# ASEE 2012 

ERM Business Meeting
Monday, June 11, 2012
12:30-2:00pm
Grand Hyatt San Antonio, Lone Star B
Moderator: Maura Borrego, Virginia Tech/National Science Foundation

## Agenda

Call to order - the meeting was called to order by Maura Borrego, ERM Chair.

## Introductions

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## Officer reports

## 1. Chair - Maura Borrego

## 2. Secretary/Treasurer - Daria Kotys-Schwartz

Treasurer report as of March 31, 2012 shows $\$ 1289.00$ in the Operating account and $\$ 68,370.06$ in the Bass account. Historical comparisons are as follows: Treasurer report as of June 28, 2011 in the Operating account was $\$ 0.00$ as of $3 / 31 / 11$, and $\$ 0.00$ as of $6 / 22 / 10$. In the Bass account, there was $\$ 96,623.22$ as of $3 / 31 / 11, \$ 126,358.10$ as of $6 / 22 / 10$, and $\$ 132,001.76$ as of $6 / 30 / 09$.

Revenue - One of the main sources of revenue comes from the FIE conference. In FY10 the bottom line was hit when the conference only brought in $\$ 1,477$. It is making a slow climb back to the FY09 level of $\$ 25,102$. ERM can expect $\$ 12,406$ from the FIE conference in FY12.

Expense - Spending has increased significantly over the past three years. Primarily due to activities that take place at the Annual Conference. The revenue generated by the sessions and events at the Annual Conference (AC) have not kept pace with the expenses.

|  | Cumulative <br> Ticket Sales | Session <br> Expenses | Net Loss from AC <br> activities |
| :--- | :--- | :--- | :--- |
| FY09 | $6,740.00$ | $10,000.00$ | $-3,260.00$ |
| FY10 | $10,044.00$ | $14,500.00$ | $-4,456.00$ |
| FY11 | $10,960.00$ | $21,000.00$ | $-10,040.00$ |

Vice-Chair for FIE 2011 (Rapid City, SD, Oct. 12-15, 2011) Programs - Jim Morgan
**FIE 2011 produced a surplus of $\$ 37,220$ US after audit, resulting in a payment to each sponsoring society of $\$ 12,406.67$ US.

## 527 total participants INCLUDING 82 student

736 abstracts submitted
643 abstracts accepted
504 papers accepted
440 papers published
3. Vice-Chair for ASEE 2012 (San Antonio, TX, June 17-20, 2012) Programs - Richard Layton, additional report from Kay C. Dee

Special thanks to our special event coordinators: Senay Purzer (best paper review), KC Dee (Distinguished Lecturer), Tom Litzinger (Breakfast with Champions), and Elliot Douglas (Brouhaha).

## Summary of sessions

| Technical <br> sessions | Originally requested 23 sessions. Later cancelled 5 at my request due to smaller than <br> expected number of accepted papers. Final tally: <br> 18 technical sessions (16 podium, 1 poster, 1 Breakfast with Champions) |
| :--- | :--- |
|  <br> special sessions | Originally received 7 proposals: 3 workshops and 1 special session approved by ERM <br> were sent forward to the next review stage. The special session was rejected during <br> paper review, but 2 of its papers were accepted as regular papers. Months after the <br> proposal deadline, 1 additional special session request was rejected. Final tally: <br> 2 Workshops approved by PIC chairs. <br> 0 Special sessions approved. |
| Other sessions <br> accepted | 1 Distinguished lecture (time slot shared and co-sponsored, decided by PIC chairs) <br> 4 Business meetings (ERM and FIE committees) <br> 2 Social events (Brouhaha and For-um \& Agin-Um)) |
| Co-sponsored | 1 workshop <br> 1 technical session |
| Total | 29 total ERM sponsored and co-sponsored sessions at 2012 ASEE meeting |

