Rules of Thumb for Course Development for Professional Development

Note: These rules of thumb summarize what is known about effective adult education.

Type of Learning	Pedagogical Intent	Essential Educational Requirements	Possible Media	Possible Delivery Formats	Format Strengths (+) and Weaknesses (-)
1 To Know "that" (concepts, ideas and principles)	Transmit concepts and ideas	1 Clear structured content which unfolds in a "proper" sequence (logically correct) 2 Need to relate abstract concept language to working language and culture of participants	Lectures Programmed instruction Written text	1 classroom lectures	repeatability lack of participant involvement
				2 "charismatic lecturers on audio or video tape"	+ difficulty of finding "charismatic lecturers - short delivery times (typically 30 to 90 minutes)
				3 programmed instruction manuals or videotapes	repeatability individual timing / accessibility expensive to develop if not currently available in market
2 To know "how" (complex management or technical skills requiring progressively more case or team work as opposed to the problems associated with technical skills practiced by individuals)	Acquire new skills to be used back on the job	Clear "concepts" and problem solving models	1 lecturettes for concept and model delivery	1 Classroom with: - lecturettes	+ effective given: relevant problems or cases and simulations and experienced instructors (in both content and business application of content) time consuming for participants expensive to develop if not currently available in market
		Opportunity to practice skill application in an environment which gives non-threatening "feedback"	2 Structured problems/ cases for practice in problem statement, solution generation/selection, solution implementation planning 3 Simulations for problem identification, problem definition, solution generation, solution selection, and solution implementation skills 4 Peer group involvement for "work relevance"	(progressively more complex problems/cases as skills move from individual technical to general management scope) - problem assignments - class worked problems - group cases and exercises - case solution and discussion for feedback - complex simulations involving video's and practice presentations	
		3 Problem material relevant and similar to the "work environment" in which the skills will have to be applied			
(knowing why certain kinds of experience must be avoided	Broaden experience / exposure without individuals' having to do Reduce risk of failure by giving individuals' opportunity to benefit	"others" must be credible "others" must be accepted as relevant in order for their experience to be taken seriously	lecturers if: - they are charismatic - they are seen as creditable & acceptable	"charismatic lecturers on audio or video tape"	+ effectiveness at "consciousness raising difficulty of finding "charismatic lecturers general nature of their "preaching", rather than focus on specific needs
cannot be simulated in a "training environment")	from experience of "others"	Requires highly effective process facilitators in order to ensure that the complex communication required works	2 guided discussion and cases during which experience is passed on	2 facilitated workshops with "acceptable" peers; some of whom have relevant experience to pass on	* "shares" experience and builds working bonds for "back on the job" expensive to develop if not currently available in market