
The Division of Chemical Education: Current Status and Future Directions

Paper Number 4: DivCHED Long Range Planning Committee

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As this paper was generated, the following questions emerged and are listed in no particular order of priority. Background information and rationales follow the list of questions.

1. How can the DivCHED identify new chemical educators on a regular basis and inform them of the opportunities provided by the DivCHED?
2. Would it be beneficial for the DivCHED to increase recruiting efforts at the international level, high school or middle school level (2)? What about the graduate teaching assistants, a significant pool of future educators. If so, what are some recruiting strategies that could work?
3. How might DivCHED activities, such as programming and committee structure, be affected with increased membership from a wide variety of groups?
4. Should the DivCHED review attendance policies for committee membership, especially for national meetings due to financial factors associated with national meetings being held in high-cost cities?
5. Is there a way for electronic communication to replace some face-to-face committee meeting requirements?
6. Would it be advisable and helpful to have some method/strategy to identify/recognize presiders at paper sessions during the time a conference is in session?
7. Is it reasonable or advisable to establish some profile for leadership positions regarding years of membership in the DivCHED? For example, would it make sense to require that a certain percentage of the Executive Committee members to have been DivCHED members for X years and another percentage (X-n) years?
8. How can the process of volunteering be made nonthreatening for those who are not acquainted with active DivCHED members?
9. How can an interest in participating be communicated to those who need to know when it comes times for committee appointments?
10. Are we at a juncture where it would be reasonable to consider increasing the DivCHED dues in order to establish a travel fund, for example, or other financial incentives to help members accomplish various tasks related to the DivCHED activities? How would this fund or line item be administered and would the benefits outweigh the administrative time and effort?
11. Would increasing DivCHED dues have a negative impact on any effort to increase membership?
12. What role and effect could the Biennial Conference in Chemical Education and regional meetings have toward de-emphasizing programming and activities at national meetings with the goal of and increasing member participation in DivCHED activities?
13. Would chemistry colleagues view participation at the regional level to be as prestigious as participation at the national level?
14. Are there ways to increase the DivCHED profile within ACS such that the DivCHED activities are in the main loop of conference activities?
15. Would an all-out effort requesting that ACS develop and implement a plan to rotate all the division programs to remote locations on a regular schedule be useful?
16. Would this proximity to other programs help the DivCHED offer more co-sponsored programs? Would we want to go that direction?
17. Is a major reorganization of committees feasible?
18. How could any changes in committee structure serve the needs of the members more effectively and efficiently than the current structure?
19. Would it be more reasonable for the New Member Committee to be a subcommittee of the Membership Committee than a stand-alone unit? Would this help incorporate new members more efficiently into the DivCHED activities yet provide a group to focus on the unique needs of new members?
20. Does the DivCHED need to have a standing curriculum committee? How might such a committee

interact synergistically with the Examinations Institute or provide input to potential changes in academic curricula?

21. Will *JCE* be able to continue to meet the needs of an increasing diverse membership base?
22. Would an increase in subscription price offset decrease in numbers of subscriptions or would this merely create more cancellation of subscriptions?
23. Are there alternate, possibly less expensive, viable ways of delivering the information provided in *JCE*?
24. Is it time to review the information that is included in the Newsletter? If so, who should be responsible for that review?

The DivCHED Long Range Planning Committee may have the lowest profile among the division committees but it is interested in what members perceive and anticipate regarding the future of the DivCHED. This document identifies most of the issues that the LRPC has discussed during the recent meetings. We seek input from the group at large regarding what is perceived to be going well and what might need to be changed to improve the activities for professional chemical educators.

The American Chemical Society Council (ACS) Committee on Divisional Activities has recommended in a recent white paper that each division review its practices, programs, policies, etc. and determine if everything is current and consistent with professional needs and operations at a time when the nature of chemistry as a discipline is being redefined (by practice, not formal decision-making) to be more interdisciplinary in nature than the current chemistry curriculum based on classical pedagogy (1).

Recent annual reviews of the DivCHED activities have been positive and suggest that the DivCHED is a healthy, active, and successful organization. If this is the situation, then it might be reasonable to ask why members of the group are being asked to take time from their busy schedules to review activities of the Division and think about the future. This review process is analogous to your regular physical check-ups. In order to maintain a viable and healthy body or organization it is good practice to review current processes and practices periodically and selectively adjust, if appropriate or as needed, to maintain or improve the current status.

As the DivCHED begins the challenging review and evaluation process, it is important to keep in mind that the:

- DivCHED serves a widely diverse set of professionals and their needs.
- Vast majority of the work done for the DivCHED is done by volunteers.

