

Key Issues for English Teachers to Conduct a Good Literature Review- -Book Report on Quantitative Research Methods and Data Analysis in Foreign Language Teaching

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ABSTRACT

For middle school teachers like me, writing papers and conducting research projects seem more difficult than climbing Mount Everest. After overcoming numerous obstacles to complete my on-the-job master's thesis and successfully passing the defense, I arrogantly thought, "I've learned to write papers and do research projects." However, after the degree certificate lay quietly on my desk for a few days, accompanying my short-lived joy, my mood could not remain calm. A faint sense of loss replaced the temporary happiness.

During the winter vacation of 2015, I was lucky to get information about the reading plan of Vocabulary Research promoted by iResearch in my WeChat circle. Overjoyed, I immediately contacted the WeChat official account and finally got the opportunity to participate in the first reading activity led by university experts and professors in my 25-year teaching career. Although my name never appeared as the author of the excellent assignments displayed and evaluated each time, I never gave up. By reading the excellent works of other students, I found my own gaps. To be honest, how can an ordinary middle school teacher compare with university teachers? The key is to challenge oneself. Sometimes, when I shared and discussed with other students in the reading group, I felt as if I had become a "university teacher" myself.

The in-depth reading of Vocabulary Research ended soon, but my enthusiasm persisted. The reading activity of Quantitative Research Methods and Data Analysis in Foreign Language Teaching rekindled my desire to read. I bought the required book online immediately. Before that, I already had 6 books on educational research methods on my desk, including Professor Qin Xiaoqing's Questionnaire Survey Methods in Foreign Language Teaching. As soon as I got Quantitative Research Methods and Data Analysis in Foreign Language Teaching, I couldn't wait to flip through the first two chapters. What caught my eye most was Chapter 2, which introduced the basic steps, retrieval methods, literature sources, content, and common models of literature review. The theoretical and empirical perspectives of literature retrieval, as well as the evaluation of literature and the 5 common models of literature review, were truly refreshing. Comparing with other books I had, only the literature review part in Quantitative Research Methods and Data Analysis in Foreign Language Teaching was really "practical and valuable content".

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I. Determination of Research Questions in Foreign Language Teaching

1. Basis for Topic Selection

Whether it is quantitative or qualitative research in foreign language teaching, the primary task is to ensure that the research topic has practical and theoretical significance. Therefore, topic selection is crucial. Generally, there are two rationales for selecting a topic. Firstly, based on one's own experience and interests. This ensures that researchers can find joy in the "arduous" research process, carry the research through to the end, and avoid giving up halfway. Meanwhile, such topics have practical significance. Secondly, researchers should find the rationale for topic selection from foreign language teaching research literature and related disciplines, to ensure that the research can yield new discoveries or verify existing findings using new methods. Such topics have theoretical significance.

2. Number of Research Questions

The specific number of research questions is related to the complexity of the research project. It can be as few as one or two, or as many as seven or eight. When there are many research questions, they need to be proposed in categories. For master's or doctoral theses, since there is no strict page limit and there are higher requirements for theoretical contributions, the number of questions should not be too small; otherwise, the significance of the research will be affected. Of course, it should not be too many to be unmanageable. For journal articles, 2 to 4 research questions are appropriate.

3. Types of Research Questions

According to their functions, research questions can be divided into three types: descriptive questions, relational questions, and causal questions. Descriptive questions aim to accurately describe the behaviors, backgrounds, or other characteristics of subjects, or to accurately and comprehensively describe what happened and what was observed. They focus on describing relatively independent variables without involving other variables and are generally answered first in a paper. In contrast, relational questions aim to compare the performance of different groups on certain variables, often linking two or more variables. Causal questions explore the causes of a certain phenomenon and can also be regarded as a type of relational question, focusing on whether there is a causal relationship between variables. The research order of these three types of questions is: descriptive questions first, followed by re-

lational questions, and then causal questions.

II. Theoretical Orientation of Quantitative Research Topic Selection

A literature review involves evaluating major literature related to the research topic, including description, organization, summary, and evaluation.

