Panel Discussion Notes:

**Good Conferences to attend:**

- Grace Hopper Conference
- Richard Tapia
- SIGCSE
- CSTA Symposium
- ICE – Indiana Computer Educators
- NCWIT

**How do you define program success?**

- Measure how many people you reach, how many think about CS. Dispelling myths. It is NOT about increased enrollment in your program.
- Have the kids had fun?
- Figure out your goals, measure your success by if you have met your goals.
  - Short term goals: did they have fun, did they understand
  - Long term goals: did they go into a technology related career, were they more informed in general about technology. These are tougher to measure.
- Have we used our resources to the best of our ability?
- Look back on it and think about what you can change in the future.
- Don’t get discouraged if your “numbers” don’t change quickly.
- Look for kids who haven’t had the exposure. Don’t just recruit the people who are already going to school in CS.
- Think of the progress of an individual child, not just the end success. Think of where they start and go, not just what they finally decide to major in.
- Get the at risk students. Work with corporations to guarantee (or help find) internships and scholarships.
- It’s easy to teach to the best students in the class. DON’T do that.
- Make sure that all students know about your program and are able to come. Provide scholarships.
- Don’t just think about one specific aspect of the program. Consider the “15” topics that you’ve taught and inspired.

**Retention**

- It’s critical. Not just awareness, once they’re there, bring them back. Continue to support them, throughout undergraduate and even beyond (research/industry).
• Not just out in the community – How about looking inside your own University? Other, perhaps non-technical, departments.

How to produce an annual report:

• Corporations (and others) don’t just need numbers. Just give a general idea of where the spending went. Give a breakdown that shows how valuable their contribution was.
• Send a framed photo of the students. The framing is important – it means they can’t throw it away.
• Get promoted to dean so you don’t have to. (Well, that might work for Dennis Groth...)
• It’s okay to change your original plan, just let your sponsors know.

Soft Skills¹/why students should participate:

• Students aren’t equipped with soft skills.
• Outreach programs are not just for the community they are for the participants in the program – the ones giving the presentations. Helps them develop soft skills.
• Companies are looking for soft skills. These programs give participants this necessary leadership experience.
• Gives another dynamic to your resume.
• Undergrads are afraid of adults. This makes them step out of their comfort zones. Helps them when they talk to corporations.
• Gives participants appreciation of the education system, and makes them appreciate the education they have. Makes them realize what influence they have on others.

How do you get more feedback after a presentation?

• Depends on how much time you have.
• Use anonymous surveys – they can be useful, sometimes.
• Time is against us.
• While you’re presenting, are the students asking questions? Do they seem engaged in what you’re saying?
• Feedback in the moment – ask them questions. If no one answers, just wait until someone raises their hand, and don’t always call on the same person, even if that’s the only person who ever wants to answer.
• Activity based. Always plan more than you think you’ll cover. Allow people to move faster if they want.
• Just Be uses a clicker system for their interaction part.
• Visual feedback.
• Reward them. You are not a teacher. You can bring candy – kids will go crazy. Use bribery (we aren’t above it). Get swag if you can’t get funding. Even just a pen, and kids will go crazy.
• Ask – “Are you having fun?”

¹ “Soft Skills” are things like communication, presentation, teamwork, etc. Non-technical things.
What do you do if they say “no”? This really only happens in high school. There will always be classes like that.

How do you get corporate money?

- HP has a grant where they give away tablets for teaching.
- When a corporation asks to contact your students, you say – we want something from you first.
- Never ask for money for a specific program. Show a list of things that you are doing for outreach and ask for support for all of them. If they want something specific named after them, ask for a many year commitment.
- Ask local corporations. Ask every year, even if they said no before.
- One donation will lead to another...

How do we write grants?

- Contact people who got the grants you want. Ask them to share their proposals with you. Usually people are happy to do this.
- It may not be easy or possible. You might have to look for funding elsewhere.
- Your grant must describe a way that it has a higher/broader impact.
- Look for internal funding opportunities – ask your chancellor or provost. They are usually very interested in promoting diversity.
- Start small.
- Just do it.
- The less fancy you are and just answer what they want, the better.
- Academic alliance. Has a proposal process.
- Ask the schools that you’re visiting for money. Maybe the PTA has funding, etc. This could cover travel/food costs for the trip.
- If you don’t ask for it, you won’t get it.
- Anita Borg Institute – Pass IT On grant.
- Not everything has to be part of CS. You could go to other science departments, maybe piggy-back off of a similar program’s grants for a while.