

# CHAPTER 7

## Structuring and Organizing the Literature Review

By now you have summarized, analyzed, and assessed individual studies, articles, and books, as well as identified some of the core terms, central concepts, and methodologies that are relevant to your topic. Now you are ready to assemble the individual pieces of information and weave them together into a holistic narrative. A major goal of literature review writers is to demonstrate comprehensive understanding and insight into the current state of knowledge on their chosen topic. This goal cannot be achieved through a series of summaries of individual sources that are patched together one by one. Rather, the aim is to develop a holistic narrative that is analyzed, synthesized, and organized thoughtfully and logically. The theories, research methodologies, and findings extracted from the literature should be woven together to reveal patterns, discover relationships, and build a logical chain of claims supported by data.

Like a jigsaw puzzle in which the individual pieces are put together to reveal the whole picture, a review requires you to assemble the literature's various threads in a way that allows readers to gain "a bird's-eye view, or even better, a series of bird's-eye views" (Feak & Swales, 2009, p. 17). This process of reassembling should not be a patchwork, but rather be built around a logical structure where the data, theories, claims, and arguments present the "big picture" of up-to-date knowledge about your research topic and research question. At the same time, your review should also provoke new thinking and understanding through fresh and creative connections that you have captured within and among the different concepts, theories, and research.

To unearth a meaningful storyline in your literature review without getting lost in the details, you need to develop an organizational strategy. This will help you in several ways. It will impose logical order on your multiple sources, enhance your understanding of the body of knowledge relevant to your topic, and advance the development of a new perspective on the literature. Thus, an organizational design serves as the blueprint that will assist you in structuring the rich material you have gathered, highlight common themes among the different studies, compare and contrast the findings, and discern common and unusual patterns. Such an architectural plan will also allow the presentation of your ideas to flow logically and smoothly from one argument to the next.

There is no one uniform organizational strategy for structuring the literature review that allows you to make connections, highlight relationships, and bring coherence to the different individual studies (Ridley, 2012). However, there are several methods that are used by researchers to synthesize the information into an organized whole. In this chapter we describe the four approaches most often used by literature review writers: synthesis matrix, summary table, mapping, and outline. These strategies are different from each other in their organization techniques, formats of presentation, and the aspects of structure that they highlight. Each strategy contributes in different ways to your ability to identify themes and patterns in your sources, determine how they relate to each other, and discern the similarities and differences among them.

## **APPROACHES TO ORGANIZING THE LITERATURE REVIEW** |||

Like other literature review writers, you have to discover the organizational strategy that works best for you. Being aware of your own style of writing will help you choose the strategy that will benefit you the most. Your choice of organizational strategy also depends on the research question(s) undergirding your review and how you want to present your knowledge in response to this question.

Some writers prefer formulating their organization device early in the literature review process, while others favor doing it at a more advanced stage, after they have explored the research articles for some time (Ridley, 2012). The needs at each stage may be different and the strategy you choose will probably reflect that. However, as Ridley suggests, whatever strategy you decide to use, expect it to change or even be replaced as your work progresses. Moreover, the organizational structure that seems so logical at one point may evolve and transform as you advance with your reading and deepen your understanding of the issues discussed in the review.

In any case, before you create the organizational structure, you may want to revisit your research question and determine whether it still reflects your focus or needs to be revised. Your question has a major role in developing the organizational

structure of the literature review analysis and synthesis, so be sure that it still reflects your purpose for writing your review.

Next, we describe the four literature review organizational strategies mentioned above. We define and highlight what distinguishes each, examine their advantages, describe how to construct them, and offer examples that illustrate how they may be used.

## THE SYNTHESIS MATRIX

The synthesis matrix strategy involves an iterative process where you examine your analysis of individual sources and cluster them together in a grid to discern patterns and themes in the literature (Whittemore & Knafl, 2005). This strategy facilitates your ability to systematically compare authors’ different perspectives, studies’ methodologies, and findings and see the relationships among them (Garard, 2014). Thus, the synthesis matrix enables you to achieve an overview of the literature, helps you identify relationships and pattern, and provides a succinct organization that gathers related ideas, issues, or results under broader topical themes and subthemes. A synthesis matrix can serve as an organizational strategy on its own or be used as a baseline for other strategic organizational approaches, such as mapping or outline. (Helpful tools for creating the synthesis matrix are article note-taking index cards [ANTICs], as well as the thematic concentric circles; both are described in Chapter 5.)

**TO DO:** *How to Construct the Synthesis Matrix*

The list in Table 7.1 outlines the steps involved in creating a synthesis matrix.

TABLE 7.1. Steps for Creating a Synthesis Matrix	
Step	
1.	Go back to the notes you have taken in the ANTIC for each literature source. Look for the key concepts or keywords you have identified on each index card, and the accompanying entries in which you analyzed and summarized the key relevant concepts that were discussed in that source.
2.	Comb the rest of the ANTICs and look for the same keywords or concepts. Be careful not to miss any relevant source; you may have named similar or related issues or concepts with different keywords.
3.	Once you have identified the related notes, group them near one another in a grid. Be sure to note the reference for each entry.
<i>(continued)</i>	

TABLE 7.1. (continued)

Step
4. The process of clustering these sections within the individual index cards can be done by cutting and pasting (with the use of a word-processing system) or it can be facilitated with the use of computer software programs. Digital notebooks such as Evernote, One Note, and Workflow are effective in locating and retrieving keywords within the index cards' entries (Garrard, 2014).
5. Review the clustered notes and through an iterative process try to discern patterns, common and repeating issues, and topical themes. Look for similarities among these entries and see how they relate to one another and how they are logically connected. Label the group of notes with an identifying name that reflects an emerging, connecting theme (Whittemore & Knafl, 2005). Remember, a theme is a broad, more encompassing concept that contains subthemes, related ideas, common arguments or findings. For example, the theme of <i>assessment</i> may include types of assessment, use of assessments, and debates about assessment.
6. Write a short reflection in which you respond to the entry, compare it to other sources, and highlight points you want to consider or want to explore further. For example, as you read an article on assessment, you may want to write a note to find additional articles that investigate the history of assessment.
7. Compare and contrast the notes that you clustered under each theme. A theme doesn't mean that the studies comprise a unified perspective or single methodology. Rather, a theme includes agreeing with or complementing, as well as contradicting, positions held by researchers and theoreticians who have explored the same issue. For example, within the theme of assessment the writer may review studies whose authors are proponents of the use of standardized tests for evidence-based decision making in education. On the other hand, it may include studies conducted by researchers who criticize the overuse of standardized tests for accountability and instead support the use of teacher-made tests for making local educational decisions.
8. You may organize the individual entries within each theme into subgroups according to a coherent and logical order. You may arrange these subgroups in several ways. For example, sequentially, according to the type of methodology used, or structure them from general to more particular information. In another example, when you locate a seminal study, you may want to arrange research published after that study in chronological order (Garrard, 2014). Later in this chapter we consider how themes may be organized.
9. Revisit and refine the emerging themes. See if all the studies belong under this theme or if there is research that should form another theme or be discarded altogether (Garrard, 2014).

The development of the synthesis matrix is tentative and iterative and may evolve throughout the process. The emerging patterns and themes may not be clearly observable until you obtain a fuller picture of the literature on your topic. Additionally, in the early phase of the review process you will probably not fill all the spaces in the matrix. As you continue reading and adding ANTICs, you will be able to refine the themes: insert additional entries as well as themes and subthemes, combine some into one, or rearrange the order of the subgroups within the themes.

The final set of patterns, themes, and subthemes may not be completely established until the end of the process. Still, we suggest that from the earliest stages of the literature review you gradually develop the synthesis matrix and insert relevant

information into the appropriate spaces. Doing so will help you gradually identify the emerging arguments and claims, and eventually identify the organizational scheme that will structure your literature review writing.

### An Example of a Synthesis Matrix

To illustrate how to use a synthesis matrix, we present the matrix developed by Marina, who is writing the literature review chapter of her dissertation on the topic of mentoring in schools. Table 7.2 illustrates an early stage in the development of her matrix.

