

Excerpt from Stimulated Recall (Personalized Assessment of Clinical Reasoning), by Howard S. Barrows (2000) 31 pages, paper bound.

Stimulated recall was initially described by Bloom almost fifty years ago as a method to revive the memories of students after a class “in order to recall the thoughts that occurred during it.” [i] He stated that the basic idea behind the use of stimulated recall “is that a subject may be enabled to relive an original situation with great vividness and accuracy if he is presented with a large number of cues or stimuli which occurred during the original situation.” Bloom used sound recordings as the stimulus. Subsequently stimulated recall has been used in educational studies in various ways and with various stimuli (written records, audiotapes, and videotapes). Stimulated Recall, as used here, is the use of an immediate videotape replay of a student or physician encounter with a patient or standardized patient to analyze clinical reasoning and interpersonal skills. The person being studied, whether medical student, resident physician or practicing physician is referred to as the “subject.” The person that probes the subject’s thinking during the stimulated recall, stopping the tape at appropriate points in the encounter is called the “interviewer.” Although this person has been called an “interrogator” in other studies, the usual connotation of that term suggesting someone asking questions of a secret or personal nature makes the term inappropriate. This application of the stimulated recall technique originated from the work of Kagan, Schauble et al in 1967. [ii] They used it in what they termed “Interpersonal Process Recall.” Stimulated recall was used as a means to probe more deeply into a subject’s thoughts and feelings as they interact with others. They wrote, “It assumes that if a subject is given enough cues and clues to help him relive an experience, his feelings and thoughts could be explored in depth and with reasonable accuracy of recall.” The use of the technique here is to cause the subject to relive an encounter with a patient and to experience and recall the thoughts and feelings that occurred at the time. Shulman, Elstein et al adapted the technique to probe into the clinical reasoning of physicians in their seminal work on physician reasoning. [iii] Barrows and Bennett and Barrows, Norman et al adopted this technique for similar studies of physician clinical reasoning. [iv], [v] Stimulated Recall permits an investigation into the subject’s clinical reasoning process with the same freedom of inquiry used in investigating a patient’s problem through history and physical. With appropriate probes by the interviewer, hypotheses about possible problems in the subject’s reasoning process as well as deficiencies in clinical performance, interpersonal skills and knowledge can be investigated.

At the Southern Illinois University School of Medicine stimulated recall has been used to analyze and evaluate the clinical reasoning of medical students, residents and physicians who were either referred by clerkship or residency directors concerned about their reasoning skills or were self referred out of personal concern. Other medical schools have also referred students and residents for analysis using this technique.

This description of its design and use is based on a 15-year experience. Over this time its value has been repeatedly demonstrated as it complements other more common, but less personalized assessment methods. It is particularly useful in that gray area where a student is not clearly in trouble, but something seems wrong and a more rigorous, individualized and detailed assessment is needed. It is also valuable in verifying and more accurately defining the problems of a subject who has been found to perform poorly clinically.

Stimulated recall is underutilized because its existence is not generally recognized and its usefulness not appreciated. The intent here is to encourage its broader use.