



Climate Science Proviso

2018-19 Survey Report | Data Appendix

August 2019



AESD ASSOCIATION OF
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Overview

This data appendix includes Climate Science Survey responses that were disaggregated by the school-level of 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

		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	%	22	45	28	3	2
	#	150	299	187	17	16
I encourage students to consider possible barriers to implementing a solution	%	16	41	35	6	3
	#	106	273	234	39	17
I survey students about their interests and experiences relevant to science	%	12	32	39	14	4
	#	77	210	260	95	24

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?

		Very Good	Good	Fair	Poor	Very Poor	Does Not Apply
Meeting the stated learning objectives of the session.	%	67	25	7	1	0	0
	#	475	177	48	9	0	1
Use of engaging and useful activities to facilitate your learning.	%	65	24	9	3	0	0
	#	459	168	63	18	0	2

		Very Good	Good	Fair	Poor	Very Poor	Does Not Apply
Introducing you to useful resources such as curriculum materials, research articles, and practice information?	%	65	25	8	1	1	0
	#	462	176	56	10	4	2
Providing timely, relevant information that you will be able to apply in your work setting.	%	63	27	8	2	0	0
	#	447	190	57	13	3	0
Engaging you in discussion with other participants in ways to facilitate your learning.	%	69	24	6	1	0	0
	#	488	170	44	6	1	1
Providing sufficient time for you to process the information collaboratively with colleagues.	%	62	29	7	1	0	0
	#	443	205	52	9	1	0
Motivating you to recommend these types of sessions to your work colleagues.	%	63	24	9	2	2	1
	#	445	172	62	15	11	5

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

		Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
The content standards	%	51	44	4	0	1
	#	364	309	28	2	7
Research-based instructional practices	%	54	41	4	0	1
	#	386	288	27	0	9

		Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
Instructional practices to make learning experiences more inclusive for diverse student populations (e.g., special education, highly capable, migrant, students of color).	%	44	38	7	0	11
	#	315	266	50	1	78
Instructional practices to make learning experiences more inclusive for English language learners.	%	38	40	8	1	14
	#	268	282	54	5	101
Instructional practices to make learning experiences more inclusive for students with disabilities.	%	34	35	11	1	20
	#	239	245	77	4	145
A range of assessment and/or resources across the educational system such as state, local, and/or classroom assessments.	%	38	42	8	1	11
	#	269	300	56	4	81
How to share the sessions' information with others (teachers, administrators, parents).	%	39	46	6	0	9
	#	280	327	40	3	60

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

		All of the time	Most of the time	Sometimes	Never or hardly ever	Not applicable
Provide opportunities for students use data to inform their thinking	%	13	45	36	4	3
	#	86	306	245	24	22
	%	9	40	40	7	4

		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	#	63	270	271	49	28
	%	20	39	34	4	3
Engage in conversations around science findings or engineering solutions	#	132	266	228	30	22
	%	8	33	46	9	4
Engage students in science-related computational thinking	#	54	225	310	60	25
	%	23	47	24	3	2
Ask students to explain their partial understandings and potentially incorrect ideas	#	157	320	162	20	16
	%	18	43	32	5	3
Have students make explanations and revise them in response to new evidence	#	121	288	214	33	18
	%	18	43	32	5	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

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
%	55	42	3	0	0
#	390	295	23	2	0

Table 5. 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	%	22	45	28	3	2
	#	150	299	187	17	16
I encourage students to consider possible barriers to implementing a solution	%	16	41	35	6	3
	#	106	273	234	39	17
I survey students about their interests and experiences relevant to science	%	12	32	39	14	4
	#	77	210	260	95	24

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

	Very Confident	Confident	Somewhat Confident	Not Confident
%	10	42	41	7
#	71	284	281	49

Middle School Grades Survey Responses

Error! Reference source not found. through **Error! Reference source not found.** 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?

		Very Good	Good	Fair	Poor	Very Poor	Does Not Apply
Meeting the stated learning objectives of the session.	%	65	32	3	0	0	0
	#	154	75	6	0	0	1
Use of engaging and useful activities to facilitate your learning.	%	67	29	4	0	0	0
	#	157	68	10	0	0	1
Introducing you to useful resources such as curriculum materials, research articles, and practice information?	%	66	28	5	0	0	0
	#	155	67	12	1	0	1
Providing timely, relevant information that you will be able to apply in your work setting.	%	67	29	3	1	0	0
	#	157	69	8	2	0	0
Engaging you in discussion with other participants in ways to facilitate your learning.	%	70	28	3	0	0	0
	#	164	65	7	0	0	0
Providing sufficient time for you to process the information collaboratively with colleagues.	%	60	28	10	2	0	0
	#	141	67	23	4	1	0
Motivating you to recommend these types of sessions to	%	64	29	6	1	0	0
	#	151	69	13	2	1	0

	Very Good	Good	Fair	Poor	Very Poor	Does Not Apply
your work colleagues.						

