

Membership: Who are we and where do we go from here?

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Abstract

The purpose of this paper is to raise several questions about membership in the Division of Chemical Education. We do not claim to have all the answers, but we are seeking input from any and all interested parties. First question: why would someone want to be a member of the Division? Here we hope to present a demographic sketch of our current membership as well as a discussion of the benefits of membership. Second question: from what populations should we be looking to recruit new members? Here we want to look at the needs of those populations, discussing if the Division can currently meet those needs and if not, should we change and how do we accomplish this? Third question: do we just want to focus on recruiting new members or do we want to get the members we have to become more active? Here we will present some of the difficulties associated with creating opportunities for active involvement and raise questions about possibilities for the future.

Membership demographics

The demographic report for the Division of Chemical Education generated by the American Chemical Society's Office of Membership at the end of 2004, contains the following data. The majority of the members of the Division of Chemical Education are American (95%) white (57%) males (58%) who majored in chemistry (83%), who subscribe to no journals (82%) and have "professor or instructor" as their job titles (65%). Overall the Division has about 5000 total members (as of 12/31/01, the count was 5124, in 12/31/04, the count dropped slightly to 4975, as of August '05 is it again over 5000).

The membership demographics for the overall Society (data from the 2001 demographic report), paint a slightly different picture. The majority of the members of the American Chemical Society are American (88%) males (75%), who majored in chemistry (75%) and subscribe to no journals (81%). Only 42% are white (while 13% are Asian) and barely 2% claim "professor or instructor" as their job titles. Among the Division members, 48% are interested in Chemical Education as opposed to only 2% of all ACS members.

Under the "Nature of Business" category 51% of the Division's members teach at four-year universities or colleges, 16% are "pre-college" teachers and 10% are at two-year colleges or technical schools. With respect to the overall Society, the largest category is "manufacturing" (30%) with 3% teaching at four-year schools, less than 1% at two-year schools and less than 1% in "pre-college."

The following table presents the percentage of members' ages in ten year intervals.

| Age intervals | CHED 2004 | CHED 2001 | ACS 2001 |
|---------------|-----------|-----------|----------|
| 21 - 30 | 8% | 8% | 6% |
| 31 - 40 | 18% | 19% | 16% |
| 41 - 50 | 21% | 20% | 26% |
| 51 - 60 | 21% | 25% | 20% |
| 61 - 70 | 17% | 16% | 6% |
| Over 70 | 5% | 4% | 2% |
| N/A | 10% | 9% | 23% |

The following tables shows when the members joined.

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| Join Date | CHED 2004 | CHED 2001 | ACS 2001 |
|-------------|-----------|-----------|----------|
| 1991 - 1995 | 15% | 18% | 17% |
| 1996 - 2000 | 22% | 37% | 48% |
| After 2001 | 37% | 14% | 25% |

An examination of these data shows that for both the Division and the Society as a whole the majority of the members are over 40 years old (74% of the Division members, 73% of the Society) with the Division slightly better at attracting younger people than ACS. Looking at the "CHED 2004" column, the majority of the Division members have joined in the last ten years (59%). Comparing the 2001 data, the Division was lagging behind ACS in attracting new members.

The information about "membership status" is interesting. ACS has 71% "regular" members, 10% "students," 10% "emeritus," 5% "retired," and 2% "associate" members. For the Division, 89% are classified as "regular" members, 7% are "students," and 2% are "associate" members, with less than 1% classified as "emeritus" or "retired." It would seem that the Division is "aging" a little slower than the Society as a whole, but is not recruiting students as well.

Some final pieces of data to ponder: The Division has more female (38%) members than ACS (21%), double the number of African American members (Division: 2.5% versus ACS: 1.7%) and slightly more Hispanic members (Division: 2.7%, ACS 1.8%). However, ACS has a larger percentage (12%) of members from outside the United States (4% from Europe, 3% from Japan, 2% from Canada, and 3% "other"). Only 5% of the Division members come from outside the US (2% "other," 1% Europe and less than 1% each from Canada, Mexico and Japan). As noted earlier, a greater percentage (82%) of the Division's members majored in chemistry with respect to the Society as a whole (76%). The degrees in chemistry for members of the Division are: 46% Doctorates, 17% Masters, and 25% Bachelors; for the ACS overall: 43% Doctorates, 14% Masters, and 34% Bachelors.

From where should we get our members?

The Division's membership should be designed to appeal to a variety of individuals that may already be members of ACS. This would include a spectrum of individuals who are interested in the work of the Division. Being more specific, the membership might be adjusted to include:

- Any individual who is a current member of ACS who is interested in the impact that chemical education would have on those entering a specific discipline or area of expertise.
- Individuals who are concerned with the quality of higher education and the impact that it will have on their disciplines.
- Individuals who are concerned that the two year college program is being overlooked and neglected.
- Faculty members who are teaching chemistry at the two year colleges.
- High school faculty members who teach chemistry or a related discipline.
- Individuals who have an interest in chemistry and chemical education.

