



Two-Year College Chemistry Landscape 2010: Resources and Priorities Data Summary, Spring 2011

The *Two-Year College Chemistry Landscape 2010: Resources and Priorities* survey was designed to provide insight into the needs of the two-year college chemistry community and the impact of ACS activities and products, such as the *ACS Guidelines for Chemistry in Two-Year College Programs*. It was developed by the Society Committee on Education's Task Force on Two-Year College Activities, in consultation with ACS staff.

Piloted in late October, the survey was opened to the public November 9, 2010 and closed December 28, 2010. Email invitations were sent to 3,435 two-year college chemistry contacts, who were also encouraged to invite their colleagues. After three reminders, 894 responses were received. Of the responses to the survey, 752 were complete. The incomplete responses were included in the data analysis, and responses to the questions were considered individually.

The aggregate responses for each question in the survey are below. Responses to short answer questions have been removed, to preserve the confidentiality of the survey participants.

1. Where is your institution located?

<i>State</i>	<i>Number of Responses</i>	<i>State</i>	<i>Number of Responses</i>	<i>State</i>	<i>Number of Responses</i>
Alabama	10	Louisiana	3	Ohio	19
Alaska	0	Maine	1	Oklahoma	12
Arizona	26	Maryland	22	Oregon	15
Arkansas	3	Massachusetts	15	Pennsylvania	16
California	141	Michigan	46	Rhode Island	3
Colorado	4	Minnesota	17	South Carolina	15
Connecticut	11	Mississippi	15	South Dakota	0
Delaware	6	Missouri	16	Tennessee	15
Florida	36	Montana	5	Texas	62
Georgia	24	Nebraska	9	Utah	11
Hawaii	8	Nevada	4	Vermont	1
Idaho	6	New Hampshire	1	Virginia	19
Illinois	39	New Jersey	12	Washington	46
Indiana	11	New Mexico	8	West Virginia	2
Iowa	16	New York	60	Wisconsin	17
Kansas	13	North Carolina	29	Wyoming	9
Kentucky	11	North Dakota	4		
					Total number of responses: 894

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2. Which of the following does your institution offer? (check all that apply)

	<i>Number of Responses</i>
Certificate or associate's degree in chemistry	355
Certificate or associate's degree in a chemistry-based technology (e.g., chemical technology, process technology, biotechnology, etc.)	202
Certificate or associate's degree in general sciences and/or a chemistry-related field	509
Transfer programs (without degrees) in chemistry or chemistry-based technology	524
None of the above	51
Total number of responses: 894	

3. What is the approximate total course enrollment (both full- and part-time) in all chemistry and chemistry-based technology courses in the current term?

	<i>Number of Responses</i>
< 100 students	148
100 – 500 students	430
501 – 1,500 students	234
1,501 – 2,500 students	40
> 2,500 students	42
Total number of responses: 894	

4. Check the organizations of which you are currently a member:

	<i>Number of Responses</i>
No professional affiliation	181
American Chemical Society (ACS)	528
ACS Two-Year College Chemistry Consortium (2YC ₃)	274
ACS Division of Chemical Education	269
Other ACS division(s)	62
Labor union	192
Other professional organization	201
Total number of responses: 894	

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5. Indicate the *importance* of the following topics to you.

	Number of Responses		
	Little or no importance	Somewhat important	Very important
Faculty professional development	27	272	476
Curriculum development	20	243	512
Student transfer	31	181	563
Student employability skills	36	298	441
Program infrastructure	14	219	542
Partnerships	116	417	242
Data and effective practices from other two-year colleges	62	405	308
Total number of responses: 775			

6. Indicate your *need* for additional resources to address the following topics.

	Number of Responses			
	I have access to the resources I need.	Additional resources would be helpful.	Additional resources would have a large impact.	Not applicable.
Faculty professional development	169	416	183	7
Curriculum development	176	439	149	11
Student transfer	228	387	129	31
Student employability skills	151	399	166	58
Program infrastructure	120	318	332	5
Partnerships	126	415	171	63
Data and effective practices from other two-year colleges	77	457	203	37
Total number of responses: 775				

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7. Which *four* of the following resources would have the greatest impact on you, if they were made available through ACS or another organization? Rank your selections 1—4, with 1 being the resource with the greatest potential impact.

	<i>Number of Responses^a</i>	<i>Average Rank^b</i>
ACS policy documents regarding topics relevant to two-year colleges	327	2.63
Online forum for discussing two-year college chemistry education	290	2.61
Case studies or effective practices in two-year college chemistry education	482	2.52
Program assessment or self-study tools	426	2.57
Data for benchmarking programs	256	2.63
In-person workshops on program development	299	2.45
Online professional development courses or webinars	337	2.67
Funding to present at ACS national, regional, or specialty meetings	202	2.38
Funding for courses, workshops, other professional development activities	490	2.21
Total number of responses: 774		

^a Percent of respondents who selected this resource as **any** one of the four that would have the greatest impact, regardless of the rank assigned.

