

'This is by far the most comprehensive text on how to do comprehensive literature reviews! Both novice and experienced scholars will benefit from detailed examples and step-by-step demonstrations of ways to maximize the effectiveness of literature reviews to build new theories and develop better explanations of behaviours and outcomes.'

### Abbas Tashakkori, University of North Texas

'This is the most comprehensive and user-friendly book I've seen on how to conduct a literature review. The authors take the distinction of qualitative, quantitative, and mixed methods research seriously, showing how each adds something important and how being open-minded results in the use of literature based on all three approaches. Overall, the book provides a process theory of literature review, that is done before, during, and after each research study.'

### Burke Johnson, University of South Alabama

'This is a must-have resource for beginning and experienced researchers alike. I have been seeking such a book and plan to make this required reading.'

### Cheryl N. Poth, University of Alberta

This dynamic guide demystifies doing a literature review with an innovative seven step process. Teaching techniques to bring systematic thoroughness and reflexivity to research, the authors show how to achieve a rich, ethical and reflexive literature review.

What makes this book unique:

- Focuses on multimodal texts and settings so that your review covers the full research environment.
- Shows you how to synthesize information thematically.
- Brings culture into the process to help you address bias and understand the role of knowledge interpretation.
- Visualizes the steps with roadmaps so you can track progress and self-evaluate as you learn the steps.

This book is the essential best practices guide for students and researchers, providing the understanding and tools to approach both the 'how' and 'why' of a rigorous, comprehensive, literature review.

Anthony J. Onwuegbuzie is Professor in the Department of Educational Leadership at Sam Houston State University.

**Rebecca Frels** is a Licensed Professional Counselor-Supervisor and Counselor Educator at Lamar University.







Cover image © istockphoto.com Cover design • Francis Kenney

# COMPREHENSIVE

JAUE

Anthony J Onuvegbuzie

& Rebecca Frels

# STEPS to a COMPREHENSIVE LITERATURE REVIEW

A Multimodal & Cultural Approach

常州大学山书馆 藏书章



Los Angeles | London | New Delhi Singapore | Washington DC



Los Angeles | London | New Delhi Singapore | Washington DC

SAGE Publications Ltd 1 Oliver's Yard 55 City Road London EC1Y 1SP

SAGE Publications Inc. 2455 Teller Road Thousand Oaks, California 91320

SAGE Publications India Pvt Ltd B 1/I 1 Mohan Cooperative Industrial Area Mathura Road New Delhi 110 044

SAGE Publications Asia-Pacific Pte Ltd 3 Church Street #10-04 Samsung Hub Singapore 049483

Editor: Mila Steele

Assistant editor: James Piper Production editor: Rachel Burrons Marketing manager: Ben Sherwood Cover design: Francis Kenney

Typeset by: C&M Digitals (P) Ltd, Chennai, India

© Anthony J. Onwuegbuzie and Rebecca Frels 2016

First published 2016

Apart from any fair dealing for the purposes of research or private study, or criticism or review, as permitted under the Copyright, Designs and Patents Act, 1988, this publication may be reproduced, stored or transmitted in any form, or by any means, only with the prior permission in writing of the publishers, or in the case of reprographic reproduction, in accordance with the terms of licences issued by the Copyright Licensing Agency. Enquiries concerning reproduction outside those terms should be sent to the publishers.

Library of Congress Control Number: 2015942962

**British Library Cataloguing in Publication data** 

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

ISBN 978-1-4462-4891-1 ISBN 978-1-4462-4892-8 (pbk)

At SAGE we take sustainability seriously. Most of our products are printed in the UK using FSC papers and boards. When we print overseas we ensure sustainable papers are used as measured by the PREPS grading system. We undertake an annual audit to monitor our sustainability.



**SAGE** was founded in 1965 by Sara Miller McCune to support the dissemination of usable knowledge by publishing innovative and high-quality research and teaching content. Today, we publish over 900 journals, including those of more than 400 learned societies, more than 800 new books per year, and a growing range of library products including archives, data, case studies, reports, and video. SAGE remains majority-owned by our founder, and after Sara's lifetime will become owned by a charitable trust that secures our continued independence.