MEMBERSHIP

The current membership of the Division is about 5000. Many issues related to various aspects of membership have been discussed and have centered on ideas such as:

- Increasing and broadening the membership
- Increasing membership participation and recognizing members for work they do for the DivCHED
- Identifying members who want to be involved as well as how they want to be involved or contribute

Increasing and broadening the membership

Although a membership of 5000 might appear to be sufficient for an organization to sustain itself, there are many colleagues who are missing out on benefits, such as professional contacts and participation, that the DivCHED has to offer as well as the opportunity to contribute to their profession. Additional members may generate more programming and activities leading to a greater variety of opportunities to participate for all members.

- How can the DivCHED identify new chemical educators on a regular basis and inform them of the opportunities provided by the DivCHED?

Would it be beneficial for the DivCHED to increase recruiting efforts at the international level, high school or middle school teachers (2)? What about the graduate teaching assistants, a significant pool of future educators. If so, what are some recruiting strategies that could work?

- How might DivCHED activities, such as programming and committee structure, be affected with increased membership from a wide variety of groups?

Increasing member participation and recognizing members for their contributions

The DivCHED has many activities and membership participation is necessary to organize and make sure things go as planned. There is a perception that a few people "are doing all the work" or that the same people are always called upon to maintain the program. Willingness to participate may be related to many things including knowing what activities are of interest to members (see below). Inability to attend committee meetings as described by the DivCHED operations manual may be a limiting factor for increasing member participation.

- Should the DivCHED review attendance policies for committee members, especially for national meetings due to financial factors (see below)?
- Is there a way for electronic communication to replace some face-to-face meeting requirements?

Timely recognition of member contributions may be another motivating factor for participation. Rather than waiting to recognize individuals for their lifetime contributions, is there a relatively easy and not too costly method for the DivCHED to recognize contributions on a more timely basis.

- Would it be advisable and helpful to have some method/strategy to identify/recognize presidents at paper sessions during the time a conference is in session?

The challenge of getting newer members into leadership positions within the DivCHED has been raised several times over the years. This seems to cycle back to participation, interest, and communicating these interests. One good way to exhibit this interest is to attend Executive Committee meetings and become familiar with the topics of discussion in that group.

- Is it reasonable or advisable to establish some profile for leadership positions regarding years of membership in the DivCHED? For example, would it make sense to require that a certain percentage of the Executive Committee members to have been DivCHED members for X years and another percentage (X-n) years?

Identifying members who want to be involved as well as how they want to be involved

People join groups and professional organizations for a variety of reasons. It is entirely possible that for many of the 5000 DivCHED members, the ability to list membership on yearly activity reports and getting publications from the organization is sufficient for their needs. At the same time, it is possible that some of these 5000 members would be more receptive to participate if they knew how to volunteer or if they had some contact person in the DivCHED. Relying on whom you know or waiting to be invited to participate may not be the best way to diversify membership or participation.

- How can the process of volunteering be made nonthreatening for those who are not acquainted with active DivCHED members?
- How can an interest in participating be communicated to those who need to know when it comes times for committee appointments?

FINANCIAL ISSUES

Membership Dues

Although the DivCHED is fiscally sound at this time, some folks may believe that increasing the money could solve many problems.

- Are we at a juncture where it would be reasonable to consider increasing the DivCHED dues in order to establish a travel fund, for example, or other financial incentives to help members accomplish various tasks related to the DivCHED activities? How would this fund or line item be administered and would the benefits outweigh the administrative time and effort?
- Would increasing DivCHED dues have a negative impact on any effort to increase membership?

National and Regional Meetings

Some DivCHED members have expressed concern that the cost of attending national meetings in high-cost cities combined with decreasing travel support from home institutions, negatively effects their ability to volunteer and participate in DivCHED activities. That, combined with the conflicts in teaching schedules, seems to suggest that regional meetings might play a significant role for increased participation and delivery of Division benefits for a significant number of members.

- What role and effect could the Biennial Conference in Chemical Education and regional meetings have toward de-emphasizing programming and activities at national meetings with the goal of and increasing member participation in DivCHED activities?
- Would chemistry colleagues view participation at the regional level to be as prestigious as participation at the national level?

BEING THE "SET-ASIDE" ACS DIVISION

The remote locations of the DivCHED programs at national meetings is a continuing problem and seems to send a message that the DivCHED is less "worthy" than other divisions to be assigned space in central conference facilities. The high-school programming is usually in a location that is even remote from the location of the DivCHED symposia and activities. So even to a greater extent, high school teachers are way out of the communication loop. In some ways, this practice could be viewed as discriminatory. This practice also seems to support the stereotype of chemical educators as not being real chemists. Remote locations also increase the effort that DivCHED members must exert to attend programs or listen to selective chemical presentations, and interact with colleagues in the classic disciplines.

