

Continuing Education: Plan the Learning Outcomes

Planning education programs is an interactive and iterative process. You always start with the need – the gap in practice that can be effectively addressed with education. A gap exists when current practice does not meet best practice (including recent advances) in skills, knowledge, or competencies. After considering the need, it is essential to plan the outcomes. From this point forward, the planning process will be iterative because you will revisit the objectives, outcomes, and content as you develop the program. The table below includes two frameworks that are helpful in planning a continuing education program: Expanded Outcomes Framework¹ and an updated version of Bloom’s taxonomy².

Outcomes, Measurable Evaluation Data & Learning Objectives	
Expanded CME Framework Level	Description & Data Sources (Objective & Subjective)/ Learning Objective Verbs (LOV)
1 - Participation	<u>Objective Data:</u> Attendance records for participants able to be reported individually by profession.
2 - Satisfaction	<u>Subjective Data:</u> Questionnaires completed by attendees after an activity to evaluate the degree to which the expectations of participants were met.
3 A - Declarative Knowledge	This is the “what” or the degree to which participants can state what the activity intended them to know. <u>Objective:</u> pre test of current attendee knowledge and post test of knowledge gained. <u>Subjective:</u> self-report of knowledge gained after participating in the activity. <u>Learning Objective Verbs (LOV):</u> List, define, memorize, label, describe
3 B - Procedural Knowledge	This is the “how” – the degree to which participants state how to do what the activity intended (i.e., comprehension). <u>Objective Data:</u> pre test of current attendee knowledge and post test of knowledge gained. <u>Subjective Data:</u> self-report of knowledge gained after participating in the activity. <u>LOV:</u> select, match, summarize, discuss, interpret, interrelate
4 - Competence	This is the degree to which participants show in the educational setting how to do what the activity intended them to do. <u>Objective:</u> observation in educational setting of participants doing an activity. <u>Subjective:</u> self-report of competence or intention to change <u>LOV:</u> analyze, apply, synthesize, create... in the educational setting.
5 - Performance	The degree to which participants do what the activity intended in their practice setting. <u>Objective:</u> observation of participants doing in practice setting, patient charts, databases. <u>Subjective:</u> self-report of performance <u>LOV:</u> demonstrates, creates, develops... in practice setting.
6 - Patient Health	The degree to which the health status of patients improves due to changes in practice behavior of participants. <u>Objective:</u> relevant data recorded in patient charts or databases. <u>Subjective:</u> patient self-report of health status <u>LOV:</u> specific to the health status data, such as improved glucose control measured by glucose A1C.
7 - Community Health	The degree to which the health status of a community of patients improves due to changes in the practice behavior of participants. <u>Objective:</u> epidemiological data and reports <u>Subjective:</u> community self-report <u>LOV:</u> specific to the community health status data, such as vaccination rates in a community

¹ Moore DE, Green JS, Gallis HA (2009). Achieving desired results and improved outcomes: Integrating planning and assessment throughout learning activities. *Journal of Continuing Education in the Health Professions*, 29(1), 1-15.

² Krathwohl DR (2002). A revision of Bloom’s taxonomy: An overview: *Theory Into Practice*, 41(4), 212-225