<b>Themes and subthemes</b>	<b>Reference</b>	<b>Analysis and summary</b>	<b>Reflection/response</b>
<b>Definition of mentorship</b>	Ambrosetti, A., & Dekkers, J. (2010). The interconnectedness of the role of mentors and mentees in pre-service teacher education. <i>Australian Journal of Teacher Education</i> , 35(6), 42–55.	<p>The definition of mentoring is interconnected with the contextual factors that influence mentoring in teacher education. However, although there are numerous definitions, they do not clearly outline the actions that occur during the mentoring process.</p> <p>The authors' definition highlights the hierarchical and reciprocal relationships between the mentor and the mentee, who work together toward a defined outcome for the mentorship.</p> <p>Some other definitions of mentoring are:</p> <p>Mentoring is a process (Smith, 2007).</p> <p>Mentoring is a process but also a relationship (Kwan &amp; Lopez-Real, 2005).</p> <p>Mentoring is contextual (Fairbank et al., 2000).</p> <p>Mentoring is relational, developmental, and contextual (Lai, 2005).</p> <p><b>Quotation</b> (p. 52): "The relationship usually follows a developmental pattern within a specific timeframe and roles as defined, expectations are outlined and purpose is ideally clearly delineated."</p>	<p>Need to find the etymological source of the word "mentor" and its implication for current definitions. I like the assertion that the definition is part of the contextual factors. Need to expand this idea in my literature review chapter.</p> <p>I need to read the original articles which were noted in my summary.</p> <p><b>Assessment:</b> A very comprehensive critical review of research literature on mentoring that consists of multiple sources. The article presents various definitions of mentoring currently used. It insightfully interprets how these definitions impact the way the mentors are perceived and what is expected of them by teachers, administrators, and researchers.</p> <p>No explanation is offered of how the sources were identified and what the inclusion and exclusion criteria were.</p>

(continued)

TABLE 7.2. (continued)

Themes and subthemes	Reference	Analysis and summary	Reflection/response
<b>Definition of mentorship</b> (continued)	<p><b>Definition (etymological)</b></p> <p>Online Etymology Dictionary</p> <p><a href="http://www.etymonline.com/index.php?term=mentor">www.etymonline.com/index.php?term=mentor</a></p>	<p>“Wise adviser,” from Greek: Mentor, friend of Odysseus and adviser of Telemachus. Mentor in the <i>Odyssey</i> means “adviser.” “Intent, purpose, spirit, passion” from *mon-eyo- (cognates: Sanskrit man-tar- [“one who thinks”], Latin mon-i-tor [“one who admonishes”]), causative form of root *men- (“to think”).</p>	<p>The fact that in the etymological source mentor was a wise “friend” emphasizes the equal relationship between mentor and mentee.</p> <p>The “thinking” aspect is an essential characteristic of the mentor. Thinking with or thinking for? This reflects two conflicting perceptions of the role.</p>
	<p>Hudson, P., &amp; Hudson, S. (2010). Mentor educators’ understanding of mentoring preservice primary teachers. <i>International Journal of Learning</i>, 17(2), 157–170.</p>	<p>Arriving at a common definition will assist the mentoring process. Clear communication among all parties involved will enhance their ability to share a common language when it comes to the role and responsibilities of the mentor.</p> <p>The common definition they used was “an experienced teacher who supports, influences, encourages, and challenges a mentee toward teaching competencies” (p. 165).</p> <p>The qualities of the mentor according to this definition are, among others, being supportive, facilitating reflection, possessing listening skills, and responding to professional needs.</p>	<p>Look for other articles that discuss definitions of mentors’ roles to see if there is a connection between the definitions and how the roles are perceived by mentors and mentees</p>
<b>Mentor roles</b>	<p>Brondyk, S., &amp; Searby, L. (2013). Best practice in mentoring: Complexities and possibilities. <i>Journal of Mentoring and Coaching in Education</i>, 2(3), 189–203.</p>	<p>The article highlights the many different roles that are involved in mentoring in primary and secondary schools.</p> <p>The authors note that the role of mentor may be viewed in three main ways:</p> <p><b>Traditional:</b> Mentor as transmitter/messenger. Skills are transferred within an authoritative framework and within status quo culture.</p> <p><b>Transitional:</b> Mentor as collaborator; mentor and mentee are co-learners. Cultural gaps are bridged and cultural differences are honored.</p> <p><b>Transformational:</b> Mentor as change agent. Mentors and mentees are engaged in innovative and creative discourse. Their roles are fluid and changing. New realities are created as they engage in collective actions to transform the organization.</p>	<p>The three perceptions of the mentor roles remind me of Kent’s (2013) article. Make a connection between the mentor’s role and the context’s expectations (Kent).</p> <p><b>Assessment:</b></p> <p>A conceptual paper. Thoughtful with many research citations to support the claim that it is difficult to identify best practice in mentoring because the mentoring process is so complex.</p>

(continued)

TABLE 7.2. (continued)

Themes and subthemes	Reference	Analysis and summary	Reflection/response
<b>Mentor roles</b> (continued)	Ambrosetti, A., & Dekkers, J. (2010).  The interconnectedness of the role of mentors and mentees in pre-service teacher education, <i>Australian Journal of Teacher Education</i> , 35(6), 42–55.	Based on multiple articles, the authors present a list of common perceptions of the mentor roles:  <b>Supporter:</b> Assists the mentee to grow personally and professionally.  <b>Role model:</b> Assists by example and demonstration of desired behavior.  <b>Facilitator:</b> Provides opportunities to mentees to grow by performing their tasks.  <b>Assessor:</b> Assesses the mentee's performance and offers critique.  <b>Collaborator:</b> Shares and reflects with the mentee in a collaborative relationship.  <b>Friend:</b> Behaves as a critical friend.  <b>Trainer:</b> Provides skills and resources.  <b>Protector:</b> Protects the mentee from unpleasant situations.  <b>Colleague:</b> Treats the mentee as an equal professional.	Interesting list. May be helpful in categorizing the mentors observed.  Will I be able to group under the three perspectives suggested by S. Brondyk and L. Searby (2013)?
<b>Mentor roles</b> (From the perspective of acting mentors)	Hall, K. M., Draper, R. J., Smith, L. K., & Bullough, R. V. (2008). More than a place to teach: Exploring the perception of the roles and responsibilities. <i>Mentoring and Tutoring: Partnership in Learning</i> , 16(3), 328–345.	Mentors' perceptions of their role is influenced by the experiences they have had. The authors divide mentor roles into three groups:  <b>Support provider:</b> Giving feedback, guiding, sharing ideas, and modeling.  <b>Critical evaluator:</b> Giving constructive criticism with an emphasis on reflection and problem solving.  <b>Team teaching:</b> Collaborating, planning activities, and teaching together as a team.  Data based on open-ended survey given to 264 participants who are mentoring preservice teachers. The survey was followed with 34 phone interviews with randomly selected mentors.	The roles described here can be compared and contrasted to the roles discussed in other articles.  Well-planned survey. May serve as a model for my research design.

(continued)

TABLE 7.2. (continued)

Themes and subthemes	Reference	Analysis and summary	Reflection/response
<p><b>Effective mentoring practices</b> (component of effective mentoring relationships)</p>	<p>Hudson, P., &amp; Hudson, S. (2010). Mentor educators' understanding of mentoring preservice primary teachers. <i>The International Journal of Learning</i> 17(2), 157–170.</p>	<p>A mixed-methods study that focused on mentors' perspectives. The study involved surveys, questionnaires, and audiotaped focus group—14 mentors (4 m, 10 f) working with preservice teachers.</p> <p>From the mentors' perspective, three requirements were needed to form an effective mentoring experience: (a) knowing the mentor's level of development and expectations so the mentor can adequately support and challenge the mentee; (b) building professional relationships prior to placement—time is needed to establish the relationship and troubleshoot potential problems; and (c) dual role as confidant and assessor: neither role can be discounted. Mentor as confidant allows the mentor to build self-confidence and experiment with practice, while mentor as assessor can be used to guide the teacher's growth.</p>	<p><b>Consideration:</b></p> <p>The idea of mentee's developmental stage should be expanded in my paper.</p> <p><b>Critique:</b></p> <p>Very detailed analysis and results section. A bit confusing in highlighting the major themes.</p>
	<p>Efron, E., Winter, J. S., &amp; Bressman, S. (2012). Toward a more effective mentoring model: An innovative program of collaboration. <i>Journal of Jewish Education</i>, 78(4), 331–361.</p>	<p>The study highlights three components of effective mentoring relationships:</p> <p><b>Reflective dialogues:</b> Through reflective conversations mentors should encourage teachers to examine their classroom experiences, reflect on their successes, failures, and uncertainties, and assess newly gained experiential knowledge (Strong, 2009).</p> <p><b>Basis of trust:</b> Effective mentoring relationships are built on foundations of trust and open communication (Levin &amp; Rock, 2003; Yendol-Hoppey &amp; Fitchman, 2007). Only when teachers sense a mentor's nonjudgmental role and commitment to confidentiality do they feel safe enough to share their puzzles, uncertainties, and concerns.</p> <p><b>Meaningful Feedback:</b> Tension between two vital aspects of mentoring: trust and critical feedback. Enhancing teacher pedagogy while at the same time building a trusting and collaborative relationship.</p> <p><b>Quotation:</b></p> <p>“The affective nature of the social and emotional dimensions of the relationship with the teacher is essential for an effective and beneficial mentoring program” (p. 352).</p>	<p>Data collected from questionnaires given to the three groups involved in the program: teachers, mentors, and principals.</p> <p>Findings based only on open-ended surveys and on a limited number of participants.</p> <p>The tension between the mentor as assessor and as a confidant is also discussed in Hudson and Hudson.</p>