Los Angeles | London | New Delhi | Singapore | Washington DC

For Agatha N. Onwuegbuzie, a unique mother.



# **ABOUT THE AUTHORS**

Anthony J. Onwuegbuzie is Professor in the Department of Educational Leadership at Sam Houston State University, Texas, USA. He teaches doctoral-level courses in qualitative, quantitative, and mixed research. His research areas include disadvantaged and under-served populations. Additionally, he writes extensively on an array of qualitative, quantitative, and mixed methodological topics. With a current *h-index* of 66, Dr. Onwuegbuzie has secured the publication of more than 400 works, including more than 300 journal articles, 50 book chapters, and three books. Additionally, he has delivered more than 750 presentations and 100 workshops worldwide that include more than 30 keynote addresses across six continents. He has received numerous outstanding paper awards, as well as national and international teaching recognitions. Dr. Onwuegbuzie is former Editor of *Educational Researcher* (*ER*), being part of the editor team (2006–2010) that secured a first impact factor of 3.774. He is currently a Co-Editor of *Research in the Schools*, and has been Guest Editor of six mixed research special issues. Many of his articles have been the most read and cited among articles in their respective journals. For example, his mixed research article published in *ER* is the most cited *ER* article ever. His overall goal is to be a role model for beginning researchers and students worldwide.

Rebecca Frels is a Licensed Professional Counselor-Supervisor and Counselor Educator at Lamar University, Texas, USA. A former music educator and school counselor, her research and scholarship is in the areas of research methodology, mentoring, and student success. She has written or co-authored more than 30 articles and three book chapters. She has served as Production Editor for *Research in the Schools* and Guest Co-Editor for the *International Journal of Multiple Research Approaches*. International experience includes facilitating research courses for the Organization for Social Science Research in Eastern and Southern Africa (OSSREA) in Kenya, Uganda, and Tanzania and courses with the Universidad de Iberoamérica (UNIBE), San Jose, Costa Rica and Universidad IberoAmericana in Puebla, Mexico. Recently, she combined her passion for both mixed methods and mentoring, creating for *Oxford Handbook for Mixed and Multiple Method Research* a book chapter titled "Mentoring the next generation of mixed and multiple method researchers." She and her co-author Anthony Onwuegbuzie have developed the critical dialectical pluralistic approach for mixed research for promoting the voice of participants as decision makers and co-researchers in the research process. Currently, she is conducting research in the area of peer mentoring in higher education—incorporating outreach through technology and social media.

# INTRODUCTION

An overall theme in this book is integration—integrating the *products* and the *processes*. When conducting the literature review of our own in designing this textbook, we recognized that although many excellent textbooks have addressed how to conduct a literature review, few have emphasized how the literature review should incorporate research practices for a transparent process. Moreover, we discovered that few textbook authors have tackled how to address the rapidly growing Web 2.0 digital technologies and instant communications that are situated in a cultural and historical context. Considering that throughout the world, people are becoming experts at information-seeking, we are confident in saying that the literature review can be accomplished with rigor and include myriad sources—taking what might be considered as the traditional review to a new level.

### WHY ANOTHER BOOK ON CONDUCTING THE LITERATURE REVIEW?

The literature review in social, behavioral, and health sciences can take on various roles and can serve multiple purposes. For example, at the undergraduate level, the literature review is a type of desk research, often termed a book report or desk research project. At the master's and doctoral levels, a major literature review is conducted primarily at the end of a program when the student undertakes either a thesis or dissertation. However, as contended by Boote and Beile (2005), programs in higher education do not give credence to the importance of understanding how to conduct the literature review. Yet, in the social sciences, the sharing of knowledge, specifically evidence-based knowledge, is the driving force for advances in the field. Furthermore, in the academic realm, the phrase *publish or perish* (circa 1950; Sojka & Maryland, 1993) is all too familiar to even prolific researchers. Boote and Beile (2005) posited:

acquiring the skills and knowledge required to be education scholars should be the focal, integrative activity of predissertation doctoral education. Preparing students as researchers to analyze and synthesize research in a field of specialization is crucial to understanding educational ideas. (p. 3)

In using the term *comprehensive* in our textbook title, we do not claim or suggest that a literature review can be exhaustive toward a totality of literature on any given topic. Similar to that of a primary research study, the literature reviewer-as-researcher must bind the study and document the guiding criteria when doing so. As such, a literature review should be comprehensive inasmuch as it contains all the most important elements of literature reviews (e.g., including quantitative and qualitative information). The word *comprehensive* also should connote that rigorous techniques such as mixed research techniques are used to collect and to analyze information, and using sampling theory to determine when the information used is representative of the complete set of information that is available on the topic (cf. Chapter 6).

