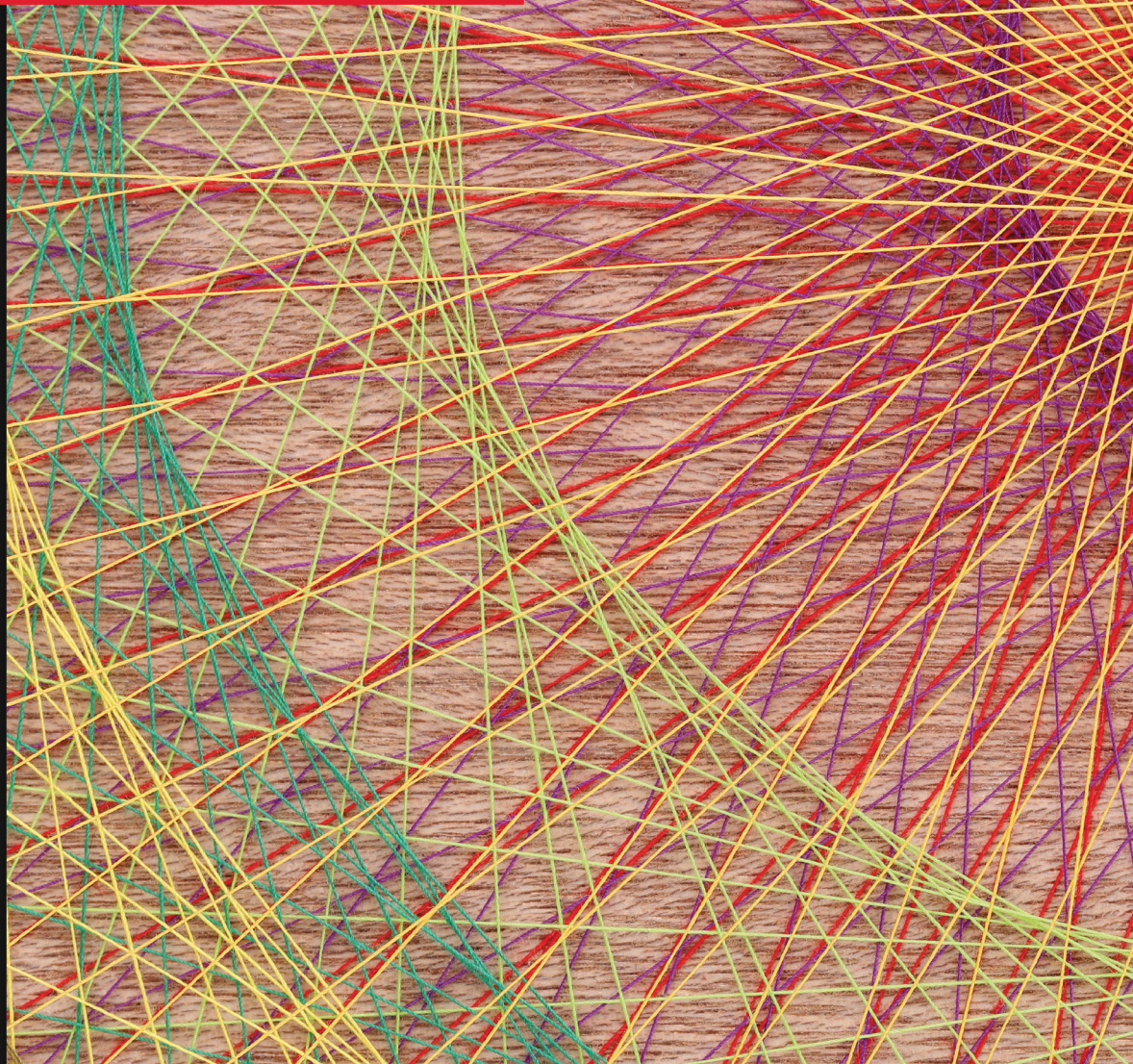




ROUTLEDGE  
HANDBOOKS



# The Routledge Handbook of Content and Language Integrated Learning

Edited by Darío Luis Banegas and  
Sandra Zappa-Hollman



# THE ROUTLEDGE HANDBOOK OF CONTENT AND LANGUAGE INTEGRATED LEARNING

Content and language integrated learning (CLIL) is an increasingly popular educational approach given its dual focus on enabling learners to acquire subject-matter through an additional language, while learning this second language in tandem with content. This *Handbook* provides a comprehensive overview of recent CLIL developments, illustrating how CLIL has been uniquely conceptualised and practised across educational and geographical contexts.

Divided into six sections, covering language and language teaching, core topics and issues, contexts and learners, CLIL in practice, CLIL around the world, and a final section looking forward to future research directions, every chapter provides a balanced discussion of the benefits, challenges and implications of this approach. Representing the same diversity and intercultural understanding that CLIL features, the chapters are authored by established as well as early-career academics based around the world.

*The Routledge Handbook of Content and Language Integrated Learning* is the essential guide to CLIL for advanced students and researchers of applied linguistics, education and TESOL.

**Darío Luis Banegas** is Lecturer in Language Education at the University of Edinburgh. He is involved in teacher associations in Latin America and Europe. He is a fellow of the Higher Education Academy and an associate fellow with the University of Warwick. His main research and teaching interests are CLIL, action research, social justice, and initial language teacher education. He has edited volumes with Bloomsbury, Multilingual Matters, and Palgrave on different aspects of language education.

**Sandra Zappa-Hollman** is Associate Professor in the Faculty of Education at the University of British Columbia, Canada, and Director of Academic English at UBC's Vantage College. Her research examines processes of language and literacy socialisation of multilingual English language post-secondary students, including the perspectives of faculty members working with diverse student populations. Her work also aims to shed light on questions and issues concerning curricular and pedagogical approaches that support culturally and linguistically responsive teaching.

## Consulting Editor: Graham Hall

### **Routledge Handbooks in Applied Linguistics**

*Routledge Handbooks in Applied Linguistics* provide comprehensive overviews of the key topics in applied linguistics. All entries for the handbooks are specially commissioned and written by leading scholars in the field. Clear, accessible and carefully edited, *Routledge Handbooks in Applied Linguistics* are the ideal resource for both advanced undergraduates and postgraduate students.

### **The Routledge Handbook of the Psychology of Language Learning and Teaching**

*Edited by Tammy Gregersen and Sarah Mercer*

### **The Routledge Handbook of Language Testing**

Second Edition

*Edited by Glenn Fulcher and Luke Harding*

### **The Routledge Handbook of Corpus Linguistics**

Second Edition

*Edited by Anne O'Keefe and Michael J. McCarthy*

### **The Routledge Handbook of Materials Development for Language Teaching**

*Edited by Julie Norton and Heather Buchanan*

### **The Routledge Handbook of Corpora and English Language Teaching and Learning**

*Edited by Reka R. Jablonkai and Eniko Csomay*

### **The Routledge Handbook of Language and the Global South**

*Edited by Sinfree Makoni, Anna Kaiper-Marquez, and Lorato Mokuena*

### **The Routledge Handbook of Discourse Analysis**

Second Edition

*Edited by Michael Handford and James Paul Gee*

### **The Routledge Handbook of Content and Language Integrated Learning**

*Edited by Darío Luis Banegas and Sandra Zappa-Hollman*

### **The Routledge Handbook of Applied Linguistics**

Volume 1 Language learning and language education, Second Edition

*Edited by Li Wei, Zhu Hua, and James Simpson*

### **The Routledge Handbook of Applied Linguistics**

Volume 2 Applied linguistics in action, Second Edition

*Edited by Li Wei, Zhu Hua, and James Simpson*

For a full list of titles in this series, please visit [www.routledge.com/series/RHAL](http://www.routledge.com/series/RHAL)

THE ROUTLEDGE  
HANDBOOK OF CONTENT  
AND LANGUAGE  
INTEGRATED LEARNING

*Edited by Darío Luis Banegas and  
Sandra Zappa-Hollman*

Designed cover image: @ Getty Images | akiyoko

First published 2024

by Routledge

4 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge

605 Third Avenue, New York, NY 10158

*Routledge is an imprint of the Taylor & Francis Group, an informa business*

© 2024 selection and editorial matter, Darío Luis Banegas and Sandra Zappa-Hollman;  
individual chapters, the contributors

The right of Darío Luis Banegas and Sandra Zappa-Hollman to be identified as the authors of the editorial material, and of the authors for their individual chapters, has been asserted in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

*Trademark notice:* Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

*British Library Cataloguing-in-Publication Data*

A catalogue record for this book is available from the British Library

ISBN: 978-1-032-00195-1 (hbk)

ISBN: 978-1-032-00196-8 (pbk)

ISBN: 978-1-003-17315-1 (ebk)

DOI: 10.4324/9781003173151

Typeset in Bembo

by Newgen Publishing UK

Access the Support Material: [www.routledge.com/9781032001951](http://www.routledge.com/9781032001951)

# CONTENTS

<i>List of figures</i>	ix
<i>List of tables</i>	x
<i>List of contributors</i>	xi
<i>Acknowledgments</i>	xxii
Introduction	1
<i>Darío Luis Banegas and Sandra Zappa-Hollman</i>	
<b>PART I</b>	
<b>Language and language teaching in CLIL</b>	<b>9</b>
1 CLIL and linguistics	11
<i>Ana Llinares</i>	
2 Translanguaging in CLIL	28
<i>Pat Moore</i>	
3 CLIL and language teaching approaches	43
<i>Raul Albuquerque Paraná, Sávio Siqueira, and Julia Landau</i>	
4 CLIL and English for specific purposes	57
<i>Gabriela Tavella and María Soledad Loutayf</i>	
5 CLIL and English-medium instruction	69
<i>Joyce Kling and Slobodanka Dimova</i>	
6 Epistemological and methodological trends in CLIL research	84
<i>José Goris</i>	

<b>PART II</b>	
<b>Core topics and issues</b>	<b>97</b>
7 CLIL and educational policy	99
<i>Yolanda Ruiz de Zarobe</i>	
8 L2 proficiency and development in CLIL	112
<i>Christiane Dalton-Puffer and Silvia Bauer-Marschallinger</i>	
9 Cognitive development in CLIL	127
<i>Alberto Fernández-Costales</i>	
10 Intercultural citizenship as CLIL in foreign language education	141
<i>Melina Porto</i>	
11 CLIL and professional development	160
<i>Limin Yuan and Yuen Yi Lo</i>	
12 Collaboration between CLIL teachers	177
<i>Josephine Moate</i>	
<b>PART III</b>	
<b>Contexts and learners</b>	<b>193</b>
13 CLIL with heritage languages	195
<i>Joanna McPake</i>	
14 CLIL with languages other than English	210
<i>Kim Bower</i>	
15 Doing CLIL with primary learners: From principles to practice	225
<i>Fabiana Fazzi and Marcella Menegale</i>	
16 CLIL with secondary school learners	238
<i>Veronico N. Tarrayo and Philippe Jose S. Hernandez</i>	
<b>PART IV</b>	
<b>CLIL in practice</b>	<b>253</b>
17 Teachers' perceptions, beliefs, and attitudes on CLIL	255
<i>Jermaine S. McDougald</i>	