^b Average of the rankings assigned to those resources when they were selected by the respondents, with 1 being the resource with the greatest potential impact.

8. Indicate which of the following activities you would do if you had access to additional funding.

	Number of Responses					
	I am not interested in this activity.	I am interested in this activity but cannot participate for non-monetary reasons.	I am interested in this activity and already have sufficient funding.	I am interested in this activity and I might do this if I had additional funding.	I would be likely to do this if I had additional funding.	Other (specify)
Presenting at ACS national meetings	335	98	31	181	118	11
Presenting at ACS regional meetings	282	106	53	204	118	11
Presenting at ACS Two-Year College Chemistry Consortium (2YC ₃)	222	109	67	211	151	14
Presenting at ACS Biennial Conferences on Chemical Education (BCCE)	288	93	43	203	133	14
Participating in local professional development workshops	67	94	178	196	227	12
Participating in professional development workshops held across the country	71	107	59	239	291	7
Total number of responses: 774						

9. What other professional development activities would have a significant impact on you, if additional funding were available?

The 231 responses received are withheld to preserve the confidentiality of the survey respondents.

10. Describe any additional topics that are important to you and corresponding resources that may be needed.

The 188 responses received are withheld to preserve the confidentiality of the survey respondents.

11. Are you familiar with the ACS Guidelines for Chemistry in Two-Year College Programs?

	Number of Responses
Yes	542
No	225
Total number of responses: 767	

12. How have you used the ACS Guidelines for Chemistry in Two-Year College Programs? (check all that apply)

	Number of Responses
I have reviewed the Guidelines and am considering ways to implement the Guidelines. [goes to Question 13]	319
I have used the Guidelines to implement changes at my institution. [goes to Question 14]	173
I have not used the Guidelines. [goes to Question 17]	103
Total number of responses: 542	

13. Which of the following challenges are you considering using the Guidelines to address? (check all that apply) [goes to Question 17]

	Number of Responses
Preparing for accreditation	73
Limiting faculty teaching/institutional requirements	116
Supporting faculty professional development	138
Adjusting departmental/program funding	67
Offering student support services	74
Acquiring equipment	170
Implementing chemical safety plan	151
Assessment and evaluation of the program	191
Establishing partnerships with other institutions, community groups, or businesses	82
Incorporating non-technical skills, such as teamwork, ethics, and communication, into the curriculum	86
Other	16
Total number of responses: 315	

14. How useful were the Guidelines for the following activities?

	Number of Responses				
	Little or no use	Somewhat useful	Very useful	Guidelines were not used	N/A
Preparing for accreditation	22	52	50	28	18
Limiting faculty teaching/ institutional requirements	36	42	69	16	7
Supporting faculty professional development	26	74	38	20	12
Adjusting departmental/ program funding	34	55	43	23	15
Offering student support services	37	63	29	25	16
Acquiring equipment	22	64	56	18	10
Implementing chemical safety plan	12	61	74	16	7
Assessment and evaluation of the program	10	69	75	10	6
Establishing partnerships with other institutions, community groups, or businesses	45	49	21	32	23
Incorporating non-technical skills, such as teamwork, ethics, and communication, into the curriculum	39	60	29	25	17
Total number of responses: 170					

15. What additional activities have been informed by the Guidelines?

The 30 responses received are withheld to preserve the confidentiality of the survey respondents.

16. Briefly describe how you used the Guidelines.

The 69 responses received are withheld to preserve the confidentiality of the survey respondents.

17. What additional information you would like to share with ACS?

The 111 responses received are withheld to preserve the confidentiality of the survey respondents.

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18. May we contact you for more information? If you answer yes, you will be asked to provide contact information, which will be kept separate from data you provided in the survey.

	<i>Number of Responses</i>
Yes, I would like to provide further input on the Guidelines.	65
Yes, I would like to provide further input on faculty development	43
Yes, I would like to provide further input on both of these topics and/or other topics related to two-year colleges.	253
No, I would not like to be contacted at this time.	392
<i>Total number of responses: 753</i>	

19. Would you like to be entered into a drawing for a Barnes & Noble Nook[®] e-reader? If you answer yes, you will be asked to provide contact information, which will be kept separate from data you provided in the survey.

	<i>Number of Responses</i>
Yes, please enter me in the drawing.	539
No, I do not want to participate at this time.	214
<i>Total number of responses: 753</i>	