## Abstracts \& papers

```
188 abstracts submitted
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## Reviews

- Every abstract received 3 independent reviews. With rare exceptions, reviewers reviewed no more than 5 abstracts.
- Every paper received 3 independent reviews. With rare exceptions, reviewers reviewed no more than 3 papers. At least one reviewer for each paper was an experienced ERM member.
- A special thanks to our 153 volunteer reviewers.

4. Vice-Chair for ASEE 2013 (Atlanta, GA, June 23-26, 2010) Programs - Elliot Douglas 2012 ERM Brouhaha
The 2012 ERM Brouhaha will take place on Tuesday, June 12, from 7 PM to 10 PM at The Pavilion by Hilton, 200 S. Alamo, San Antonio, TX. Total cost for the event is $\$ 10,155.13$. Each attendee will receive 2 drink tickets, which are good for beer, wine, soda, margaritas, mojitos, and liquor. Cash bar is available after drink tickets are used. Meal is buffet style, and includes a fajita station (meat and vegetable), brisket station, vegetable and fruit display, and dessert station. There will be entertainment and a DJ.

As of June 5 a total of 86 tickets had been sold, so there are still plenty of tickets available.

## 2013 ASEE Program

The first step in putting together the program for ASEE 2013 will be preparing the Call for Papers, which will be due to ASEE sometime in July/August. In preparation for that, the following items should be discussed:

- What is the format of ERM Special Sessions? For ASEE 2012 they were reviewed as a collection of papers using the same review criteria as other papers. This may not be appropriate.
- Cindy: still needs to be rigor. Suggest making it broader - proposals submitted early.
- Matt: need to think about the number of special sessions so we don't squeeze out papers.
- This year 7 special sessions and workshops -3 workshops went to PIC chairs, the. One special session was recommended - the papers went through the standard process and some were denied.
- Could treat this like a journal - and set up a special session?
- Do we want to require standard abstracts as part of the papers? ASEE does not require that papers have abstracts. Many authors do include abstracts, but others do not.
- Feedback from ERM, yes - we do want to require standard abstracts as part of the papers.

One additional question to be discussed is:

- Does ERM want to participate in the Division Mixer? If so, a person should be identified to take the lead in putting together the ERM table.

5. Vice-Chair for FIE 2012 (Seattle, WA, Oct. 2012) Programs - Archie Holmes and Reid Bailey
6. Vice-Chair for FIE 2013 (Oklahoma City, OK, October 2013) Programs - Teri Reed-Rhoads Things are going smoothly.
7. Vice-Chair for ASEE 2014 (Indianapolis, IN, June 15-18, 2014) Programs - Vacant, needs to be filled by this August
No report at this time.
8. Vice-Chair for Publications - Dan Budny

Removed the website from GoDaddy.com and has been moved to the ASEE server.
Dan offered to move all of the FIE information, there was not interest in moving it. The domain name is paid for through the next year.
Ruth offered to keep it in CleerHub. Norman said the he was happy to host it on ASEE; he contacted IEEE, Dan has not heard back from Norman. Dan has assumed that IEEE will not let Norman have the copyright.

Dan will be resigning as the publication chair after 20 years. Thank you for your service Dan!
Maura thanked Dan for smoothly moved our web site to ASEE server: erm.asee.org

## Committee reports

1. Apprentice Faculty Grant (AFG) Committee (to be presented at Brouhaha) - Holly Matusovich

This year we had 31 applicants. While there were many outstanding applicants, four achieved particularly high scores during the review process. 31 reviewers with most completing two or three applications each. Reviewers used an on-line scoring rubric to rate their applicant. The rubric included numerical entries as well as a comments field. The winners for this year include:

James Pembridge (Embry Riddle)
Alejandra Magana (Purdue)
Maria-Isabel Carnascali (University of New Haven)
Morgan Hynes (Tufts)
A group dinner was held Sunday evening so mentor/mentee pairs could meet early in the conference. The awards will be officially presented at the Brouhaha.

Holly would also like to thank the mentors for this year:
Richard Layton (Rose Hulman)
Jennifer Turns (University of Washington)

Nadia Kellam (University of Georgia)
Larry Richards (University of Virginia)
2. Brochure / Newsletter Editor - Glen Livesay (brochure and bookmark available at NETI) Brochures were sent to NETI but arrived an hour late.
3. Distinguished Service Award Committee (to be presented at Brouhaha) - Maura Borrego Membership is the current division chair and the last two division chairs.
We decided to shift the award from FIE to ASEE, awarded during Brouhaha! So there are two awardees to congratulate: Jennifer Karlin (awarded in 2011 at FIE) and Matt Ohland (awarded in 2012 at Brouhaha tomorrow).
4. Benjamin Dasher Award Committee (to be presented at FIE 2012) - Susan Donohue / Jenefer Husman

## Dasher Award Winner

Developing Instruments to Assess First-year Calculus and Physics Mechanics Skills needed for a Sophomore Statics and Dynamics Course
Kristi J. Shryock, Arun R. Srinivasa, and Jeffrey E. Froyd Texas A\&M University, kristis@tamu.edu, asrinivasa@tamu.edu,froyd@tamu.edu

## 2011 Dasher Honorable Mentions

Paper 1638 in Session S4D The Itasca CC Engineering Learning Model by Bart Johnson and Ron Ulseth