## Contents

18	The learner's perspective on CLIL: Attitudes, motivations, and perceptions <i>Xabier San Isidro and María Luisa Pérez Cañado</i>	268
19	Instructional scaffolding in CLIL: An overview of theory and research <i>Karina Rose Mahan</i>	284
20	Classroom interaction in CLIL <i>Dongying Li</i>	299
21	CLIL challenges in designing learning experiences <i>Liz Dale and Tessa Mearns</i>	313
22	CLIL materials: From theory to practice <i>Laura Karabassova and Nurziya Oralbayeva</i>	328
23	Corrective feedback in CLIL <i>Ruth Milla and María del Pilar García Mayo</i>	341
24	Assessment in CLIL <i>Takanori Sato</i>	355
<b>PART V</b>		
<b>CLIL around the world</b>		<b>371</b>
25	CLIL in various forms around the world <i>Liss Kerstin Sylvén and Keiko Tsuchiya</i>	373
26	CLIL in the Nordic countries <i>Sotiria Varis and Anssi Roiha</i>	387
27	CLIL in the Netherlands: Three decades of innovation and development <i>Tessa Mearns, Evelyn van Kampen, and Wilfried Admiraal</i>	403
28	CLIL in Italy <i>Jacqueline Aiello and Emilia Di Martino</i>	419
29	CLIL in Ecuador <i>Juanita Argudo-Serrano, Tammy Fajardo-Dack, and Mónica Abad-Célleri</i>	433
30	CLIL in Colombia <i>Kathleen A. Corrales and Paige M. Poole</i>	446



*Contents*

31	The CLIL experience in Cameroon <i>Innocent Mbouya Fassé and Alain Flaubert Takam</i>	461
32	Current practice and research of CLIL in Japan <i>Chantal Hemmi</i>	475
33	CLIL in Taiwan <i>Wenhsien Yang</i>	489
<b>PART VI</b>		
<b>Looking forward</b>		<b>505</b>
34	CLIL: Critical perspectives <i>Bong-gi Sohn</i>	507
35	CLIL: Future directions <i>Tom Morton</i>	521
36	Coda: Carpe diem <i>Do Coyle</i>	536
	<i>Index</i>	542

# FIGURES

1.1	Network system for the analysis of definitions in CLIL	16
1.2	Interactional layer for the analysis of speech functions in CLIL	17
1.3	SFL theory, research variables, and pedagogical applications	24
2.1	Ting's CLC quadrant	37
5.1	EMI framework	71
5.2	CLIL dimensions in EMI contexts	76
10.1	Collaborative mural	150
10.2	Civic engagement	153
10.3	Collaborative mural and civic action	154
12.1	Continuum of collaboration approaches based on proximity	180
24.1	Blank table to elicit students' knowledge of the difference between EFL and ELF	363
25.1	The CLIL continuum	381
27.1	Overview of Dutch education system, including bilingual streams; figures as of October 2021	404

# TABLES

1.1	Example of a CLIL student's development of the period study genre	18
10.1	Forms of civic engagement	146
14.1	Summary of developing strands in bilingual education in Australia and the UK	213
15.1	Example of experience-based task progression following the CLIL Matrix	229
15.2	Example of task progression in relation to the stages of child development	230
15.3	Example of story-based task progression following the CLIL Matrix	231
18.1	Studies canvassed on student perspectives	271
24.1	Claims in an AUA and relevant questions	357
24.2	Assessment instruments and tasks used by empirical studies	359
24.3	Scaffolding techniques for helping students demonstrate content knowledge	362
24.4	Task characteristics of a frequently used task in my class	366
24.5	Three assessment approaches	367
26.1	Search terms used in literature search	388
26.2	Inclusion and exclusion criteria	389
30.1	Summary of levels of Colombian educational system	447
30.2	Summary of implementation articles	450
31.1	Distribution of classes in Cameroon's secondary general educational subsystems	463
31.2	Components of the SBEP in Cameroon	466

# CONTRIBUTORS

**Mónica Abad-Célleri** has a bachelor's degree in English teaching from Universidad del Azuay and a master's degree in English language and applied linguistics from Universidad de Cuenca, both in Ecuador. She has a PhD in Education from Universidad Nacional de la Plata, Argentina. She is also a professor in the teacher-training programme at Universidad de Cuenca. Her research areas of interest are CLIL for pre-service teachers and pronunciation and identity.

**Wilfried Admiraal** is Full Professor of Technology-Enhanced Teaching and Learning at the Centre for the Study of Professions of Oslo Metropolitan University, Oslo, Norway. His research interest combines the areas of teaching, technology, and social psychology in secondary and higher education, covering topics such as learner and teacher engagement, teacher-learner relationships and learner sense of belonging. More information on projects and publications on his personal homepage: <https://sites.google.com/site/wilfriedadmiraal/>.

**Jacqueline Aiello** is an Assistant Professor at the University of Salerno. She earned her doctorate from New York University. She is the author of *Negotiating Englishes and English-speaking Identities* (Routledge, 2018), for which she was awarded the 2019 AIA Junior Book Prize, and of *The Discursive Construction of the Modern Political Self* (Routledge, 2022).

**Raul Albuquerque Paraná** is a pedagogic coordinator and educational consultant with Edify Education. He also serves as a guest professor in various postgraduate programmes in Brazil and collaborates with the Máster Interuniversitario en Enseñanza Bilingüe y Aprendizaje Integrado de Contenidos y Lenguas Extranjeras and the Online Masters in English Studies from the University of Jaén, Spain. He holds an MA from the University of Jyväskylä, Finland, and a BA from the Federal University of Bahia, Brazil. He focuses on CLIL-based education and is particularly interested in stakeholder perspectives, especially as they relate to CLIL conceptualisation, curriculum development, and equity.

**Juanita Argudo-Serrano** has a bachelor's degree in English teaching from Universidad del Azuay and a master's degree in English language and applied linguistics from Universidad de Cuenca, both in Ecuador. She holds a doctorate in education from Universidad Nacional

de la Plata, Argentina. She is a professor in the teacher-training programme at Universidad de Cuenca. Her research areas of interest are in-service and pre-service teachers' development and language evaluation.

**Darío Luis Banegas** is Lecturer in Language Education at the University of Edinburgh. He is involved in teacher associations in Latin America and Europe. He is a fellow of the Higher Education Academy and an associate fellow with the University of Warwick. His main research and teaching interests are CLIL, action research, social justice, and initial language teacher education. He has edited volumes with Bloomsbury, Multilingual Matters, and Palgrave on different aspects of language education.

**Silvia Bauer-Marschallinger** is Lecturer in English language teaching at the KPH Vienna/Krems and the University of Vienna, training pre-service primary and secondary teachers. Previously, she was a research fellow at the University of Vienna, where she was working on her PhD project, which addressed the issue of content and language integration in secondary history CLIL settings. Originally a teacher of English and history, her research interests include CLIL, language-aware history didactics, as well as language teaching and learning at primary and secondary level.

**Kim Bower** holds a Chair in Innovation in Languages Education at Sheffield Hallam University and is President of the Association for Language Learning. She is a Principal Fellow of the Higher Education Academy and received a National Teaching Fellowship for her leadership of curriculum innovation in language and teacher education. An experienced researcher in these fields, Kim leads an international network for CLIL in Anglophone countries. Her research focuses on bilingual education and motivation. Recent publications include *Curriculum Integrated Language Teaching: CLIL in Practice* (Cambridge University Press, 2020).

**Kathleen A. Corrales** is an assistant professor, researcher, and the Academic Coordinator of the Instituto de Idiomas at the Universidad del Norte, Colombia. She is an interdisciplinary scholar whose interests lie in the intersection of language teaching and learning, CLIL, internationalisation, development of international and intercultural competences, and global business communication. She has participated in research projects and has published articles and chapters in these areas.

**Do Coyle** is Chair in Language(s) Education and Classroom Pedagogies at the University of Edinburgh. She has worked tirelessly in the field of plurilingual education with governments and professional agencies but especially with CLIL teachers and learners across the world to co-construct critical plurilingual pedagogies that inspire principled, dynamic, and inclusive practices. Do's more recent work with the Graz Group has developed a Pluriliteracies approach to Teaching for Deeper Learning (PTDL) that explores ways of developing pluriliteracies across languages and cultures for all learners. Do heads the Scottish Alliance – a forum reconceptualising innovative 'learning spaces' that promote inclusive learning design where physical, social, and cognitive spaces meet.

**Liz Dale** is a senior lecturer and teacher educator for secondary and vocational education English and CLIL teachers. She is based in the Department of English at the Amsterdam University of Applied Sciences. Her recent research interests, carried out at the AUAS Centre

for Applied Research in Education, include the pedagogical and collaborative practices of language teachers in CLIL contexts and enhancing students in vocational education's use of their full plurilingual repertoire in their studies and future profession. Liz is the author of several teaching handbooks for CLIL. She is also a CLIL consultant and regularly chairs audit panels for the accreditation of bilingual schools in the Netherlands.

**Christiane Dalton-Puffer** is Professor of English Linguistics at the University of Vienna and one of the leading researchers internationally on content and language integrated learning. She is the author of *Discourse in Content and Language Integrated Learning (CLIL) Classrooms* (Benjamins, 2007), has edited books and journal issues on CLIL research, and has authored numerous articles in international journals. Her current research focuses on how teachers and students use language to express subject content and work towards curricular learning goals of specialist subjects.

**Emilia Di Martino** (Università Suor Orsola Benincasa) qualified for full professorship in English Language and Translation in 2019 and for Educational Linguistics in 2022. She is interested in a wide variety of topics, focusing on the nexus between identity, language, and power. Among her publications are *Celebrity Accents and Public Identity construction* (Routledge, 2019) and *Indexing 'Chav' on Social Media* (Palgrave Macmillan, 2022).

