The Annual Report & Recommendations of the Connecting Us Team, Strategic Doing Initiative (Ad Hoc Committee on Interdivisional Cooperation)

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Introduction

While ASEE's divisional structure enables engineering educators with similar interests to develop robust conversations around specific topics, the Board itself has long recognized that this structure has created intellectual and pedagogic silos that limit our interactions and efficacy as engineering educators. The Connecting Us Team was established to address this challenge; it also drew upon a bottom up initiative to address the very same concern. A bulk of the membership of our Strategic Doing team draws on an Ad Hoc Committee on Interdivisional Cooperation that existed prior to the Strategic Doing initiative, and hopes to continue its work following the Strategic Doing process.

Achievements

The primary accomplishments of the Connecting Us Team / Ad Hoc Committee on Interdivisional Cooperation are as follows:

- Developing an annual "Interdivisional Town Hall Meeting" on topics of common interest across many—indeed a majority—of ASEE Divisions. There are two separate events to maximize opportunities for ASEE members to get involved: an online virtual conference and an in-person meeting at the ASEE annual conference. Past and current events include:
 - O **2014:** Why is Change So Difficult to Sustain in Engineering Education (29 Divisions)
 - o **2015:** Organizing Non-Traditional Sessions on Current Topics (34 Divisions)
 - o **2016:** Assembling ASEE Member Views on... ABET (37 Divisions & Units)
 - o **2017:** The Culture of Teaching (51 Divisions & Units)
- Convening an annual meeting of all current and incoming program chairs and division chairs, this as a means of:
 - O Conveying best practices, especially with regards to building a strong technical program
 - O Fostering innovation by sharing information on the best things people saw at the annual meeting
 - O Discussing matters of common interest
 - Enhancing the peer review process
 - Advising division membership on ASEE's publication options & policies, and preparing a report for consideration by the Board (currently in draft form)

- **Expanding the range of social activities** that facilitate spontaneous exchange across division membership
 - o Dinner board
 - O ASEE Active! (Morning run/walk sessions for ASEE 2017, plans for formal race in 2018 for the 125th)
 - O Central table during Division Mixer highlighting activities and people involved in interdivisional initiatives
 - o Exploring other ideas

Developing and advancing recommendations to the Board

- O A Standing Committee on Interdivisional Cooperation
- o Divisions & affinity groups
- o Organizational structure & governance

Recommendations

Recommendation #1: A Standing Committee on Interdivisional Cooperation

While ASEE's divisional structure serves its members well, the dominance of this structure within our society sometimes makes it difficult for us to relate to one another and to speak in a unified voice as engineering educators. This is a major issue for our Society. We recommend that the ASEE Board establish a standing Committee on Interdivisional Cooperation, similar to the Diversity Committee and the PK-12 Committee. The committee could report directly to the Board, or perhaps more appropriately, the Professional Interest Council and specifically the PIC Chairs, given that this council represents the interests of the divisions. Such a committee would not duplicate the activities of the PIC Chairs, and could be made to report to and support their functions in ways that enhance communication between the ASEE membership and the Board.

While it appears that ASEE committees, unlike the ASEE divisions, do not always have bylaws, we have, with Norman Fortenberry's encouragement, used the divisional bylaws template as a starting point for describing the mission and governance features of the proposed standing committee. (See Appendix A)

Recommendation #2: Managing Divisions & (Creating) Affinity Groups

The fluid organizational structure of ASEE, which makes it easy for new groups to set themselves up as Constituent Committees and eventually Divisions is an asset of our organization. It enables ASEE to remain agile in the face of constant new developments within engineering education. However, the proliferation of divisions can also burden the organization, especially when separate divisions arise in conjoined areas. While this issue should also be addressed by the (Strategic Doing) Governance Team, we offer the following, subsidiary recommendations as they relate to ASEE divisions and their interests:

The ASEE Board should maintain adequate oversight over the formation of new

divisions to ensure that there is not an excessive proliferation of divisions. Divisions with related interests should be encouraged to develop structures internal to the division that allow multiple groups and constituencies to function within the framework of a single division when this can be of mutual benefit. As membership within a division declines, the Board may also wish to help orchestrate mergers among divisions with aligned interests. On the other hand, we do feel that restrictions should not be placed on the formation or continuation of divisions with substantially different interests. This remains a valuable feature of our organization.

• We also feel that a formally recognized "Affinity Group" structure might help avert divisional splintering. While ASEE has several affinity groups, they are not yet recognized as part of any official structure. There are at least two significant groups within ASEE (Communication & Robotics) who have interests that span across the existing divisions. And while these educators are content to work within the framework of existing divisions so long as they are able to find and interact with one another--and they are not eager to assume the administrative responsibilities associated with setting up and managing a division--so long as they are unable to locate each other's papers and engage in common social activities, they have no alternative but to consider divisional status. Different implementations are possible, but one possibility is described in Appendix B.

