

3:00 PM FINAL BREAKOUT: Facilitated Discussion
LOCATION: RASMUSSEN CENTER

Science Teacher Educators
Facilitators: Mike Clough and Cherin Lee
Note Taker: Robin White, Grand View
Location: Rasmussen 103

NOTES:

- We need to know more about the relationship between science programs and science education programs at Iowa's post-secondary institutions. To what extent do they work together to prepare highly effective science teachers?
- We need to know more about the program structure and emphasis of Iowa's science education programs. Perhaps at the next summit each school could erect a poster that describes their program.

RESOURCES:

- Association for Science Teacher Education www.theaste.org
- Regional group is North Central ASTE (NASTE)-very active organization, upcoming meeting October 8-10, Dubuque, Thursday-Saturday noon, talk about issues in Science Education. Good discussions, want to help structure the future for the organization in regard to substantive things, need a focus, one vehicle for science professionals in IA to come together, they are still accepting proposals for the meeting.
- Cherin Lee is managing a listserv for this info contact Cherin.Lee@uni.edu
- Mark your calendars for 2011 in Minneapolis. NC region will host the National meeting.
- Iowa Science Teachers Journal - free journal, students find it valuable, is available on line, editorial policy in line with best educational research. <http://ists.pls.uni.edu/>
- Iowa Science Teachers Section of Iowa Academy of Science, pre-conference on Delta Education Oct 27 before full conference October 28th at the Polk County Convention Complex. Next evening social evening at the Iowa Science Center, downtown, info on website at <http://ists.pls.uni.edu/>
- Other professional development opportunities - ASCD network on alternative assessment publishing some good material, not canned stuff, dedicated to alternative assessment in math and science.
- Thanks for organizing this. Have another Summit a year from now, survey those in attendance to determine what issues they want discussed next time, some will volunteer to do those sessions, need opportunity to learn about each others' respective programs/perspectives/context.
- Yes, do another summit, but what could we do between now and then. Could focus groups be held to go more in depth about specific topics covered here?

Given what's been done today, what are some of those issues?

- Finding what the essential components of science methods courses should be; then determine who's doing it, and what the common threads among the programs are in Iowa.
- Follow up, when grads leave how do we help them continue on with the inquiry skills we've taught them; issues we don't have control over, but might be able to influence- example: not many science teachers in MN, but now every district teaching science with hands on science kits.
- The NCLB cut into that in 90s, need some way as group to articulate content teaching recommendations to the Iowa DE.
- Assure math and science getting taught even in primary classrooms, can't find enough field experiences for pre-professional students.
- Like that we had a physicist here. Good to talk about how the different sciences complement each other
- Good to know what's going on at each other's institutions.
- Have a poster session, this is what we do in El Ed/Sec Ed Science

What can each of us do at our own institutions and what can we do collectively?

- State legislators hear about what schools should be doing, but aren't hearing from teacher educators, if they did they would be allowing people teach with only 12 hours in a science area. We know better, but we aren't a voice.
- Needed a session where we presented to Judy Jeffrey, versus us always hearing from her.
- DM Register - not having high enough standards, but at times Judy says we have too many. Need more two way dialogue.
- What would you like NMEST to do so we can continue to connect with each other? Separate Elementary Ed and Secondary Ed? Yes, different enough to have separate meetings.
- Need access to info about changes coming down the pike that will influence us, tend to hear after decisions already made.
- Need more content - how to develop maybe a survey course for Elementary Ed so they are better prepared, versus maybe taking only one Bio course which they didn't do well in.
- More content prep, what's going on at Purdue? In addition to general education courses, 3 required content courses in science before they even take their methods course - (environmental course, physical, earth and space science: http://www.education.purdue.edu/advising/pdf/T-502COE_2007.pdf) Could be a problem with small colleges, but shouldn't settle too low.
- Elementary Ed content pretty good consensus, need better content prep, may be multiple models to get there, need IMSEP to help get there through BOEE, DE to use as leverage to increase requirements when some LAS don't want it to happen.

- UNI part of liberal arts course designed just for Elementary Ed students, takes resources to do that.
- State mandate professional development over course of their career.
- How does professional development under umbrella of NCLB have an effect on literacy of math and science? Japanese lesson model strong on pedagogy.
- Beneficial with NCLB and Iowa Core will need to do professional development on the Core. Would help for us to do some of that professional development on math and science not just reading and writing literacy.
- Use curriculum part of Iowa core to justify need for more breadth of content for Elementary Ed teachers. Often they aren't science literate.
- 9 credit hours for math and 9 for science coming from DE as a recommendation. Not content or methods specified as one or the other, could be a combination. Be careful it doesn't come just as science knowledge, need the methods as well.
- As we get requests from DE for public comment, please respond. It lumps physical, earth and space, etc. together, only mentions inquiry as one strategy, our feedback on the proposal is a way for us to be a voice.