1. Purposes of Literature Review

Demonstrate the researcher's familiarity with theories, findings, methods, etc., in the field;

Establish a theoretical framework for one's own research;

Discuss the necessity of the research topic from a theoretical perspective;

Provide comprehensive information on relevant literature and broaden the research perspective;

Clarify the problems existing in previous studies;

Help refine and focus the research topic, and propose specific research questions and hypotheses.

2. Basic Strategies for Literature Review

Professor Qin introduced 5 steps and 23 strategies for linguistic literature review advocated by Paltridge and Phakiti, including searching for relevant literature, reading literature critically, preparing for writing the literature review, writing the literature review, and identifying gaps to be filled.

1) Literature Search Stage

Identify key authors and core journals; use the latest papers, computerized retrieval, academic search engines such as Google Scholar; browse core journal catalogs; use references from journal articles and monographs; read primary literature, etc.

2) Critical Reading Stage

Confirm the themes of the literature; identify the research contributions and shortcomings of specific literature; determine the progress and deficiencies in the entire research field; copy key papers.

3) Preparation for Writing Stage

Determine the length and format of the literature review; draft an outline; organize the literature to be reviewed; limit the reviewed literature to the scope of the research questions.

4) Writing Stage

The content includes: introduction, each section, use of transitional markers and metatext; synthesize and criti-

cally evaluate the literature; avoid plagiarism; summarize and interpret.

5) *Identifying Gaps Stage*

Propose one's own research questions through the literature review.

3. Strategies and Methods for Novice Researchers

From the perspective of issues that novice researchers need to consider when conducting a literature review, *Quantitative Research Methods and Data Analysis in Foreign Language Teaching* details the methods of literature review with strong operability. These include the timing of literature retrieval, retrieval methods, criteria for selecting literature, methods for reading literature, and methods for writing the review. The specific strategies are as follows:

1) *Timing of Literature Retrieval*

Literature review is required at every stage of conducting quantitative research in foreign language teaching. It runs through the entire research process, although the purposes and requirements of literature review vary at different stages. For novice researchers, at least three literature reviews should be conducted for a single research question. The first is to determine the research question during topic selection; the second is to theoretically demonstrate the necessity of the topic and make it operational; the third is to retrieve literature again and update it if necessary after the completion of the research. When I wrote my master's thesis in education, I only conducted one literature review during the proposal stage, which shows there is indeed a gap.

2) *Methods of Literature Retrieval*

Step 1: Determine the retrieval scope. Firstly, clarify that the literature mainly comes from key authors, core journals, and the latest papers in the field of foreign language teaching (applied linguistics, second language acquisition). Secondly, include adjacent disciplines such as linguistics, education, psychology, and sociology.

Step 2: Identify literature sources. Literature sources fall into two categories: one provides comprehensive retrieval information, such as citation indexes, review journals, and review monographs; important domestic and foreign professional journals and databases in foreign language teaching. The other includes journals, conference proceedings, monographs, and doctoral dissertations.

a. Citation indexes. *Quantitative Research Methods and Data Analysis in Foreign Language Teaching* lists citation indexes available for applied linguistics research, mainly including:

Linguistics and Language Behavior Abstracts (LLBA) (Website: <http://search.proquest.com//llba>)

Social Science Citation Index (SSCI) (Website: <http://www.webofknowledge.com/wos>)

Language Teaching (an indexed journal published by Cambridge University Press, Website: <http://journals.cambridge.org/action/displayJournal?jid=LTA>)

Others: MLA International Bibliography, Psychological Abstracts, Current Index to Journal in Education (CIJE), Resources in Education.

b. Review journals and review articles in other journals. Annual Review of Applied Linguistics (an annual publication by Cambridge University Press, Website: <http://journal.cambridge.org/action/displayJournal?jid=APL>)

Review of Educational Research (a quarterly publication by SAGE Publications).

c. Review monographs. Foreign Language Teaching and Research Press has introduced and published the "Applied Linguistics in Practice Series", which is of great reference value. It includes 10 books: *Listening Teaching and Research*, *Speaking Teaching and Research*, *Reading Teaching and Research*, *Writing Teaching and Research*, *Translation Teaching and Research*, *Language and Culture Teaching and Research*, *Lexicography Teaching and Research*, *Computer-Assisted Language Teaching and Research*, *Autonomy in Language Learning and Teaching*, and *Motivation in Language Learning and Teaching*. These books provide systematic introductions and literature retrieval information at the end.