## GROUP WORK

1. Using your synthesis matrix, choose six articles to share with your group.
2. Read each other's analysis of the chosen articles as presented in the matrix.
3. Discuss the articles under each theme and subtheme using the following questions:
  - a. Are the references listed according to APA or other chosen publication style rules?
  - b. How clear and informative is the summary of each article? Will it be helpful in writing the literature review?
  - c. Are the reflections useful in developing the next step of the literature review and are the critical responses logically presented?
  - d. Do the articles under each theme enrich the understanding of the theme and illuminate its different aspects?
  - e. How do the themes and subthemes relate to each other and how do the articles within each theme connect to each other?

## SUMMARY TABLES

You can summarize the research studies that have a direct bearing on your topic in a single summary table. Such tables can help you organize the literature and assist in recalling and sorting information as you plan and write the review. In fact, a summary table can also be incorporated into your literature review narrative. Such a table helps the readers compare and contrast multiple studies in one glance. If there is too much information to be included in a single table, Pan (2013) suggests the use of one or more tables to summarize the literature. For example, you can create a table for summarizing qualitative or quantitative studies only, rather than including studies with different designs in a single table. You can also create several tables that focus on certain aspects of your subject, such as definitions, research methods, and findings.

## HOW TO CONSTRUCT A SUMMARY TABLE

A comprehensive summary table like the template in Figure 7.1 (p. 130) allows you to organize and record your notes about a variety of research articles on your topic. In this table you can record: (1) the source where you found the article, (2) the purpose of the study, (3) the methodology used in the study, and (4) the major findings. The Sources column is further divided into three parts: Authors, Date, and Journal. Listing the references by their author(s) allows you to easily add, delete, and alphabetize sources, and including the date of publication provides information about the timeliness of the study. The Methodology column is divided into Design, Sample, and Data Collection Tools. This provides a quick reference to the design specifics of the study. Finally, the findings are summarized in a separate column. In this table, each research study is summarized in its own separate row.

Further information about each column is provided in the following sections. An example of a summary table follows the explanations.

Source			Methodology			Findings	
Author(s)	Date	Journal	Purpose	Design	Sample		Data collection tool(s)

**FIGURE 7.1.** Template of a summary table for research studies.

### *Source*

The Source column is used to record information about the article and is divided into three columns. The first, Author, is designed to record the author(s) of the study, using the same format as you might use to refer to the author(s) in your review. Date of publication is listed next, followed by the title of the journal or other publication information that will help you obtain this article again if you wish to read it further or get additional information.

### *Purpose*

The Purpose column is used to summarize the main goals and reasons for conducting the study, as presented by the authors. This information can often be found in the article's abstract or introduction.

### *Methodology*

This column is further divided into three columns: Design, Sample, and Data Collection Tools. In the first column, record the design of the study (e.g., experimental, descriptive). For experimental studies, you may want to add information about the study's procedures and treatments. Information about the sample used in the study (e.g., the sample size and its demographic characteristics, and how it was selected) is included in the next column. Finally, a description of the tools that were used to collect data is included in the Data Collection Tools.

### *Findings*

The last column is used to record the study's major findings. Following Galvan's (2013) advice, we recommend summarizing the findings in a narrative form rather than in statistical terms in order to more easily compare results from different studies and facilitate the interpretation of the findings.

You can develop your own abbreviation method. For example, you can use "J" instead of "Journal" or "Quant" and "Qual" to represent quantitative and qualitative design. You can also use other widely accepted shorthand notations such as  $N$  or  $n$  to denote a population or sample size, and "yrs" to represent "years."

## **An Example of a Summary Table**

To illustrate how to use this summary table, let's look at the information gathered by Melinda, a doctoral student (whom we mentioned in Chapter 3) who is studying the topic of childhood depression and how to treat it. Her literature review yielded many studies on this important topic and she needed an efficient system to organize them. Figure 7.2 (pp. 132–135) shows excerpts from four of the studies Melinda analyzed and summarized for her review of the literature.

Source		Methodology				Findings	
Author(s)	Date	Journal	Purpose	Design	Sample		Data collection tool(s)
Challen, Machin, & Gillham	2014	<i>Journal of Consulting &amp; Clinical Psychology</i> , 82(1), 75–89	Assess the effectiveness of an 18-hr cognitive-behavioral group intervention in reducing depressive symptoms (and associated outcomes) in a universal sample of students in mainstream schools in England.	Quantitative; experimental; classes of students were assigned arbitrarily into intervention (UKRP) or control conditions based on class timetables; students surveyed at baseline, post intervention, 1-year follow-up, and 2-year follow-up.	<i>N</i> = 2,844; from 16 regions in the UK; 67% White, 49% female; ages 11–12; demographically varied, 25% eligible for free school lunch	Children's Depression Inventory; Revised Children's Manifest Anxiety Scale; Goodman Strengths and Difficulties Questionnaire	In post intervention, experimental group students reported lower levels of depressive symptoms than control group students, but the effect was small and did not persist to 1-year or 2-year follow-ups; no significant impact on symptoms of anxiety or behavior at any point. UKRP produced small, short-term impacts on depression symptoms and did not reduce anxiety or behavioral problems.
Garmy, Berg, & Clausson	2015	BMC Public Health, 15, 1074	Explore adolescents' experiences with adolescent-based cognitive-behavioral depression prevention program	Qualitative assessment of intervention	<i>N</i> = 89; adolescents aged 13–15; divided into 12 focus groups designed to capture the experiences of adolescents who had participated in a school-based mental	Interviews were analyzed using qualitative content analysis. Transcripts were read repeatedly to achieve immersion and to obtain a sense of the whole picture. Sections of the text related to adolescents' experiences	Three categories and eight subcategories were found to be related to the experience of the school-based program. The first category, intrapersonal strategies, consisted of the subcategories of directed thinking, improved

		<p>health program; the program consisted of 10 weekly manual-based sessions, each 90 minutes long with 7–18 students. The program is based on cognitive-behavioral techniques for changing negative thoughts, communication training, problem-solving strategies, exercises to strengthen social skills and social networks, and increased participation in health promotion activities.</p>	<p>participating in a school-based mental health program were combined into one text to form a content area. This text was divided into meaning units (<math>N = 478</math>), which were then condensed, abstracted, and labeled with codes. The context as a whole was considered during the condensing and coding process. The codes were compared on the basis of differences and similarities and sorted into three categories and eight subcategories. The first author conducted the first coding. The second and third authors independently coded two interviews each, and the three authors subsequently met and discussed the coding until they reached consensus. All authors reflected on and discussed the codes, categories, and subcategories throughout the analysis process to increase the level of trustworthiness.</p>	<p>self-confidence, stress management, and positive activities. The second category, interpersonal awareness, consisted of the subcategories of trusting the group and considering others. The third category, structural constraints, consisted of the subcategories of negative framing and emphasis on performance. Conclusions: The school-based mental health program was perceived as beneficial and meaningful on both individual and group levels, but students expressed a desire for a more health-promoting approach.</p>
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**FIGURE 7.2.** An excerpt from a summary table on the topic of treating childhood depression.

