



## **BEST PRACTICES FOR EFFECTIVE PROFESSIONAL DEVELOPMENT**

Illustrated with the *Earth to Sky*  
Professional Development Workshop

*Your commitment to these principles will help you create training opportunities that promote change or growth, reach clear outcomes, and help people develop new relationships.*

### **1. Establish and share clear outcomes**

- State goals and objectives of workshop up front
- Give everyone an agenda that provides a sense of structure and rhythm for the experience
- Provide opportunities for participants to know where they are within the process—recap activities, overview of next steps

### **2. Design activities to engage all participants**

- Teach/use collaboration tools (like Norms of Collaboration)
- Importance of shared interest—allow opportunities to highlight shared values, and to share their motivation for being in the training
- Provide a catalyst for participants to get to know one another (otherwise it may not happen on its own). This also encourages free exchanges of ideas during the training process.
- Create a balance between structured and unstructured time
- Provide an opportunity for a little fun—silliness with a purpose (awards, icebreakers, etc)
- Provide ample opportunities for informal, unstructured interactions between participants and between participants and speakers
- Provide for varied learning styles (lecture, facilitated interaction, group work, one on one conversations, “share-a-thon,” dedicated individual work time, were all used in *Earth to Sky*)

### **3. Model effective learning processes and environments:** Make sure participants are learning by being engaged in the process (model good interpretive technique if you are teaching interpretation)

- Try to build some consistency in structure of each day (research supports this concept)
- Allow choice (do not always assign group memberships, allow learners to choose topics of greatest interest if at all possible)
- Give breaks!
- Move from the most familiar to the least familiar throughout course of workshop

- Have groups build some cohesiveness and achieve some success (perhaps with somewhat familiar content) before attempting a big task or before learning and applying weighty content
- Pay attention to the physical space
  - Setting is important! (familiar locations or new, cramped room vs. spaciousness, urban or rural, lighting, layout of space...)
  - Orient people to physical space and let them know their physical needs will be met: breaks; lunch; where is the bathroom, pencil sharpener, socket for laptop, coffee, etc.

#### **4. Establish clear roles**

- Describe who is involved in the workshop/task (in *Earth to Sky*: education and outreach specialist, scientist, facilitator, evaluator, participants)
- Clarify the task (in *Earth to Sky* it was to learn and create a plan for an interpretation product using new knowledge)
- Remind participants of their responsibility for achieving the task as appropriate/needed

#### **5. Have participants take responsibility for reaching the stated outcomes**

- *Earth to Sky* facilitator/coaching structure (facilitators also were participants, and their coaching helped participants to stay focused and on task)
- Part of the requirement for acceptance to the course was a commitment to use materials and content presented during the workshop
- Set realistic and honest expectations (ex., do not surprise people at the end by suddenly collecting or reporting their work!)

#### **6. Connect with participant's own work and thinking**

- Provide a context for the content to be delivered (for *Earth to Sky*, it was science context and interpretation context—provide participants with a contextual understanding of where the content fits)
- Ask yourself, how will the content apply to participants' jobs?
- In *Earth to Sky* we taught the Interpretive Process Model *before* the science, so people could begin to relate how the science would fit into the process of creating interpretive products
- In *Earth to Sky* facilitated discussions for each science presentation provided opportunity for participants to make the connection between the content and their own work (creating interpretive products)

7. **Provide opportunities for continued learning and maintaining relationships after the event**
  - Through use of technology maintain contacts (follow up e-mails, calls, updates; web site creation)
  - Availability of leaders and scientists after event was emphasized in *Earth to Sky*
  - Make use of the mentors/coaching /“auditing” processes at home park or site
  
8. **Encourage participants to share what they have learned with others outside the event**
  - Participants asked to do so as part of initial screening process
  - Participants created and conducted training for peers at their parks/regions
  - Posting of action plans and follow-ups on workshop website
  
9. **Ensure adequate time for authentic work activity** (as close as possible to the participants’ “real world” task)
  - Stick with the 40/60 rule (40% content, 60% to reflect upon and use the content to accomplish the task--challenging to do!)
  - Dedicated, structured time to work together on identified task
  - Provide resource-rich environment (experts, in-print resources, electronic resources, example interpretive techniques, etc.)
  
10. **Provide ample time for reflecting on the information and experiences**
  - Include reflection time for participants throughout the workshop (use journals, and pauses to write/think in sessions)
  - End of day assessment/reflection time for participants (a chance to breathe! journal time)
  
11. **Meaningful Evaluation!** (providing reflection time increases likelihood of worthwhile responses during evaluation)
  - Use application process as tool for pre-assessment; use e-mail or online access to administer pre-assessment tool
  - Pre- post- assessment chart (akin to the handout in this session)
  - Use focus groups to provide feedback at points the workshop (formative evaluation, catch items one might not otherwise)
  - End of day debrief for workshop organizer team (this provided insights we would not have otherwise received)

Drawn from *Designing Professional Meetings and Conferences in Education: Planning, Implementation and Evaluation* by Susan Mundry, Edward Britton, Senta A. Raizen, and Susan Loucks-Horsley Corwin Press 2000

**Earth to Sky Contacts:**

Anita Davis [anita.l.davis@nasa.gov](mailto:anita.l.davis@nasa.gov) 301-614-6669      Ruth Paglierani [ruthp@ssl.berkeley.edu](mailto:ruthp@ssl.berkeley.edu) 510-643-5669