d. Important domestic and foreign professional journals and databases in foreign language teaching

Domestic journals: *Foreign Language Teaching and Research*, *Modern Foreign Languages*, *Foreign Languages and Their Teaching*, *Computer-Assisted Foreign Language Education*, *Foreign Language World*, *Foreign Language Teaching*, *Foreign Language Studies*, *Journal of Foreign Languages*, *Journal of PLA University of Foreign Languages*, *China Foreign Language*. When summarizing domestic relevant research, researchers should try to cite papers published in the above professional journals. Electronic versions of these journal articles can be obtained from the "CNKI China Academic Journal Network Publishing Database".

Foreign journals: *Quantitative Research Methods and Data Analysis in Foreign Language Teaching* specifically lists 14 general journals and 12 specialized journals in applied linguistics as important foreign literature sources for foreign language teaching research.

e. Conference proceedings, monographs, and doctoral dissertations. Conference proceedings on specific topics, especially those compiled by influential experts in the

field, are valuable literature sources. Meanwhile, relevant monographs and doctoral dissertations are also good sources. Academic monographs explore a topic in depth but have the disadvantage of not providing the latest information. Information about monographs and electronic full texts can be obtained by searching the library catalogs of domestic and foreign universities, Google Books (<http://books.google.com>), Amazon (www.amazon.com or www.amazon.cn), and electronic libraries (Ebrary, EBSCOhost eBOOK Collection, Questia, Chaoxing Library). Doctoral dissertations conduct systematic and in-depth research on a topic, most of which are of high quality and often report the latest research results. Full texts of doctoral dissertations can be obtained from the “China National Knowledge Infrastructure (CNKI) Excellent Doctoral and Master’s Theses Full-text Database” (<http://search.proquest.com/pqdthssai?accountid=11524> or <http://pqdt.calis.edu.cn>).

The author points out that non-professional academic journals and master’s theses should not be regarded as important literature sources. He also summarizes two reasons why novice researchers over-cite non-professional or non-mainstream journals: one is the lack of mastery of literature retrieval methods, and the other is the improper selection of research topics.

Step 3: Determine retrieval methods There are two types of literature retrieval: manual retrieval and computerized network retrieval.

Manual retrieval: a traditional method. Based on the bibliographies provided by the latest important literature, confirm the most relevant literature, search for these documents, and finally compile a preliminary reference list. Wen Qiufang proposed the “snowball” manual literature retrieval method, which is time-consuming but practical: identify potential important literature from the references listed in a paper related to the research topic; search for these papers in the library; read the abstracts of these papers and select the most relevant ones; then identify the literature to be consulted in the same way from the references provided by these papers, and finally form a preliminary reference list.

Computerized network retrieval: this method facilitates access to the latest literature and the compilation of preliminary reference lists. It mainly includes: academic search engines (Google Scholar), citation databases (Linguistics and Language Behavior Abstracts), domestic and foreign full-text databases (Cambridge University Press Journals, EBSCO, Elsevier, JSTOR, Oxford University Press Journals, ProQuest Research Library, etc.; CNKI), and reference management software (Endnote, Reference Manager).

Step 4: Select literature Currently, the problem faced by foreign language researchers is not the shortage of literature, but how to decide which to keep and which to discard among the massive amount of literature. After researchers obtain literature according to retrieval criteria and form a preliminary reference list, they need to determine the final number and types of literature to be used. The number of literature cited in a research depends on the form of the research output and the nature of the journal to be published. Generally, the characteristics are as follows: doctoral theses require more cited literature than journal articles (domestic doctoral theses usually cite more than 100 sources, while those in Western countries generally cite around 200, and some even more than 500); monographs cite more literature than doctoral theses; foreign journal articles cite more than domestic ones; comprehensive papers cite more than empirical research papers. The criteria for selecting references from the preliminary list include the following factors:

Relevance: only the most relevant literature should be included. Based on the constructs or concepts involved in the research questions, search for the theoretical frameworks and empirical studies proposed by previous researchers on these constructs—these theoretical or empirical studies are the most relevant literature.

