

Supplemental Material

CBE—Life Sciences Education

Matyas *et al.*

**Supplementary Materials for
 “Professional Societies’ Undergraduate Education Efforts Increase
 during the Vision and Change Era,”
 Matyas, M.L., Ruedi, E. A., Engen, K. and Chang, A.L.**

**Table S1: Societies Addressing Undergraduate Education through
 Leadership Activities 2008-2014**

Leadership and Sustainability Activities	2014 All Respondents (%)
Society’s mission and strategic goals address undergraduate education explicitly	48
Undergraduate faculty are represented in society governance or committees	81
Community college faculty are represented in society governance or committees	33
Future faculty (e.g., graduate students and postdoctoral fellows involved in undergraduate teaching) are represented in society governance or committees	44
Undergraduate students are represented in society governance or committees	22

¹ Includes those societies who said they had internal and external support for undergraduate activities.

Table S2: Volunteer Leadership and Society Staff Responsible for Education Initiatives

Volunteer Position	2014 All Respondents (%)	Staff Position	2014 All Respondents (%)
Committee Chair (with education, communication, and or diversity missions)	86	Section Director (with education and/or communication responsibilities)	36
Editorial Expert (Editor in chief or associate editor)	17	Manager/Coordinator (not specifically education)	36
Education Fellow	11	Executive Director	11
Executive Director (staff)*	3	Staff assistant to Executive Dir.	3
		Education Fellow	3
		No paid staff/not applicable	22

* One society indicated that their executive director took responsibility for education initiatives on a volunteer basis.

Table S3: Sources of Support for Education Programs 2008-2014

Support Source	2014 All Respondents (%)	Comparison Group (%)	
		2008	2014
Revenue generated from other society programs and/or activities not included above (e.g., membership, registrations, subscriptions, fees and/or non-business related activities)	82		
External sources (e.g., grants, contracts, and/or foundations)	57		
Society's strategic reserves (e.g., endowments and/or reserved funds)	46	7	54 ¹
Revenue generated from society education programs and/or activities (e.g., registrations, subscriptions, and/or fees)	43		

¹p=0.0142

Table S4: Societies' 2014 Annual Budgets for Education

Budget Ranges	2014 All Respondents (%)
Less than \$25,000	19
\$26-50,000	7
\$51-100,000	15
\$101-250,000	15
\$251-500,000	19
Greater than \$500,000	11
Don't know	15

Table S5: Collaborations with Other Organizations 2008-2014

Collaborations	2014 All Respondents (%)
Formal education collaborations and coalitions with other societies	76
Formal education collaborations and coalitions with other organizations (e.g., education centers, museums, community-based programs) and foundations	48
Sponsored presentations with other societies (e.g., society sponsored sessions at the National Science Teacher Association)	67
Sponsored memberships with other societies for undergraduate faculty	24
Sponsored memberships with other societies for undergraduate students	5
Outreach to international community on undergraduate education initiatives	52

Table S6: Society Undergraduate Programs with Specific Goals and Measureable Objectives

Percentage of programs with specific goals and objectives	2014 All Respondents (%)
None	32
1 to 24%	18
25 to 49%	11
50 to 74%	11
75 to 99%	18
100%	7
Don't know	4

Table S7: Evaluation Designs Used for Society Undergraduate Programs 2008-2014

Design Approaches	2014 All Respondents (%)
Post assessment only (e.g., exit survey of participants)	62
Time series assessment (e.g., pre-, post-, and/or follow-up survey of participants)	34
Quasi-experimental design (includes participants and a comparison group)	7
Randomized study (participants randomly assigned to program or control group)	-
Not applicable	17
Don't know	3
Other evaluations	7

Table S8: Evaluation Methods Used for Society Undergraduate Programs 2008-2014

Evaluation Methods	2014 All Respondents (%)
Survey – multiple choice questions	70
Survey – open-ended questions	63
Records/Products (e.g., products developed, attendance rates, grades, completion rates)	41
Interviews and/or focus groups	41
External evaluation – Consultant	30
Online discussions	26
Observations	26
External evaluation – Committee review	19
Not applicable	19
Tests/quizzes	15

I don't know	7
Other quantitative or qualitative methods	4

Table S9: Evaluation Dissemination Methods Used for Society Undergraduate Programs 2008-2014

Evaluation Dissemination Methods	2014 All Respondents (%)
Web distribution (e.g., society sponsored webpages, blogs)	56
Sessions at society's meetings, workshops, and other events	44
Non-scholarly publications (e.g., magazines, newsletters, reports)	37
Sessions at non-society sponsored meetings, workshops, and other events	30
Social media (e.g., Facebook, Twitter, LinkedIn)	30
Peer-reviewed scholarly publications (e.g., journals or reports)	11
Not applicable	30
I don't know	15
Other (please describe)	-