**Slobodanka Dimova** is an associate professor at the University of Copenhagen. Her research interests include language testing, English-medium instruction (EMI), and L2 speaking production. Her work appears in *TESOL Quarterly*, *Language Testing*, *English for Specific Purposes*, *Journal of English-Medium Instruction*, and *World Englishes*.

**Tammy Fajardo-Dack** has a bachelor's degree in English teaching from Universidad del Azuay and a master's degree in English language and applied linguistics from Universidad de Cuenca, both in Ecuador. She is a PhD in Language and Literacies Education from the University of Toronto. She is also a professor in the teacher-training programme at Universidad de Cuenca. Her research areas of interest are CLIL for pre-service teachers, teacher research in university education, communities of practice as a space for teacher professional development, and social theories of learning.

**Innocent Mbouya Fassé** is Associate Professor at the University of Douala. He is an applied sociolinguist and language educator whose scientific areas of interest include individual and societal bi-multilingualism issues, bi-multilingual education, foreign language education, including general pedagogic and didactic issues. He currently heads the Science of Education laboratory of ENSET Douala and the Translation Unit of the University of Douala. His research societies affiliations include RAIFFET, ACETELACH, and WAACLALS. He totals to his credit a dozen scientific articles, one book co-authored, scores of master's degrees dissertations supervised, and close to ten PhD candidates he is (co-)supervising. He is also an international academic mobility consultant.

**Fabiana Fazzi** is a postdoctoral researcher at the Department of Linguistics and Comparative Cultural Studies at Ca' Foscari University of Venice (Italy) and Adjunct Professor of English language and teaching in early years at the University of Bologna (Italy). Her main areas of interest include content and language integrated learning (CLIL), language learning beyond the classroom, multiliteracy and multimodal skills in the language classroom, teaching and

learning global issues in the language classroom, and teacher professional development. Her publications include several articles on CLIL in and beyond the classroom and on primary and secondary teachers' perceptions of content and language integration and pedagogical translanguaging in bilingual schools worldwide.

**Alberto Fernández-Costales** is Associate Professor in TESOL at the University of Oviedo (Spain). Among others, his research interests include content and language integrated learning, English-medium instruction, language attitudes, language teaching methodology, and didactic audiovisual translation. He serves as an associate editor of two international journals: *Perspectives: Studies in Translation Theory and Practice*, published by Taylor and Francis, and *Porta Linguarum*, published by the University of Granada.

**María del Pilar García Mayo** is Full Professor of English Language and Linguistics at the University of the Basque Country. She has published widely on the L2/L3 acquisition of English morphosyntax and the study of conversational interaction in English as a foreign language. She has been an invited speaker to universities in Europe, Asia, and North America and is an honorary consultant for the Shanghai Center for Research in English Language Education. Professor García Mayo is the director of the research group Language and Speech and the MA programme Language Acquisition in Multilingual Settings. She is the editor of *Language Teaching Research* and belongs to the editorial board of numerous journals, including *Language Teaching for Young Learners*.

**José Goris** studied educational sciences and English language and literature. She has been involved in teaching English as a Foreign Language at secondary schools and language institutes in the Netherlands. In 2019 she obtained a doctorate from Radboud University Nijmegen, Netherlands, for her study of divergent approaches to CLIL implementation and effects on target language learning in various European countries. Her research interests include sociolinguistic perspectives on the teaching of English as an international language, and good practice in content-based language teaching. At present she conducts research into CLIL learner profiles and the effects of CLIL education in later life.

**Chantal Hemmi** is Professor at the Center for Language Education and Research (CLER) at Sophia University. She worked for the British Council, Tokyo for 18 years, first as a teacher, trainer, and as Academic Director. She took the post at Sophia University in 2013 where she has been involved in the development of EAP, CLIL, and EMI courses at CLER. Her recent research interests are in critical thinking in CLIL classrooms. She is presently creating CLIL projects for the social inclusion of the unique international presence of children who lived abroad and are now living in Japan.

**Philippe Jose S. Hernandez** is an English language teacher in the University of Santo Tomas (UST), Manila, the Philippines, where he supervises pre-service teachers at the College of Education and the university's laboratory high school. His research interests include English language teachers' research experiences and pre-service training. As a university administrator, he leads UST's Communications Bureau as its Director.

**Laura Karabassova** gained her MA in Educational Leadership at the University of Warwick and PhD at Nazarbayev University Graduate School of Education. Her research spans both secondary school and higher education levels in Kazakhstan with a focus on trilingualism

and content and language integrated learning. Laura has extensive experience in the implementation of trilingual education in Kazakhstan as she has worked as a trilingual education specialist, ministry task force member, in-service teacher professional development programme administrator, CLIL trainer, researcher and university leader. Laura has published papers, books, and book chapters on issues related to trilingual education policy and practice.

**Joyce Kling** is a Senior Lecturer at Lund University. She publishes in the areas of English-medium instruction, teacher cognition, the international classroom, and language testing. Her work appears in *TESOL Quarterly*, *Journal of English-Medium Instruction*, as well as several edited volumes and monographs.

**Julia Landau** holds an MA in Language and Culture from the Federal University of Bahia (UFBA) and is a bilingual programme coordinator at the elementary school level. She focuses on CLIL-based education, the role of first language in second language acquisition, translanguaging practices, and critical perspectives in language education.

**Dongying Li** is currently Assistant Professor in the School of Foreign Languages and Cultures in Nanjing Normal University. Her research interests include second language writing and second language pedagogy.

**Ana Llinares** is Full Professor in the English department at the Universidad Autónoma de Madrid, Spain. She teaches second language acquisition and content and language integrated learning (CLIL), both at undergraduate and postgraduate levels. She coordinates the UAM-CLIL research group ([www.uam-clil.org](http://www.uam-clil.org)) and has published widely on CLIL at primary and secondary school levels, mainly applying systemic functional linguistic models. She has co-authored the book *The Roles of Language in CLIL* (Cambridge University Press, 2012) and has co-edited the volume *Applied Linguistics Perspectives on CLIL* (John Benjamins 2017). She has recently co-edited the special issue *Systemic Functional Linguistics: A Social-semiotic Approach to Content and Language Integrated Learning in Bilingual/Multilingual Education* in the *International Journal of Bilingual Education and Bilingualism*.

**Yuen Yi Lo** is Associate Professor at the Faculty of Education, University of Hong Kong. Her research interests include bilingual education, medium of instruction policy, professional development of teachers in content and language integrated learning (CLIL) and issues related to CLIL assessment. She has recently published *Professional Development of CLIL Teachers* (Springer, 2020).

**María Soledad Loutayf** is a teacher of English (Universidad Nacional de Tucumán, Argentina) and a sworn public translator (Universidad Católica de Salta, UCASal, Argentina). She holds a master's in Applied Linguistics from Universidad de Jaén, Spain, 2010, and a master's degree in Teaching English from the University of Warwick, UK (Hornby Scholar). She is a Fulbright scholar who participated in the Distinguished Fulbright Award for Teachers programme in 2012, USA. She is a member of research groups at UCASal, Universidad Nacional de Salta (UNSa), and Universidad Nacional de la Plata. She is an associate professor at UCASal and lecturer at UNSa. Her areas of research include: English for specific/academic purposes, intercultural education, digital literacy, 21st-century skills, and criticality. She has participated in seminars and conferences in Argentina and abroad.



*List of contributors*

**Karina Rose Mahan** (PhD) is an Associate Professor of Teaching English as a Second Language at the Norwegian University of Science and Technology (NTNU). Her current areas of research are CLIL, second language acquisition, scaffolding, observation, and mixed methods. She is currently leader of the research group Multidisciplinary Educational Research, based at NTNU.

**Jermaine S. McDougald** is Director of ELT Business Development at the International Center of Foreign Languages & Cultures, Universidad de La Sabana (Bogotá, Colombia), and is currently, the Liaison Officer and Co-Founder for TESOL Colombia. His research interest includes CLIL, teacher development, and bilingual and international education. He is a member of the research group LALETUS – Language Learning and Teaching, Universidad de La Sabana.

**Joanna McPake** is Reader in Education at the University of Strathclyde. Her research focuses on the learning and teaching of heritage languages.

**Tessa Mearns** began her CLIL career as a modern languages teacher in the UK, before moving into bilingual secondary education in the Netherlands. She is now a lecturer and teacher educator in the World Teachers Programme (WTP) at ICLON Leiden University Graduate School of Teaching. The WTP is a specialised bilingual track of the pre-service secondary Teaching Master aimed at nurturing linguistically and culturally aware teaching for bilingual and international education. Tessa's research and teaching interests include learner perspectives in bilingual education, subject-specific approaches to CLIL, teacher professional development, and equity, diversity, and inclusion in (teacher) education. She regularly chairs audit panels for the accreditation of bilingual schools, and is actively involved in organising CLIL events in the Netherlands and internationally.

**Marcella Menegale** works as a researcher in Educational Linguistics at the Department of Linguistics and Comparative Cultural Studies at Ca' Foscari University of Venice (Italy), where she teaches courses in foreign/second language learning and teaching. She directs the Laboratory of Foreign language teaching. Her main areas of interest are plurilingualism, content and language integrated learning, intercomprehension among related languages, and learner and teacher autonomy, topics on which she has published two monographs, several papers and book chapters. Her current projects include investigations on language teacher wellbeing and on multiliteracy-based approaches to language learning and teaching.

**Ruth Milla** is Assistant Professor at the Faculty of Education of Bilbao (University of the Basque Country), where she teaches undergraduate courses on foreign language and CLIL teaching and participates in innovative educational projects. She belongs to the research group Language and Speech and the results from her investigations have been presented at international conferences and published in prestigious journals such as *System*, *IJES*, *ISLA*, and *VIAL* and publishing houses such as Cambridge University Press and Multilingual Matters. Her research interests are oral and written corrective feedback, focus on form in foreign language classrooms, CLIL, teachers' and learners' beliefs, and teacher training.

**Josephine Moate** is Senior Lecturer in Bilingual and Multilingual Pedagogy and Docent in the Language of Education based at the Department of Teacher Education, University

### *List of contributors*

of Jyväskylä, Finland. Before moving to Finland Josephine qualified as a subject teacher of English and Religious Education and over her 25 years in Finland Josephine has taught in primary schools, high school and community colleges, adult and tertiary education. Josephine's research interests and publications address pre- and in-service teacher development, the role of language and culture in education, theorisations and modes of education. Josephine coordinates the JULIET programme, a programme specialised in foreign language education and CLIL/bilingual education for younger learners.

