



## Instructional Design and Implementation

Designing and carrying out the teaching activity is the heart of the educational process that begins with determination of professional practice gaps, identification barriers to closing those gaps, identification of educational needs that will help close the gaps, development of learning objectives tied back to the educational needs, and ends with evaluation.

Despite its central importance, the choice of methodology and technique is often unimaginative and unrelated to the purposes that were defined earlier. The activity instructional design must be responsive to the characteristics of prospective learners such as; knowledge level, professional experience, and preferred learning styles. It should also take into account the evolving CE-literature on instructional design.

Once the content and method is determined, they must be made known to prospective learners in all print materials. As always, documentation of this process is necessary.

The following is a sample (though not exhaustive) list of learning designs which may be considered: You are encouraged to think outside the box to come up with the best learning design given the goal the activity is trying to achieve.

**Curriculum-Based CE:** Conventional CE is generally very fragmented. It consists of a series of live or enduring activities almost totally unconnected in content and purpose. Curriculum-based CE places the programs into categories that are connected through principals or clusters of knowledge.

Example: A series of activities or modules that contribute to a single organized theme.

**Discussion Groups/Small Group Workshops:** A small number (five to fifteen) of clinicians exploring problems collaboratively, with the guidance of a skilled leader rather than a formal presenter.

Example: Round-table discussions on a specific case, topic, or problem of common interest.

**Mini Residencies/Preceptorships:** The clinician will leave his/her practice for a specified period of time to learn as a "resident" in a clinical setting. For a healthcare professional that has a defined need for a particular type of clinical experience, the mini-residency can be a highly rewarding experience.

**Internet:** Besides text based learning, live activities can be presented on the web and archived for later access. Computer learning currently is poor for skill development, however, it lends itself well to case studies, problem solving, lessons in QI (how their practice patterns match others), information data, and legal/ethical issues. When developing internet activities, efforts should be made to take advantage of the opportunities for active learning (ie polling questions, etc) which the medium offers.

**Performance Improvement CME (PI CME/CE):** PI CME/CE is a certified activity in which an accredited CME provider structures a long-term three-stage process by which an individual or group of providers learn about specific performance measures, assess their practice using the selected performance measures, implement interventions to improve performance related to these measures over a useful interval of time, and then reassess their practice using the same performance measures. A PI CME/CE activity may address any facet (structure, process or outcome) of a physician's practice with direct implications for patient care. PI CME may also be offered for physician assistants.

**Skill Session:** Requires a model for the learner to emulate and a chance for supervised practice.

Example: CPR Training

**Simulations:** Either with paper and pencil or with live (e.g., patients or actors) interaction with clinical problems specifically designed for educational purposes. The newer simulators are remarkably realistic and present the learner with relevant diagnostic and management problems.

Example: Patient interviewing techniques

**Self-Assessment Inventories:** A mixture of evaluation and learning. These paper-and-pencil instruments give individual clinicians an effective means to discover what they know or don't know – in various fields. Many specialty societies sponsor such tools.

**Teleconferencing:** The use of telephone and/or television to link live presenter(s) to one or more audiences. Experts from anywhere in the world can be presented to the audience. Many hospitals have satellite capabilities to receive educational programming (downlink) transmitted from a single location via orbiting communication satellite (up-link).