Source		Methodology			Findings		
Author(s)	Date	Journal	Purpose	Design		Sample	Data collection tool(s)
McCann & Lubman	2012	<i>BMC Psychiatry</i> , 12(1), 96–104	Examine the experience of young people with depression accessing Australian Government recently established primary care services (headspace) that target young people with emerging mental health issues with a focus on understanding how they access the service and the difficulties they encounter in the process.	Qualitative; descriptive	N = 26; in-depth, audio-recorded interviews were used to collect data. Participants with depression were recruited from a headspace site in Melbourne, Australia. Participants' ages ranged from 16–25, with a mean age of 18 years; 16 were young women, most were single; 15 lived in the same household as one or both parents; 6 were still attending high school; and 7 were engaged in various forms of paid employment; average length of engagement with the service was less than five months.	Purposive or criterion sampling was used to inform data collection. Inclusion criteria were: (i) primary diagnosis of depression, and (ii) aged 16–25 years. Exclusion criteria were (i) history of psychosis, (ii) currently expressing suicidal plans, and (iii) unable to communicate in conversational English. Interpretative phenomenological analysis was used to analyze the data. Interviews proceeded until no new themes were identified in the data. Furthermore, saturation of identified themes with “thick” description of the data was obtained when no new data emerged to support these themes. Each theme contained thick descriptions; deep, dense, depictions of the young people's experiences accessing the service. It was this process that determined the actual number of participants in the study (an important part of the rigor of the qualitative approach to determining sample size).	Four overlapping themes were identified in the data, reflecting the experiences of young people accessing the enhanced primary care service: (i) school counselors as service access mediators, (ii) service location as an access facilitator and inhibitor, (iii) encountering barriers accessing the service initially, and (iv) service funding as an access facilitator and barrier. Overall, the findings of this study indicate that while young people's experiences of accessing services share some similarities with adult consumers, such as the importance of establishing a trusting relationship with primary health care practitioners, there are important differences, including reliance on school counselors and use of informal access pathways; furthermore, because of the age of young people they are less likely to have the same social networks and help-seeking skills as adult consumers, which may delay their help-seeking efforts.

Sifers & Mallela	2013	<i>Child and Adolescent Social Work Journal</i> , 30, 169–180	Examine relationship between hyperactivity and depression	Quantitative; descriptive	N = 100; 8- to 14-year-old students from public schools in a small Mid-western metropolitan area; equal gender ratio; 94% European-American; household mean income of 79,949.	Social Support Scale for Children; Family Environment Scale; Behavioral Assessment System for Children, 2nd ed.	Hyperactivity is linked to difficulties in peer relationships, associated with depressive symptoms; hyperactivity is associated with a decrease in cohesion and an increase in conflict within the family, and with their levels of depressive symptoms. Relationship difficulties, both familial and nonfamilial, may be the conduit through which hyperactivity is linked to depressive symptoms.
Stice, Shaw, Bohon, Marti, & Rohde	2009	<i>Journal of Consulting and Clinical Psychology</i> , 77(3), 486–503		Quantitative; meta-analysis; descriptive	Authors identified 47 trials that evaluated 32 prevention programs, producing 60 intervention effect sizes; focus on trials that targeted children.	Five procedures were used to retrieve published and unpublished trials of depression prevention programs.	Among the 32 prevention programs that were evaluated in 60 trials, 13 produced significant reductions in depressive symptoms; 12 of the trials that produced significant effects found that intervention participants showed greater decreases in symptoms relative to decreases observed in controls, although one found that intervention participants showed a significant decrease in depressive symptoms, whereas controls showed a significant increase; intervention effects were significantly larger for high-risk participants, samples containing more females, and older adolescents.

**FIGURE 7.2.** (continued)

By using electronic data-recording tables, which you can create in Excel, you can organize your sources in a systematic way that will allow you to easily sort and retrieve information. For example, if you wish to further examine studies that were conducted using quantitative data, you can sort the table by the design column which will group together quantitative studies. Additionally, the use of an electronic table will allow you to write more detailed and specific notes or elaborate on certain points or on landmark studies, or on studies that are more directly related to your specific topic.

Our advice to you is to be creative and experiment with different formats of summary tables that will best meet your needs and help you organize and easily retrieve information!

### GROUP WORK

1. Using your summary table, choose two articles to share with your group.
2. Read each other's analysis of the chosen articles as presented in the table.
3. Discuss the articles using the following questions:
  - a. Are the sources listed in according with APA or other chosen publication style rules?
  - b. Is the purpose of the study clearly explained and related to the literature review question(s)?
  - c. Are there details provided about the study's methodology including its design, sample, and data collection tools?
  - d. Are each article's findings summarized in a way that enables the comparison of results from different studies?

### MAPPING THE LITERATURE

Mapping is a technique that uses a diagram to present the concepts and ideas included in the literature review. "Mapping out the ideas," claims Hart (1998), "is about setting out, on a paper, the geography of research and thinking that has been done on a topic" (p. 144). Organizing this "geography" visually helps the literature review writer recognize the connections and relationships among the research and theoretical conceptualizations and identify patterns that otherwise may be less apparent (Kalmer & Thomson, 2006). The pictorial presentation is useful for categorizing the different streams of research, identifying historical development of ideas, and noting schools of thought or other classifications (Daley & Torre, 2010). Such pictorial presentations may also be useful for illustrating to the reader the connections among the theoretical ideas and the research that are discussed in the literature review.

According to Hart (1998), mapping contributes to two kinds of literature knowledge: a declarative knowledge and a procedural knowledge. *Declarative*

*knowledge* allows the writer to gain knowledge about theories, ideas, and concepts as presented in the literature. *Procedural knowledge* enhances the literature review author's ability to recognize how the above elements fit together and relate to one another. This, in turn, helps the writer review the literature written by others through his or her unique insight and understanding and then present it in a way that is original and creative.

There are different types of maps, among them mind maps, concept maps, topic flowcharts, cognitive maps, and flowcharts. Here we focus on two—the mind map and concept map—as examples of visual displays that will help you navigate and organize the information on your research topic.

### The Mind Map

A mind map is a useful graphic device for organizing your thinking around individual major themes and defining their boundaries and subdivisions. The strength of this visual organization strategy lies in its simplicity (Ramanigopal, Palaniappan, & Mani, 2012). It is easy to construct and it does not require complex drawings or advanced graphic skills.

#### TO DO:

#### *How to Construct a Mind Map*

The list in Table 7.3 outlines the steps involved in constructing a mind map.

**TABLE 7.3. Steps for Constructing a Mind Map**

Step
1. Draw a circle and in its center write a main concept or theme from the literature.
2. Draw spoke lines leading from the circle outward.
3. Jot down at the end of each line the subtheme that is the subsidiary or supporting idea to the major theme in the circle.
4. Break down (when needed) the subthemes by extending spokes from them and recording additional narrower subconcepts.

While mind mapping can be easily performed without electronic methods, mapping software, such as FreeMind, LucidChart, MindMeister, and MindMup, may allow you to link the mind mapping with information you have summarized from the literature on each of the concepts.

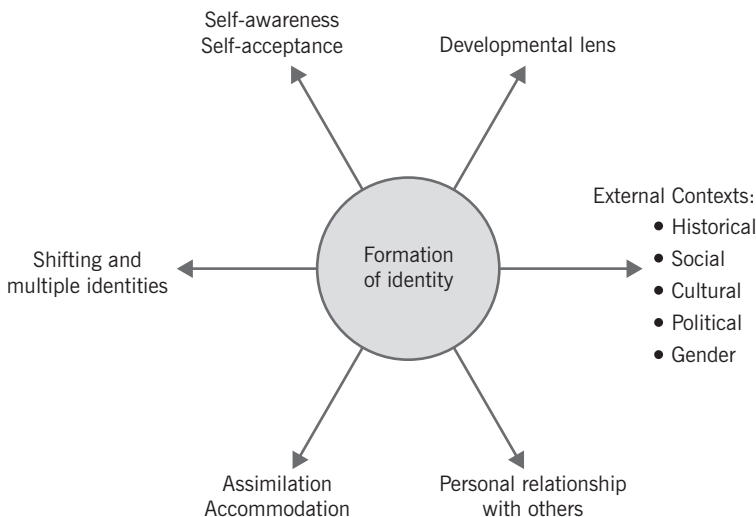
Machi and McEvoy (2012) suggest using two kinds of mind maps for organizing the literature: mapping by core ideas and mapping by authors.