Paper 1250 in Session S3F Understanding Physical Models in Design Cognition: A Triangulation of Qualitative and Laboratory Studies by V. Viswanathan and J. Linsey
5. Helen Plants Award Committee (to be presented at FIE 2012) - Monica Cardella / Matthew Verleger

The 2011 Helen Plants winner was Session T2A: Cognitive Processes Critical for Ill-Defined Problem Solving: Linking Theory, Research, and Classroom Implications, presented by Senay Purzer and Jonathon Hilpert.

There were only 6 special sessions this year. One issue that came up that has apparently been resolved for 2012 is the "mini-workshop" versus the "special session". In 2011, these were listed as 2 different things in the call for papers, but had no meaningful difference in purpose - both were meant to be non-traditional sessions with high levels of interactivity. There were 11 mini-workshops offered at the 2011 conference that were not qualified for the Helen Plants award for no clear reason. In the 2012 call for papers, mini-workshops have been removed, meaning that more potential sessions will be viable for the Helen Plants award in 2012. Volunteers will be needed to attend all the sessions, should the number be similar to 2011's workshop and special session count.
6. Best ERM Paper Award for the 2012 ASEE Conference - Senay Purzer

## Paper-Reviewer Matching Process

A qualtrics survey was used to seek input from the reviewers on which papers they are interested in reviewing. In addition, paper assignments are made with the goal of balancing the number of reviews
for each paper and matching the paper-reviewer expertise.

## Decision Timeline (10 days)

March 23, 2012 - received nomination list from Richard Layton
April 2, 2012 - completed all reviews \& arrived at a final decision
Final Results
3337: In Search of the Engineers of 2020: An Outcome-Based Typology of Engineering Undergraduates
David B. Knight
Pennsylvania State University

## 7. Nominating Committee - Julie Martin

This report summarizes the committee's actions and the results of the 2012 ERM election.
The Nominating Committee, consisting of Julie Martin, Adam Carberry and Matthew Verleger, held elections with a strong ballot. The ballot consisted of 5 committee nominated candidates, 4 member nominations, and 1 self-nomination. For the first time in ERM, a web-based voting system was used. Matthew Verleger developed the system using Qualtrics, by which each ERM member received by email a unique web address for voting. Candidates were presented in a randomized order for each member to avoid bias. 302 votes were counted.

The results of the election are:
Secretary/Treasurer: Daria Kotys-Schwartz
Director: Susan Lord
Director: Senay Purzer
8. PIC IV Chair - Bev Watford

- PIC Chair meeting and Executive meeting results.

There will be a dues increase across the board ( $15-20 \%$ ). The question is why?

- Conference registration - the cost does not cover the cost of people attending the conference.
- A best paper award committee will be (term of 1 year, not more than 3 year). Reading, evaluating and selecting a best paper from the PIC division.
- Session evaluations - put together a committee to re-evaluate the piece of paper in the sessions. The charge of the committee was not completed. Paper evaluations are not being done this year.
- How was the mixer? It was too loud. Tables were too close together, hard to move from one division to another. Mixer will likely continue in following years.
- Issue where a conference paper was only be presented/conference attended by the graduate student (advisor did not attend). New policy: there must be a full conference registration associated with a paper.


## Additional reports

1. FIE Steering Committee -Beth Eschenbach, Cindy Finelli, Jim Morgan

9 members on the steering committee, Cindy's term ends after todays meeting. Questions regarding the way that the wording is on the website - there must be a full conference registration associated with a paper (not ever author). There is not a set location after 2015; please let the steering committee know if you are interested in hosting the conference.

## 2. National Effective Teaching Institute (NETI) - Rich Felder

The $22^{\text {nd }}$ annual National Effective Teaching Institute took place at the Grand Hyatt Hotel in San Antonio, Texas, on June 7-9, 2012. The facilitators were Rebecca Brent (President, Education Designs, Inc., Cary, North Carolina), Richard Felder (North Carolina State University), Michael Prince (Bucknell University), and NETI Fellow Cindy Finelli (University of Michigan). A special presentation was also given Jared Woodfill of NASA, the safety control engineer for the Apollo 11 and 13 moon missions. ASEE staff support was provided by Monique Arbertha. The participants were 55 professors from 36 different schools. The NETI has now reached a total of 1154 professors from 228 different schools (Appendix), and has received 801 overall ratings of "Excellent," 224 "Good," 9 "Average," 1 "Fair," and no "Poor" ratings.

