## **BOOK REVIEW**

## Teacher Cognition and Language Education: Research and Practice by Simon Borg (2006). London: Continuum. 314 pp. £80. ISBN 0-8264-7728-3 (hardback). Paperback version forthcoming in May 2008.

Hugo Santiago Sanchez

Teacher Cognition, defined by Borg as teachers' "beliefs, knowledge, theories, attitudes, images, assumptions, metaphors, conceptions, perspectives about teaching, teachers, learning, students, subject matter, curricula, materials, instructional activities, (and) self' (Figure 1.5, p. 41), has been an area of research in the field of Language Education for more than 30 years, achieving a steady and significant growth in the last 15 years. Such research interest has resulted in hundreds of individual studies exploring language teacher cognition from different perspectives in a wide variety of subject areas and educational contexts, and reporting a substantial number of findings which have allowed us to gain insight into teachers' mental lives and to understand the psychological bases of their professional practice. Missing was a volume which could bring together all or most of the extensive research done on Language Teacher Cognition thus far, summarise and categorise the main findings, and provide some guidance on the future growth of this domain of research inquiry. Teacher Cognition and Language Education: Research and Practice fills this gap by providing a comprehensive and categorised description of the present state of language teacher cognition research and by outlining the framework for its future development.

Intended primarily for researchers, policy makers, classroom practitioners, school managers, and other professionals engaged in teacher development, *Teacher Cognition and Language Education: Research and Practice* is organised into 10 chapters which could be divided into two main parts, the first one (chapters 1-5) providing a description of teacher cognition research to present date, and the second part (chapters 6-9) presenting a series of research methods used in this field of study. There is a final chapter (chapter 10) which serves as a conclusion and which is aimed at examining some issues concerning language teacher cognition and at making some suggestions for further research. In addition, the

volume contains an introduction describing the aims, potential audience and structure of the book; a short subject index; and an invaluable list of 417 references which contains informed sources on research methodology and almost everything there is to read about language teacher cognition between the 1970s and 2006. Those willing to use Teacher Cognition and Language Education: Research and Practice as a reference book would argue that missing are an author index, a list of the valuable figures and tables included in the different chapters, and a separate glossary of research and teacher cognition terms, though the author does include two tables (1.1 and 2.2 in chapters 1 and 2 respectively) with a comprehensive list of concepts in teacher cognition.

In the first part of the book, chapter 1, titled "The Origins of Teacher Cognition Research", gives a significant overview of the historical background of teacher cognition research since the 1970s. Borg divides this chapter into four distinct periods: 1970s, 1980s, 1990s, and the period since 2000. In the first period, Borg skilfully situates teacher cognition within the study of teaching, moving from a description of the original concern for teacher behaviour and the product of teaching to a subsequent interest in the thinking behind such behaviour and decisionmaking. In the 1980s the author shows how teacher cognition outgrows this behavioural model of teaching and evolves into a discipline which recognises the bi-directional relationship between thinking and classroom practices, and the role of context-related factors in shaping such practices. The 1990s is shown as a decade characterised by the proliferation of reviews of the different studies on teacher cognition up to that moment, which substantial contributions made understanding of teacher beliefs and teacher knowledge. Finally, in the last period Borg describes further conceptual issues explored in the new millennium and the role of teacher cognition in teacher development. The chapter ends with the



author's accurate conclusions, a suitable list of the wide variety of concepts used in teacher cognition research, a detailed diagram of the elements of teacher cognition and the factors interacting with them created by Borg himself, and a list of suggestions for further reading.

Chapters 2 and 3 focus on the cognitions of pre-service and in-service language teachers respectively. In chapter 2 Borg groups the studies done on prospective teachers into the following four themes: "(a) the influence of prior language learning experience on pre-service teachers' cognitions; (b) pre-service teachers' beliefs about language teaching; (c) cognitions in relation to practicum experiences and (d) pre-service teachers' decision-making instructional and (p. 52). In addition, the author knowledge" includes five sections which discuss the impact of teacher education on prospective teachers' cognitions (specifically their beliefs knowledge) and their behaviour. In chapter 3, Borg examines the studies carried out on practising language teachers, grouping them into five themes: "the cognitions of novice language teachers; the cognitions and reported practices of inservice language teachers; the cognitions and actual practices of in-service language teachers; cognitive change in in-service teachers; comparisons of the cognitions of expert and novice language teachers" (p. 75, emphasis in original). In these two chapters, Borg provides not only accurate summaries of the research done on each theme but also a critical analysis of some of the issues arising from this research, and an overview of what aspects have been covered in each field so far and what features still require further exploration.

