Climate Science Proviso

2018-19 Interim Survey Report | Data Appendix

February 2019

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Overview

This data appendix includes Climate Science Survey responses that were disaggregated by school-level professional development participants. The survey questions are divided into three sections, sharing responses for educators serving students in the elementary school grades (grades K–5), middle school grades (grades 6–8), and high school grades (grades 9–12).

Elementary School Grades Survey Responses

Table 1 through Table 6 list the number and percent of responses for each question answered by elementary school-level professional development participants.

Table 1. Thinking about your professional learning session, how would you rate it for the following?

Questions	Very Good	Good	Fair	Poor	Very Poor	Does Not Apply
Meeting the stated learning objectives of the session	97 (70%)	38 (27%)	4 (3%)	0 (0%)	0 (0%)	0 (0%)
Use of engaging and useful activities to facilitate your learning	96 (69%)	34 (25%)	9 (7%)	0 (0%)	0 (0%)	0 (0%)
Introducing you to useful resources such as curriculum materials, research articles, and practice information	85 (61%)	45 (32%)	9 (7%)	0 (0%)	0 (0%)	0 (0%)
Providing timely, relevant information that you will be able to apply in your work setting	85 (61%)	49 (35%)	5 (4%)	0 (0%)	0 (0%)	0 (0%)
Engaging you in discussion with other participants in ways to facilitate your learning	94 (68%)	40 (29%)	4 (3%)	1 (1%)	0 (0%)	0 (0%)
Providing sufficient time for you to process the information collaboratively with colleagues	74 (53%)	54 (39%)	10 (7%)	1 (1%)	0 (0%)	0 (0%)
Motivating you to recommend these types of sessions to your work colleagues	91 (66%)	40 (29%)	6 (4%)	1 (1%)	0 (0%)	0 (0%)

Table 2. As a result of participating in this Professional Learning Experience, I have broadened/deepened my existing knowledge of:

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
The content standards	59 (42%)	75 (54%)	3 (2%)	0 (0%)	2 (1%)
Research-based instructional practices	62 (45%)	71 (51%)	3 (2%)	0 (0%)	3 (2%)
Instructional practices to make learning experiences more inclusive for diverse student populations (e.g., special education, highly capable, migrant, students of color)	51 (37%)	52 (38%)	3 (2%)	0 (0%)	33 (24%)
Instructional practices to make learning experiences more inclusive for English language learners	39 (28%)	53 (38%)	8 (6%)	0 (0%)	39 (28%)
Instructional practices to make learning experiences more inclusive for students with disabilities	33 (24%)	49 (35%)	11 (8%)	0 (0%)	46 (33%)
A range of assessment and/or resources across the educational system such as state, local, and/or classroom assessments	36 (26%)	69 (50%)	9 (7%)	0 (0%)	25 (18%)
How to share the sessions' information with others (teachers, administrators, parents)	49 (35%)	68 (49%)	7 (5%)	0 (0%)	15 (11%)

Table 3. How frequently do you implement the below instructional practices in your science or STEM teaching?

Questions	All of the time	Most of the time	Sometimes	Never or hardly ever	Not applicable
Provide opportunities for students to use data to inform their thinking	13 (10%)	64 (48%)	49 (37%)	3 (2%)	4 (3%)

Questions	All of the time	Most of the time	Sometimes	Never or hardly ever	Not applicable
Test the ability of students to apply key science ideas to new situations	9 (7%)	57 (43%)	57 (43%)	8 (6%)	2 (2%)
Engage in conversations around science findings or engineering solutions	28 (21%)	58 (44%)	37 (28%)	6 (5%)	2 (2%)
Engage students in science-related computational thinking	10 (8%)	46 (35%)	60 (46%)	13 (10%)	2 (2%)
Ask students to explain their partial understandings and potentially incorrect ideas	28 (21%)	76 (57%)	26 (19%)	1 (1%)	3 (2%)
Have students make explanations and revise them in response to new evidence	25 (19%)	69 (52%)	31 (24%)	3 (2%)	4 (3%)

Table 4. Participating in this Professional Learning Experience prepared me with the necessary skills to try something new or different in my professional practice

Question	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
Participating in this Professional Learning Experience prepared me with the necessary skills to try something new or different in my professional practice	73 (53%)	64 (46%)	2 (1%)	0 (0%)	0 (0%)

Table 5. How frequently do you engage in the instructional practices in science and STEM teaching below?

Questions	All of the time	Most of the time	Sometimes	Never or hardly ever	Not applicable
I plan for multiple ways for my students to access learning	28 (21%)	68 (52%)	33 (25%)	0 (0%)	2 (2%)
I encourage students to consider possible barriers to implementing a solution	19 (14%)	61 (46%)	48 (36%)	2 (2%)	3 (2%)
I survey students about their interests and experiences relevant to science ideas	12 (9%)	41 (31%)	60 (46%)	16 (12%)	2 (2%)

Table 6. How confident are you about teaching the Next Generation Science Standards (NGSS) climate science-related topics at your current level?