In recent years nominations for the NETI reached their maximum limit in less than a month after the forms were sent out to the deans, and many nominees had to be turned away. A second annual offering to be given in January, as well as a new advanced NETI that will focus on learner-centered instructional methods such as cooperative and problem-based learning to be given every year or every other year, depending on demand. These offerings will be designated NETI-1A (3-day basic NETI, held in conjunction with the annual ASEE Conference), NETI-1B (basic NETI, January shortly after New Year), and NETI-2 (2-day advanced NETI, held in conjunction with the Frontiers in Education Conference). Engineering deans may nominate up to two faculty members from their campuses for each of the basic NETI offerings, and NETI-2 is open to all applicants, with each workshop being limited to an enrollment of 55. The next workshop offerings will be as follows:

- NETI-2. Seattle, October 7-8, 2012
- NETI-1B, Tampa, January 4-6, 2013
- NETI-1A, Atlanta, June 20-22, 2013

3. New ASEE Fellows - Ann McKenna or Maura Borrego

Congratulations to New ASEE Fellows, seven of which are members of ERM:
Jeffrey Froyd
Lawrence Genalo
Thomas Hall, Jr.
Robert Herrick
Charles McIntyre
Matthew Ohland
Richard Zollars
They join the ranks of now 60 ASEE Fellows with ERM affiliation! Ann McKenna is going to coordinate some nominations next year.

## Old Business

- Vote to approve minutes from FIE 2011

Matt Verleger motioned, second by Julie. Passed.

- Inter-divisional cooperation - Susan Lord for Shane Brown

Liberal studies division wanted to look at the possibility of joint projects. There were only a few people ( $21 / 1300$ ) who participated in the survey. Many did not participate. Please come see Susan Lord if you would like to assist.

- PIC chairs request to investigate redesign ASEE conference evals - Heidi Diefes-Dux

Using the input from 8 current chairs (via email), a short online survey was created and conducted. A link to the survey was emailed to 165 current (2012) and recent past (2009, 2010, \& 2011) program chairs:

- Sixty (60) participants completed the survey. From the results, the following three themes were expressed by the participants:
- The review process is a difficult task, especially identifying reviewers. Other tasks that are difficult include assigning reviewers with attention to potential conflicts of interest, tracking reviewer progress, and communicating with reviewers. There is a need for a reviewer database that tracks contact information, expertise, participation history, and quality of participation.
- There is a need to improve the ease with which program chairs can communicate with authors, reviewers, division members, and other program chairs (through Monolith).
- Monolith is not easy to use for the review process, assigning papers to sessions, and communicating with authors, reviewers, moderators, division members, and other program chairs. An ability to see exactly what authors and reviewers see within the system and receive for communication might be helpful.
- Discussion and Voting on Bylaws Updates - Maura Borrego

Verbal report?
Motion - Cindy: Move to be able to vote on bylaws online
Rich - second the motion

- New ERM Pins - Doug

Thanks to Doug Schmucker for designing and purchasing new ERM pins, which we usually give to board members. We will not be giving out to all ERM members.

## New business

- Division Mixer at ASEE 2012 (Sun pm) - quick discussion and feedback Need to identify someone who is takes the lead on this for 2013.
- For-um \& Agin-um, Breakfast with Champions - feedback sought

What are the number of tickets sold? 12
Cindy: we need to have someone who is the lead.
Karl: what about having proposals for the event?
For-um \& Agin-um: is during the evening, has to social be social; Breakfast with Champions: ?

- Emails in digest format - feedback sought

Major issues from reviewers: no research questions, no methodology, no results Accepted with revision - is an 'accept' it cannot be kicked out by the program chair. Requesting that the papers not be draft; they need to be the final paper.

## Opportunities to get involved

- Vacant positions: Vice-Chairs for ASEE 2014 (Indianapolis, IN) and FIE 2014 (Madrid, Spain), FIE Steering Committee rep, ASEE Best Paper Chair - let Maura know if you are interested
- Committee service: Reviewers needed for Helen Plants Award (fall), Apprentice Faculty Grants (spring), New Faculty Fellows, Best Paper (spring) - let committee chairs or Maura know if you are interested


# 2012 Vice-Chair for Programs Report 

Educational Research and Methods Division
American Society for Engineering Education
Richard A. Layton

2012 ASEE Annual Meeting, San Antonio, TX
June 10-13, 2012

1. The Monolith paper management system worked satisfactorily this year. Every time I had a problem or a suggestion, Na'ilah Metwally at ASEE responded promptly and effectively. I forwarded numerous suggestions to the Monolith developers based on my experience and the suggestions of ERM authors.
2. Please note that ERM deadlines for workshop and special session proposals are earlier than the ASEE deadlines - the website lists the deadline for Program Chairs to send approved proposals to the PIC chairs. The earlier ERM deadline gives us time to review and select proposals for submission.
3. Special thanks to our special event coordinators: Senay Purzer (best paper review), KC Dee (Distinguished Lecturer), Tom Litzinger (Breakfast with Champions), and Elliot Douglas (Brouhaha).

## 4. Summary of sessions

| Technical <br> sessions | Originally requested 23 sessions. Later cancelled 5 at my request due to smaller than <br> expected number of accepted papers. Final tally: <br> 18 technical sessions (16 podium, 1 poster, 1 Breakfast with Champions) |
| :--- | :--- |