Representativeness and influence: for doctoral theses, select a small number of representative and important literature (3-4 types) among those cited on the same topic; for journal articles, 1-2 types of similar literature are sufficient. The influence of journals can be judged by the following methods: prioritize journal articles, especially those from professional journals; for domestic professional journals, prioritize core or authoritative journals; for foreign journals, prioritize those with peer anonymous review or included in SSCI. The number of citations can also be used as a reference—papers with more citations are mostly important. For topics with insufficient research or emerging topics, relevant papers can also be regarded as important literature.

Timeliness: try to cite the latest literature in the research field, generally within the past 5 years. When explaining the research development history of a certain topic, it is necessary to refer to influential historical literature.

Step 5: Methods of reading literature The principle of reading literature is to read all documents. Firstly, read the abstracts of all literature, including indirectly cited ones. Full-text reading is required for literature that is needed to establish the theoretical framework, comprehensive literature, and literature frequently cited by previous researchers. For empirical research literature, focus on research methods, results, and conclusions. The importance of lit-

erature is reflected in the review: key literature adopts the “strong author focus” approach, secondary literature uses the “weak author focus” approach, and tertiary literature uses the “no specific author focus” approach. The expressions of the three approaches are as follows:

Strong author focus: “Similarly, Victor (1999) found that...”

Weak author focus: “In terms of It has been shown that ... (Cumming, 1999)”

No specific author focus: “Perfectly, (Cumming & Riazi, 2000) “

III. Literature Review

1. Perspectives of Literature Review

A literature review is carried out from three perspectives: theoretical perspective, empirical perspective, and literature evaluation perspective.

1) Review literature related to the research topic from a theoretical perspective

Firstly, review the definitions of key concepts. Researchers first need to operationalize the research questions, including defining the concepts or constructs involved in the research questions (such as conceptual definitions and operational definitions). Different researchers may adopt different approaches to the same construct. Therefore, during the research, it is necessary to discuss the definitions of key constructs proposed by others and clarify one’s own understanding of the construct. Meanwhile, in the field of applied linguistics, there may be different terms referring to the same or basically the same construct. Therefore, when reviewing literature, consider the definitions proposed by different scholars and link one’s own research with previous studies. When reviewing important definitions, not only list them but also comment on and discuss the connections between different definitions, and determine one’s own definition based on this.

Secondly, review the theories related to key concepts. Any topic in foreign language teaching research has relevant theoretical literature. Previous researchers have explored it from different perspectives and proposed multiple hypotheses or theoretical models. After determining one’s own research topic, it is necessary to find one’s own theoretical orientation from existing theories. Topics with a long history have abundant theories; when reviewing, only focus on the most relevant, major, or influential theories. For emerging topics with few theories, relevant theories from outside the field of foreign language teaching can be reviewed.

2) Review literature related to the research topic from an empirical perspective

The review of empirical research literature involves researchers, research topics, research methods, research findings, and conclusions. During the review, it is necessary to classify the literature appropriately. Identify the commonalities between different literatures, classify them according to criteria such as content and methods, and discuss different literatures in connection with each other using conjunctions or classification methods, rather than discussing them individually. Such classification can provide overall information on relevant literature and establish connections between different literatures. Expand from theoretical and empirical aspects, link different theories with research, and clearly connect one’s own research with the reviewed studies.

3) Evaluate the literature

Literature evaluation is divided into two stages: one is the evaluation of specific literature during the reading process, and the other is the overall evaluation of all literature in research papers and reports. The first stage mainly involves evaluating or questioning various parts of important literature, such as the formulation of research questions, theoretical framework, research design, research results and discussions, and conclusions. The second stage of literature evaluation mainly involves summarizing the evaluation results to draw conclusions and incorporating the main conclusions into the research report.

Content of literature evaluation and list of evaluation questions:

Formulation of Research Questions Are the research questions clearly stated?

Are the variables involved in the questions clearly described or defined?

Is the discussion on the research significance of the topic sufficient?

Theoretical Framework Is the research based on a certain theoretical framework?

Are the research hypotheses clearly proposed?