How can we serve these members?

Meeting the needs of such diverse groups will present a challenge. Each would be choosing membership for diverse reasons. Marketing strategies will need to be diverse.

The biggest problem lies in the fact that we have no list of ACS members who might be interested in the Division and, consequently, we can not initiate a successful plan to accomplish the goals that would be set.

There are currently some marketing strategies that are available to some of the people already in ACS but not sufficiently utilized. Within the ACS a more rigorous campaign needs to be designed to encourage the current members to take another look at being a member of the Division.

Higher education faculties have the privilege of student affiliation providing student with reduced membership rates. They also have the privilege of presenting papers at ACS meetings. The Division will need to concentrate on retention of these affiliates and provide additional incentives for joining the Division

Member of high school faculties need a more rigorous campaign. Getting the Journal of Chemical Education is not exactly a high priority item. It would be necessary for us to design a welcome package for them, provide them with contact people who can answer their questions and make them more welcome at national meetings. Don't have their poster displays at some site away from the convention. Provide them with space at the place of the meeting.

Also make them feel welcome at the national meetings. It determines whether they return again or not. It determines whether they renew their membership or not.

Also make them feel that they can run for offices in the organization. The high school teachers need to know that it is okay for them to take ownership of what occurs in the Division.

Get more members or get members more active?

Do we just want to focus on recruiting new members or do we want to get the members we have to become more active? It seems to us that active involvement of members is important for the health of the division, so in some sense this is rhetorical question. However, as we contemplate taking action ourselves to achieve the goal of a more active membership, we see two major difficulties. The first is in the form of a concrete barrier, while the second is more philosophical.

Communication: the number one problem

Perhaps the most difficult thing about trying to become involved in the Division is finding out what the possibilities are. In the ideal situation, a member has a range of opportunities from which to choose, and selects the one that appears to be the best match for his or her particular talents and interests. For example, while national committee membership is currently one of the major avenues for involvement, not every member can be on a national committee, nor, we imagine, would every member want to be. Some committees themselves take an active role in encouraging members to contribute to committee goals (e.g. the Chemical Education Research Committee, which has a "friends" list from which it draws for symposium organizers, considering it part of their mission as a committee. The friendly, open nature of our Divisional networking has a down side, however -- finding appropriate opportunities for involvement can be too much a "who you know" situation (in a welcoming "we're all friends here" sense rather than in the pejorative). Personal contacts, though pleasant, are a relatively inefficient way to create an active membership. To move beyond word of mouth strategies for engagement, a deliberate structure capable of addressing the need to reach out to greater numbers without losing the personal and informal tone of the Division is essential.

While the Membership and/or New Member Committee can certainly take on the responsibility of drafting an annual call for involvement in specific projects based on the needs of the Division, it is not clear to us at this time how to prevent the call from being associated only with our committee members' own knowledge of Divisional needs, i.e. arbitrarily based on our own informal networks. It doesn't seem to us to be within the charge of either the Membership or the New Member Committee to make these critical decisions regarding which opportunities to publicize on behalf of the Division, nor to translate the various committee reports, without input nor approval, into a set of specific opportunities. To use a workplace analogy: we can do the recruiting, but we can't create the job advertisements. Decisions about how to get the recruiting call out there (the Web, e-mail, the Welcome Packet), are irrelevant without a better structure in place for ensuring that the call is appropriate. We don't know who makes the decisions about which "jobs" should be advertised, nor who assembles the list of relevant skills and interest for each one, but we suspect that the Executive Committee could utilize the present committee structure to get this done.

The problem of growth

We have said that we believe structured, deliberate recruiting in the form of calls to action is essential to move the Division forward, and suggested that the current committee structure should be utilized to ensure the recruiting is equitable. What about outside the committee structure? How do we promote active "special interest" groups while maintaining a sense of the Division as a whole? Increased engagement of a variety of chemical educators, which the Membership and New Member Committee believe is essential to the health of the division, will expose differences of opinion within the Division. The health of the Division also depends upon the united front we present to the larger organization of the American Chemical Society and to the other Divisions. Unless we find a way to handle our disagreements internally, the Division will not remain healthy. You can see some of our awareness of this issue in our consideration of the previous problem, in which we state clearly that the way forward is for the Division to take an active role in deciding which opportunities should be publicized by the Membership and New Member Committees, and that such decisions be deliberate and thoughtful, not based on arbitrary networks. Any other path forward creates the possibility that the Division will unintentionally privilege some members and tasks more than others. Only stunted growth is possible under such circumstances.

Membership: what is in it for me?

Since the overall purpose of this on-line conference is to stimulate discussions, we hope that if you currently a member of the Division, you will address these questions.

Why do you choose to be a member of the Division of Chemical Education? Are you a member of another technical Division? What benefits do you derive from being a member? Would you encourage your friends/colleagues to become members of our Division? Why or why not?

If you are not a current member, why not? What could we do to make membership more appealing to you?
