
UW Whitewater	(n=20; 13.1%)	17/85	9	8	3/15	0	3
UW Stevens Point	(n=18; 11.8 %)	15/83	9	6	3/17	2	1
UW La Crosse	(n=17; 11.1%)	15/88	6	9	2/12	0	2
UW Oshkosh	(n=17; 11.1%)	16/94	11	5	1/6	0	1
UW Riverfalls	(n=11; 7.2%)	8/73	5	3	3/27	1	2
UW Eau Claire	(n=10; 6.5%)	8/80	4	4	2/20	0	2
UW Green Bay	(n=8; 5.2%)	7/88	4	3	1/12	0	1
UW Madison	(n=8; 5.2%)	8/100	2	6	0/0	0	0
UW Milwaukee	(n=7; 4.6%)	7/100	3	4	0/0	0	0
UW Superior	(n=5; 3.3%)	4/80	4	0	1/20	0	1
Northland College	(n=4; 2.0%)	4/100	3	1	0/0	0	0
Marinette Teachers College	(n=3; 2.0%)	2/67	1	1	1/33	1	0
Alverno College	(n=2; 1.3%)	2/100	1	1	0/0	0	0
Carroll College	(n=2; 1.3%)	0/0	0	0	2/100	1	1
UW Platteville	(n=2; 1.3%)	2/100	1	1	0/0	0	0
St. Norbert College	(n=2; 1.3%)	1/50	1	1	1/50	0	1
FOR ALL THE REST OF THE INSTITUTIONS: (n=1; 0.7%)							
Audubon Center		1/100	0	1	0/0	0	0
Carthage College		1/100	0	1	0/0	0	0
Concordia College		1/100	0	1	0/0	0	0
Fallen Timbers		1/100	1	0	0/0	0	0
Lakeland College		1/100	1	0	0/0	0	0
Milwaukee Audubon		0/0	0	0	1/100	1	0

*Pr 85 represents teachers certified prior to 1985

*Po 85 represents teachers certified in 1985 or after

Universities where received EE training con't. (Results of question #6)	Does Infuse			Doesn't Infuse		
	n/%	Pr 85	Po 85	n/%	Pr 85	Po 85
Mt. Senario College	1/100	1	0	0/0	0	0
Outagamie Teachers College	1/100	1	0	0/0	0	0
Racine/Kenosha Teachers College	1/100	1	0	0/0	0	0
Sheyboygan Teachers College	1/100	1	0	0/0	0	0
Silver Lake College	1/100	1	0	0/0	0	0
Taylor County	1/100	1	0	0/0	0	0
UW Center Baraboo	1/100	0	1	0/0	0	0
UW Center Baron	1/100	1	0	0/0	0	0
UW Center Washington	1/100	0	1	0/0	0	0
UW Parkside	1/100	1	0	0/0	0	0
UW Stout	1/100	0	1	0/0	0	0

Results from question #9:

Number of in-service/post-graduate EE courses taken: N=288

1	(n=132; 45.8%)
2	(n=75; 26%)
3	(n=34; 11.8%)
4	(n=18; 6.3%)
5	(n=13; 4.5%)
6	(n=3; 1%)
7	(n=2; 0.7%)
8	(n=3; 1%)
9 or more	(n=8; 2.8%)

Results from question #11:
 What grade level or subject
 do you teach? N=906

		Does Infuse EE			Doesn't Infuse				
		n %	Pr 85*	Po 85*	Pr EE*	n %	Pr 85	Po 85	Pr EE
1.	Elementary (n = 517; 57.1%)	393 76	264	129	57	124 24	90	34	12
2.	Science (n = 70; 7.7%)	66 94	51	15	9	4 6	1	3	2
3.	Social Sciences (n = 31; 3.4%)	23 74	18	5	3	8 26	7	1	1
4.	Language Arts (n = 63; 7%)	32 51	18	14	2	31 49	21	10	0
5.	Math (n = 39; 4.3%)	14 36	3	11	1	25 64	17	8	0
6.	Business (n = 15; 1.7%)	4 27	3	1	0	11 73	10	1	0
7.	Home Economics (n = 21; 2.3%)	16 76	16	0	0	5 24	5	0	0
8.	Music (n = 65; 7.2%)	23 35	12	11	0	42 65	35	7	0
9.	Art (n = 41; 4.5%)	30 73	24	6	0	11 27	8	3	0
10.	Technical Education (24; 2.6%)	14 58	14	0	0	10 42	10	0	0
11.	Agriculture (n = 7; 0.8%)	7 100	6	1	0	0 0	0	0	0
12.	Health (n = 13; 1.4%)	8 62	4	4	3	5 38	3	2	1

*Pr 85 represents teachers certified prior to 1985

*Po 85 represents teachers certified in 1985 or after

*Pr EE represents the number of teachers who received their certification after 1985 and reported that they did receive pre-service training in EE