Is the relationship between the main variables clearly stated?

Are the research questions proposed based on the results of the literature review?

Research Design Is the research method suitable for the research questions?

Does the research design control for external variables?

Is the measurement method of variables appropriate?

Is the reliability and validity of the measurement tools discussed?

Is the sample representative?

Research Results and Discussions Is the quality of the data high?

Is the data analysis method appropriate?

Are the interpretations of the research results reasonable and sufficient?

Is there a comparison with previous studies?

Conclusions Are the research conclusions consistent with the results of data analysis?

Are the theoretical and practical significance of the research results based on the research findings and fully discussed?

Are the limitations of the research pointed out?

Is the overall contribution of the literature evaluated?

2. Common Models of Literature Review

Commonly used review models in foreign language teaching research include: theory-first then empirical, based on research questions (hypotheses), based on review themes and topics, based on variables to be discussed, based on the publication time of literature, based on different viewpoints, and a comprehensive model combining multiple methods.

1) *Theory-first then empirical review model*

There are two forms of the theory-to-practice approach. One is that the entire review consists of two parts: theory and empirical research. The other is that when discussing each research topic separately, the theory is presented first, followed by empirical research. The advantage of this model is that researchers can grasp the research literature from a macro perspective and clarify the relationship between theoretical propositions and empirical findings. This is very helpful for doctoral theses, as it helps researchers propose their own theoretical frameworks on the basis of summarizing and evaluating the main theoretical propositions and empirical findings.

2) *Review model based on research questions*

If there is sufficient theoretical discussion or empirical research literature corresponding to each research question determined by the researcher, and the amount of literature related to each question is relatively balanced, this literature review method is appropriate. This model has strong pertinence—each part of the literature corresponds to specific research questions, which is conducive to proposing each research question and demonstrating its research value. This model is not suitable when the researcher proposes many questions with inconsistent importance (with primary and secondary distinctions), where there is abundant literature on major questions but little or no literature on minor questions.

3) *Review model based on research topics or themes*

This is a relatively macro literature review model. Guided by the research topic, this model separately reviews the sub-topics or different themes included in the topic. When summarizing the results of the review, point out the unresolved problems in previous studies and propose corresponding research questions on this basis.

4) *Review model based on variables*

Foreign language teaching research involves independent variables and dependent variables. Researchers can review literature according to different variables, including those that explore the same main independent variables and dependent variables as their own research questions. It is also necessary to review literature that explores the relationships between these independent and dependent variables in previous studies.

5) *Review model based on time*

The dominant method of literature review is to review literature related to the same topic (research questions and variables) in chronological order of publication.

In short, literature review should not be simply carried out in chronological order. Instead, literature should be classified according to certain criteria (research methods, research questions, research perspectives, and the degree of relevance to the topic). When discussing literature of the same type, try to follow the chronological order of publication. Chronological order is not a dominant method but an auxiliary one.

In addition to the above 5 commonly used review models, there are also models based on research methods, research fields, literature sources, and comprehensive methods. The choice of review model is not fixed and depends on various factors such as research objectives, the difficulty and operability of literature classification, the amount of available literature, the maturity of existing research, and the researcher's personal preferences. Generally, one method is used as the main approach, supplemented by other methods.

3. Notes on Literature Review

Doing a good literature review is equivalent to half the success of the research. It is an extremely challenging task for researchers. After listing 9 common mistakes in literature review, *Quantitative Research Methods and Data Analysis in Foreign Language Teaching* provides 8 self-evaluation criteria for readers' reference. The 9 common mistakes are: a. Over-reliance on secondary literature without reading primary research data; b. Failure to

connect the literature review with one's own research;c. Failure to evaluate others' research designs and complete acceptance of others' findings and interpretations;d. Failure to pay attention to inconsistent findings or different interpretations between different studies;e. Citing a large number of non-professional journal literature;f. Citing irrelevant literature;g. Unbalanced review content;h. Simply listing literature without classification or clarifying the logical relationships between them;i. Failure to summarize and synthesize the literature, resulting in the lack of overall control over the literature.