**Pat Moore** has been in English language teaching since the mid-1980s and in the Department of Languages and Translation at the Universidad Pablo de Olavide (Seville) since the early 2000s. Both her teaching and research revolve around bilingual education, from primary to tertiary levels, in the foreign language classroom and/or in CLIL, with pre- and in-service (foreign) language and content teachers and students. Her publications include articles, chapters, and co-edited collections in a range of international journals and books. As a researcher she has participated in numerous Spanish and international projects and has presented the findings of her research in conferences all over the world.

**Tom Morton** is Beatriz Galindo Distinguished Research Fellow at the Universidad Autónoma de Madrid, Spain, where he is a member of the UAM-CLIL Research Group. His research focuses mainly on classroom discourse and teacher knowledge and identity in CLIL, EMI, and TESOL. He is co-author of *The Roles of Language in CLIL* (Cambridge University Press, 2012), *Applied Linguistics Perspectives on CLIL* (John Benjamins, 2017) and *Social Interaction and English Language Teacher Identity* (Edinburgh University Press, 2018), and has published widely on CLIL and TESOL topics in leading applied linguistics and language education journals. He has participated in many funded research projects and is currently principal investigator on a project which investigates university EMI lecturers' knowledge-building practices.

**Nurziya Oralbayeva** gained her master's in multilingual education at Nazarbayev University Graduate School of Education. Her research interests include language policy, language planning, bi-/multilingualism, content and language integrated learning, communicative language teaching, and robot-assisted language learning. Currently, she is involved in a research project entitled CoWriting Kazakh: Learning a New Script with a Robot, investigating the innovative ways of teaching the new Latin-based Kazakh alphabet to young children using social humanoid robots, tablets, and traditional teaching approaches. Nurziya is particularly drawn to explore the effects of technological tools on early literacy development in bi-/multilinguals.

**María Luisa Pérez Cañado** is Full Professor at the Department of English Philology of the University of Jaén, Spain, where she is also Rector's Delegate for European Universities and Language Policy. Her work has appeared in more than 120 scholarly journals and edited volumes and she is also author or editor of 15 books on the interface of second language acquisition and second language teaching. She is currently coordinating the first intercollegiate MA degree on bilingual education and CLIL in Spain, as well as four European, national, and regional projects on attention to diversity in CLIL. She has also been granted the Ben Massey Award for the quality of her scholarly contributions regarding issues that make a difference in higher education.

**Paige M. Poole** is the Learning Director at Pangea Chat. Prior to her work at Pangea Chat, she was an English as a Foreign Language professor and programme coordinator for 11 years. She has led national and local-scale English language projects with the Ministerio de Educación Nacional in Colombia and with the Secretaría de Educación Distrital de Barranquilla. She holds an MA in TESOL Studies from the University of Leeds and has published on CLIL, materials design, global simulation, teacher development, and project-based learning. She is also interested in research related to intercultural and international competence development and international virtual exchanges.

**Melina Porto** holds an MA ELT (Essex University), a PhD in Sciences of Education (Universidad Nacional de La Plata, UNLP, Argentina), and a postdoctoral degree in Humanities and Social Sciences (Universidad de Buenos Aires, Argentina). She is a researcher at the National Research Council and Professor at UNLP (Argentina). She is Honorary Research Fellow at the University of East Anglia. Her research interests include intercultural language education, intercultural citizenship, pedagogies of discomfort, the arts in language education, service learning, and ethics.

**Anssi Roiha** works as a university lecturer in foreign language pedagogy at the Department of Teacher Education at the University of Turku, Finland where he trains pre-service teachers. His main research interests include CLIL, differentiation, and intercultural education.

**Yolanda Ruiz de Zarobe** is Full Professor of Applied Linguistics at the University of the Basque Country. Her research interests are in the acquisition of English as a third language, multilingualism, and content and language integrated learning. Her work has appeared in books, edited books and international journals. Her book *Content and Foreign Language Integrated Learning: Contributions to Multilingualism in European Contexts* (Peter Lang, 2011), co-edited with Juan Sierra and Francisco Gallardo del Puerto, received the Spanish Society for Applied Linguistics award for senior researchers. She is a member of the editorial board of several journals such as the *International Journal of Bilingual Education and Bilingualism*, *Journal of Immersion and Content-Based Language Education*, and *International Journal of Literacy, Culture and Language Education*.

**Xabier San Isidro** has an academic and professional background in policymaking and multilingualism, and has worked for a number of universities in Europe, the UK, and Central Asia. With an international PhD and the doctorate extraordinary award in Arts and Humanities from the University of the Basque Country, he now holds the post of Education Officer at the Directorate General of Bilingualism and Quality in Teaching for the Government of Madrid, which he combines with teaching, as an Invited Professor, at the intercollegiate MA degree on bilingual education and CLIL for the University of Jaén. Besides being an external assessor for Erasmus+, he has taken part in various EU-funded research projects. He is also the author of numerous scientific and pedagogic publications.

**Takanori Sato** is Associate Professor at the Center for Language Education and Research at Sophia University, Japan. He received his PhD in linguistics from the University of Melbourne in 2014 and has eight years of experience as a second language teacher and teacher educator in higher education in Japan. His research interests include second language assessment and English as a lingua franca. His recent research has examined the assessment of students' subject knowledge and critical thinking skills in CLIL. In particular, his main

interests lie in conceptualising this knowledge and these skills from the perspectives of subject and critical thinking specialists. His work has appeared in *Applied Linguistics*, *Language Testing*, *Journal of English as a Lingua Franca*, *Papers in Language Testing and Assessment*, and *Language Testing in Asia*.

**Sávio Siqueira** is Associate Professor at Bahia Federal University, Salvador, Brazil. He is a permanent professor at UFBA's Graduate Programme in Language and Culture and the Graduate Programme in Letters (Federal University of Tocantins, Brazil) where he supervises both MA and PhD candidates. He has conducted postdoctoral studies on critical language pedagogy at the University of Hawai'i at Manoa, Honolulu, HI, USA, and collaborates with the MA in Multilingualism, Linguistics, and Education from Goldsmiths University of London, UK, and the Máster Interuniversitario en Enseñanza Bilingüe y Aprendizaje Integrado de Contenidos y Lenguas Extranjeras from the University of Jaén, Spain. He is the leader of the nationally accredited research group ELFBrazil-UFBA.

**Bong-gi Sohn** is an instructor at the University of Winnipeg, Canada. Her research focuses on language, education, and migration, exploring international student mobilisation in higher education as well as multilingual/minority family language policy and practices. In her doctoral study, she elaborated how current scholarship on global chains of care and so-called feminised multilingual development explains the ways in which immigrant wives selectively move on to become bilingual workers in service of the host country's preparation for its global future. In her current work, focusing on the lived experience of international/multilingual students, she is advocating a critical discipline-specific content language integrated learning for plurilingual students and teachers.

**Liss Kerstin Sylvén** is Professor of Language Education at the University of Gothenburg. With a PhD in English linguistics, her research interests include various perspectives of computer assisted language learning, content and language integrated learning, second language vocabulary acquisition, motivation, individual differences, and extramural English. Apart from publishing in a variety of journals, Liss has co-authored *Extramural English in Teaching and Learning: From Theory to Practice* (with Pia Sundqvist, Palgrave Macmillan, 2016), and edited the volume *Investigating Content and Language Integrated Learning: Insights from Swedish High Schools* (Multilingual Matters, 2019).

**Alain Flaubert Takam** received his PhD in Linguistics from Dalhousie University, Canada. After teaching French and Linguistics in several Canadian universities, he moved to Alberta, Canada, where he is Associate Professor of French and Linguistics. In addition to teaching, Dr Takam has contributed to several academic journals as author, reviewer, and/or editor. Such journals include *Revue SudLangues*, *World Englishes*, *English Today*, *Canadian Journal of Native Studies*, *Journal of Education and Learning*, *International Journal of Evaluation of Research in Education*, *Language Policy Journal*, *The Canadian Modern Language Review*, and *International Journal of Applied Linguistics*. His research focuses on language planning and applied linguistics, contact linguistics, and socio-pragmatics.

**Veronico N. Tarrayo** is Associate Professor at the Department of English, Faculty of Arts and Letters of the University of Santo Tomas (UST), Manila, the Philippines. He is also a research associate at the UST Research Center for Social Sciences and Education. At present, he is a member of the international advisory board of the *Asian Journal of English Language*

*Studies*, and the editorial board of the *International Journal of TESOL Studies and Professional and Academic English*, the journal of the IATEFL English for Specific Purposes Special Interest Group. Among his research interests are stylistics, English language teaching (ELT), gender perspective in ELT, and teacher beliefs/ideologies.

**Gabriela Tavella** holds an MA in Professional Development for Language Education, Leeds Metropolitan University, UK and a Postgraduate Diploma in Education, University of East Anglia, UK. She is an ESP lecturer, director of a research team at Facultad de Lenguas (FADEL), Universidad Nacional del Comahue, and member of a research team at Facultad de Humanidades y Ciencias de la Educación, Universidad Nacional de La Plata. She is also Professor at the master's programme from FADEL, UNCo, as well as coordinator of professional development sessions, and a regular presenter at national and international conferences. Formerly she was Vice-President of Federación Argentina de Asociaciones de Profesores de Inglés. She is a reviewer for academic journals and member of the *Argentinian Journal of Applied Linguistics* editorial board. Her research interests are intercultural citizenship, CLIL, ESP, language methodology, and individual differences in language learning. She has published research articles, reflective pieces, and book chapters.

**Keiko Tsuchiya** is Associate Professor at the Graduate School of Urban Social and Cultural Studies, Yokohama City University. Her research interest includes multimodal analysis of team interactions in healthcare settings and language education in Japanese contexts, i.e., English as a lingua franca and content and language integrated learning. She has recently edited the two volumes *Content and Language Integrated Learning in Spanish and Japanese Contexts* (with María Dolores Pérez-Murillo, Palgrave, 2019) and *English as a Lingua Franca in Japan: Towards Multilingual Practices* (with Mayu Konakahara, Palgrave, 2020).

**Evelyn van Kampen** obtained her PhD focusing on CLIL pedagogies from the Leiden University Graduate School of Teaching. She is currently a lecturer in the European Studies programme at The Hague University of Applied Sciences. Evelyn's research and teaching interests include exploring how theoretical insights related to (CLIL) pedagogies are and can best be applied in various bilingual and international educational settings.

**Sotiria Varis** is a postdoctoral grant researcher in the Faculty of Education at University of Jyväskylä, Finland. Her research interests involve professional identity and emotions in the fields of CLIL, language teacher education, doctoral training, and higher education.