In addition, to interpret historically and culturally the relevancy of authors' works, we have integrated reflective practices for seeking many perspectives—hence, the subtitle of our book: "A culturally progressive, ethical, and multimodal approach." This approach balances the intent of the original sources with the intent of the literature reviewer. Finally, our use of the phrase "Seven Steps" in the textbook title should indicate that our book represents an organized and sequential approach to literature reviews. Also, the word *steps* should connote that the elements are distinct, although representing an inter-related and a sequential approach by no means implies that the steps are linear, but rather that the process can be approached

in a sequence. The steps, after being visited for the first time, become dynamic, integrated parts that require reflection and revisiting upon each new step.

### WHO MIGHT USE THIS BOOK?

This book was designed to be a tool and guide for master's-level students, doctoral-level students, and new and experienced researchers. In fact, we believe that any person who is a scholar will find the book helpful for conducting, documenting, and presenting the literature review. We have designed this book to work as either a supplemental textbook in a research methodology course or as a stand-alone textbook for a research methodology course. In particular, if you are an emergent scholar at the doctoral level, this book will help guide you through the literature review process for your thesis or dissertation and also provide valuable support for your research. Finally, this book will be helpful to methodologists and scholars alike as a bridging meta-framework, inclusive of best practices in research.

### **HOW IS THIS BOOK UNIQUE?**

### IT IS ABOUT CULTURE

When considering how long the practice of literature reviewing has been part of scholarship, to our surprise, there has been virtually no mention of culture and how it influences not only *what* is found, but also *why* one literature reviewer selects particular works and not others. A culturally progressive literature reviewer considers the idea that knowledge sources stem from people (i.e., participants) and are generated by people (i.e., researchers, authors) who represent all cultures, races, ethnic backgrounds, languages, classes, religions, and other diversity attributes.

As a result, our approach to the literature review involves the literature reviewer engaging in reflective practices to become intimately aware of his/her own cultural attributes better to recognize, to acknowledge, to affirm, and to value the worth of all participants and researchers/authors to capture their voices. As such, the crux of the Comprehensive Literature Review (CLR) is what is often referred to as *cultural competence*. This awareness of biases and personal values and how these elements might influence decisions made at every step of the literature review process is what we term a *culturally progressive approach*.

### IT SPEAKS TO ETHICAL RESEARCH STANDARDS

Broadly speaking, ethics incorporate moral principles and best practices pertaining to both research and subject discipline topics. Ethics provide the essence that overflows into every component of the literature review process. When conducting a Comprehensive Literature Review, the literature reviewer practices professional competence and undertakes tasks within recognized skill sets relating to the topic explored and the results reported. Ethical research in the literature review includes integrity, scholarly responsibility, social responsibility, and respecting rights, dignity, and diversity.

### IT IS A MIXED METHODS LITERATURE REVIEW (TO BE APPROACHED WITHOUT FEAR!)

As a mixed methods approach, the Comprehensive Literature Review is conducted using mixed research techniques—that is, by collecting and analyzing *both* quantitative and qualitative information within the same literature review. Due to this integrative nature, we explain that the literature reviewer does not merely *summarize* the extant literature and the information extracted from this literature (dispelling one of the many myths over time), but he/she *synthesizes* the qualitative information (e.g., data stemming from qualitative

studies) and quantitative information (e.g., data stemming from quantitative studies) thematically, resulting in a final report or presentation that recognizes how one type of data illuminates the understanding or contradictions of another. There you have it—the use of mixed research techniques!