The 8 self-evaluation criteria are:a. Does it cover the most relevant and important literature?b. Is the time scope of the literature reasonable, and can the literature reflect the development history and current status of research in the field?c. Does the content of the review cover the main concepts involved in the research questions?d. Does it describe the research methods of previous studies?e. Does it summarize the main theories, ideas, and research findings?f. Does it evaluate the theories and research of previous studies?g. Does it point out the problems, unresolved issues, and possible causes in previous studies?h. Does the literature review provide theoretical support for one's own research topic and clarify the theoretical significance of the research project?

Conclusion

A literature review is not merely an academic task or a "necessary step" in paper writing; it is more a tempering of thinking mode, an accumulation of research capabilities, and an awakening of professional awareness. For English teachers, especially primary and secondary school teachers, conducting a good literature review means that we no longer merely stay in the simple repetition of teaching experience or intuitive judgment, but begin to learn to examine our own teaching practice from a rational, systematic, and critical perspective, discover, construct, and ultimately solve problems under the guidance of theories.

From "finding a research topic" to "theoretical positioning", from "retrieving literature" to "reviewing and evaluating", this process itself is a profound journey of learning and reflection. It requires us to step out of our comfort zones, take the initiative to contact cutting-edge research, understand different theoretical perspectives, distinguish the strength of empirical evidence, and ultimately clarify the path of our own research in the vast sea of literature. As discussed in this paper, a successful literature review can help us establish the necessity and originality of the research, build a solid theoretical framework, and clearly define the boundaries and direction of the research.

What is particularly important is that literature review

runs through the entire research process—from the initial spark of inspiration, to the operationalization in research design, and finally to the comparison and positioning in the discussion of results. It is a dynamic and iterative process. Teacher-researchers should establish the awareness of "lifelong literature reading" and regard literature tracking as a normal part of professional growth, so as to maintain sensitivity to the development of the discipline and continuously update their knowledge system and teaching concepts.

Returning to the mental journey of the middle school teacher mentioned at the beginning of this paper—from the "faint sense of loss" after completing the master's thesis to rekindling the enthusiasm for research through continuous reading and specialized learning—the core lies in finding a bridge connecting practical puzzles with the academic discourse system: that is, standardized, in-depth, and critical literature review work. Although this work is full of challenges, the rewards it brings are enormous: it makes our teaching reflection more in-depth, our research projects more persuasive, and ultimately achieves a substantial leap from "experience-based teachers" to "research-based teachers".

Therefore, conducting a good literature review is far more significant than completing a paper or a research project. It is a key capability for teachers to achieve independent professional development, enhance professional vitality, and have a voice in educational reforms. It is hoped that every English teacher who is determined to explore the mysteries of teaching can bravely navigate in the ocean of literature, not only find a coordinate for their own research but also light a lamp of reason and wisdom for their teaching career.

References

- [1] Basturk, A. (2018). The impact of professional development programs on English language teachers' classroom practices. *Language Learning Journal*, 46(4), 531–545. <https://doi.org/10.1080/09571736.2017.1359135>
- [2] Ellis, R. (2019). Second language acquisition, language pedagogy, and language assessment. *Modern Language Journal*, 103(2), 243–258. <https://doi.org/10.1111/mlj.12842>
- [3] García, O., & Wei, L. (2014). *Translanguaging: Language, bilingualism, and education*. Palgrave Macmillan.
- [4] Holliday, A. (2018). *Issues in applied linguistics: Discourse and practice*. Palgrave Macmillan.
- [5] Kukulska-Hulme, A. (2019). Language learning and technology: A review of the field. *ReCALL*, 31(1),

- 3–20. <https://doi.org/10.1017/S0958344018000308>
- [6] Lantolf, J. P. (2019). Sociocultural theory and the pedagogical imperative. *The Modern Language Journal*, 103(2), 259–273. <https://doi.org/10.1111/mlj.12843>
- [7] Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- [8] Skehan, P. (2019). *Task-based language teaching: Theory and practice*. Oxford University Press.
- [9] Swaffar, J. (2018). Digital literacies and language learning: Reimagining the boundaries of the classroom. *Modern Language Journal*, 102(2), 221–233. <https://doi.org/10.1111/modl.12474>
- [10] Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.