Making the Most of Your Opportunities: Leveraging Key Resources and Connections

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Two-Year Colleges and ACS

Recent events

- 2008 – reinvigoration of Regional Advisory Boards for the Two-Year College Chemistry Consortium
- 2008 – programming at 20th BCCE
  “Using the ACS Guidelines for Chemistry Programs in Two-Year Colleges to Enhance Programs Facilitate Student Transitions”
  “Exploring the ACS Guidelines and Expectations for the First Two Years of Chemistry”
- 2009 – release of ACS Guidelines for Chemistry in Two-Year College Programs
- 2009 – formation of Society Committee on Education Task Force on Two-Year College Activities
- 2010 – expansion of ACS Office of Two-Year Colleges
- 2010 – collection of data on chemistry faculty at two-year colleges
Workshop Goals

• To determine growth opportunities for two-year college chemistry students, faculty, and programs.
• To develop strategies for pursuing those opportunities.
• To inform participants of what ACS has to offer Two-Year Colleges.
Pursuing Growth Opportunities

What would you like to accomplish in your classroom, laboratory, or program next year?
Leveraging Connections

How might ACS help?

- Who is an ACS member?
- Who is involved in their ACS local section?
- Who is involved in ACS divisions?
- Who is a CHED member?
- Who is a 2YC$_3$ member?
- Whose institution is a 2YC$_3$ member?
ACS at a Glance – Student Resources

- *inChemistry* magazine
- Undergraduate Programming at National Meetings
- ACS Student Chapters
- Career information and services
- ACS Scholars
- ACS-International Research Experiences for Undergraduates
- Safety brochures and booklets
ACS at a Glance – Faculty Resources

Networking
• National and regional meeting programming
• Two-Year College Chemistry Consortium (2YC₃)
• Division of Chemical Education
• Local ACS sections

Professional Development
• A Guide to Classroom Instruction for Adjunct Faculty, 2nd Ed.
• ACS Webinars
• Leadership Development System
• Short courses

Publications
• Journal of Chemical Education
• Chemistry Outlook
ACS at a Glance – Program Resources

• Symposium reports

• ACS Diversity Reports
  – *Workshop on Increasing Participation of Hispanic Undergraduate Students in Chemistry* (2008)
  – *Workshop on Increasing Participation of Native American Undergraduate Students in Chemistry* (2008)

• Survey results

• ACS policy statements

• *Safety in Academic Laboratories*, Volume 2
ACS at a Glance – Program Resources

- ACS Guidelines for Chemistry in Two-Year College Programs
- ACS Guidelines and Evaluation Procedures for Bachelor’s Degree Programs
Vision of Excellence

The *ACS Guidelines for Chemistry in Two-Year College Programs* are intended to:

- Stimulate faculty, departments, and administrators by providing a vision of excellence in chemistry education for the first two years of college.
- Be used as a resource for self-evaluation and ongoing improvement of chemistry education in the first two years of college.
- Serve as a call for collaborative action for all stakeholders to improve chemistry education in the first two years of college.
ACS Guidelines at a Glance

Table of Contents for *ACS Guidelines for Chemistry in Two-Year College Programs*

1. Goals of Guidelines
2. Institutional Environment
3. Faculty and Staff
4. Infrastructure
5. Curriculum
6. Student Research and Scholarly Activities
7. Development of Student Skills
8. Student Mentoring and Advising
9. Program Self-Evaluation and Assessment
10. Partnerships
ACS Guidelines at a Second Glance

ACS Guidelines for Chemistry in Two-Year College Programs provide:

- A comprehensive model designed for a range of institutions
- A framework for reviewing two-year college chemistry programs
- Help in identifying areas of strength and opportunities for change
- Opportunity to leverage support from institutions, partners, and external agencies

ACS Guidelines for Chemistry in Two-Year College Programs parallel ACS guidelines for baccalaureate programs.
ACS Guidelines at a Third Glance

*ACS Guidelines for Chemistry in Two-Year College Programs* do not include:

- Extensive justifications
- Details
- Examples
- Implementation strategies
- Resources

Things to think about:

- In which cases is such information needed?
- How should such information be provided?
Developing Strategies: Scenario Analysis

- **Scenario** – Two chemistry faculty members are retiring from your institution at the end of the coming academic year. Administration would like to replace only one position. Your department chair has asked you to help prepare a request to fill both positions.