|  <br> special sessions | Originally received 7 proposals: 3 workshops and 1 special session approved by ERM <br> were sent forward to the next review stage. The special session was rejected during <br> paper review, but 2 of its papers were accepted as regular papers. Months after the <br> proposal deadline, 1 additional special session request was rejected. Final tally: |
|  | 2 Workshops approved by PIC chairs. <br> 0 Special sessions approved. |
| Other sessions | 1 Distinguished lecture (time slot shared and co-sponsored, decided by PIC chairs) <br> accepted Business meetings (ERM and FIE committees) <br> 2 Social events (Brouhaha and For-um \& Agin-Um)) |
| Co-sponsored | 1 workshop <br> 1 technical session |
| Total |  |

## 5. Abstracts \& papers

188 abstracts submitted
62 abstracts rejected approximately (acceptance rate of $67 \%$ ).
abstracts transferred to other divisions

117 papers submitted
papers rejected (acceptance rate of $97 \%$ )
paper transferred to other divisions
papers withdrawn or not uploaded
completed papers scheduled for presentation in ERM sessions
6. Reviews

- Every abstract received 3 independent reviews. With rare exceptions, reviewers reviewed no more than 5 abstracts.
- Every paper received 3 independent reviews. With rare exceptions, reviewers reviewed no more than 3 papers. At least one reviewer for each paper was an experienced ERM member.
- A special thanks to our 153 volunteer reviewers.


## 7. Program listing

## Workshops

Creative and diverse idea generation using design heuristics. ERM-sponsored.
From sundials to superconductors: Exploring how the integration of technology and societal context supports intrinsic motivation and autonomy. ERM-sponsored.
Talk to me and ENGAGE: Improving faculty student interaction from both sides of the diploma. First-
Year Programs Division sponsored; ERM co-sponsored.

## Technical sessions

Before and After: Matriculants and Alumni
Breakfast with Champions
Contextual Competencies
Epistemic Research
ERM Potpourri
Identity and Culture
Model Eliciting Activities
Problem-based and Challenge-based Learning
Research in Assessment
Research in Engineering Education I \& II
Research Informing Teaching Practice I \& II
Research on Engineering Design Education
Thinking About the Engineering Curriculum
Understanding Our Students I \& II

Distinguished lecture
Charles Henderson. Primary sponsor: ERM.
John Heywood. Primary sponsor: Technology Literacy Division.
Meetings and social events
Brouhaha
For-um \& Agin-um, co-sponsored with the New Engng Educators Div. \& the Student Division
ERM Business Meeting and Luncheon
FIE Steering Committee: Open Session
FIE Steering Committee: Executive Session
FIE 2012 Planning Committee Meeting
7. Best Paper Nomination

Congratulations to the author of the ERM division best paper, "In Search of the Engineers of 2020: An Outcome-Based Typology of Engineering Undergraduates", by Mr. David B Knight, Pennsylvania State University, University Park.
8. Call for Papers, ASEE 2013

The 2013 ERM call for papers will include the ERM deadlines for submitting workshop and special session proposals to the 2013 ERM Vice Chair for Programs (Elliot Douglas, edoug@mse.ufl.edu ), as well as the ASEE abstract submission deadline. Watch for the call for papers on the ASEE website and in the ASEE Prism, in August or early September.

## Chair: Şenay Purzer

Committee Members/Reviewers: 14 reviewers helped review 11 papers nominated for the Best Paper award. This resulted in about 5 papers reviewed by each reviewer.

- Adam Carberry
- Aidsa Santiago
- Cindey Waters
- Elliot Douglas
- Euan Lindsay
- Jennifer Karlin
- Marisa Orr
- Monica Cardella
- Rose Scripa
- Ruth Streveler
- Ruth Wertz
- Sarah Zappe
- Shanna Daly
- Steve Krause


## Paper-Reviewer Matching Process

A qualtrics survey was used to seek input from the reviewers on which papers they are interested in reviewing. In addition, paper assignments are made with the goal of balancing the number of reviews for each paper and matching the paper-reviewer expertise.

Decision Timeline (10 days)
March 23, 2012 - received nomination list from Richard Layton
April 2, 2012 - completed all reviews \& arrived at a final decision
Final Result
3337: In Search of the Engineers of 2020: An Outcome-Based Typology of Engineering
Best Paper Undergraduates
64.4 pts David B. Knight

Pennsylvania State University

## ERM Nominating Committee Report June 2012 Submitted by: Julie Martin, Nominating Committee Chair

This report summarizes the committee's actions and the results of the 2012 ERM election.

The Nominating Committee, consisting of Julie Martin, Adam Carberry and Matthew Verleger, held elections with a strong ballot. The ballot consisted of 5 committee nominated candidates, 4 member nominations, and 1 self-nomination. For the first time in ERM, a web-based voting system was used. Matthew Verleger developed the system using Qualtrics, by which each ERM member received by email a unique web address for voting. Candidates were presented in a randomized order for each member to avoid bias. 302 votes were counted.

The results of the election are:

## Secretary/Treasurer: Daria Kotys-Schwartz

Director: Susan Lord

## Director: Senay Purzer

Many thanks to the other candidates for running:

- Elizabeth Cady (S/T)
- Chrys Demetry (S/T)
- Nadia Kellam (S/T)
- Aidsa Santiago-Roman (D)
- Gisele Ragusa (D)
- Heidi Steinhauer (D)
- Sarah Zappe (D)


