The quality of retrospective reports in survey research is often compromised by the respondent’s inability to recall personal events accurately. In order to reduce reporting error caused by memory problems, various aided recall techniques have been developed. This dissertation focuses on calendar instruments, such as the Event History Calendar, which combine the use of temporal landmarks and visual response feedback. The dissertation addresses the question whether retrieval processes are different between interviews with calendar instruments and interviews with regular retrospective questionnaires. Furthermore, it discusses the results of a methodological experiment aimed at examining the differential effects of temporal landmarks and visual response feedback on data quality in a web-based retrospective life course survey. Based on the findings of the study, recommendations are made for the optimal design of standardized calendar recall aids in self-completed life course surveys.