**Wenhsien Yang** received his doctorate in Teaching English as a Foreign Language from the University of Exeter, the UK. He currently is Full Professor of the Department of Applied English and the Dean of the International College at National Kaohsiung University of Hospitality and Tourism, Taiwan. His main teaching and research interests include English for specific purposes, content and language integrated learning, English as a medium of instruction, and bilingual education.

**Limin Yuan** is currently a PhD student at the University of Glasgow. Her research interests include content and language integrated learning, intercultural communication, and English language education. She has presented her research at international conferences including AERA, ISLS, and EAC.

*List of contributors*

**Sandra Zappa-Hollman** is Associate Professor in the Faculty of Education at the University of British Columbia, Canada, and Director of Academic English at UBC's Vantage College. Her research examines processes of language and literacy socialisation of multilingual English language post-secondary students, including the perspectives of faculty members working with diverse student populations. Her work also aims to shed light on questions and issues concerning curricular and pedagogical approaches that support culturally and linguistically responsive teaching.

# CLIL IN ECUADOR

*Juanita Argudo, Tammy Fajardo-Dack and Mónica Abad*

## Introduction

Content and language integrated learning (CLIL) involves the interplay of three core dimensions: content, language, and procedures or skills, in which both the conceptual content and linguistic content are considered vehicles for the development of cognitive skills or competences, which are contained in the procedural content (Ball et al., 2015). In CLIL, it cannot be assumed that learners already have the necessary language skills to learn subject content. In fact, learners need to develop these language skills through explicit teaching, which consists of making learners aware of the type of language they need in order to perform a task as well as supporting learners when producing that type of language (Ball et al., 2015). In order to achieve a systematic integration of language and content that contributes to the development of CLIL pedagogies, Coyle (2007) developed the 4Cs Framework that integrates ‘content (subject matter), communication (language), cognition (learning and thinking), and culture (social awareness of self and “otherness”)’ as a complex relationship (p. 550).

Due to the substantial benefits that learners can reap from CLIL such as enhanced motivation, higher levels of cognitive engagement and related cognitive development, enhanced communication skill development, deeper language progress, meaningful interaction, and intercultural awareness, among others (Dale & Tanner, 2012), CLIL has expanded rapidly, especially in Europe and Latin America. Empirical studies have focused mainly on teachers’ and learners’ beliefs (Corrales et al., 2016), pedagogy (McDougald, 2018), teacher education (Banegas & del Pozo Beamud, 2022), global citizenship (Porto, 2016), and language development (Torres Martinez, 2013); nevertheless, data-driven studies that show how CLIL has been operationalised in Latin America are scant (Banegas et al., 2020), Ecuador being no exception to this reality. This chapter reviews the current status of research in CLIL in the Ecuadorian context.

## Context

According to the Ecuadorian Ministry of Education (Ministerio de Educación del Ecuador, 2016), taking EFL classes in all educational levels is mandatory and is based on the canons of

the Common European Framework of Reference for Languages (CEFR). Although students are expected to reach a B1 proficiency level when finishing high school, they are far from meeting this requirement, as shown in the Education First (EF) index (2020), which ranks Ecuador in position 93 out of 100 countries and in the last position out of 19 countries in Latin America. Some have speculated that these results could be the consequence of the insufficient number of English teachers and low proficiency levels of some of the in-service teachers. In order to address this identified need to improve English as a foreign language (EFL) teaching and learning, as of 2016 the Ecuadorian educational authorities have implemented CLIL in the national English curriculum with the goal of enhancing students' English learning through the use of CLIL pedagogies (Ministerio de Educación del Ecuador, 2016, 2019a). Similarly, in higher education, CLIL has been used in some undergraduate programmes such as EFL teaching, international relations, and tourism for teaching subject matters. However, despite these key recent changes in Ecuadorian education, very few studies on CLIL implementation and its effects have been published. In this paper, we address this issue and aim to make a contribution by summarising the state-of-the-art research conducted on CLIL implementations in Ecuador. Through this analysis, our aim is to examine the literature and present here how CLIL has been operationalised and implemented in Ecuadorian educational settings and help to determine trends and omissions, which can contribute to improve and advance research in this area. The chapter begins with a review of the research methodologies used in the corpus of studies examined; it then focuses on factors that seem to have either contributed to or hindered CLIL implementation in Ecuador, and in the last section, we report on findings about the effects of CLIL on language and cognitive development.

### The review

For this review, a literature search was conducted in order to identify and analyse how teachers and researchers have implemented CLIL in Ecuador since it was adopted in 2016. For this purpose, the following criteria for selecting the studies were considered: The studies had to be conducted in Ecuador; only peer reviewed publications were selected to ensure only high-quality research was included. In addition, as the focus of this chapter is on empirical studies, this was also a criterion for inclusion in our corpus of articles on CLIL studies that were carried out in Ecuador.

Our search was conducted by accessing several academic databases. The search terms, keywords, and phrases in their various combinations were the following: (1) CLIL in Ecuador; (2) language development; (3) content development (4) cognitive skills; (5) language learning; and (6) content learning. The search was done for research articles in Spanish and English published since 2016 as this is the year the government included CLIL in the curriculum. Our search strategy also specifically included publication venues that focus on research in Latin American, such as *Latin American Journal of Content and Language Integrated Learning (LACLIL)*, *Revista Pertinencia Académica*, *Revista Boletín Redipe*, *Ciencia Digital*, among others. After a thorough search, only eight articles reporting on empirical studies conducted in the Ecuadorian context meeting all our search criteria were found: Andrade Mendoza et al. (2020), Argudo et al. (2018), Benalcázar-Bermeo and Ortega-Auquilla (2019), Dahik Solis et al. (2017), Ortega-Auquilla et al. (2021), Palma (2020), Recino et al. (2019), and Vega and Moscoso (2019).

We analysed each of the eight studies following these categories: (1) the research methodology used for the study; (2) the factors that enhance and hinder the application of CLIL



in educational contexts; and (3) the learners' development of language and cognitive skills. This process followed the two coding levels described by Creswell (2014); in other words, a holistic procedure to organise information into categories and a thematic analysis to look for issues that responded to the purpose of the analysis (Wolcott, 1994 as cited in Creswell, 2014). After the first round of coding, there was a comparison process to solve any disagreements among the three researchers/authors of this chapter.

### ***On research methods and contexts***

Educational research provides teachers with the essential tools to analyse and make important and necessary decisions about how to improve their teaching methodologies (Mertens, 2015). In this regard, examining the different research methodologies used by Ecuadorian EFL teachers and researchers to carry out studies on the implementation of CLIL can contribute to shed light on the current situation to upgrade the use of this approach, which can also bring about positive effects on students' performance.

### ***Participants and setting***

Both a wide age range and various levels of education and occupation of participants were found in the different studies, including primary and secondary school students (Andrade Mendoza et al., 2020; Benalcázar-Bermeo & Ortega-Auquilla, 2019), university students (Dahik Solis et al., 2017; Ortega-Auquilla et al., 2021; Vega & Moscoso, 2019), EFL student teachers (Argudo et al., 2018; Recino et al., 2019), and EFL teachers (Andrade Mendoza et al., 2020; Palma, 2020). The majority of studies were carried out with high school students, probably because of the requirement to follow this approach in the national curriculum. Most of the studies were conducted in public institutions and only two studies in private settings (Andrade Mendoza et al., 2020; Vega & Moscoso, 2019).

The studies were carried out in the following cities of Ecuador: Cuenca (Argudo et al., 2018; Benalcázar-Bermeo & Ortega-Auquilla, 2019; Vega & Moscoso, 2019), Azogues (Ortega-Auquilla, et al., 2021; Recino et al., 2019), Ambato (Andrade Mendoza et al., 2020), Babahoyo (Dahik Solis et al., 2017), and Manta (Palma, 2020). It is worth mentioning that no studies were found in the most populated cities in Ecuador (Quito and Guayaquil) nor in any rural setting.

### ***Research design***

Different types of research designs were used: descriptive, quasi-experimental, exploratory, and non-experimental. For example, Dahik Solis et al. (2017) worked with both a control and an experimental group, which were not selected randomly; thus, a quasi-experimental study (Creswell, 2014) was adopted. Recino et al. (2019) used a qualitative approach while Benalcázar-Bermeo and Ortega-Auquilla (2019) and Vega and Moscoso (2019) used a mixed-method approach; nevertheless, these papers can be also classified into action research studies as the authors implemented the CLIL approach in their classes with their own students.

Benalcázar-Bermeo and Ortega-Auquilla (2019) and Ortega-Auquilla et al. (2021) used a mixed-method approach. In the case of Benalcázar-Bermeo and Ortega-Auquilla (2019) and Ortega-Auquilla et al. (2021), the data obtained was analysed by using a quantitative approach. However, the research approach chosen depends more on the researchers' method of data analysis than on the approach of data collection (Eyisi, 2016); therefore, even though

data was obtained with a qualitative instrument, these studies may be considered to be quantitative because they were analysed using a quantitative approach. Some authors also employed only a quantitative approach to draw their conclusions (Argudo et al., 2018; Palma, 2020).

As can be observed, mixed methods seem to be the preferred approach; nonetheless, the most common data analysis approach is quantitative, making the latter the most common one in the Ecuadorian CLIL studies. Additionally, the action research methodology was identified (Andrade Mendoza et al., 2020; Benalcázar-Bermeo & Ortega-Auquilla, 2019; Dahik Solis et al., 2017; Ortega-Auquilla et al., 2021; Recino et al., 2019; Vega & Moscoso, 2019); nevertheless, none of the researchers reported considering students' needs to plan their classes. According to Ball et al. (2015), identifying students' language needs is a step that has to be taken into account when implementing CLIL in order to plan strategic class activities to teach the content, considering that students learn more effectively when they have to produce spoken and written language and personalise the learned material.

### Instruments

A variety of instruments were used to collect the data in the studies. The most common instruments applied were either a questionnaire or a survey (Andrade Mendoza et al., 2020; Argudo et al., 2018; Benalcázar-Bermeo & Ortega-Auquilla, 2019; Ortega-Auquilla et al., 2021; Palma, 2020; Vega & Moscoso, 2019). Vega and Moscoso (2019) made the participants complete the survey after the intervention; however, this instrument was not used with their control group. It would have been interesting to make students in the control group, who were taught through English for specific purposes (ESP), complete the survey to compare answers. Another important aspect to consider is the fact that some studies asked students about their knowledge of CLIL (Andrade Mendoza et al., 2020; Benalcázar-Bermeo & Ortega-Auquilla, 2019; Vega & Moscoso, 2019); however, students do not need to be aware of the specific methodological features the teacher uses in class, and it is not necessary to ask them about these issues (Dörnyei, 2003).