## Report on the National Effective Teaching Institute Submitted to the ASEE-ERM Division by Rich Felder, 6/10/2012

The $22^{\text {nd }}$ annual National Effective Teaching Institute took place at the Grand Hyatt Hotel in San Antonio, Texas, on June 7-9, 2012. The facilitators were Rebecca Brent (President, Education Designs, Inc., Cary, North Carolina), Richard Felder (North Carolina State University), Michael Prince (Bucknell University), and NETI Fellow Cindy Finelli (University of Michigan). A special presentation was also given Jared Woodfill of NASA, the safety control engineer for the Apollo 11 and 13 moon missions. ASEE staff support was provided by Monique Arbertha. The participants were 55 professors from 36 different schools. The NETI has now reached a total of 1154 professors from 228 different schools (Appendix), and has received 801 overall ratings of "Excellent," 224 "Good," 9 "Average," 1 "Fair," and no "Poor" ratings.

In 2008, Rebecca Brent and Rich Felder surveyed all of the NETI alumni for whom email addresses could be found regarding the impact of the workshop on their teaching practices, attitudes toward teaching and learning, student ratings, and engagement in educational scholarship and instructional development. The survey was sent to 607 alumni, and valid responses were obtained from 319 of them for a $53 \%$ response rate. A full report of the survey results presented at the 2009 Annual ASEE Conference can be found at http://www.ncsu.edu/felder-public/Papers/NETIpaper.pdf. A paper summarizing the results and discussing their implications for design and assessment of faculty development in engineering and the sciences was published as J. Engr. Education, 99(2), 121-134 (2010), and can be found at http://www.ncsu.edu/felder-public/Papers/NETIpaper(JEE).pdf.

In recent years nominations for the NETI reached their maximum limit in less than a month after the forms were sent out to the deans, and many nominees had to be turned away. In 2011 at the suggestion of ASEE Executive Director Norman Fortenberry plans were undertaken by the NETI codirectors for the establishment of a second annual offering to be given in January, as well as a new advanced NETI that will focus on learner-centered instructional methods such as cooperative and problem-based learning to be given every year or every other year, depending on demand. These offerings will be designated NETI-1A (3-day basic NETI, held in conjunction with the annual ASEE Conference), NETI-1B (basic NETI, January shortly after New Year), and NETI-2 (2-day advanced NETI, held in conjunction with the Frontiers in Education Conference). Engineering deans may nominate up to two faculty members from their campuses for each of the basic NETI offerings, and NETI-2 is open to all applicants, with each workshop being limited to an enrollment of 55 . The next workshop offerings will be as follows:

- NETI-2. Seattle, October 7-8, 2012
- NETI-1B, Tampa, January 4-6, 2013
- NETI-1A, Atlanta, June 20-22, 2013


## Final Report: ERM Committee to Assess ASEE Program Chair Data Needs

Charge: To study what [evaluation] information ASEE program chairs could use to help them do their jobs better.

## ERM Committee Membership:

Shane Brown, Washington State University, shanebrown@wsu.edu
Adam Carberry, Arizona State University, adam.carberry@asu.edu
Heidi Diefes-Dux, Purdue University, hdiefes@purdue.edu (Chair)
Tris Utschig, Georgia Tech, tris.utschig@cetl.gatech.edu
Matthew Verleger, Utah State University, matthew.verleger@usu.edu

## Email Interview \& Results:

The following email was sent to 8 current (2012) program chairs. The selected chairs represented diverse divisions in terms of focus and size. These chairs were also considered likely to respond to the email request. The intent of the email interview was to solicit ideas for the construction of a short survey that could be sent to greater number of past program chairs. Six (6) program chairs responded.

> A subcommittee from the ERM Division of ASEE has been charged by the PIC Chairs to identify what evaluation ASEE Annual Conference information would help ASEE Program Chairs do their jobs more effectively. You have been identified as a current or past chair. I am hoping that you will take a few minutes to share with us your answers to the following questions. Your responses will help us develop a survey to capture the needs of the other ASEE program chairs. If you could please respond by April 27th, that would be most helpful. If you only have time to answer one of these questions, a response to the 4th question is the one most critical to our immediate goals.

1. What were the key steps that you went through to complete your program chair responsibilities?
2. What went well?
3. What were some struggles along the way?
4. What data do you wish you had available when you were a program chair?

The issues raised by these current program chairs were less about data that could be gathered in a conference evaluation than about resolving some practical issues. The issues brought up by these program chairs were:

- Desire for counts of accepted, rejected, and presented papers at the ASEE Conference by division
- Desire for historical attendance counts at sessions
- Reviewer identification is a burden and reviewer conflict-of-interest is hard to sort out when making assignments to papers
- Reviewers not completing their job on time or at all
- Review criteria need to be shared across divisions along with the decision processes for accepting or rejecting abstracts and papers