- Are there ways to increase the DivCHED profile within ACS such that the DivCHED activities are in the main loop of conference activities?
- Would an all-out effort requesting that ACS develop and implement a plan to rotate all the division programs to remote locations on a regular schedule be useful?
- Would this proximity to other programs help the DivCHED offer more co-sponsored programs? Would we want to go that direction?

COMMITTEE STRUCTURE

A group the size of the DivCHED has several organizational options to conduct business. Currently, the majority of DivCHED committees address needs and opportunities for the diversity of subgroups within the DivCHED. Another organizational scheme would be to subdivide into different issue groups such as nature of institution (e.g., four-year non-PhD granting colleges, private colleges), job responsibilities (e.g., chemistry coordinators, chemical demonstrators) or some other subgroup categorization where programming would be directed and specific to the needs and interests of these focused groups.

- Is a major reorganization of committees feasible?
- How could any changes serve the needs of the members more effectively and efficiently than the current structure?

Another strategy would be to examine the current committees and determine if any should be dissolved or

incorporated into a different committee and/or new committees established or whether some committee responsibilities should be reassigned to different committees. For example:

- Would it be more reasonable for the New Member Committee to be a subcommittee of the Membership Committee than a stand-alone unit? Would this help incorporate new members more efficiently into the DivCHED activities yet provide a group to focus on the unique needs of new members?
- Does the DivCHED need to have a standing curriculum committee? How might such a committee interact synergistically with the Examinations Institute or provide input to potential changes in academic curricula?

PUBLICATIONS

The *Journal of Chemical Education (JCE)* is a monthly publication of the Division and unlike ACS Journals attempts to meet the needs of a more diverse readership than do other ACS division journals. *JCE*, including ancillary materials and services (e.g., *JCE* Software, *JCE* Online, *JCE* Online Store) is currently structured to be financially self-supporting and independent of the DivCHED treasury. Publishing a journal is expensive and decreasing subscriptions in recent years could put the publication of *JCE* in jeopardy. Is the problem of decreasing subscriptions a function of reduced financial support and the general economy or is it due, in large part, to not meeting the needs of the readers? Communications with ACS about publishing *JCE* have not been fruitful. With a new editor due to be in place in several years, it might be time to review the members or readers expectations for *JCE* and the necessity and/or appropriateness of ancillary services and materials.

- Will *JCE* be able to continue to meet the needs of an increasing diverse membership base?
- Would an increase in subscription price offset decrease in numbers of subscriptions or would this merely create more cancellation of subscriptions?
- Are there alternate, possibly less expensive, viable ways of delivering the information provided in *JCE*?

The *CHED Newsletter* is published three times each year at considerable cost to the DivCHED. The *Newsletter* editor does a tremendous job of organizing information conveniently for DivCHED members. However, compared to other professional newsletters I receive, it seems to have expanded into something more than a newsletter. One could question the necessity of including summary descriptions of symposia presentations or a full meeting program. On the other hand, is this necessary because not all DivCHED members are also ACS members and, therefore, do not have access to information through ACS? Would it be viable to shift the delivery method to Web based delivery along with the budget set aside for editorship and publication? How much effort would be required do this and who would be responsible for doing this? Putting information "on the web" is too often voiced as a quick fix but maintaining an up-to-date website is time consuming. Would the work of volunteers be adequate and acceptable or would the cost of electronic publication on the web be about the same as publishing hard copy?

The Examinations Institute is also a financially self-supporting unit of the DivCHED. However, would input and involvement of a DivCHED Curriculum Committee play an important role in establishing topics, etc., included in the exams or provide insight into relevant curricular changes that could impact exams?

Many questions arise, some that I have not addressed, when examining the operation of any organization. Often there are more questions than viable answers or solutions. My goal in preparing this document was to raise questions and issues for further discussion and consideration...not to identify, prioritize, or solve any problems. I do not believe that all change is good in and of itself. As I get older I think along the line of "be careful what you wish for, you just might get it".

Bibliography

1. "A Report of the Summit on The Effects of a Multidisciplinary Marketplace on the American Chemical Society and its Scientific and Professional Member Divisions", Ruth Hathaway, ACS Council Committee

- on Divisional Activities (DAV) meeting, October 1-3, 2004, Charlotte, NC.
2. "From the Chair-Elect", Loretta Jones, *CHED Newsletter*, Fall 2005, page 7.
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