Project Dissemination

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Project Dissemination

• Projects develop “stuff”
  – Instructional materials, instructional methods, assessment instruments and so on
• Projects must disseminate this “stuff”

What does dissemination mean?
Common Curriculum Reform Model

• Develop and disseminate model
  – Transfer or transmission model

• Developer (change agent)
  – Creates instructional materials and strategies
    • Significant effort
    • Research-based
    • False starts
  – Tries to convince other faculty to use them
    • Postings, presentations, publications (the 3 p’s)
    • Short, one-time workshops

Are these approaches effective?
Change Takes Time

- Froyd’s Faculty Readiness Change Model
  - Six stages sequential change model
    - Pre-awareness – Willing to read a one-pager
    - Awareness – Willing to read longer summaries
    - Interest – Willing to read journal or conference publication
    - Search – Willing to attend a 2-4 hr workshop
    - Decision – Willing to attend a 1-2 day workshop
    - Action – Willing to implement

- Faculty cannot be moved from Pre-awareness to Action with a single workshop

- Change is not an event – it is a process

Froyd, FIE, 2001
Other Issues with Develop and Disseminate Model

• Two negative manifestations impede success:
  – An “us vs. them” attitude
    • Myth # 1 -- Developers think faculty are unaware and unwilling to change
    • Myth # 2 -- Faculty think developers are dogmatic and judgmental
  – Neglect of important local factors

Dancy and Henderson, NRC Workshop Report, 2008
Alternate Model

- Dancy and Henderson’s Rational Faculty Model
  - Provide easily modifiable material
    - Users will customize
  - Provide research ideas with material
    - Users understand the rationale
  - Make it clear what aspects will transfer under what conditions
    - Identify critical elements
  - Recommend modification for different situations

Dancy and Henderson, NRC Workshop Report, 2008
Need for Dissemination

- Most NSF education programs require dissemination
- Example – Review criteria for TUES Program include:
  - Projects should produce exemplary materials, processes, or models that can be adopted by other sites
  - Projects should involve a significant effort to facilitate adaptation at other sites
  - Projects should have the potential to contribute to a paradigm shift in undergraduate STEM education

**How do you address these criteria in a proposal? In a project?**
Types of Dissemination

As you work on your project (or develop your proposal) think about:

• Enabling others
  – Develop your “stuff” so that others can use it

• Encouraging others
  – Make others aware of and interested in your “stuff”

• Facilitating others
  – Help others use your “stuff”

• Collaborating with others
  – Engage others in improving your “stuff”
Exercise

Enabling

How do you develop your “stuff” so that others can use it?

• **Process:**
  - Write down a few ideas
  - Share with a partner
  - Report partner’s ideas to group
Response

Enabling

- Build in flexibility
- Consider how the approach could be used:
  - In other curricular models, other courses, or other disciplines
  - With other teaching styles
- State clearly the expected learning outcomes
- Minimize special equipment needs and implementation cost
- Collect convincing evaluation data
- Summarize the approach’s rationale (the research-base, false starts, etc.)
- Recruit a few faculty at other sites that teach the course (potential future users) and ask them periodically to consider
  - How well the approach fits their course and their style
  - How could it be made more compatible
  - What data would convince them
Exercise

Encouraging

How do you make others aware of and interested in your “stuff”?

• **Process:**
  – *Write down a few ideas*
  – *Share with a partner*
  – *Report partner’s ideas to group*
Response
Encouraging

• Post, present, and publish it
• Present workshops at PI’s institution or at national meetings
• Post it on more widely accessed sites
  – Connexions site (cnx.org)
  – National Instruments (ni.com)
  – NSF’s NSDL (nsdl.org)
  – Others?
• Use technology
  – Videos
  – Social media (YouTube, Face Book)
• Provide a Information package (a “sales brochure”)
  – Statement of need and importance
  – Summary of approach
  – Evaluation data
Exercise
Facilitating

How do you help others use your “stuff”? 

• Process:
  – Write down a few ideas
  – Share with a partner
  – Report partner’s ideas to group
Response

Facilitating

• Continued support
  – Series of workshops
  – Wikis
  – Virtual workshops and support group
  – Organize a support group (a community of practice)

• Share evaluation instruments and processes

• Prepare a user’s guide
  – Pitfalls
  – Alternate approaches

• Use “open source” approach
Exercise

Collaborating

How do you engage others in improving your “stuff”? 

• Process:
  – Write down a few ideas
  – Share with a partner
  – Report partner’s ideas to group
Response

Collaborating

• Share control
  – Allow others to develop pieces of the material
  – Enable partners to contribute to the posted material

• Develop a common evaluation process and database

• Develop group approaches for engaging and facilitating others
Reflection

• Does your proposal or your project have an effective dissemination plan?
• How can you improve it?
Questions
References
