

Understanding Development and Proficiency in Writing

Quantitative corpus research on written language development has expanded rapidly in recent years, assisted by the ever-increasing power and accessibility of software capable of reliably analysing huge collections of learner writing. For this work to reach its full potential, it is important that researchers have a strong understanding of its methodological foundations and of the existing empirical evidence base on which it can build. This book provides the most comprehensive discussion to date of research in this area. Covering both first-and second-language learning contexts, it sets out a coherent theoretical framework and systematically reviews studies published over the last seventy years in order to establish what such research has taught us about written language development, what it hasn't taught us, and what we should do next. Timely and original, this is an essential reference work for academic researchers and students of first- and second-language writing.

PHILIP DURRANT is Associate Professor in Language Education at the University of Exeter. He has been a language teacher and researcher for more than twenty years, working at schools and universities in both the UK and Turkey. He has published widely on corpus linguistics, vocabulary learning, and academic writing.

MARK BRENCHLEY is Senior Research Manager at Cambridge Assessment English, with a particular focus on writing, grammar, auto-marking, and corpus-based methodologies. With Philip Durrant, he co-built the Growth in Grammar corpus, a unique database of L1 student writing. He has published on linguistics in various media, including co-writing the *Times Educational Supplement*'s Grammar Bites column.

LEE MCCALLUM is a Postdoctoral Research Fellow at the University of Exeter and has extensive teaching experience from Europe and the Far and Middle East. She is co-editor of *The Assessment of L2 Written English across the MENA Region* (2020).



Understanding Development and Proficiency in Writing

Quantitative Corpus Linguistic Approaches

Philip Durrant

University of Exeter

Mark Brenchley

Cambridge Assessment English

Lee McCallum

University of Exeter





CAMBRIDGEUNIVERSITY PRESS

University Printing House, Cambridge CB2 8BS, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

79 Anson Road, #06-04/06, Singapore 079906

Cambridge University Press is part of the University of Cambridge.

It furthers the University's mission by disseminating knowledge in the pursuit of education, learning, and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781108477628 DOI: 10.1017/9781108770101

© Philip Durrant, Mark Brenchley, and Lee McCallum 2021

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press.

First published 2021

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data

Names: Durrant, Philip, 1976– author. | Brenchley, Mark, 1981– author. | McCallum, Lee, 1989– author.

Title: Understanding development and proficiency in writing: quantitative corpus linguistic approaches / Philip Durrant, University of Exeter; Mark Brenchley,

Cambridge Assessment English ; Lee McCallum, University of Exeter.

Description: Cambridge, United Kingdom; New York, NY: Cambridge

University Press, [2021] | Includes bibliographical references and index.

Identifiers: LCCN 2020046968 (print) | LCCN 2020046969 (ebook) | ISBN 0781108477638 (hardlessle) | ISBN 0781108477638 (hardlessle) | ISBN 0781108477638 (hardlessle)

9781108477628 (hardback) | ISBN 9781108770101 (ebook)

Subjects: LCSH: English language – Rhetoric – Study and teaching – Evaluation. | English language – Study and teaching – Evaluation. | Corpora (Linguistics) | Computational linguistics.

Classification: LCC PE1404 .D865 2021 (print) | LCC PE1404 (ebook) | DDC 420.1/88–dc23

LC record available at https://lccn.loc.gov/2020046968

LC ebook record available at https://lccn.loc.gov/2020046969

ISBN 978-1-108-47762-8 Hardback ISBN 978-1-108-72580-4 Paperback

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.



Contents

| List of Figures List of Tables | | | page vii viii | |
|-----------------------------------|--|--|------------------|--|
| Αc | knov | vledgements | ix | |
| 1 | Introduction | | | |
| | 1.1 | Aims and Scope | 1 | |
| | 1.2 | Overview of the Evidence Base | 6 | |
| | 1.3 | Outline of the Book | 13 | |
| 2 | Theoretical and Methodological Foundations | | 14 | |
| | 2.1 | Introduction | 14 | |
| | 2.2 | Key Constructs | 14 | |
| | 2.3 | Linguistic Features in a Theory of Writing Development and Proficiency | 27 | |
| | 2.4 | Quantitative Corpus Linguistics | 32 | |
| | 2.5 | 8 | 52 | |
| | 2.6 | Conclusion | 55 | |
| 3 | Development in Syntax | | 56 | |
| | 3.1 | Introduction | 56 | |
| | 3.2 | Theoretical Framework | 57 | |
| | 3.3 | Review of Studies | 62 | |
| | 3.4 | e | 108 | |
| | 3.5 | Conclusions | 114 | |
| 4 | Development in Vocabulary | | | |
| | 4.1 | Introduction | 117 | |
| | 4.2 | Theoretical Framework | 118 | |
| | 4.3 | | 123 | |
| | 4.4 | | 141 | |
| | 4.5 | Conclusions | 144 | |
| 5 | Development in Formulaic Language | | | |
| | 5.1 | Introduction | 147 | |
| | 5.2 | Theoretical Framework | 148 | |
| | 5.3 | Operationalising Formulaic Language | 152 | |

