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Old dog, new tricks: Innovations in think-aloud methodology
Nathan J. Barrows, Scott E. Thompson and Janet Bond-Robinson

Although the think-aloud protocol (TAP) is a well-established method in cognitive and educational research, an essential feature limits its effectiveness: an interviewer is present during data collection. When analyzing TAP data, one assumes that a participant's verbal and nonverbal responses reflect the cognitive processes active in his or her working memory during problem solving. However, the presence of the interviewer introduces socially-situated confounds into participants' working memories. To explore the social interactions between interviewers and interviewees, our group has developed three variations of the TAP method: peer interviewers, novice interviewers, and "voice of god" interviewers. The results of on-going studies employing these new methods in organic chemistry and biochemistry will be presented.