### *The Core Idea Map*

The visual display of a *core idea map* assists you in centering your focus on individual major themes and organizing your analysis around different elements in the review relevant to these themes. These elements may be different theoretical positions, chronological development of ideas, or different definitions of a concept. ANTICs and thematic concentric circles (or even the synthesis matrix) may help you use keywords that will become a theme with its subthemes in your review. To illustrate the use of a core idea map, let's look at an example that Dave developed (see Figure 7.3). Dave, a doctoral student in counseling psychology, writes a paper about first-generation immigrants' level of success in their college studies. One of the major arguments in Dave's literature review is that one's identity is a key factor in the success of immigrant students. Dave uses a core idea map to reflect the different components that research claims contribute to identity formation.

### *The Author Map*

The author map approach focuses on major figures related to your research topic. As you analyze the individual sources, you may recognize that the works of particular theoreticians or researchers are seminal in the development of the field and are central to your understanding of the topic. Constructing an author map may help you gain a deeper understanding of their positions as they relate to your own research or study. This map may also allow you to compare and contrast their ideas with the positions of other theoreticians or researchers.



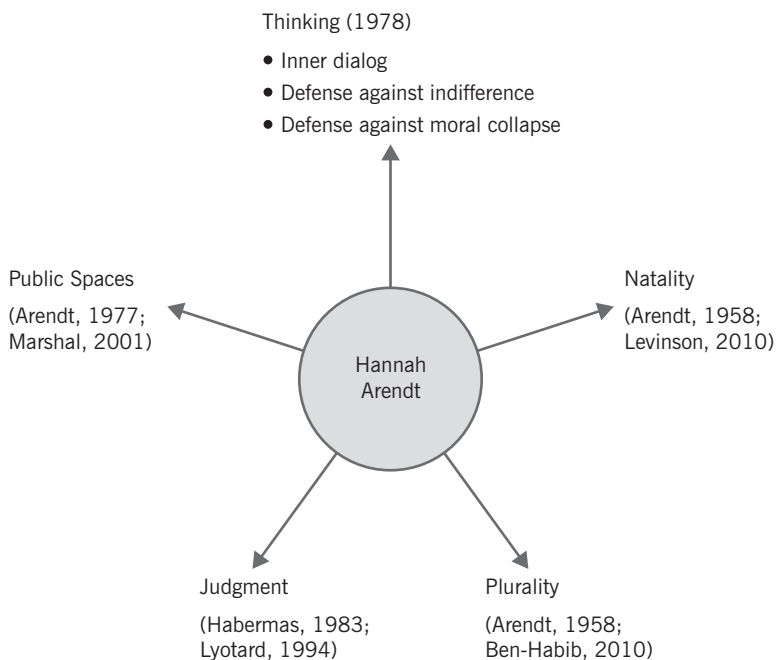
**FIGURE 7.3.** Core idea map: Identity formation. Based on Machi and McEvoy (2012).

As in any mind map, in an author map you extend a series of spokes from the circle at the center, in this case around the author's name. Drawing from his or her work, record the author's ideas and positions. For this map, you may use primary sources, as well as secondary sources in which the researcher's ideas and viewpoints are interpreted.

The use of an author map is illustrated by the way Rina, a sociology student, applied this approach to her research on democratic societies in the 20th century. In her reading, she was captivated by the idea developed by Hannah Arendt, a political theorist, about the role of dialogues with self and with others in forming a democratic citizen. Figure 7.4 shows an author map (based on Machi & McEvoy, 2012) that Rina developed while working on her literature review on Arendt's ideas.

As your work on the literature review progresses, we suggest developing iterative core idea maps or author maps for each of the major themes or central concepts that emerge as you read your sources. These maps can be modified and expanded as you continue reading the literature about these themes or authors.

Some writers like to develop mind maps concurrently with their work on the synthesis matrix. The matrix may serve as a helpful tool for identifying the concepts that will be at the center of their mind maps, and the core ideas or author



**FIGURE 7.4.** Author map: Hannah Arendt's concept of democracy.

maps will visually depict the subthemes within each theme and how they relate to each other.

## The Concept Map

A concept map is a hierarchical structure that visually represents how different concepts are related to each other. The main difference between a mind map and a concept map is that the first is focused on a single concept while the latter reflects multiple concepts and the connections among them.

The advantage of a concept map is that it allows you to gain a holistic view of the literature review. The hierarchical diagram enhances your understanding of the general, as well as the specific, concepts within their overall context. In one glance, a full picture of the literature review components, their interconnections, and their structural organization unfolds before your eyes.

The concept map starts with broader concepts and through a hierarchical process narrows itself down to more specific ones. While there are many ways to construct the concept map, the process usually follows eight steps.

### TO DO:

#### *How to Construct a Concept Map*

The list in Table 7.4 outlines the steps involved in constructing a concept map.

**TABLE 7.4. Steps for Constructing a Concept Map**

Step
1. Jot down a list of concepts that emerge from your readings. (You may be helped by your synthesis matrix.)
2. Write down, on the top of the page, the literature review's focus or question. (Most writers prefer using a landscape layout.)
3. Under the literature review focus write the broadest and most inclusive key concepts, from which all others stem.
4. From the list of concepts (see #1 above) identify those that branch out from the broadest concepts and record them underneath.
5. Continue downward in a progressively hierarchical pattern until the most specific concepts are listed.
6. Enclose the concepts in boxes, circles, or other geometric shapes.
7. Add lines to connect the concepts, possibly including a word or two to explain the relationships between them.

Some reviewers who use this organizing approach use different colors and various shapes as they construct their concept maps; others find this superfluous. Regardless of the style you choose, it is important that the concept map that you design is clear and that it concisely demonstrates the concepts and the relationships among them. Some researchers (e.g., Booth et al., 2008; Machi & McEvoy, 2012) suggest using Post-it index cards to construct the concept map and arranging them on a whiteboard or table horizontally and vertically according to ranking. They claim this enhances your flexibility and creativity in mapping the concepts by allowing you to move the cards around, add concepts, or change the relationships among them as you read additional articles.

A number of software programs have been developed to construct concept maps; among them are MindGenius, MindView, and SmartDraw. Alternatively, you may use traditional word-processing, presentation, and design programs such as Microsoft Word, Microsoft PowerPoint, Corel WordPerfect, or CorelDRAW to design different styles of concept maps. The advantage of the digital concept map programs is that they overcome the challenge of drawing clear and well-constructed concept maps by hand. Moreover, as your ideas evolve, using a digital map program makes it much easier to modify and revise your diagram.