- Difficulty in comparing revised papers to draft submissions to determine whether reviewer recommendations were met
- There were a variety of HQ communication issues despite a sense that HQ was helpful and responsive when questions or problems arose. Issues identified included the following: deadline changes not being communicated, food count estimates not interfacing with ticket sales, creating sessions well in advance of draft paper submission deadline, workshop approvals required by HQ.
- There were also a variety of Monolith issues (e.g. not sure it is sending reviewers emails, non friendly user-interface issues, can't add co-sponsor for workshops, need for online training to use)


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Some of these issues could be handled by sharing what data ASEE has with the division program chairs and improving data collection through Monolith (particularly with regards to reviewer issues). The sense is that program chair issues are so tied to practical issues that conference level data needs is not on their minds.

## Online Survey \& Results:

Using the input from the email interviews, a short online survey was created and conducted. A link to the survey was emailed to 165 current (2012) and recent past (2009, 2010, \& 2011) program chairs:

Dear Former and Current ASEE Program Chairs:<br>A subcommittee of the ERM Division of ASEE has been charged by the PIC Chairs to identify what data/information could be gathered by ASEE to help ASEE Program Chairs do their jobs more effectively. You have been identified as a current or past chair. I am hoping that you will take a few minutes to complete a VERY short anonymous survey. Results of this survey will be presented to the PIC Chairs at the ASEE Annual Conference this June.<br>Follow this link to the Survey: Take the Survey<br>Or copy and paste the URL below into your internet browser: https://purdue.qualtrics.com/WRQualtricsSurveyEngine/?Q SS=5zJDHc2cc8xie0Y 51Ogxn4t6i19mN S\& =1

## The survey will close Monday June 4th at 5 pm.

Your input is very much appreciated!

Sixty (60) participants completed the survey. From the results, the following three themes were expressed by the participants:

- The review process is a difficult task, especially identifying reviewers. Other tasks that are difficult include assigning reviewers with attention to potential conflicts of interest, tracking reviewer progress, and communicating with reviewers. There is a need for a reviewer database that tracks contact information, expertise, participation history, and quality of participation.
- There is a need to improve the ease with which program chairs can communicate with authors, reviewers, division members, and other program chairs (through Monolith).
- Monolith is not easy to use for the review process, assigning papers to sessions, and communicating with authors, reviewers, moderators, division members, and other program chairs. An ability to see exactly what authors and reviewers see within the system and receive for communication might be helpful.

As found from the email interview, these themes are not about data that could be gathered through an ASEE conference evaluation but are more focused on practical issues experienced by program chairs.

However, some data collection ideas were provided by the participants:

- Post conference evaluations could be conducted with authors to get feedback on their experiences, from abstract submission to final paper presentation, with Monolith and program chairs.


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- Post conference evaluations could be conducted with moderators to get feedback on session attendance and author attendance (meeting the requirement for publication).
- There could be a post-session evaluation of moderator performance by session attendees.
- Session attendee counts should be taken relative to room capacity.
- Presentation evaluations could be improved - there is a need for better and more explicit evaluation criteria. Further, the method of data collection could be updated. One suggestion was to use a mobile app.
- Paper evaluation could be improved. One suggestion was to use the "best paper" criteria.
- Conference attendees could provide information about sessions they attended, session conflicts they experienced, and overall satisfaction with division sessions.
- Monolith could be used to collect data about author/attendee willingness to review, moderate, etc.

Participants also expressed a need for better access to data that may already be available or could be collected:

- Already available ASEE conference related data needs to be better shared with program chairs.
- Better access to and collection of historical data is desired. This includes data on past reviewers, moderators, papers (accepts/rejects/final papers/papers presented), session attendance possibly including divisional affiliation.

More detailed results are in the appendix.

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## Appendix - Summary of Results from Online Survey

1. Based on your experience as an ASEE Program Chair, rate the following tasks on a scale of very easy to very difficult.

| Item | N | Very <br> Easy <br> $(1)$ | Easy <br> $(2)$ | Neutral <br> $(3)$ | Difficult <br> $(4)$ | Very <br> Difficult <br> $(5)$ | NA | Mean | Median |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Create and Post Call <br> for Papers | 59 | 11 | 28 | 16 | 4 | 0 | 0 | 2.22 | 2 |
| Identify Reviewers | 60 | 1 | 15 | 17 | 18 | 8 | 1 | 3.29 | 3 |