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

		Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
The content standards	%	38	49	6	0	6
	#	90	116	15	0	15
Research-based instructional practices	%	54	42	1	0	3
	#	128	99	3	0	6
Instructional practices to make learning experiences more inclusive for diverse student populations (e.g., special education, highly capable, migrant, students of color).	%	48	34	7	0	11
	#	113	81	17	0	25
Instructional practices to make learning experiences more inclusive for English language learners.	%	36	35	11	1	17
	#	85	83	26	2	40
Instructional practices to make learning experiences more inclusive for students with disabilities.	%	34	36	11	1	19
	#	79	84	26	2	45
A range of assessment and/or resources across the educational system such as state, local, and/or classroom assessments.	%	38	36	7	1	18
	#	89	86	16	2	43
How to share the sessions' information with others (teachers, administrators, parents).	%	36	50	4	1	10
	#	85	117	9	2	23

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

		All of the time	Most of the time	Sometimes	Never or hardly ever	Not applicable
Provide opportunities for students use data to inform their thinking	%	23	52	25	0	0
	#	52	119	58	1	1
Test the ability of students to apply key science ideas to new situations	%	18	52	25	3	2
	#	41	120	58	6	5
Engage in conversations around science findings or engineering solutions	%	28	42	29	0	1
	#	63	96	67	1	2
Engage students in science-related computational thinking	%	16	43	38	2	1
	#	36	97	85	5	2
Ask students to explain their partial understandings and potentially incorrect ideas	%	35	49	16	0	0
	#	80	112	37	0	0
Have students make explanations and revise them in response to new evidence	%	30	45	22	2	0
	#	69	102	51	5	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

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
%	63	36	1	0	0
#	149	85	2	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	%	36	49	14	1	1
	#	81	110	32	2	2
I encourage students to consider possible barriers to implementing a solution	%	22	47	30	1	0
	#	50	105	67	2	1
I survey students about their interests and experiences relevant to science	%	19	28	40	12	1
	#	42	64	90	27	2

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

	Very Confident	Confident	Somewhat Confident	Not Confident
%	13	50	32	5
#	30	115	72	11

High School Grades Survey Responses

Table 7 through **Error! Reference source not found.** list the number and percent of responses for each question answered by high school-level professional development participants.

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

		Very Good	Good	Fair	Poor	Very Poor	Does Not Apply
Meeting the stated learning objectives of the session.	%	65	32	3	0	0	0
	#	149	74	6	0	0	0
Use of engaging and useful activities to facilitate your learning.	%	62	32	5	0	0	0
	#	143	73	12	1	0	0
Introducing you to useful resources such as curriculum materials, research articles, and practice information?	%	58	35	6	0	0	0
	#	133	80	13	1	1	1
Providing timely, relevant information that you will be able to apply in your work setting.	%	57	36	7	1	0	0
	#	130	82	15	2	0	0
Engaging you in discussion with other participants in ways to facilitate your learning.	%	64	32	3	1	0	0
	#	146	73	7	3	0	0
Providing sufficient time for you to process the information collaboratively with colleagues.	%	49	38	12	1	0	0
	#	111	88	27	3	0	0
Motivating you to recommend these types of sessions to	%	60	31	5	2	0	2
	#	137	71	12	4	1	4

	Very Good	Good	Fair	Poor	Very Poor	Does Not Apply
your work colleagues.						

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

		Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
The content standards	%	39	49	6	0	6
	#	90	112	14	0	13
Research-based instructional practices	%	52	45	2	0	1
	#	120	102	5	0	2
Instructional practices to make learning experiences more inclusive for diverse student populations (e.g., special education, highly capable, migrant, students of color).	%	35	48	7	0	10
	#	80	109	16	1	23
Instructional practices to make learning experiences more inclusive for English language learners.	%	27	45	11	1	16
	#	61	102	26	3	37
Instructional practices to make learning experiences more inclusive for students with disabilities.	%	24	40	13	2	21
	#	55	91	30	4	49
A range of assessment and/or resources across the educational system such as state, local, and/or classroom assessments.	%	32	47	7	0	13
	#	74	107	17	1	30
How to share the sessions' information with others (teachers, administrators, parents).	%	35	52	6	0	7
	#	79	119	13	1	17

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

		All of the time	Most of the time	Sometimes	Never or hardly ever	Not applicable
Provide opportunities for students use data to inform their thinking	%	20	50	28	1	0
	#	45	114	64	3	0
Test the ability of students to apply key science ideas to new situations	%	16	51	31	2	0
	#	35	114	69	5	1
Engage in conversations around science findings or engineering solutions	%	15	46	35	4	0
	#	34	102	77	9	1
Engage students in science-related computational thinking	%	15	46	36	3	1
	#	32	100	80	7	1
Ask students to explain their partial understandings and potentially incorrect ideas	%	28	42	28	2	0
	#	63	93	63	5	0
Have students make explanations and revise them in response to new evidence	%	20	44	33	4	0
	#	44	98	74	8	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

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Addressed
%	59	40	1	0	0
#	135	91	2	1	0

Table 17. 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	%	45	42	12	1	0
	#	100	95	27	2	0
I encourage students to consider possible barriers to implementing a solution	%	25	40	31	3	0
	#	56	90	70	6	1
I survey students about their interests and experiences relevant to science	%	17	33	40	10	0
	#	38	73	89	23	0

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

		Very Confident	Confident	Somewhat Confident	Not Confident
%		26	46	24	4
#		59	104	54	8