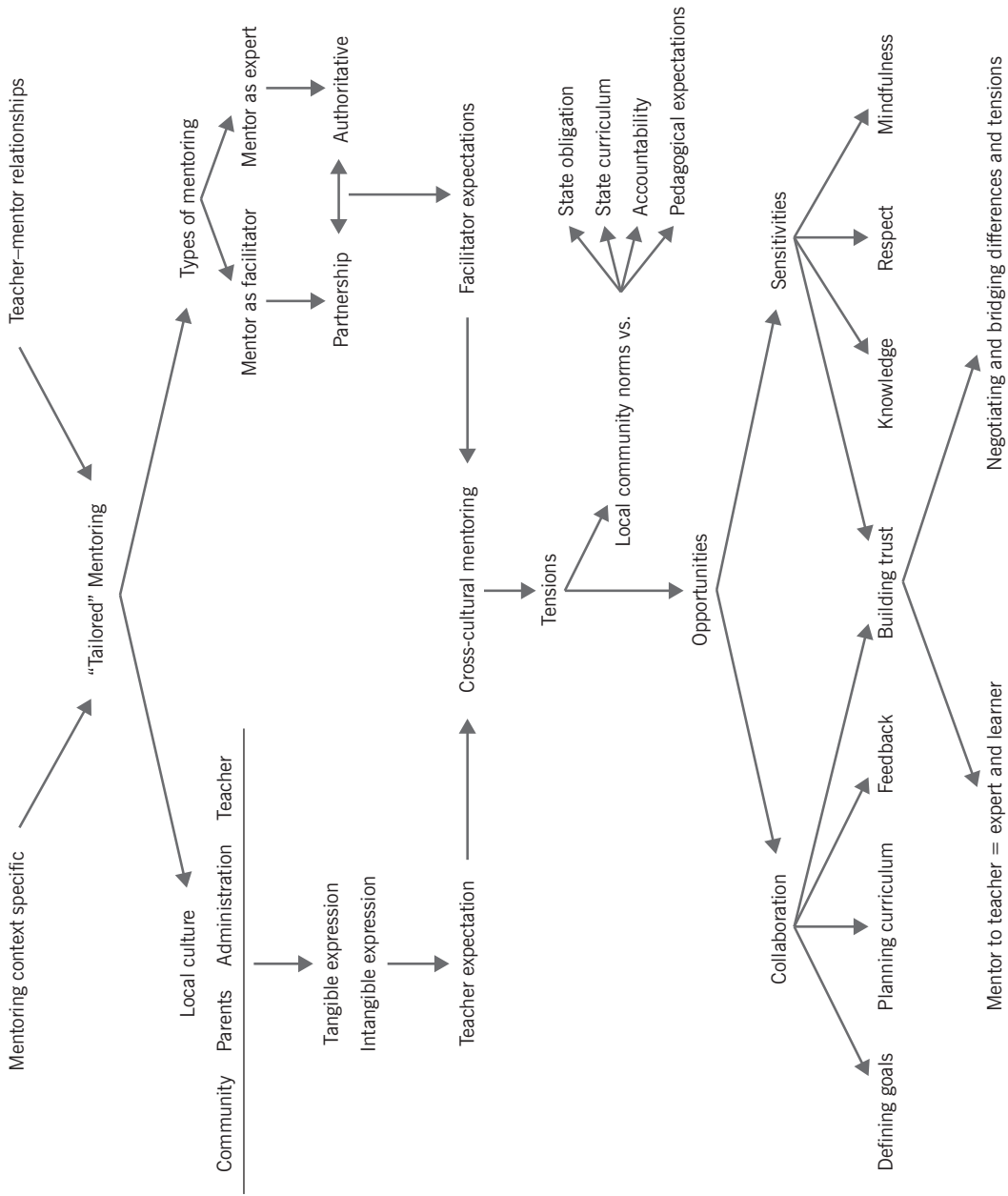
Conversely, hand-drawn maps may enhance your thinking and stimulate your imagination. Advocates of hand-drawn concept maps feel that this approach allows them to come up with creative ideas they would not have thought of before they actually started their design. Our suggestion is to be attuned to what works for you and follow that style.

### *An Example of a Concept Map*

Figure 7.5 (p. 142) is an example of a concept map from a study conducted by Efron, Winter, and Bressman (2017) on the topic of mentoring across cultures. This concept map highlights the issues involved in this topic.

## **GROUP WORK**

To assure the usefulness of the mind map and concept map you have constructed, share your outline with your group members and ask them to assess your map(s) using the checklist in Table 7.5 (p. 143).



**FIGURE 7.5.** Concept map: Mentoring across cultures.

TABLE 7.5. A Checklist to Assess the Mind Map and/or Concept Map

The mind map (theme/author) or concept map . . .	✓
1. Is developed in a way that responds purposefully to your research question.	
2. Includes concepts that reflect the central issues needed to understand the theme/author's ideas or the sources in the literature review.	
3. Offers a clear visual presentation of the concepts related to your research topic.	
4. Offers a clear and concise verbal presentation of the concepts related to your research topic.	
5. Demonstrates the relationships among the concepts or themes in the mind map.	
6. Offers a complete and inclusive list of the issues relevant to the theme/author or to your review.	
7. Has a hierarchical structure of the themes and subthemes that is logically constructed.	

## OUTLINE

The last method you may want to consider for organizing the review of your sources is an outline. An outline is a structural plan that logically charts the main components of the literature review arranged in the order in which they will be discussed. It clearly distinguishes between major points and subordinate ones and guides the logical progression of the elements within the review (Wolcott, 2009). A well-constructed outline serves as a helpful blueprint for your literature review and makes the writing process easier and much more effective.

### TO DO:

#### *How to Construct an Outline*

The list in Table 7.6 contains the steps involved in constructing an outline.

TABLE 7.6. Steps for Constructing an Outline

Step
1. Revisit the notes you have written for each reference in the Article Note-Taking Index Cards (ANTICs) and group them together according to their common focus in order to identify the major themes of your outline. The key terms you used to label your summaries will help you in this effort. (If you already have created the synthesis matrix or mind maps, this phase will be much faster and easier.)
2. Check the ANTICs again and select issues that fall logically under the major themes and can serve as subthemes. These subdivisions represent more specific information that defines, explains, or supports facets of the major themes.
3. If the subthemes are still too broad, divide them into narrower categories.

The selection of the themes, subthemes, and categories in your outline is based on your research purpose and the questions that undergird your review, as well as the references included in your review. Constructing an outline provides you with an opportunity to revisit your questions and see whether, after the readings that you have done, they still reflect your research focus or need to be revised.

As you develop the outline, you have to make three choices. The first one relates to the *format* of the outline, the second to the *style* of the outline, and the third to the way you *order* the themes and subthemes in your outline.

## Outline Format

The basic format for the outline uses a series of numbers and letters according to their level of importance. The letters or numbers at each level are aligned at the same indentation and are structured as following:

1. The **first** level of the outline, the major themes, is labeled with uppercase Roman numerals: **I, II, III**, etc.
2. The **second** level of the outline, the subthemes, is indented and labeled with uppercase letters: **A, B, C**, etc.
3. The **third** level of the outline, the categories, is indented again and labeled with Arabic numerals: **1, 2, 3**, etc.
4. The **fourth** level of the outline is indented again and labeled with lowercase letters: **a, b, c**, etc.
5. If additional subcategories are needed, indent again and use lowercase Roman numerals: **i, ii, iii**, etc.

According to the rules, there can't be a single item in a subset. There have to be at least two entries.

The outline format may look like this:

- I. \_\_\_\_\_
  - A. \_\_\_\_\_
  - B. \_\_\_\_\_
    - 1. \_\_\_\_\_
    - 2. \_\_\_\_\_
      - a. \_\_\_\_\_
      - b. \_\_\_\_\_
        - i. \_\_\_\_\_
        - ii. \_\_\_\_\_

Some writers (e.g., Booth et al., 2008; Wolcott, 2009) view this formalistic approach with its emphasis on indenting, numbering, and rigid rules as too complex and limiting. While they recognize the advantages of an outline, they prefer a simpler, more loosely structured format that allows the imagination to flow without the “nuisance” of keeping all the above rules in mind.

## Outline Style

Your second decision in developing the outline is choice of style. There are two common choices:

- ▶ A topic outline that consists of very few words or short phrases
- ▶ A sentence outline that uses full sentences

Booth et al. (2008) suggest that each of these styles of outlines can be useful at different stages in the development of the literature review. At earlier stages of writing, when you just start to construct your ideas and concepts, you may prefer using a topic outline. However, at a later stage, as you continue reading and analyzing articles and other sources, a sentence outline is more useful. Such an outline helps you see whether your ideas hang together and flow logically one from another. Additionally, topic outlines lack clear specificity, and after a while, when you revisit your topic outline, it may seem too vague and you may not recall the exact meaning of your short phrases. A full-sentence outline, on the other hand, may trigger your memory and remind you of the ideas you had when writing the topic outline’s entries. Some writers prefer to combine the two styles and use complete sentences for the major topics and short phrases for the subtopics and narrower categories.

## An Example of an Outline

The following is an example of an outline based on the literature review chapter in Dr. Barbara Sherman’s (2014) dissertation that was described above.