Question	Very Confident	Confident	Somewhat Confident	Not Confident
How confident are you about teaching the Next Generation Science Standards (NGSS) climate science-related topics at your current level	9 (7%)	53 (39%)	60 (44%)	14 (10%)

Middle School Grades Survey Responses

Table 7 through Table 12 list the number and percent of responses for each question answered by middle school-level professional development participants.

Table 7. Thinking about your professional learning session, how would you rate it for the following?

Questions	Very Good	Good	Fair	Poor	Very Poor	Does Not Apply
Meeting the stated learning objectives of the session	64 (58%)	43 (39%)	3 (3%)	0 (0%)	0 (0%)	1 (1%)
Use of engaging and useful activities to facilitate your learning	64 (58%)	39 (35%)	7 (6%)	1 (1%)	0 (0%)	0 (0%)
Introducing you to useful resources such as curriculum materials, research articles, and practice information	65 (59%)	38 (34%)	7 (6%)	1 (1%)	0 (0%)	0 (0%)
Providing timely, relevant information that you will be able to apply in your work setting	63 (57%)	42 (38%)	5 (5%)	1 (1%)	0 (0%)	0 (0%)
Engaging you in discussion with other participants in ways to facilitate your learning	67 (60%)	41 (37%)	3 (3%)	0 (0%)	0 (0%)	0 (0%)
Providing sufficient time for you to process the information collaboratively with colleagues	55 (50%)	42 (39%)	13 (12%)	0 (0%)	0 (0%)	0 (0%)
Motivating you to recommend these types of sessions to your work colleagues	58 (53%)	41 (37%)	10 (9%)	1 (1%)	0 (0%)	0 (0%)

Table 8. As a result of participating in this Professional Learning Experience, I have broadened/deepened my existing knowledge of:

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
The content standards	37 (33%)	54 (49%)	9 (8%)	0 (0%)	11 (10%)
Research-based instructional practices	55 (50%)	50 (45%)	3 (3%)	0 (0%)	3 (3%)
Instructional practices to make learning experiences more inclusive for diverse student populations (e.g., special education, highly capable, migrant, students of color)	47 (42%)	41 (37%)	12 (11%)	0 (0%)	11 (10%)
Instructional practices to make learning experiences more inclusive for English language learners	34 (31%)	42 (38%)	17 (16%)	0 (0%)	17 (16%)
Instructional practices to make learning experiences more inclusive for students with disabilities	29 (26%)	44 (40%)	15 (14%)	0 (0%)	22 (20%)
A range of assessment and/or resources across the educational system such as state, local, and/or classroom assessments	42 (39%	37 (34%)	10 (9%)	0 (0%)	20 (18%)
How to share the sessions' information with others (teachers, administrators, parents)	32 (29%	60 (55%)	6 (6%)	0 (0%)	11 (10%)

Table 9. How frequently do you implement the below instructional practices in your science or STEM teaching?

Questions	All of the time	Most of the time	Sometimes	Never or hardly ever	Not applicable
Provide opportunities for students to use data to inform their thinking	23 (21%)	61 (57%)	23 (22%)	0 (0%)	1 (1%)
Test the ability of students to apply key science ideas to new situations	13 (12%)	56 (52%)	35 (32%)	2 (2%)	2 (2%)
Engage in conversations around science findings or engineering solutions	25 (24%)	47 (44%)	34 (32%)	0 (0%)	0 (0%)
Engage students in science-related computational thinking	15 (14%)	50 (47%)	37 (35%)	4 (4%)	1 (1%)
Ask students to explain their partial understandings and potentially incorrect ideas	33 (31%)	56 (52%)	18 (17%)	0 (0%)	0 (0%)
Have students make explanations and revise them in response to new evidence	27 (25%)	48 (45%)	29 (27%)	2 (2%)	1 (1%)

Table 10. Participating in this Professional Learning Experience prepared me with the necessary skills to try something new or different in my professional practice

Question	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
Participating in this Professional Learning Experience prepared me with the necessary skills to try something new or different in my professional practice	62 (56%)	48 (43%)	1 (1%)	0 (0%)	0 (0%)

Table 11. How frequently do you engage in the instructional practices in science and STEM teaching below?

	All of the time	Most of the time	Sometimes	Never or hardly ever	Not applicable
I plan for multiple ways for my students to access learning	34 (32%)	52 (50%)	18 (17%)	0 (0%)	1 (1%)
I encourage students to consider possible barriers to implementing a solution	19 (18%)	46 (44%)	37 (36%)	1 (1%)	1 (1%)
I survey students about their interests and experiences relevant to science ideas	15 (15%)	31 (30%)	45 (44%)	11 (11%)	1 (1%)

Table 12. How confident are you about teaching the Next Generation Science Standards (NGSS) climate science-related topics at your current level?

