



CAMBRIDGE ASSESSMENT

How do question writers compose examination questions? Question writing as a socio-cognitive process

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Abstract

Setting written examinations has a long historical tradition, being highly prevalent across different education systems and learning contexts (e.g. schools, universities, and professional assessments) (Gilbert, 2011; Raban, 2008; Russell, 2002). Whilst the practice of writing examination questions is ubiquitous, and may even be considered to constitute a genre of writing, limited research has been carried out on how setters [question writers] write questions.

The limited previous research in this area has tended to adopt a cognitivist approach, using verbal protocol methods to explore what question writers think about when writing questions (e.g. Fulkerson, Mittelholtz and Nichols, 2009; Fulkerson, Nichols and Mittelholtz, 2010). This current project sought to extend this area of enquiry, using a variety of research methods, to look at question writing as a socio-cognitive process, so as to consider writing as both an internal and external process.

This project focused on the question writing practices of seven question setters from different subjects (Mathematics, Physics, Biology, Geography). The setters all had experience of writing questions for examinations based at the General Certificate of Secondary Education level. To capture evidence of the setters' writing practices each setter was observed remotely via video recording software whilst they carried out a question writing task. The visual data available to the researchers included a view of the setter's on-screen writing as well as their off-screen activity (e.g. note taking on paper, document use, etc.). The video material was then used to facilitate a stimulated recall session where individual setters could explain the processes that motivated their observed behaviours. All participants reported that the processes they had gone through under observation were representative of their usual practice.

Analyses suggested that the setters shared a common model of the writing process that paralleled a general cognitive model of writing proposed by Flower and Hayes (1981). This question writing model comprised three basic but interconnected phases: thinking about writing; writing and reflective thinking; and reviewing. In addition, question writing practice was influenced by the social system of examining through the way that the setters considered a variety of perspectives during the writing task. This insight gives an indication of how expert setter practice develops, implicating a sociocultural perspective which suggests that the broader social context of examination question writing is an inevitable influence on setter practice (Wenger, 1998).

References

Flower, L., & Hayes, J.R. (1981). A cognitive process theory of writing. *College composition and communication*, 32 (4), 365-387.

- Fulkerson, D., Mittelholtz, D.J., & Nichols, P.D. (April 2009). The psychology of writing items: Improving figural response item writing. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.
- Fulkerson, D., Nichols, P.D., & Mittelholtz, D.J. (May 2010). What item writers think when writing items: towards a theory of item writing expertise. Paper presented at the annual meeting of the American Educational Research Association, Denver, Colorado.
- Gilbert, I. (2011). *Why do I need a teacher when I have Google? The Essential Guide to the Big Issues for Every 21st Century Teacher*. Oxford: Routledge.
- Raban, S. (2008). *Examining the World: A History of the University of Cambridge Local Examinations Syndicate*. Cambridge: Cambridge University Press.
- Russell, D. R. (2002). *Writing in the Academic Disciplines: A Curricular History*. 2nd Ed. Carbondale, IL: Southern Illinois University Press.
- Wenger, E. (1998). *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press.