Another common instrument used to collect data was a test, either a placement test (Argudo et al., 2018), a proficiency test (Vega & Moscoso, 2019), or a pre- and post-test (Benalcázar-Bermeo & Ortega-Auquilla, 2019). In addition, other sources of information to evaluate students' language proficiency level were also used, such as the analysis and evaluation of written assignments (Argudo et al., 2018; Dahik Solis et al., 2017) and the evaluation of oral production through dramatisation (Dahik Solis et al., 2017). As Creswell (2014) states, researchers need to be careful when working in the different stages of the experiment since measuring the variables incorrectly could threaten the statistical conclusion validity; however, in Dahik Solis et al.'s (2017) study, these authors compared data collected by using an instrument with one group (written text) and a different instrument with the other (oral production), which compromises the validity of the study.

It was also found that *in situ* observations were used in some research studies (Andrade Mendoza et al., 2020; Dahik Solis et al., 2017); however, information about the observation protocols as well as the implementation of the CLIL approach was not provided. Crucial details about the procedures, materials, tasks, language scaffolding, and activities used when implementing the CLIL approach were not found in the studies, which constitutes a research pitfall since as stated by Block and Kuckertz (2018), a complete and detailed description of the procedures used is necessary in the case of a future replication study. This omission may have happened due to teachers' lack of knowledge about the CLIL approach and the duties

that CLIL teachers need to fulfil (Andrade Mendoza et al., 2020; Dahik Solis et al., 2017; Palma, 2020).

From the above analysis it could be said that training in research protocols is crucial for Ecuadorian CLIL researchers if reliable findings are to be achieved. In the same vein, training in the CLIL approach seems urgent to improve teaching practices and reach the learning outcomes determined by the Ecuadorian educational authorities.

### ***Influential factors***

Although none of the research articles set out to directly examine factors that can enhance or hinder the application of CLIL, they were determined based on the analysis of their research contexts and results.

Regarding the factors that can promote CLIL implementation, two main categories were identified: *curriculum requirement* and *motivation and attitude*. The first category refers to the fact that CLIL has been endorsed by educational policies, which can foster its implementation since the sustainability of a programme is more likely to occur when education authorities support it (Ball et al., 2015). In this light, the studies carried out in high school contexts mention CLIL as a curriculum core principle (Andrade Mendoza et al., 2020; Benalcázar-Bermeo & Ortega-Auquilla, 2019; Palma, 2020). In fact, since 2016, the Ecuadorian national English curriculum has enforced the use of a language-driven CLIL approach, in which language and language use are more emphasised than content knowledge, and the development of content, communication, cognition, and culture are highlighted as well (Ministerio de Educación del Ecuador, 2016). Furthermore, in university contexts, Recino et al. (2019) indicated that CLIL is the pedagogical approach to teach subjects in English at the EFL teaching major, while Argudo et al. (2018) reported that, even though CLIL is not established as the approach to teach at the EFL teaching programme, a content-led approach, *hard* CLIL (Ball et al., 2015), has been used for many years for teaching most of the subject matters. As can be seen, the CLIL approach has engaged the attention of Ecuadorian educational authorities, EFL teachers, and researchers at the three levels of education: primary, secondary, and university, which can contribute to advance research in this area, which, according to Banegas (2022), is still exiguous in South America.

The *motivation and attitude* category subsumes positive learners' perceptions towards the CLIL approach, which can positively influence its implementation. For instance, enthusiasm when doing tasks (Benalcázar-Bermeo & Ortega-Auquilla, 2019), stress release, more confidence, and class participation (Ortega-Auquilla et al., 2021) have been reported. Likewise, Vega and Moscoso (2019) pointed out that learners perceived that learning through CLIL was easier since they did not have to take grammar and vocabulary quizzes, and thus, had more time to focus on the content, which demands more effort. As a consequence, the learners reported they were more engaged in learning since meaningful content related to their future careers was used instead of the tedious textbook. These findings are in line with the view that authenticity of tasks, materials, content, and communication in the target language as well as their direct connection with the learners' interests promote learner motivation (Fazzi & Lasagabaster, 2020). On the other hand, concerning the factors that can hinder CLIL implementation, three categories were identified: *low English proficiency level*, *insufficient CLIL knowledge*, and *time-consuming lesson planning*.

Regarding *low English proficiency level*, some studies acknowledge that both learners' and teachers' low English proficiency can be an obstacle when learning and teaching through

CLIL. For instance, Vega and Moscoso (2019) found that some low English proficient learners admitted that their self-assessed low English level hampered content understanding and comprehension, so they did not perceive they benefited from CLIL. In fact, one student in the CLIL group even wished to have taken some grammar lessons, which shows that these low English proficient students did not perceive the value of not having to learn grammar in CLIL classes, since their lack of grammar knowledge hindered content understanding. This finding supports the need of a threshold level of proficiency for taking CLIL lessons (Ball et al., 2015). Nevertheless, it is not clear whether the learners' low proficiency level or the lack of scaffolding, since nothing is mentioned about language scaffolding in Vega and Moscoso's (2019) study, are to be blamed for the lack of understanding. In relation to scaffolding language development, Mariño (2014) noted that without the provision of language-focused tasks that make the language prominent, the student participants' accuracy and academic vocabulary did not improve in a content-driven CLIL class in Colombia.

Concerning teachers' L2 proficiency, Palma (2020) pointed out that the majority of the EFL teacher participants do not meet the national standard English proficiency level (B2), while Argudo et al. (2018) reported that the majority of the student teachers exhibit A1 and A2 English proficiency levels, and even some seventh-semester students, A1 minus and A1. This fact is a hurdle for CLIL implementation since, as stated by Ball et al., (2015), even though teachers' CLIL pedagogical ability has been given more importance than teachers' proficiency level, a teacher at A1 or A2 levels is very unlikely to teach CLIL in a meaningful way.

The next category, *insufficient CLIL knowledge*, encompasses the lack of CLIL knowledge and training as well as some omissions found in relation to CLIL practice. Some studies reported EFL teachers' lack of CLIL knowledge (Andrade Mendoza et al., 2020; Palma, 2020). Palma (2020) indicated that the majority of EFL teachers have none or little knowledge of CLIL and that only 10% of the teachers have received CLIL training. As mentioned below, methodological awareness is crucial for CLIL teachers to the extent that it can compensate for the lack of linguistic competence (Ball et al., 2015). Consequently, CLIL programmes will not succeed without the provision of enough training for teachers.

Some omissions were identified in the studies. For instance, Benalcázar-Bermeo and Ortega-Auquilla (2019) affirmed that in the high school where their study was conducted 'students are not being exposed to an authentic CLIL approach' because 'there is a greater focus on the knowledge of content than [on] language use' (p.122–123). However, the Ecuadorian English curriculum guidelines recommend the use of soft CLIL (which is language-driven), and thus, the mandatory resources feature this principle (Ministerio de Educación del Ecuador, 2019b). Therefore, it is not clear if the EFL teachers at this high school decided not to use the national textbooks and developed their own resources. If that was the case, it is also unclear what teaching approach and resources they implemented instead, and how they differed from the 'authentic' CLIL approach that the authors claimed was used for their study. Another missing aspect that most of the studies feature is related to language scaffolding, which, according to Ball et al. (2015), is a crucial factor in CLIL and thus, CLIL teachers have to make the language prominent and explicit and provide learners with the necessary scaffolding when speaking and writing. However, the studies do not specify how language was made salient and how language scaffolding was offered (Andrade Mendoza et al., 2020; Benalcázar-Bermeo & Ortega-Auquilla, 2019; Dahik Solis et al., 2017; Ortega-Auquilla et al., 2021; Recino et al., 2019; Vega & Moscoso, 2019).

Lastly, some studies stress the category of time-consuming *lesson planning* because they indicate that teaching through CLIL demands more preparation, and thus, more planning

time (Palma, 2020; Vega & Moscoso, 2019). In the words of Palma (2020), the majority of EFL teachers are reluctant to content teaching since they believe that the lack of resources would force them to spend more time to design materials and plan lessons; besides, they perceive school authorities do not realise the extra effort needed for teaching CLIL. These findings are similar to the ones reported by González and Barbero (2013) in which CLIL teachers in Spain expressed their dissatisfaction about their excessive workload and responsibilities which did not positively affect their wages in comparison to the non-CLIL teachers. Accordingly, it can be said that Ecuadorian educational authorities interested in CLIL have just made schools adopt this approach without realising the extra burden it entails for teachers. As Banegas (2022) wonders, how fair is it 'to expect quality CLIL provision by increasing the pressure on EFL teachers' workload and duties without professional support or improvement of working conditions?' (p. 384).

### ***The development of language and cognitive skills***

#### *Language skills*

Focusing on language in CLIL involves making an interaction between basic interpersonal communication skills (BICS) and cognitive academic language proficiency (CALP) in terms of grammar, vocabulary, discourse markers, thinking skills, and the four language skills (Ball et al., 2015). Cummins (2008) argues that while BICS could be practised and developed in one to two years through social interaction, CALP might take up to seven years to fully develop, and it needs to be instructed with suitable methods and techniques to allow students to complete context-reduced communication tasks positively. It is necessary to highlight that CALP is a requisite to use language in the cognitively demanding tasks of context-reduced academic situations where higher-order thinking skills (HOTS) are needed (Baker, 2006). It is also imperative to provide students with the necessary contextual and extensive instructional scaffolding (Ball et al., 2015; Chamot, 2009); in the words of Cummins (2008),

the construct of academic language proficiency refers not to any absolute notion of expertise in language but to the degree to which an individual has access to and expertise in understanding and using the specific kind of language that is employed in educational contexts and is required to complete academic tasks. Thus, in the context of schooling, discussions of greater or lesser degrees of language proficiency or adequacy of an individual's proficiency refer only to the extent to which the individual's language proficiency (CALP) is functional within the context of typical academic tasks and activities.

*Cummins, 2008, p. 67*

Therefore, practising the language in CLIL should involve principles such as (1) mediating language between the learner and the subject knowledge; (2) developing awareness of the language of the subject; (3) planning with language in mind; (4) making academic language explicit; and (5) sequencing language practice activities from personal oral expression, in groups, in plenary, to finally reach written production.