Chapters 4 and 5 feature the research done on teacher cognition vis-à-vis two specific curricular domains, grammar teaching and instruction. In chapter 4, Borg fully examines the studies focusing on the former curricular area, dividing them into three groups: "teachers' knowledge about grammar", "teachers' beliefs about grammar teaching", and "practices and cognitions in teaching grammar", the last group capturing the most attention. In chapter 5, Borg organises the discussion of teacher cognition and literacy instruction in the following way: "first language reading instruction", "second and foreign language reading instruction", "first language writing instruction", "second and foreign language writing instruction", and "teacher cognition in literacy" in general. Deserving of note are the tables included in the two chapters which contain a full list of the studies conducted in relation to each curricular domain. It is also worth noting that, at the beginning of chapter 4, Borg explains that he has decided to discuss the research done on teacher cognition only in connection with two curricular domains, grammar teaching and literacy instruction, since these are the areas most widely researched from a teacher cognition perspective. However, given that this book is not aimed exclusively at language educators interested in grammar teaching and literacy instruction, at least a whole chapter should have been devoted on summarising the main findings from studies focusing on other curricular areas such as error treatment and vocabulary teaching.

In the second part of the book, Borg discusses four types of data collection methods used in the study of language teacher cognition: self-report instruments, verbal commentaries, observation, and reflective writing. In chapter 6, three kinds of self-report instruments are examined: questionnaires, scenario rating, and tests. In chapter 7, four forms of verbal commentaries are including interviews, explored: structured scenario-based interviews and repertory grid interviews, semi-structured interviews, stimulated recall interviews, and think-aloud protocols. Chapter 8 is devoted mostly to outlining the different dimensions of observation such as the observer's role, the authenticity of the settings under observation, the disclosure of the purposes of the research, and the ways research data can be recorded, coded, and analysed. Finally, in chapter 9, four different categories of reflective writing are described: journal writing, autobiographical accounts, retrospective accounts, and concept mapping. Borg acknowledges in chapter 6 that, "given that teacher cognition research is interested in phenomena which are not directly observable, a key challenge for researchers has been to identify data collection strategies through which these phenomena can be elicited" (p. 167). The four chapters devoted to the data collection methodology used in teacher cognition research are of invaluable help to those facing this challenge, not only because of the detailed description provided of each data collection method in which definitions, samples instruments, and examples of the data collected are included, but also because of the thoughtprovoking critical discussions Borg engages in of ethical issues, the scope of each instrument, and the way other strategies can be used in conjunction with the instruments described.

Finally, Borg includes a concluding chapter (chapter 10), in which he summarises the most salient issues explored in the previous chapters and provides an abundance of potential ideas for

further research. These issues are discussed under the following headings: "the nature of language teacher cognition"; "the scope of language teacher cognition research"; "the relationship between teacher cognition and classroom practice in language teaching"; "the impact of context on language teachers' cognitions and practices"; "the processes of pre-service teacher learning in language teaching"; "the relationship between cognitive change and behavioural change in language teachers"; "the nature of expertise in language teaching"; "methodological issues in the study of language teacher cognition"; "a framework for language teacher cognition research", and "consolidating and extending language teacher cognition research".

All in all, Teacher Cognition and Language Education: Research and Practice is not a mere compilation of individual studies done on language teacher cognition but a painstaking critical review of a comprehensive list of theme-related research works carried out in relation to this domain of inquiry. The well-defined overall structure of the book, writing style, and language used by the author make the book suitable for a wide array of readers, ranging from classroom language teachers to experienced researchers in the field. Borg carefully guides the reader across the different chapters through clear definitions, illustrative tables and figures, and appropriate explanations about the book contents and structure. No doubt through this volume Borg has made an invaluable contribution to the field of language teaching and teacher cognition in particular, Teacher Cognition and Language Education: Research and Practice thus representing a must-read for all educators engaged in language teacher cognition research and language teacher training.