- **Key players** – you, department chair, others?

- **Enact meeting**

- **Analyze interaction**
Developing Strategies: Scenario Analysis (con’t)

• **Scenario** – Two chemistry faculty members are retiring from your institution at the end of the coming academic year. Administration would like to replace only one position. Your department chair has asked you to help prepare a request to fill both positions.

• **Analyze interaction**
  – What went well?
  – What might you have done differently?
  – Resources – ACS, others?

• **Next steps?**

• **Re-enact meeting**
Developing Strategies: Breakout Session

What would you like to accomplish in your classroom, laboratory, or program next year?

Choose a scenario. (from list generated in slide 3)
Developing Strategies: Breakout Session

1. Join one of the following groups and introduce yourselves
   a) Guidelines solutions
   b) Alternative solutions

2. Select a Time-Keeper and a Reporter for your group
   
   **Time-Keeper:** Keep group on-task to enact and analyze a scenario in 15 min
   **Reporter:** Record key points from group discussions

3. Discuss the selected scenario, identifying the key players and resources that could be utilized

4. Share the solutions from the guidelines and the alternative solutions group with all

5. Select members from the guidelines and the alternative solutions groups to represent the key players and act out the scenario
Developing Strategies: Scenario Analysis

Debrief on breakout session:

- Scenario
- Key players
- Resources
- Interaction
  - What went well?
  - What might you have done differently?
- Next steps
Taking Programs to the Next Level

What will foster the pursuit of excellence?

(See below for previous responses.)
Taking Programs to the Next Level

Strategies are needed for…

a) obtaining resources to meet student needs
b) fostering continuous development of programs
c) establishing and developing partnerships that benefit students and programs

Key questions
I. What do you do that you wish others knew about?
II. What do other people do that you wish you knew more about?
Society Committee on Education (SOCED)
Task Force on Two-Year College Activities

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• Society Committee on Education
• Two-Year College Chemistry Consortium
• Division of Chemical Education Committee on Chemistry in the Two Year Colleges
• Office of Two-Year Colleges
Thank you for your participation!
Recognizing Progress

How might ACS recognize and celebrate progress in

a) obtaining resources to meet student needs?

b) fostering continuous development of programs?

c) establishing and developing partnerships that benefit students and programs?

d) Other ways?
Recognizing Progress

How might ACS recognize and celebrate progress in…

a) obtaining resources to meet student needs?
Articles in newsletters, C&EN, web site (video testimonies), targeted press releases
Opportunities to present at meetings (signature/invited symposia)

b) fostering continuous development of programs?
Provide successful models, resources and time to incorporate improvements

c) establishing and developing partnerships that benefit students and programs?
Partnerships with HS, four-year programs
Incentives/opportunities for opening doors for partnerships

d) Other ways?
Ask LSAC to establish ChemLuminary Award for 2YCs (with criteria for assessment)
Local section college awards
Involve 2YC3 – share on web site
Opportunities to share best practices and serve as role models
Letters acknowledging accomplishments
Give money!
Pursuing Opportunities
(these are examples given at BCCE; a copy of slide 4 with the group responses will be placed here.)

What would you like to accomplish in your classroom, laboratory, or program next year?

• Find out what honors class will require (vs. regular class)
• Identify what topics are REALLY needed in courses
  – Guidance on course content, student learning outcomes, assessment
• Institute math prerequisite
• Raise awareness of new science degree program
• Create chemical safety & hygiene plan
  – Reduction of chemical waste
• Laboratory design (experiments and assessment)
• Facilitate articulation
Developing Strategies: Scenarios
(chose one of these scenarios for team role playing?)

Scenario A – You have been invited to represent your department at a planning meeting regarding the development of online courses and laboratories.

Scenario B – You will be meeting with the dean about a recent program review that highlights the need to increase the contact hours for laboratory sections.

Scenario C – An institution to which your chemistry students transfer has decided to no longer accept credits for courses taken at your institution. The deans and registrars from both institutions will be meeting to discuss this decision. You have been asked to provide a report for that meeting.

Scenario D – The dean has expressed concern about the high DFW rates for general chemistry and will be meeting with the chemistry faculty.