CLIL research in Ecuador has given special attention to the study of how language skills are developed and/or improved; however, it seems that teachers and researchers have taken for granted that learners can listen, speak, read, or write fluently in the target language, and have not provided, or at least it is not shown in the studies, the language support needed

while learning the new content (Benalcázar-Bermeo & Ortega-Auquilla, 2019; Dahik Solis et al., 2017; Recino et al., 2019; Vega & Moscoso, 2019), which, as aforementioned, must be done through explicit instruction (Ball et al., 2015; Chamot, 2009; Cummins, 2008).

The main concern thus seems to be methodological as the researchers do not provide enough information about the teaching dimension of the study. For instance, the quasi-experimental study conducted by Vega and Moscoso (2019), which collected data through tests and interviews, portrays a minimal improvement, in fact not significant, in language proficiency when direct grammar instruction was provided only to university students in a non-CLIL versus a CLIL group. Both groups were taught content in tourism through the use of the same coursebook; while the CLIL group received instruction with a focus on content, the non-CLIL group was an English for specific purposes (ESP) course that emphasised vocabulary and language functions. The authors report that participants in the CLIL group felt their oral production, vocabulary, and reading and listening comprehension improved. However, even though language production, oral and written, should be scaffolded, and encouraged as a sequence (Ball et al., 2015), there is no evidence of how the researchers provided scaffolding or made language salient to achieve oral or written production. Similarly, Benalcázar-Bermeo and Ortega-Auquilla (2019) sought to examine the impact of CLIL in oral production through a mixed-methods study conducted in an Ecuadorian university. From pre- and post-tests and surveys, gains in oral production were found; however, as procedures, materials, tasks, and activities they used to provide strategic and planned language scaffolding – which according to Ball et al. (2015) is imperative – were not presented nor explained, the reported gains could have happened as a result of instructing students with any language teaching approach.

Another example is that of Dahik Solis et al. (2017) who conducted an action-research study in which they compared the results of using the Direct Method and CLIL for developing reading skills. The participants were two groups of students of a language centre at a tertiary education institution. Through observing participants during the development of tasks, researchers collected and analysed data, reporting findings that students in the CLIL group outperformed students in the Direct Method group when expressing sentences and phrases more clearly, applying the vocabulary of the course content, answering comprehension questions about the content correctly, and improving their reading comprehension skills; nonetheless, the process followed to apply CLIL and provide language support is not explained. While the researchers reported that the results were positive, favouring CLIL as a potential approach to foster reading comprehension skills, it is necessary to acknowledge certain omissions in the design, data collection, and data analysis stages of the study which could have influenced the reported findings. It is mentioned in the article that 30 students participated in the group instructed by CLIL, but it is not made explicit how many students were in the group taught using the Direct Method. Even though the study sought to analyse and communicate positive results regarding the impact of CLIL and the Direct Method on reading comprehension, the researchers did not assess this skill; instead, they evaluated speaking in the CLIL group and writing in the Direct Method one. While learners in the latter had to write a paragraph at the end of the intervention, which rather is the last stage in CLIL to develop CALP (Ball et al., 2015), the group taught by CLIL had to perform a dramatisation based on the content of the reading activities. The comparison made between two different tasks completed by the two groups after the treatments, producing written and spoken texts respectively, could have had a major effect on the results obtained.

Correspondingly, another action research study interestingly performed three cycles to analyse the use of CLIL in the training process of language teachers (Recino et al., 2019).

Each application phase implemented different CLIL frameworks. The first integrated Coyle's (2007) 4Cs Framework; the second phase applied the 5Cs framework of Attard et al. (2014) which integrates content, communication, cognition, community, and competence. During the third phase of the study, the researchers introduced five essential elements of CLIL also proposed by Attard et al. (2014): scaffolding, learner autonomy, interaction, evaluation, and scenario to complete the methodological tool. The analysis of the data collected through classroom observations confirmed the development of linguistic skills and the enhancement of their communicative competence; however, it is not clear how the CLIL process took place and how the language gains were measured.

Studies drawn on the perceptions of students toward the use of CLIL for improving overall language proficiency are found in the published CLIL research in Ecuador. For example, in a study conducted with 171 university students from four different undergraduate education programmes (Ortega-Auquilla et al., 2021), participants' self-reported reflections showed that their English proficiency level improved when content subjects were used as vehicles for learning. Notwithstanding, learners report a feeling of language proficiency improvement, only perceptions about reading and listening skills are observed when the objective of CLIL is to practise the language through oral activities to ultimately achieve written production (Ball et al., 2015). These student teachers also expressed that learning English through content subjects improves their language and course content learning, their in-service performance, and their academic opportunities to pursue graduate degrees.

Furthermore, in a survey-based study with ten English teachers of a public school, Palma (2020) aimed at determining participants' knowledge and understanding of CLIL. After measuring teachers' answers by means of a Likert scale, findings illustrated the lack of knowledge participants had of the basic features and principles of CLIL and the guiding role teachers have in helping students respond to the demands of input and the development of the skills necessary to complete a task in the target language, which, according to Palma (2020), results in the infrequent implementation of CLIL in Ecuadorian classrooms. Conversely, some studies reported participants' positive perceptions (Andrade Mendoza et al., 2020; Argudo et al., 2018) regarding the development of content, communication, cognition, and culture through the English language (Andrade Mendoza et al., 2020). In Andrade Mendoza et al. (2020), participants (students and teachers) mentioned they felt motivated to learn and teach, respectively, through the CLIL approach. Furthermore, Argudo et al. (2018) reported that even though participants felt they were not developing the language at the same time as content, they were 'acquiring the necessary subject knowledge' (p. 82).

### *Cognitive skills*

CLIL programmes are effective for learning content and improving language proficiency, bearing in mind that language and content are vehicles for acquiring abilities in the target language and developing thinking skills (Ball et al., 2015; Cummins, 2013), especially HOTS. Ball et al. (2015) state that the interplay between the three dimensions of CLIL, concepts, procedures, and language, allow students to understand content by doing something and using language as a tool.

As with language proficiency, it cannot be assumed that thinking skills develop automatically through CLIL; instead, tasks and activities that engage the use of lower- and higher-order thinking skills are needed. Another assumption that needs to be deconstructed regarding the development of thinking skills in the L2 is that learners, due to their inter-language, will not be able to use HOTS and therefore cognitive demanding tasks have to

be modified (Ball et al., 2015). Therefore, teachers' guiding role becomes crucial to train students 'to use problem solving skills, to engage them interculturally, to develop their sense of initiative, and to ground them in an awareness of the ethical consequences of their action' (Ball et al., 2015, p. 32); in other words, to help them increase their range of thinking to expand their range of language (Ball et al., 2015).

Banegas (2022) stated that CLIL research in South America fails to describe how thinking skills (LOTS and HOTS) are developed, and in the specific case of Ecuador, this tendency is not different as the studies analysed highlight the importance of content and thinking skills, but do not provide information about processes where scaffolding and taxonomy are used to progress from LOTS to HOTS (Bruno & Checchetti, 2015; Kusuma et al., 2017).

For instance, Argudo et al. (2018) discuss that most of the learners in their study somehow developed HOTS throughout the undergraduate programme; however, there were students who had difficulties when examining and breaking information into pieces, identifying causes and effects, making inferences, analysing, evaluating, and creating. These challenges that students faced show that teachers might not be using suitable and enough learning strategies to foster in students the use or development of HOTS (Bruno & Checchetti, 2015), which can predict academic success or failure.

Andrade Mendoza et al. (2020) and Recino et al. (2019) agree that content courses can help students improve language and cognitive skills. For instance, during the second action research cycle of Recino et al.'s (2019) study, it was observed that as student teachers learned the content of the mainstream subjects of their teaching programme, they integrated language skills with higher-order thinking skills while explaining, diagnosing, and evaluating what they observed in their practicum teaching framed within the content of the courses. However, the study does not provide detailed information on the process of developing HOTS.

In regards to cognitive development, the perceptions of participants have been of the interest of CLIL researchers. The conclusions provided in the study conducted by Ortega-Auquilla et al. (2021) relied on the students' self-reflections about learning language and content in their mainstream courses. These students report they felt content courses had positive effects and influence on their academic training, critical thinking, and cognition. Similarly, Palma (2020) draws on teachers' perceptions to acknowledge that a reduced number of teachers use activities that involve discussions, projects, and problem-solving. The majority of her participants do not spend enough time on developing students' thinking skills. These findings are similar to those reported by Savić (2012) who discussed that teachers were not ready to implement CLIL as they lack experience or interest in 'applying appropriate pedagogical practices involving problem-solving, negotiations, discussions and classroom management'. As it was aforementioned, the development of cognitive skills in CLIL in Ecuador has been scarcely analysed which suggests that it may be neglected in teaching pedagogical practices and research.

## Conclusions and implications

The aim of this chapter was to provide a state-of-the art review on how CLIL has been implemented and researched in Ecuador. One of our goals was to identify trends in implementation as well as in the types of studies conducted; we also aimed to identify omissions, gaps, and aspects that require investigation. Despite the small number of published and available empirical studies, this research synthesis sought to raise critical understanding of the issues within Ecuadorian classrooms where content and language are being taught, which



could lead to informed actions being taken to benefit student populations with the many advantages this approach could offer.

CLIL has gained prominence at all educational levels in this country as it is one of the core principles of the Ecuadorian curriculum for the teaching of EFL in schools and high schools (Ministerio de Educación, 2019a). Some research on the implementation of CLIL has been conducted reporting, among other positive effects, the optimistic views of researchers, teachers, and students about the benefits it could bring to learning the language. However, information about the procedures that the studies that implemented CLIL in classrooms followed were not detailed; this might constitute a starting point for conducting further studies in the area of CLIL research and practice at the primary, secondary, and higher educational levels in the country.

Even though CLIL has been implemented and studied in most of the educational levels in Ecuador, research studies conducted with elementary school students were not found. It is clear that this area needs to be explored in order to have a thorough understanding of CLIL implementation and face the challenges the use of this approach involves. According to Mertens (2015), conducting research at all educational and psychological levels can help to enhance the comprehension and management of any situation under study.

As for the implications, they are presented in this section at two levels: (1) practice and (2) research, which should not be treated as two entirely separate activities, because when creating a link between them teaching practices are enhanced, a research culture is strengthened, and students' learning experience is improved.