Question	Very Confident	Confident	Somewhat Confident	Not Confident
How confident are you about teaching the Next Generation Science Standards (NGSS) climate science-related topics at your current level	11 (10%)	47 (44%)	41 (38%)	8 (8%)

High School Grades Survey Responses

Table 13 through Table 18 list the number and percent of responses for each question answered by high school-level professional development participants.

Table 13. Thinking about your professional learning session, how would you rate it for the following?

Questions	Very Good	Good	Fair	Poor	Very Poor	Does Not Apply
Meeting the stated learning objectives of the session	61 (71%)	25 (29%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Use of engaging and useful activities to facilitate your learning	56 (65%)	28 (33%)	2 (2%)	0 (0%)	0 (0%)	0 (0%)
Introducing you to useful resources such as curriculum materials, research articles, and practice information	56 (65%)	24 (28%)	5 (6%)	0 (0%)	0 (0%)	1 (1%)
Providing timely, relevant information that you will be able to apply in your work setting	55 (64%)	28 (33%)	3 (4%)	0 (0%)	0 (0%)	0 (0%)
Engaging you in discussion with other participants in ways to facilitate your learning	63 (73%)	21 (24%)	1 (1%)	1 (1%)	0 (0%)	0 (0%)
Providing sufficient time for you to process the information collaboratively with colleagues	38 (44%)	32 (37%)	14 (16%)	2 (2%)	0 (0%)	0 (0%)
Motivating you to recommend these types of sessions to your work colleagues	52 (60%)	27 (31%)	4 (5%)	0 (0%)	0 (0%)	3 (4%)

Table 14. As a result of participating in this Professional Learning Experience, I have broadened/deepened my existing knowledge of:

Questions	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
The content standards	35 (40%)	37 (43%)	5 (6%)	0 (0%)	9 (11%)
Research-based instructional practices	45 (52%)	39 (45%)	1 (1%)	0 (0%)	1 (1%)
Instructional practices to make learning experiences more inclusive for diverse student populations (e.g., special education, highly capable, migrant, students of color)	36 (42%)	42 (49%)	4 (5%)	0 (0%)	4 (5%)
Instructional practices to make learning experiences more inclusive for English language learners	28 (33%)	41 (48%)	8 (9%)	0 (0%)	9 (11%)
Instructional practices to make learning experiences more inclusive for students with disabilities	24 (28%)	33 (38%)	9 (11%)	0 (0%)	20 (23%)
A range of assessment and/or resources across the educational system such as state, local, and/or classroom assessments	31 (36%)	41 (48%)	2 (2%)	0 (0%)	12 (14%)
How to share the sessions' information with others (teachers, administrators, parents)	30 (35%)	45 (52%)	3 (4%)	0 (0%)	8 (9%)

Table 15. How frequently do you implement the below instructional practices in your science or STEM teaching?

Questions	All of the time	Most of the time	Sometimes	Never or hardly ever	Not applicable
Provide opportunities for students to use data to inform their thinking	19 (22%)	46 (54%)	20 (24%)	0 (0%)	0 (0%)
Test the ability of students to apply key science ideas to new situations	11 (13%)	47 (55%)	27 (32%)	0 (0%)	0 (0%)
Engage in conversations around science findings or engineering solutions	11 (13%)	42 (50%)	29 (35%)	2 (2%)	0 (0%)
Engage students in science-related computational thinking	9 (11%)	39 (48%)	30 (37%)	4 (5%)	0 (0%)
Ask students to explain their partial understandings and potentially incorrect ideas	21 (25%)	42 (50%)	17 (20%)	4 (5%)	0 (0%)
Have students make explanations and revise them in response to new evidence	20 (24%)	38 (45%)	24 (28%)	3 (4%)	0 (0%)

Table 16. Participating in this Professional Learning Experience prepared me with the necessary skills to try something new or different in my professional practice.

Question	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
Participating in this Professional Learning Experience prepared me with the necessary skills to try something new or different in my professional practice	54 (64%)	31 (37%)	0 (0%)	0 (0%)	0 (0%)

Table 17. How frequently do you engage in the instructional practices in science and STEM teaching below?

Questions	All of the time	Most of the time	Sometimes	Never or hardly ever	Not applicable
I plan for multiple ways for my students to access learning	35 (42%)	39 (47%)	10 (12%)	0 (0%)	0 (0%)
I encourage students to consider possible barriers to implementing a solution	23 (27%)	32 (38%)	27 (32%)	2 (2%)	0 (0%)
I survey students about their interests and experiences relevant to science ideas	11 (13%)	25 (30%)	39 (47%)	8 (10%	0 (0%)

Table 18. How confident are you about teaching the Next Generation Science Standards (NGSS) climate science-related topics at your current level?

Question	Very Confident	Confident	Somewhat Confident	Not Confident
How confident are you about teaching the Next Generation Science Standards (NGSS) climate science-related topics at your current level	24 (28%)	38 (45%)	21 (25%)	2 (2%)