Recommendation #3: Organizational Structure and Governance

Whether ASEE's current organizational structure and approach to governance is adequate depends on the mission of our organization. *If it is ASEE's primary aim to support an annual conference on varied topics within engineering education, our present organizational structure, with its emphasis on autonomous divisions, serves our members well.* However, if it is ASEE's goal to also serve as a significant voice in engineering education, then *divisional splintering within our organization precludes effective coordination and synthesis of views* among the ASEE membership.

The latter is of course a challenging task. Engineering education in the United States takes place within a complex institutional ecology comprised of public and private institutions; general universities, engineering schools, engineering programs embedded within liberal arts colleges, and community colleges; separate and yet partially overlapping degrees in engineering and engineering technology; and fifty separate state systems of higher education and a federal higher education bureaucracy. Neither ABET nor the National Academy of Engineering can offer the depth of knowledge and the membership base upon which to develop broad articulations about current and future directions in engineering education.

If it is ASEE's goal to develop our capacity to give our members a stronger voice in engineering education, there are a number of related issues pertaining to our organizational structure and approach to governance that needs to be made to function more effectively.

• Proper balance between Board representation for Zones, Sections, and Councils. The

Board composition should more accurately represent how ASEE members identify with the organization. If a typical member's primary identification is with the divisions, divisional representation should be expanded, perhaps to 6-7 representatives, with a corresponding increase in the number of Professional Interest Councils. This would also reduce PIC chair workloads.

• Build better communication between the Board and ASEE members, particularly from division membership to the Board: Ways need to be developed to better communicate the concerns and needs of ASEE members who have considerable "on the ground" experience within our society and across the diverse ecosystem of engineering education. Supporting better communication between membership and the board should be built on both formal channels (e.g. PIC chairs) as well as informal channels, such as more opportunities for in-person meetings between regular members and the Board. The Board also needs to be responsive to member concerns, and ensure that answers to questions raised are addressed and communicated back to those who raised a concern.

It is our understanding that the Governance Team will be offering several concrete recommendations about how this can be done (surveys, board visibility, topical listening sessions, etc...), which we endorse. The Interdivisional Town Hall Meeting (including its pre-meeting virtual conference) is another venue through which Board members can gain an insight into member perspectives.

Another key issue is PIC chairs rushing between divisional business meetings, which does not allow the types of meaningful discussions with members and division leadership that are needed for good upwards communication. We support the idea of having PIC Chairs interacting with division chairs and division leadership in between the annual meeting so that more robust communication can occur.

• Strengthen leadership training and persistence within the divisions. The rotational model used by the divisions enhances access to the society's leadership position. However, as currently practiced, it can limit organizational memory and capacity building. The Society should develop a stronger leadership training program for new officers--both specialized training for specific positions (treasurer, program chair, etc.), but also general training in leadership, strategic communication, and transparency. This will enable divisions to function more effectively, and provide professional development for the next generation of leaders within and beyond ASEE.

The Board should also advise the divisions on how to maintain a leadership structure that ensures continuity. Options include two-year terms, "office books" maintained by the division with detailed instructions for each role, as well as the election of directors in addition to officers, as already practiced by some of the divisions. There is no single solution, as the size of the divisions vary, but greater attention to strengthening the leadership structure of the divisions will enhance the strength of ASEE as a whole.

• A Minor Reorganization of the Professional Interest Councils around shared interests. This is currently a recurring concern within our organization. Assignment to PIC III and PIC IV has, in particular, been somewhat random, and this limits the ability of those two PIC Chairs to consistently represent the views of the members within their Professional Interest Council. We recommend that distinct themes be assigned to each PIC so that present and future assignment can be done on a "shared interest" versus "workload" basis. (However, the Board should recognize that the number of ASEE divisions represented within each PIC affects PIC Chair workloads. The size of each Professional Interest Council, as measured by the total number of individual members, should remain balanced.)

While we hope that these suggestions about organization and governance will be reflected in the recommendations of the Strategic Doing Governance Team, given that they relate directly to current issues of importance to the divisions, we also take note of them in our report.

Appendix A

Proposal for a Standing Committee on Interdivisional Cooperation

We presume that a Committee on Interdivisional Cooperation, if established as a standing committee, is technically not required to have a set of bylaws on the same basis as an ASEE Division. Nevertheless, some of the components of the Division bylaws seem applicable to a standing Committee on Interdivisional Cooperation, and therefore we offer the following as an outline of the conditions that shall apply to this standing committee, if established.

A more formal articulation of these conditions will be provided if we are requested to do so by the Board.

