Essential Best Education Practices

FOR EVERY EDUCATION OR LEARNING SITUATION

The learning experience:

- Is specifically designed to maximize the type of outreach or education effort selected:
    - Information (one-way communication)
    - Communication (two-way communication)
    - Education (formalized learning process)
    - Capacity building (enhance group or community skills)
- Contributes to meeting learning goals:
    - Knowledge – the development of intellectual skills, such as recall of data, comprehension, application, analysis, synthesis and evaluation
    - Attitudes – the manner in which we deal with things emotionally, such as feelings, values, appreciation, enthusiasms, motivations, and ways of thinking
    - Skills – physical movement, coordination, and use of motor-skill areas

FOR THE INDIVIDUAL

The learning experience:

- Has a clear purpose with tightly focused outcomes and objectives.
- Is learner centered, and consequently:
    - Assesses the learner in order to set appropriately high and challenging standards.
    - Relates to the individual's level of physical, intellectual, emotional, and social development.
    - Can be adapted to individual differences in learning strategies and approaches.
    - Relates to personal interests and provides for personal choice and control.
    - Encourages the learner to set meaningful learning goals and to take personal responsibility for their own learning.
- Promotes active engagement and real world problem solving.
- Enables the learner to link new knowledge to their existing knowledge in meaningful ways.
- Builds thinking and reasoning skills – analysis, synthesis, evaluation, and problem solving – that learners can use to construct and apply their knowledge.
- Presents a new behavior or skill by:
    - Demonstrating its similarity to a current behavior or skill.
    - Relating the new behavior to current social practices.
    - Demonstrating ease of adoption in terms of time, effort and money.

- Provides a *nurturing context* for learning, with attention to: cultural or group background and influences, the physical environment, and the use of tools or practices appropriate to learner skills and abilities.
- Provides opportunities for extended effort and practice.
- Builds on positive emotions, curiosity, enjoyment, and interest.
- Allows a learner to interact and collaborate with others on instructional tasks.

FOR THE CLASS OR GROUP

The learning experience:
- Is based on and shaped by some form of needs assessment and use of a planning model (such as the logic model).
- Is designed to focus on a targeted audience and is built on an understanding of audience skills and interests.
- Content and delivery is determined in cooperation with the target audience and stakeholders.
- Is relevant to and accessible by people with diverse backgrounds and influences.
- Presents accurate and balanced information, incorporating many different perspectives.
- Incorporates methods for assessing the value of the experience, especially as it relates to desired outcomes.
- Is facilitated by quality instructors who have been trained in effective teaching methods and are supported by the program sponsor.
- Uses creative approaches.
- Values lifelong learning.
- Builds environmental literacy:
  - Questioning and analysis skills
  - Knowledge of environmental processes and systems
  - Skills for understanding and addressing environmental issues
  - Personal and civic responsibility
- Builds from key principles underlying environmental education:
  - Systems and interdependence are characteristics of the biological and natural order
  - Natural sciences, social sciences, and humanities disciplines contribute to understanding of the environment and environmental issues
  - Learner connections to immediate surroundings provide a base for understanding larger systems, broader issues, causes and consequences

FOR WEB-BASED LEARNING

The learning module:
- Addresses a specific topic that is narrow in scope.
- Follows a logical hierarchy of skill and knowledge development.
- Moves from knowledge transmission to learner-controlled systems.
- Is self-directed and self-contained (students can progress through the material on their own and all materials are readily accessible as part of the course).

- Has clear and concise directions on how to complete the module.
- Chunks the content into manageable "bites".
- Provides a complete demonstration of the concept.
- Provides detailed and consistent feedback for practice opportunities.
- Makes appropriate use of a variety of media.

FOR THE COMMUNITY

The learning experience:
- Evolves from work with a coalition or group.
- Supports a person who takes responsibility for managing or leading the process, and relies on quality group planning and facilitation techniques.
- Relates to long-term community vision and goals.
- Takes into consideration the community as a whole, including: socio-political, economic, historical, and cultural influences.
- Builds on locally existing skills and resources.
- Is flexible in response to both process and conditions.
- Generates and makes use of data about the local condition.
- Provides training to increase skills needed to accomplish goals identified by the group.
- Takes place close to the location where people practice a behavior of concern.
- Builds effectiveness through linkages to other communities, partners, and resources.
- Reaches people in multiple ways.
- Provides participants with feedback about the results of their actions.

BEYOND THE COMMUNITY

The learning experience:
- Builds value for education as part of policy development and implementation.
- Builds skills for flexibility and responsiveness to environmental issues and for facilitating community engagement.
- Concerning a particular topic – consolidates the <u>learning goals</u> for all levels of responsibility, but not the <u>teaching methods</u>, which are adapted for the target audience.
- Matches the target audience to the scale of the problem.
  - For example, related to a particular problem, watershed council staff receive training about a locally significant topic, while agency staff receive training about how information about several related topics informs policy development.
- Offers avenues for participation which are competent, fair, and enhance involvement for all levels of responsibility.

References

Essential Best Education Practices were primarily derived from the following resources. Some references summarize major ideas from multiple authors.

- American Distance Education Consortium. ADEC Principles for Distance Teaching and Learning. Available at http://www.adec.edu/admin/papers/distance-teaching_principles.html
- American Psychological Association Board of Educational Affairs. Learner-Centered Psychological Principles, as described at www.apa.org/ed/lcp.html
- E. Andrews, M. Smith, and G. Wise. 2002. The Community Based Environmental Education model (CBEE) documented in *"A Model of Community-Based Environmental Education"*. Chapter 10 in *New Tools for Environmental Protection: Education, Information, and Voluntary Measures*. National Research Council Division of Behavior and Social Sciences and Education: Committee on the Committee on the Human Dimensions of Global Change, Thomas Dietz and Paul C. Stern, editors. National Academy Press. This chapter describes an education model that builds on findings of a national study and the work of over 90 authors. It incorporates community development; environmental education; adult and youth education; public participation and empowerment; social marketing; and technology transfer theory.
- A. Fedler. 2001. *Defining Best Practices in Boating, Fishing, and Stewardship Education*. Report to the Recreational Boating and Fishing Foundation, Alexandria, VA. Available at www.rbff.org/educational/
- R. Holsman. 2001. *What Works . . . Documenting standard practices for aquatic resource education*. A report to the U.S. Fish and Wildlife Service – Region 5, Federal Aid. Summarizes environmental education, outdoor education and fisheries education studies from over 130 authors.
- R. L. Horton and S. Hutchinson. 1997. The Learning Cycle (student-centered inquiry education developed from Piaget's learning theory and an extension of John Dewey's philosophy of education), as described in *Nurturing Scientific Literacy among Youth through Experientially Based Curriculum Materials*. Center for 4-H Youth Development, College of Food, Agricultural and Environmental Sciences. Columbus: The Ohio State University.
- W. Scott and J. Fien. 1999. *An evaluation of the contributions of educational programmes to conservation within the WWW network*: Final Report. Unpublished report to the Worldwide fund for Nature, Gland, Switzerland.
- B. Simmons et al. 2000. Environmental education principles as described in *Guidelines for the Initial Preparation of Environmental Educators*. The North American Association for Environmental Education. Washington, D.C.
- University of Tennessee, Office of Information Technology, Educational Technology Collaborative. Instructional Module components and evaluation. See example at http://edtech.tennessee.edu/%7Eset4/default.html
- Planning models, such as the Logic Model, available from a variety of sources. This advice is based on a version used by the University of Wisconsin Cooperative Extension.