### **BOX 7.1. Scholarship Students: Squeezing through the Glass Ceiling of an Affluent Private School**

- I. Introduction to field of study
  - A. The importance of understanding the historical, social, political, and educational contexts that impact scholarship students
  - B. Major issues discussed in the literature review

*(continued)*

**BOX 7.1.** (continued)

- II. Early immigrants to America (late 18th–early 20th century)
  - A. Creating social hierarchy as waves of immigrants face cultural norms (Ramirez et al., 2008)
  - B. Racism-serving scientific theory
    - 1. Using “scientific” means to classify immigrants into racial categories (Jackson & Weidman, 2006)
    - 2. Social Darwinism: connecting race to abilities and survival potential (Darwin, 1871; Jeynes, 2011; Spencer, 1851)
    - 3. Eugenics movement’s Immigration Restriction League (Immigration Restriction League’s web page, Harvard University)
  - C. Prejudice, racism, and discrimination are socially constructed
    - 1. Defining the concepts of prejudice, racism and discrimination (Katz, 1978)
    - 2. Political, economic, and social circumstances’ impact on perception of the social other (Higham, 1983; Perry, 2010)
    - 3. Attitude toward the Asian immigrant (Tan, 1989), the South American immigrant (Rosenblum, Soelke, & Wasem, 2012) and the African American (Ogbu, 1978; Tim, 1992)
- III. Educational response to the surge of immigrants
  - A. Keeping the “other” outside the mainstream or assimilating them? (Zangwill, 1976)
    - 1. Espoused principles of equality vs. realities of discrimination (De Hoyos, 2012; Ramsey & Williams, 2003)
    - 2. Educate immigrants and encourage their assimilation into “American culture” (Ramsey & Williams, 2003)
    - 3. American Indians join the melting pot to become “true Americans” (Manuelo, 2005)
  - B. Segregation of community and of school
    - 1. Laws to ensure segregation: Jim Crow and *Plessey v. Ferguson* of 1896 (Wright, 2009)
    - 2. Horace Mann’s Common School vs. segregation (Cayton et al., 2003)
    - 3. The story of Malcolm Little (Malcolm X) as a story of discrimination against African American children (Haley, 1999)
  - C. Cultural pluralism: Marginal communities fight to retain their culture
    - 1. 1920s curriculum programs supportive of cultural pluralism and embracing immigration (Ratner, 1984)
    - 2. Black leaders of the 1940s make demands for equal opportunity in employment, schooling, and the armed forces (De Hoyos, 2013)
    - 3. The Black Power movement demands equal rights (De Hoyos, 2013)
    - 4. Rising of Latino and Asians movements (Brown Power and Yellow Power)

(continued)

**BOX 7.1.** (continued)

- IV. Turning point: American education begins to embrace diversity
  - A. Attempts to Create Equality between the Races (Norton, 2002)
    - 1. The effects of *Brown vs. Board of Education* on schools (Patterson, 2001)
    - 2. Hilda Taba's Intergroup Education Movement (Banks, 2007; Norton, 2002)
    - 3. Education and the Civil Right Movement: 1960 (Cayton, 2003; Patterson, 2001)
    - 4. Reform of the immigration policy: New Immigration Policy (1965) (Ludden, 2006)
  - B. Education supports multiculturalism: 1970s
    - 1. Cultural pluralism evolves into multicultural education (Banks, 2001; Ramsey & Williams, 2003)
    - 2. Goals of multicultural education (Grant, 1978)
    - 3. Multicultural education adopts social deconstructionism (Nieto, 2012)
    - 4. White race identity theory (Helms, 1990)
- V. The achievement gap
  - A. Disparity in achievement between races (Ladson-Billings, 2009; NAEP, 2009)
    - 1. Role of class and economics in the achievement gap (Scott & Lonhardt, 2009)
    - 2. Narrowing the achievement gap (National Assessment of Education Progress, 2009; The Quiet Revolution: Secretary Arne Duncan's Remarks at the National Press Club, 2010)
    - 3. Cultural vs. sociopolitical roots of the achievement gap (Hilliand, 1992; Ladson-Billing, 2001, 2009; Ogbu, 1999; Williams, 1996)
- VI. Telling only one story endangers curriculum
  - A. Marginalizing a group by a single image (Adichie, 2009)
    - 1. The power of the written word in creating and destroying images of groups of people (Horn, 2003; Katz & Earp (1999)
    - 2. Media image of minority youth (Katz & Earp, 1999)
  - B. The message of hidden curriculum (Audre Lorde, as cited in Tatum, 1997, p. 22)
    - 1. Defining hidden curriculum (Giroux & Penna, 1979; Murrell, 2007)
    - 2. Hidden curriculum creates barriers (Grunty, 1987; Jardine, 2006; Langhout, 2008)
      - a. Two approaches to hidden curriculum: The functionalist approach and the neo-Marxist approach (Anyon, 1980; Apple, 1980; Lynch, 1989)
      - b. Hidden agenda determined by hegemony (Sari & Doganay, 2009)

(continued)

**BOX 7.1.** *(continued)*

3. Institutional discrimination: A product of hidden curriculum (Anyon, 1980; Freire, 1970; Murrell, 2007)
    - a. Cultural Capital (Bourdieu, 1986; Yosso, 2005)
    - b. School as political institution (Dewey, 1916; Freire, 1970)
  4. Hidden curriculum's impact on human dignity (Sari & Doganay, 2009)
  5. Hidden curriculum's reinforcement of social constructs (Anyon, 1980; Tyack, 1993)
- VII. Challenges of pursuing an education in private schools
- A. From poorly resourced schools to affluent private schools (Murrell, 2007)
    1. Definition of cultural competence (Ingram, 2011)
    2. The role of cultural competence in successful integration (Banks, 1981, 1987)
  - B. Stigmatizing students without cultural competencies (Salzman, 2005)
    1. Knowledge deemed worth knowing (Bullhan, 1985; Pinar et al., 2008)
    2. Deficit theory and its consequences (Hale, 2011)
  - C. The impact of race on social relationships within schools (Baldwin, 1971; Castnell & Pinar, 1993; Fanon, 1970; Pinar, 2008)
- VIII. School responsibility: Creating democratic citizens in practice
- A. School's role in a democratic society (Dewey, 1916, 1959; Horn, 2003; Pinar, 2008)
    1. Human dignity as the root of democratic values (Kaboglu, 2002)
    2. Practicing democracy in school community (Jardine et al., 2006; Sari & Doganay, 2009)
  - B. Unpacking the "Monster" in the curriculum (Nall, 1999)
    1. Curriculum conflicts with the teaching of democracy (Dewey, 1959)
    2. Culturally sensitive teaching (Banks & Banks, 1995; Gay, 2000)
    3. Diversity in schools enriches education (Troyna & Hatch, 1992)
- IX. Diversity in schools enriches education (summary and discussion)

## GROUP WORK

To assure the usefulness of the outline you have constructed, share it with your group members and ask them to assess it using the checklist in Table 7.7.

**TABLE 7.7. A Checklist to Assess the Outline**

The Outline . . .	✓
1. Is developed in a way that responds purposefully to your research question.	
2. Offers a holistic presentation of the state of knowledge related to your research topic.	
3. Is properly sequenced and flows logically from one idea to the next.	
4. Is complete and inclusive of all the issues relevant to your review.	
5. Does not include repetitive or irrelevant items that stall the progress of your review.	
6. Does not have entries that should be combined or divided.	
7. Includes different or even contradictory opinions or perceptions.	
8. Has entries that are clearly and concisely stated.	
9. Is not too detailed or too brief.	
10. Cites the authors and publication dates of the sources used in the entries.	

## Outline Organization

The third decision, and probably the most important one you make as you develop your outline, is how to organize it. Your decision should be based on your purpose in writing the review and the literature you included. There is no one single way in which the outline should be organized; rather, you have the freedom to choose how to structure it. With the exception of preparing an outline for a systematic review (that is further discussed below), you may structure the review in a way that you deem fit as long as the themes are progressing logically and there is a coherent and purposeful movement from one idea to the next.

In the following section we describe some of the most common organizational approaches: thematic outline, chronological outline, outline separating the theoretical from the empirical, theoretical to methodological outline, systematic review outline, and hermeneutic–phenomenological review outline. Examples are provided to illustrate the distinguishing characteristics of each approach. These examples represent the major topics of the review and do not include the subtopics.

### *Thematic*

The most commonly used approach to outline organization is based on dividing it into themes. The distinct themes around which the entries are organized may surface from the literature or may be predetermined. Each theme may integrate both theoretical writings and empirical studies that are related to the research topic. Box 7.2 presents an example of a thematic outline on the topic of assessment developed by Joseph for his master's thesis in educational leadership.

### *Chronological*

An outline may be organized chronologically with the major topics ordered around time periods. This organizational approach is uniquely suitable for subjects that have changed over time. The entries in the outline indicate the major time periods (from earlier dates to the present) that mark the historical developments of the subject. A review based on such organization may explore chronologically the progress of theories, emergence of policies, development of research methods, or changes in practices. This organizational approach allows the writer to discern changing trends over time. An example of such organization (Box 7.3, p. 151) was chosen by Mina for a research paper about the historical cycles of reform in education from the post–World War II period to the present.