### IT EXTENDS THE LITERATURE REVIEW TO INCLUDE OTHER SOURCES

The Comprehensive Literature Review process reflects the multimodal nature of text in the Web 2.0 era by initially using published articles as a starting point, and then extending the search to include multimodal texts and settings, referred to as MODES: Media, Observation(s), Documents, Expert(s) in the field, and Secondary data. After beginning the search through traditional literature, or published journal articles via the search in library databases, we explain how to use guiding criteria for evaluating the most up-to-date knowledge using new literacies, or what is referred to as multimodal literacy, associated with a topic (especially considering that there is always a time lag between when the information is first conceptualized/written and when it becomes accessible [e.g., by being published]) to present a holistic picture and, thus, an integrated literature review.

### THE SEVEN STEPS MAKE THE PROCESS DO-ABLE

Upon first glance, the word *comprehensive* might give the illusion that the literature review is some daunting task, or is quite insurmountable. Therefore, we simplify the literature review process by breaking the review into the following seven overlapping but distinct steps: (a) Step 1: Exploring Beliefs and Topics; (b) Step 2: Initiating the Search; (c) Step 3: Storing and Organizing Information; (d) Step 4: Selecting/Deselecting Information; (e) Step 5: Expanding the Search (MODES); (f) Step 6: Analyzing and Synthesizing Information; and (g) Step 7: Presenting the CLR Report. These seven steps are multidimensional, interactive, emergent, iterative, dynamic, holistic, and synergistic—because each step informs all other steps. Each step concludes with what we describe as the CORE of the process, which is Critical examination, Organization, Reflections, and Evaluation via the evaluation checklist. Yes, a comprehensive literature review is do-able!

### IT IS A META-FRAMEWORK

The literature review involves activities such as identifying, recording, understanding, meaning-making, and transmitting information. In its optimal form, the literature review not only represents a study; it represents a mixed research study facilitated by using mixed research techniques—that is, by collecting and analyzing *both* quantitative and qualitative information from collected sources, as a literature synthesis. Whether the literature review is conducted to inform primary research or is a stand-alone work, it involves the literature reviewer making meta-inferences within multiple steps.

### IT PROVIDES NUMEROUS EXAMPLES AND TOOLS

By using one example of a literature review topic as a common thread for the steps, this textbook becomes a practical resource for conducting a literature review. In addition, we have created numerous typologies, resource guides, and frameworks using visual displays for facilitating understanding and application of the Seven-Step Model.

### **HOW IS THIS BOOK ORGANIZED?**

### **FOUNDATIONS**

We begin this book in Chapter 1 by reviewing some basic elements and terminology relating to research through the quantitative, qualitative, and mixed methods research traditions. We then move into the

myths that have surrounded the literature review process so that the literature reviewer might not fall into these traps when beginning the journey. Furthermore, we outline the reasons and objective of the literature review.

### **OVERVIEWS**

In the next two chapters, we provide the overall summary of the Comprehensive Literature Review and the Seven-Step Model. We explain how, within the meta-framework, the Comprehensive Literature Review is a methodology, method, tool, and multimodal (or new literacies) approach. We also highlight the identity of the literature reviewer as an original thinker, critical thinker, reflexive researcher, ethical researcher, and most of all—a culturally progressive researcher.

### CHAPTER STEPS

The next eight chapters present the steps, one-by-one (with two chapters representing the seventh step). After presenting these 11 chapters, we end our textbook with a postscript in which we provide five examples as to how to conduct theory-driven and model-driven CLRs—a pathway that when integrated with the Seven-Step Model provides one of the more exciting areas for the further development of CLRs. At the end of each chapter, we present evaluation questions that pertain to the knowledge discovered, and critique the products that have evolved as a result of the step. It involves what is happening emotionally and cognitively. In short, it examines *the what* and *why this*?

We have based the guiding questions after each chapter on what is commonly known as Socratic questioning, as a form of inquiry and debate. For reflexivity purposes, we present questions for self-dialogue to challenge biases and viewpoints. Additionally, this type of challenge is dialectical, and by exposing any contradictions, might lead to a strengthening of the literature reviewer's identity and illuminate ideas for the next step. The critical thinking questions are categorized into six types (Paul & Elder, 2006) and presented in a table such as the one below (Table I.1), and are designed to judge assumptions and actions.

