

**Working Group II:
STEPS TOWARDS ACTION.**

We wish to identify ten (of which we will pick 5) areas of action that we wish to come out of this conference. These are to be based on the initial frameworks and discussions of speakers and working group I.

Please help identify areas that are:

- of interest to you
- tractable, and reasonable scale efforts
- potential to result in a product / action (e.g.: conference paper, white-paper call for funding, ...)

[group discussion]

Selected Areas / Grouping

B) Research Agenda: *What are the necessary next steps for INTER/ TRANS/ MULTI disciplinary research agenda for improving change strategies in STEM education?*

Beach, Borrego, Dokter, Borgford-Parnell, Hehn, Hora, Lin, Perkins,

F) Change Agent Resource Suite: communication Packet for Change in STEM: Condensed document from speakers / compendium – (for Deans, dept, chancellor and **Disseminating finding** of this group – in journal, book, etc.. Share advances in models of change in STEM Edu reform to other areas.

Birkett, Beichner, Calkins, Finkelstein, Gilbert, Henderson, Hughes-Hallett, Millar, P. Varma-Nelson Wieman,

G) Levers of Change: what are the key points (people, tools, resources) for promoting change in STEM education?

Andersen, Dancy, Kelly, Middlecamp, Presson, Rankin, Tobias, Turpen

H) Communities of Practice: what is the role and process of bring diverse partipants together for creating and sustaining change?

Connolly, Nelson, Nuhfer, Schwartz, Wildman,

I) Faculty resource suite: what are necessary components for a suite of tools useful for disciplines?

Colbeck, Coleman, Froyd, Gess-Newsome, Larsen, Wiemer,

Topical Groups – Working Group Two (Groups voted on):

- A) **FUNDING:** what would funding agencies, and disciplinary societies do in order to improve stem education, e.g.:
- B) **RESEACH AGENDA:** What are the necessary next steps for INTER/ TRANS/ MULTI disciplinary research agenda for improving change strategies in STEM education
- C) **MISSING LIT:** What are the missing literatures in the framework for us to develop an understanding of change in STEM education. E.g.:
- D) **NETWORKS:** how might network analysis be useful for:
- E) **Concrete Institutional Steps** – with cross institutional support
- F) **Change Agent Resource Suite:** ommunication Packet for Change in STEM: Condensed document from speakers / compendium – (for Deans, dept, chancellor
 - a. **Disseminating finding** of this group – in journal, book, etc.. Share advances in models of change in STEM Edcu reform to other areas.
- G) Levers of Change:
- H) Knowledge producing **communities of practices** across STEM Educaiton and Social Science- what are attributes of these communities?
 - a. What venues might these communities gather /
- I) **Faculty Resource Suite** (people processes and Tools) –suite of tools useful for disciplines
- J) **Outside the box models** of change – fundamentally different from those tried
- K) **Survey of people with STEM** educ grants on models of change & resources & networks