| Assign Reviewers to <br> Abstracts | 60 | 5 | 30 | 16 | 3 | 4 | 2 | 2.50 | 2 |
| Assign Reviewers to <br> Papers | 60 | 5 | 28 | 16 | 7 | 3 | 1 | 2.58 | 2 |
| Monitor Completion <br> of Reviews | 60 | 7 | 21 | 14 | 15 | 2 | 1 | 2.73 | 3 |
| Apply Accept/Reject <br> Criteria for Abstracts | 59 | 5 | 18 | 24 | 9 | 2 | 1 | 2.74 | 3 |
| Apply Accept/Reject <br> Criteria for Papers | 59 | 5 | 17 | 22 | 12 | 2 | 1 | 2.81 | 3 |
| Communicate with <br> Authors | 60 | 3 | 14 | 19 | 15 | 7 | 2 | 3.16 | 3 |
| Create Sessions | 59 | 5 | 30 | 12 | 11 | 0 | 1 | 2.50 | 2 |
| Assign Sessions to <br> Time Slots | 60 | 5 | 24 | 18 | 9 | 3 | 1 | 2.68 | 3 |
| Assign Papers to <br> Sessions | 60 | 8 | 24 | 13 | 10 | 4 | 1 | 2.63 | 2 |
| Assign Moderators <br> to Sessions | 60 | 5 | 33 | 17 | 3 | 1 | 2 | 2 | 2 |
| Finalize Sessions | 60 | 6 | 35 | 12 | 6 | 0 | 1 | 2.31 | 2 |
| Communicate with <br> ASEE Staff | 60 | 23 | 21 | 9 | 5 | 2 | 0 | 2.03 | 2 |
| Other (please <br> specify) <br> $\bullet$ <br> Final edits by authors <br> remove unused sessions <br> en | 4 | 0 | 0 | 0 | 2 | 2 | 0 | 4.50 | NA |

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2. For the tasks that were most difficult, please elaborate on why they were so difficult. [46 written responses]

- Identifying Reviewers - difficult to find enough, would be good to have division email list [8]
- Communicate with Authors \& Reviewers - not easy to email individuals or groups, not sure what emails are getting sent [8]
- Monolith - confusing user-interface, difficult to email can't add co-sponsors [7]; similar Smoothpaper comments [3[
- Finalizing Papers - Path from final edits to submittal for proceedings is confusing, when to add back identifiers following blind review, many emails required [3]
- Assign Paper to Sessions - program chairs do not have control of assigning papers to exact time slots; Monolith interface makes this difficult [2]
- Assign Reviewers - abstract reviews take too much time, should eliminate from process [1]
- Communication with ASEE Staff - some were not responsive [2]
- Assigning Moderators - make email easier [1]
- Creating Sessions - Papers are moved without explanation to program chairs [1]
- Monitor Completion of Reviews - Getting reviewers to complete their job [1]
- Deadlines Change - leads to confusion [1]
- Need easier way to connect to other program chairs [1]
- Guide for Program Chairs - incomplete, for example how to provide review criteria [1]

3. In light of your responses above, what data/information would you recommend be collected through the...

Data/information collected through the ASEE overall conference evaluation (completed by the attendees of the conference): [20 written responses]

- None [4]
- Not sure [2]
- Author experiences with Monolith, paper submission to acceptance process, and interactions with program chairs [2]
- Communicate these results to the program chairs [2]
- Feedback on plenary speakers [1]
- Sessions attended by participants [1]
- Session conflicts experienced by participants [1]
- Satisfaction with sessions offered by divisions [1]
- Make it possible to submit the hardcopy after the last sessions / move to online [1]
- Put online [1]


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Data/information collected through the ASEE session evaluations (completed by attendees in the session rooms): [23 written responses]

- Attendance (and relative to room capacity) [5]
- Evaluation of presentation quality (need to revise and specify the criteria; need to ensure evaluation links back to actual paper being presented, use mobile apps to submit data) [4]
- Communicate these results to the program chairs [4]
- Identify future potential reviewers and moderators [2]
- Evaluation of moderator [1]
- Satisfaction with overall topic and talks in session [1]
- Not sure [1]
- None [1]

Data/information collected through Monolith (the paper management system): [27 written responses]

- Author demographics (especially emails so that they can be emailed more easily) [6]
- Not sure [4]
- Reviewer demographics, performance evaluation across years [4]
- Paper numbers (accept, reject...) at each stage (across divisions and years) [3]
- Identification of reviewers \& moderators (allow members to volunteer) [3]
- Communicate and access what Monolith is currently tracking [2]
- Access to time slot conflicts for authors [2]
- Access to division member email list [1]
- Author evaluations of experience [1]
- Keyword flagging for abstracts (enable sorting to divisions) [1]
- Use best paper rubric across the board for review [1]
- Access to planned attendance at sessions from calendar function [1]
- Identify presenter when multiple authors [1]
- Have ability to see tracked changes in final papers [1]
- Author evaluation of experiences with Monolith, paper submission to acceptance process, and interactions with program chairs [1]
- Not applicable [1]

Data/information collected from other ASEE sources: [16 written responses]

- Not sure [4]
- Not applicable [3]
- None needed [2]
- Reviewer database (with expertise) [1]
- Centralized division member mailing list [1]
- Moderator conference evaluation (report on size of audience, speakers not attending) [1]
- Percent attendees (to conference or to specific sessions) by division [1]
- Feedback from current program chairs to create a tips sheet for incoming program chairs [1]
- Division affiliation lists [1]
- Monolith interface issues [1]