At the practice level, the basic conditions needed for any (language) teaching experience to succeed should be (re)considered and given its due importance. First, the English language has to be practised by teachers to keep or even achieve higher proficiency levels to prevent hurdles when trying to teach CLIL in meaningful ways. Second, the lack of teacher training in regards to CLIL theory and practice was a common thread in all the studies. It is a responsibility of the Ecuadorian Ministry of Education to offer ongoing training, with special emphasis on scaffolding, activities to develop thinking, and assessment, if teachers are expected to adopt and successfully implement this new approach, still unknown by many practitioners. In the same light, there is an urgent need for support at the national and institutional level. National educational authorities should support the implementation of CLIL by providing teachers with the resources and material required to teach CLIL lessons, or at least offer assistance for creating such material to somehow ameliorate the time-consuming task it represents. Third, EFL teaching programmes for pre-service teachers ought to undertake curriculum updates to include CLIL as one of their essential courses to work in accordance with what the Ministry of Education expects from future English teachers.

At the research level, it is evident, by the reduced number of published studies found, that teachers and researchers should be encouraged to closely observe and examine what is happening in English classrooms, where CLIL is supposed to be the main teaching approach according to the language teaching policies in the country. Through the analysis conducted, gaps in the literature and, as a result, opportunities for future research were identified. Several aspects of language and content acquisition and learning could be researched. For instance, it would be interesting to know how the dimensions of CLIL are connected in lesson planning and in the actual class. Also, it would be important to increase the existing research by examining contextual, instructional, and language scaffolding processes and their impact on cognition and language learning. Last, but not less important, teachers and researchers must be aware and up to date on research methodologies and processes to avoid omissions and misleading results.

## Further reading

- Ball, P., Kelly, K., & Clegg, J. (2015). *Putting CLIL into practice*. Oxford University Press.
- This book contains a complete model for the successful implementation of CLIL with practical examples and explicit instructions to help both experienced and novice teachers.
- Carrió-Pastor, M., & Bellés, B. (Eds.). (2021). *Teaching language and content in multicultural and multilingual classrooms: CLIL and EMI approaches*. Palgrave Macmillan.
- This book discusses the similarities and differences between CLIL and EMI and explains how they are implemented and exert an influence on language and content acquisition.
- deBoer, M. & Leontjev, D. (Eds.). (2020). *Assessment and learning in content and language integrated learning (CLIL) classrooms: Approaches and conceptualizations*. Springer.
- This book provides teachers with a wide range of activities to carry out assessment in a CLIL classroom.
- Hemmi, C. & Banegas, D. (Eds.). (2021). *International perspectives on CLIL*. Palgrave Macmillan.
- This book provides current information on the implementation of CLIL in different educational contexts as well as practical details of the challenges, implications, and opportunities this approach offers.
- Mehisto, P. (2017). *CLIL essentials for secondary school teachers*. Cambridge University Press.
- This work delineates the underlying principles of CLIL and provides scaffolding techniques to foster content and language learning and formative assessment strategies as well.

## References

- Andrade Mendoza, J.L., Padilla Padilla, Y.N., & Padilla Padilla, N.M. (2020). Educación bilingüe en un contexto CLIL, una propuesta de intervención en Ecuador. *Ciencia Digital*, 4(1), 321–333. <https://doi.org/10.33262/cienciadigital.v4i1.1060>
- Argudo, J., Abad, M., Fajardo-Dack, T., & Cabrera, P. (2018). Analyzing a pre-service EFL program through the lenses of the CLIL approach at the University of Cuenca-Ecuador. *Latin American Journal of Content & Language Integrated Learning*, 11(1), 65–86. DOI:10.5294./laclil.2018.11.1.4
- Attard, S., Walter, L., Theodorou, M., & Chrysanthou, K. (2014). *The CLIL guidebook*. CLIL4U.
- Baker, C. (2006). *Foundations of bilingual education and bilingualism*. Multilingual Matters.
- Ball, P., Kelly, K., & Clegg, J. (2015). *Putting CLIL into practice*. Oxford University Press.
- Banegas, D. (2022). Research into practice: CLIL in South America. *Language Teaching*, 55(3), 379–391. <http://doi.org/10.1017/S0261444820000622>
- Banegas, D.L., & del Pozo Beamud, M. (2022). Content and language integrated learning: A duoethnographic study about CLIL pre-service teacher education in Argentina and Spain. *RELC Journal*, 53(1), 151–164. DOI:10.1177/0033688220930442journals.sagepub.com/home/rel
- Banegas, D.L., Poole, P., & Corrales, K. (2020). Content and language integrated learning in Latin America 2008–2018: Ten years of research and practice. *Studies in Second Language Learning & Teaching*, 10(2), 283–305.
- Benalcázar-Bermeo, J., & Ortega-Auquilla, D. (2019). Effects of the CLIL approach in oral production of English students in the second year of the united general baccalaureate at a high school in Cuenca, Ecuador. *Revista Boletín Redipe*, 8(12), 117–128.
- Block, J., & Kuckertz, A. (2018). Seven principles of effective replication studies: Strengthening the evidence base of management research. *Management Review Quarterly*, 68, 355–359. <https://doi.org/10.1007/s11301-018-0149-3>
- Bruno, M.C., & Checchetti, A. (2015). CLIL & IBSE methodologies in a chemistry learning unit. *European Journal of Research and Reflection in Educational Science*, 4(8), 1–12.
- Chamot, A. (2009). *CALLA handbook: Implementing the cognitive academic language learning approach*. Pearson Education.
- Corrales, K.A., Rey, L.A., & Escamilla, N.S. (2016). Is EMI enough? Perceptions from university professors and students. *LACLIL*, 9(2), 17–36. <https://doi.org/10.5294/laclil.2016.9.2.6>
- Coyle, D. (2007). Content and language integrated learning: Towards a connected research agenda for CLIL pedagogies. *International Journal of Bilingual Education and Bilingualism*, 10(5), 543–562.

- Creswell, J. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.
- Cummins, J. (2008). BICS and CALP: Empirical and theoretical status of the distinction. In B. Street & N.H. Hornberger (Eds.), *Encyclopedia of language and education* (pp. 71–83). Springer Science.
- Cummins, J. (2013). Bilingual education and content and language integrated learning (CLIL). *Padres y Maestros*, 349, 6–10.
- Dahik Solis, C., Câneppa Muñoz, C., & García León, E. (2017). Applying CLIL Method for a Comprehensible Input in Reading Skill. *Revista Pertinencia Académica*, 5, 11–18. <http://revistaacademica.utb.edu.ec/index.php/pertacade/article/view/101>
- Dale, L., & Tanner, R. (2012). *CLIL activities: A resource for subject and language teachers*. Cambridge University Press.
- Dörnyei, Z. (2003). *Questionnaires in second language research: Construction, administration, and processing*. Lawrence Erlbaum Associates.
- Eyisi, D. (2016). The usefulness of qualitative and quantitative approaches and methods in researching problem-solving ability in science education curriculum. *Journal of Education and Practice*, 7(15), 91–100.
- Fazzi, F., & Lasagabaster, D. (2020). Learning beyond the classroom: Students' attitudes towards the integration of CLIL and museum-based pedagogies. *Innovation in Language Learning and Teaching*, 15(2), 156–168. DOI:10.1080/17501229.2020.1714630
- González, J., & Barbero, J. (2013). Building bridges between different levels of education: Methodological proposals for CLIL at university. *Language Value*, 5(1), 1–23. <https://educacion.gob.ec/wp-content/uploads/downloads/2017/02/Acuerdo-Ministerial-Nro.-MINEDUC-ME-2016-00020-A.pdf>
- Kusuma, M.D., Rosidin, U., Abdurrahman, A., & Suyatna, A. (2017). The development of higher order thinking skills (HOTS) instrument assessment in physics study. *Journal of Research & Method in Education*, 7(1), 26–32.
- Mariño, C.M. (2014). Towards implementing CLIL at CBS (Tunja, Colombia). *Colombian Applied Linguistics Journal*, 16(2), 151–160.
- McDougald, J. (2018). CLIL across the curriculum: Benefits that go beyond the classroom. *LACLIL*, 11(1), 9–18. DOI:10.5294/LACLIL.2018.11.1.1
- Mertens, D. (2015). *Research and evaluation in education and psychology*. Sage.
- Ministerio de Educación del Ecuador. (2016). Acuerdo Ministerial MINEDUC-ME-2016-00020-A. <https://educacion.gob.ec/wp-content/uploads/downloads/2017/02/Acuerdo-Ministerial-Nro.-MINEDUC-ME-2016-00020-A.pdf>
- Ministerio de Educación del Ecuador. (2019a). *Currículo de los niveles de educación obligatoria*. Ministerio de Educación del Ecuador. <https://educacion.gob.ec/curriculo-lengua-extranjera/>
- Ministerio de Educación del Ecuador. (2019b). *Libros de texto*. Ministerio de Educación del Ecuador. <https://educacion.gob.ec/libros-de-texto/>
- Ortega-Aquilla, D., Siguenza-Garzón, P., Cherres-Fajardo, S., & Bonilla-Marchán, A. (2021). An overview of undergraduate students' perceptions on content-based lessons taught in English: An exploratory study conducted in an Ecuadorian university. *Revista Publicando*, 8(29), 65–78, <https://doi.org/10.51528/rpv08.ide2183>
- Palma, S. (2020). Content and language integrated learning in Ecuadorian public schools: An analysis of the teachers' reality. *Revista Cognosis*, 5(2), 83–102, <https://doi.org/10.33936/cognosis.v5i2.2017>
- Porto, M. (2016). Intercultural citizenship education in the English language classroom in higher education: Does it lead to language learning? In D. Banegas, M. López-Barrios, M. Porto, & M.A. Soto (Eds.), *ELT as a multidisciplinary endeavor: Growing through collaboration. Selected papers from the 41st FAAPI Conference* (pp. 125–138). ASJPI.
- Recino, U., Cajas, D., & Acosta, H. (2019). *The use of CLIL to teach English and subjects related to teaching practice at UNAE, Ecuador*. <https://wefla2019.sciencesconf.org/data/58.pdf>
- Savić, V. (2012). Effective CLIL lesson planning: What lies behind it? *Content and language integrated learning (CLIL) in teaching English to young learners*, conference proceedings, 11, 35–45.
- Torres Martínez, S. (2013). A role for lexical bundles in the implementation of content and language integrated learning programs in Colombian universities. *English Today*, 29(2), 40–45.
- Vega, M.V., & Moscoso, M. de L. (2019). Challenges in the implementation of CLIL in higher education: From ESP to CLIL in the tourism classroom. *Latin American Journal of Content & Language Integrated Learning*, 12(1), 144–176. <https://doi.org/10.5294/lacil.2019.12.1.7>