V



| vi | | Contents | |
|------------|-------------------------|--|-----|
| | 5.4 | Review of Studies | 161 |
| | 5.5 | Methodological Issues | 177 |
| | 5.6 | Conclusions | 181 |
| 6 | Development in Cohesion | | 183 |
| | 6.1 | Introduction | 183 |
| | 6.2 | Halliday and Hasan's Model of Cohesion | 184 |
| | 6.3 | The Coh-Metrix Model of Cohesion | 192 |
| | 6.4 | Conclusions | 199 |
| 7 | Conclusions | | 201 |
| | 7.1 | Introduction | 201 |
| | 7.2 | Summary of Findings | 201 |
| | 7.3 | Theoretical Conclusions | 203 |
| | 7.4 | Methodological Conclusions | 205 |
| | 7.5 | The Future | 211 |
| References | | nces | 215 |
| Index | | | 240 |



Figures

| 1.1 | Letters written by children in Years 2 and 11 of schools in | | | |
|-----|---|--------|--|--|
| | England | page 2 | | |
| 1.2 | Letters written at CEFR bands B1 and C2 | 2 | | |
| 1.3 | Studies over time | 8 | | |
| 2.1 | Grabe and Kaplan's (1996) model of writing as communicative | | | |
| | language use | 18 | | |
| 2.2 | Bulté and Housen's (2012) levels of construct specification | 49 | | |
| 3.1 | Mean dependents per noun phrase | 85 | | |
| 3.2 | Use of relative clauses and postmodifying prepositional phrases | | | |
| | across year groups | 86 | | |
| 3.3 | Use of participial premodifiers across year groups | 87 | | |
| 3.4 | Frequencies of subordinate clause types | 95 | | |
| 3.5 | Use of adverbial clauses across year groups | 96 | | |
| 4.1 | Mean log frequencies by part of speech | 132 | | |
| 4.2 | Mean academic and fiction vocabulary scores | 136 | | |
| 5.1 | Mean frequency of learner combinations in reference corpus | 172 | | |
| 5.2 | Mean MI of learner combinations in reference corpus | 173 | | |
| 5.3 | Mean percentage of academic collocations | 173 | | |

vii



Tables

| 1.1 | Studies by area | page 7 |
|-----|---|--------|
| 1.2 | National context of studies | 9 |
| 1.3 | L2 educational contexts | 10 |
| 1.4 | L1 developmental variables | 10 |
| 1.5 | Growth in Grammar corpus texts and demographics | 12 |
| 1.6 | Growth in Grammar corpus texts per genre/discipline | 12 |
| 2.1 | Writing descriptors for two L2 frameworks | 26 |
| 3.1 | Statistical interrelationship of Hunt's synopsis of clause-to- | |
| | sentence factors | 67 |
| 3.2 | Summary of general generic index associations | 73 |
| 3.3 | Sample of syntactic annotation | 84 |
| 3.4 | Some alternative feature counts for writing is hard | 109 |
| 4.1 | Levels of vocabulary proficiency | 121 |
| 4.2 | Sample of word frequency data | 131 |
| 4.3 | Sample of genre proportions from the transformed COCA | |
| | frequency list | 136 |
| 4.4 | Summary of measures | 141 |
| 4.5 | Vocabulary grading criteria | 143 |
| 5.1 | Parsed text | 158 |
| 5.2 | Accuracy of automated identification of syntactic relations | 159 |
| 5.3 | Example of word combination data | 160 |
| 5.4 | Functional classification of lexical bundles, based on Biber et al. | |
| | (2004) | 165 |
| 5.5 | Structural classification of bundles | 167 |
| 5.6 | Types of formulaic language studied | 178 |

viii



Acknowledgements

We have benefitted from the help of many people in writing this book. We would like to thank especially all those who were involved in the Growth in Grammar project, particularly our collaborators, Debra Myhill, Rebecca Clarkson, and Victorina González-Díaz. We would also like to thank the schools, teachers, and children whose generous participation made the project possible, as well as the transcribers and annotators whose work was essential in creating the corpus. The project was financially supported by the Economic and Social Research Council (9ES/M00967X/1) and by the University of Exeter, where it was conducted.

We owe special thanks also to Bethany Gray, Kris Kyle, Jim Milton, Magali Paquot, and Anna Siyanova-Chanturia, who read and commented on aspects of the manuscript and whose advice has strengthened the final book considerably. Thanks also to the excellent editorial team at Cambridge University Press – in particular, Becky Taylor, Izzie Collins, Josh Penney, Jayavel Radhakrishnan, and Andrew Kerr-Jarrett.

Finally, we are above all grateful for the love and inexhaustible patience of our families: Ayça, Alona, Max, and Mauro. This book would not have been possible without you.