Operating Conditions of the Committee on Interdivisional Cooperation

A. Name

The name of this unit shall be the Committee on Interdivisional Cooperation. It shall operate as a committee of the ASEE Board (or Professional Interest Council).

B. Committee Charge

The primary charge from the ASEE Board (or Professional Interest Council) to this committee is to strengthen the intellectual exchanges and social interactions across ASEE divisions in ways that are identical to, and serve the objectives of the Society as set out in the ASEE Constitution. Specifically the unit shall:

- [1.] Create diverse academic forums for the members of all ASEE divisions to engage, as a single body, in discussions about engineering education, engineering education research, instructional methods, and pedagogy.
- [2.] Create opportunities for division leadership to share and convey best practices, with regards to the quality of, and innovations in the annual meeting program and program practices.
- [3.] Strengthen the capacity of the ASEE division leadership to deliberate over matters of shared interest, and convey these interests to the ASEE Board (or Professional Interest Council for consideration and possible conveyance to the Board).

C. Membership

The committee shall be comprised of six (6) members. A Nominating Committee, as

outlined below, shall, while placing first the commitment of those nominated, strive to maintain overall balance within the committee with one (1) representative from each of the PICs. The Nominating Committee shall extend an invitation for nominations to all ASEE division chairs.

D. Election of Committee Members

The recommended candidates for the committee shall be provisionally elected for a three-year term by the Division chairs, in staggered appointments, either through a vote conducted during a meeting of division chairs at the annual conference, or by electronic balloting within 30 days of the annual meeting. Any vacancies shall be filled through a special election to cover the remaining term of the member whose position is being filled.

The recommended candidates for committee membership shall be forwarded to the ASEE Board (or Professional Interest Council) for their review and approval. Should this slate not be approved, additional nominees will be solicited and a special election held through electronic ballot for consideration by the Board (or Professional Interest Council).

E. Selection and Approval of Committee Chair

The committee shall select its own chair from among its members. The committee chair will hold a three-year, once renewable appointment (for a total of up to six years of service). In the first year, they shall serve as Chair Elect, and serve concurrently with the current chair of the committee in order to facilitate organizational continuity and transition. The staggered terms of the other members of the committee will be adjusted to enable the committee chair to serve their full term of office.

F. Duties of Committee Chair, Committee Members, and Subcommittees

It shall be the duty of the committee chair to set the agenda; convene regular meetings (at least once a quarter, online); and represent the committee in communications to and interactions with the ASEE Board (and/or Professional Interest Council). Beyond this, the work of the committee may be distributed across the members as well as subcommittees of the committee.

G. Subcommittees

The Committee on Interdivisional Cooperation may establish subcommittees to manage specific activities such as an annual Interdivisional Town Hall Meeting. While effort shall be made to solicit interest from the divisions, any ASEE member may be appointed to a subcommittee.

The Nominating Committee shall consist of a current member of the Committee on Interdivisional Cooperation and two non-members, one of whom shall be appointed by the committee chair, and the other by the remaining members of the committee.

H. Meetings & Activities

The committee shall meet, at a minimum, on a quarterly basis. Meetings may be conducted in person, or through teleconferencing. The committee may establish such other activities as deemed desirable to promote the objectives of the unit.

I. Amendments

Proposed amendment to these operating conditions may be advanced during any meeting of the committee upon affirmative vote by two-thirds of those voting. These amendments will be subject to the approval of the ASEE Board (or Professional Interest Council).

J. Diversity

The Committee on Interdivisional Cooperation is committed to diversity and inclusion. The Nominating Committee shall strive to identify candidates that maintain the diverse composition of the committee with respect to various factors including, but not limited to race, ethnicity, national origin, and gender.

K. Other Provisions

Any condition stipulated above shall be deemed invalid if it contravenes the Constitution and By-Laws of ASEE.

Appendix B

Proposal for Formal Recognition of Affinity Groups

We propose that ASEE affinity groups could be formed by submitting requests to PIC Chairs for approval as an affinity group. The proposal must include a primary contact person, and a list of at least 20 interested ASEE members.

Upon approval of the PIC chairs, groups would be able to:

- Tag papers that they submit thru a division as also being part of an affinity group
- Organize one social event
- Request a workshop, but any associated financial issues would have to be run through a primary sponsoring division

Unlike divisions, the affinity groups would have no budget and no fees.

Groups would be sent an invitation for renewal every 2 years; if no request is received, the group would sunset.

Note, these affinity groups do not have the same purpose as what is currently available.

Requirements for implementation:

- In Monolith, the ability for authors to designate an affinity group, in addition to primary division through which they are submitting a paper.
- In the Online Session Locator, search based on affinity group, versus division.
- Development of a mechanism to propose one social event and workshop.
- PIC Chair and Board approval of this structure for affinity groups

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