### *Separation of the Theoretical from the Empirical*

If you have identified multiple sources, both theoretical and empirical, you may want to divide the review into two distinct sections. In the first part, your review can focus on theoretical and conceptual studies, while in the second part your attention will center on empirical studies (quantitative and/or qualitative), their methodologies, and their findings. Some researchers (e.g., Carnwell & Daly, 2001; Ridley, 2012) assert that if you have chosen this type of review, you should not be satisfied with merely describing the literature, but rather adopt a critical stance.

#### **BOX 7.2. An Example of Thematic Outline Organization**

- I. Different perceptions of assessment in history
- II. Summative assessment (theories, research, and practice)
- III. Formative assessment (theories, research, and practice)
- IV. Assessment by systems
- V. Assessment by teachers
- VI. Assessment by students

**BOX 7.3. An Example of Chronological Outline Organization**

- I. Cold War in school—The impact of Russia launching Sputnik (1957)
- II. The Civil Rights Movement—Elementary and Secondary Education Act (1967)
- III. Nation at Risk—Expanding the federal role (1983)
- IV. No Child Left Behind—The children who were left behind (2002)
- V. Common Core: Opportunities, challenges, risks (2010s)
- VI. Reforming No Child Left Behind—Every Student Succeeds Act (2015)
- VII. Reflections: The expanding role of government in enforcing accountability and standardization.

An example of this kind of organization can be found in Box 7.4. It is an outline of a review written by Magda, who trains counselors and is now getting ready to defend her doctoral dissertation. The focus of her research is the development of cultural competency among counselors-in-training.

*Theoretical to Methodological*

When the sources you have found in the literature on your topic are mostly theoretical and you have located very few or no empirical references, you may consider this type of organization, which is divided into two parts. The first part is a theoretical discussion on conceptual frameworks and the schools of thought underpinning your subject and the differences and commonalities among them. The second part consists of an exploration of a research approach that complements the identified theories discussed in the first part and may lead to your research question. An

**BOX 7.4. An Example of Separation-of-the-Theoretical-from-the-Empirical Outline Organization**

- I. Defining culture and its role in relationships
- II. Multicultural competency theory
- III. The implications of multicultural competency theory for the counseling field
- IV. Self-awareness among novice counselors-in-training of the role of multicultural competency in counseling
- V. Critical analysis of the methods currently practiced to develop multicultural competency in counseling programs
- VI. Research-based recommendations for developing multicultural competencies for counselors

**BOX 7.5. An Example of Theoretical-to-Methodological Outline Organization**

- I. Feminism and cultural hegemony
- II. Evolution of thought toward feminist theory
- III. Transnational feminist theory
- IV. Summary of thoughts
- V. The power of stories that matter: A feminist perspective
- VI. Narrative as a research design

example of this type of an organization is the outline in Box 7.5 based on April's dissertation in sociology, whose literature review focused on transnational feminine theory.

*Systematic Review*

This approach is specifically intended for writers of systematic reviews. This type of review does not allow writers flexibility nor freedom in developing the organization of their literature review, but rather expects them to strictly follow a required discussion structure (Booth et al., 2016). In order to enhance the researcher's ability to systematically compare studies on the basis of variables, such as sample characteristics, research design, or results, the systematic review approach dictates how the outline should be constructed. A typical structure of such a review can be found in Box 7.6.

**BOX 7.6. An Example of Systematic Review Outline Organization**

- I. Formulating the research question
- II. Criteria for including studies
- III. Methods for searching the literature
- IV. Data extraction (examines which elements of data are presented in each study)
- V. Data analysis (evaluates and summarizes studies in a table format)
- VI. Results and interpretation
- VII. Discussion and implications

### *Hermeneutic–Phenomenological*

The last approach to literature review organization is appropriate for hermeneutic–phenomenological inquiries (Boell & Cecez-Kemanovic, 2014). In structuring an outline for this type of review, a particular framework is used to present the discourse on a chosen topic. An example of such a structure can be seen in a chapter of James Magrini’s dissertation (2014). In this chapter, Magrini’s discussion of the work of van Manen and Heidegger in relation to selfhood leads him to criticize the current accountability and standardization trends in education. Using the hermeneutic–phenomenological lenses, he identifies gaps, reveals weaknesses, and problematizes the dominant language that typifies current educational research and practice. This hermeneutic–phenomenological approach to outline organization can be found in Box 7.7.

#### **BOX 7.7. An Example of Hermeneutic–Phenomenological Outline Organization**

- I. The unfolding of hermeneutic–phenomenological interpretation
- II. Positivism and losing or forgetting of phenomenological and ontological selfhood
- III. Critique of the language of standardized learning
- IV. Learning as understood in phenomenological-ontological terms.

## FINAL COMMENTS

As you plan the organization of your review, experiment with different ways of ordering your themes. Developing an outline is an iterative process and you do not want to be locked into a single form before you are ready to write your review. As you continue reading and analyzing your sources, don’t be controlled by the themes or subthemes you have identified. Whenever you note something in a source that supports, explains, or contradicts, add it to your existing themes or construct a new one. Every now and then, check whether your organization of the review is still suitable or if a new order is needed. Remember, an outline is a living organism (Dawidowicz, 2010) that requires an openness to revisions.

Additionally, whatever outline organizational strategy you choose for structuring your review, keep in mind that in the end the literature review—unless it is a stand-alone review—should lead smoothly and logically to your own research. Consider the process as a funnel, where the discussion about the topic starts from a wide angle that eventually and gradually narrows to focus on your own research question. Therefore, as you come closer to the end of the review you should zoom

in on studies that are most similar or most relevant to your own particular research (Wellington et al., 2005).

In this chapter we offered several strategies for logically organizing the information you have obtained through the analysis of the individual sources you have deemed as relevant to your literature review. These strategies are: synthesis matrix, summary table, mind map and concept map, and topical outline. Each of the strategies may serve to identify patterns, highlight themes, and note relationships that will allow you to build a logical flow and reveal your review's story line. Having a choice between several kinds of strategies enables you to select the ones that best suit your learning style, serve your particular goals in writing the review, and reflect the nature of your review.

Play with the different strategies until you feel that you found those that will enhance your writing. You may want to alternate among the strategies, combine several of them, or develop your own distinct way of classifying and organizing your literature review. This is an imaginative, innovative, and purposeful process that will allow you to assemble the building blocks to reveal the whole picture.

## GROUP WORK

In this chapter we discussed several organizational styles: synthesis matrix, summary table, mind map and concept map, as well as an outline. In your group, consider which one or more of these organizational strategies will be useful for your literature review writing. This decision can be based on your purpose in writing the review, the literature included, and your self-awareness of your personal learning style.

In your group discussion, each of you should respond to the following questions:

1. Will you use one or more of the organizational strategies offered in this chapter? Explain why.
2. How does your chosen organizational strategy reflect the purpose of your literature review and the articles you will include in your writing? Explain.
3. Explain how your chosen organizational strategy reflects your personal learning style.

## WHAT'S NEXT?

In this chapter we described the strategies most often used for organizing the literature review; these strategies offer different ways to logically construct your narrative. The following chapter focuses on constructing your literature review arguments.

**CHAPTER SUMMARY**

1. Methods used by researchers to construct their literature review differ from each other in their organization techniques, formats of presentation, and the types of structure that they highlight.
2. The *synthesis matrix* enables researchers to achieve an overview of the literature, providing a succinct organization of the tentative and iterative topical themes and subthemes of the narrative.
3. A *summary table* is used to sum up research studies that have a direct bearing on the topic. Such tables help to organize, retrieve, and easily sort information about the different studies.
4. There are different formats for summary tables, among them *mapping*, *mind map*, *core idea map*, and *author map*.
5. A *concept map* is a hierarchical structure that visually represents how different concepts are related to each other. It starts with broader concepts and through a hierarchical process narrows itself down to more specific ones.
6. A *topic outline* is a structural plan that logically charts the main components of the literature review, arranged in the order in which they will be discussed.
7. The selection of the themes, subthemes, and categories in the topic outline is based on the research purpose and the questions that undergird the review, as well as the references that are included in the review.
8. As you develop the topic outline, there are three choices to be made. The first one relates to the *format* of the outline, the second to the *style* of the outline, and the third to the *order* of the themes and subthemes.
9. Common organizations of an outline are: thematic, chronological, separating the theoretical from the empirical, theoretical to methodological, systematic review, and hermeneutic–phenomenological review.
10. Developing an outline is an iterative process, and as you continue reading and analyzing your sources, don't be controlled by the outline you have developed.