**Table I.1** Examples of six types of Socratic questions to be used after each step of the Seven-Step Model

Type of Question	Question(s)
Clarification	Why did you select or state what you stated in this step?
Assumptions	What might you be assuming to be true?
Reason and evidence	What do you think caused you to select or say that?
Viewpoint and perspective	What might be an alternative viewpoint?
Implications and consequences	What are the strengths and weaknesses of what I select or say? What are some generalizations?
About the questions themselves	What was the point of this question? What did I seek to know and why?

We also created a CORE process so that the reflexivity for the literature reviewer might take a meaningful direction (Figure I.1). In the CORE, the C presents Critical examination, the O presents Organizing ideas, the R presents Reflection questions, and the E presents some Evaluation points.

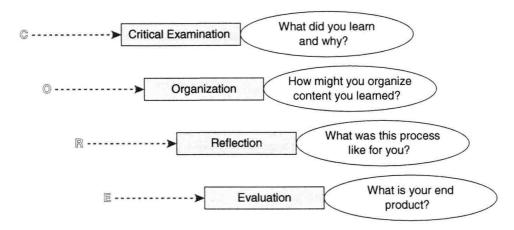


Figure I.1 The CORE process

We hope that you find this textbook useful as both a resource for research methodology and also the literature review!

# TABLE OF CONTENTS

	Introduction	
	Why Another Book on Conducting the Literature Review? Who Might Use This Book? How is This Book Unique? How is This Book Organized?	xii xiii xiii xiv
PAF	RT ONE OVERVIEW	1
1	Foundations of the Literature Review	2
	The Quest for Knowledge Characteristics of the Three Research Traditions The Literature Review: Process and Product Myths Associated with the Literature Review Reasons for Conducting the Literature Review Goals of the Literature Review The Comprehensive Literature Review (CLR) Defined in Detail Where to Find a Literature Review The CORE Product	3 4 8 9 14 16 18 19
2	The Literature Review	22
	Historical Origins of the Literature Review The Current State of the Literature Review The Narrative Literature Review The Systematic Literature Review The Combined (Integrated) Review Comparing Characteristics of Reviews Role of Culture on the Literature Review Using a Culturally Progressive Approach Using an Ethical Approach Using a Multimodal Approach The Five MODES Attitudes of the Literature Reviewer Contextual Considerations	23 23 23 25 28 29 35 36 37 38 39 43
3	Methodology of the Literature Review	48
	The CLR: A Data Collection Tool The CLR as a Method	49

	Considerations of Mixed Research Techniques	49
	Using Multiple Sections of a Report	50
	A Pathway to Knowledge: Methodology	51
	The CLR as a Methodology	53
	The CLR Meta-Framework	54
	Introducing the Seven-Step Model	54
	Using the Seven-Step Model to Inform Primary Research	57
	The Seven-Step Model as a Cyclical Process	62
PAF	RT TWO EXPLORATION	65
4	Step 1: Exploring Beliefs and Topics	67
	Beliefs: What We Know and How We Know	68
	Your Worldview	69
	Research Philosophical Stance: The Way We Explore	71
	Selecting a Topic	73
	Organizing the Process	79
5	Step 2: Initiating the Search	85
	The Audit Trail	86
	Guiding Criteria for the Initial Search	88
	Five Tasks of the Search	88
	Task 1: Identifying Databases	88
	Task 2: Performing a Search	91
	Task 3: Exploring Information	100
	Task 4: Identifying Key Terms	101
	Task 5: Focusing the Search	103
6	Step 3: Storing and Organizing Information	113
	Importance of Storage	114
	Basic Strategies for Storing and Organizing	114
	Intermediate Strategies for Storing and Organizing	120
	Advanced Strategies for Storing/Organizing Information	136
	Selecting Strategies	148
7	Step 4: Selecting/Deselecting Information	155
	Meta-Reflection	156
	Distinguishing Levels of Information	157
	The Claim Credibility Meta-Framework	165
	Evaluating Information, Guiding Questions, and Examples	170
	Create Focus Questions for the Selection Process	174
	Create Field Notes	174