

Literature Review and Use of Benjamin Bloom's Taxonomy¹

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Abstract

This paper explores the use of Benjamin Bloom's taxonomy in the process of reviewing the related literature and writing a literature review. Specifically, the discussion focuses on four fundamental issues raised in the study as follows: purpose and focus of literature review, literature review in the research proposal, literature review and use of Benjamin Bloom's taxonomy, and writing a literature review. Six categories in Bloom's taxonomy (ways of thinking) are elucidated as follows: remembering, understanding, applying, analyzing, evaluating and creating. Through the use of these tasks and ways of thinking in the literature review process, the study shows that the review of the related scholarship is one of the most important processes of research methods in the sense that it enables the researcher to determine the state of research in his or her area of investigation. The background knowledge acquired in the course of the research enables him or her to make useful connections between the literature review and other parts of the research project, ensuring that the lacunae in the previously concluded research are addressed and that any possible gap is filled by the present study. Hence, it also shows that doing a review of the related literature is a serious business aimed at enhancing the quality and relevance of the research focus, theoretical framework, methodology and findings, thereby helping to promote originality and excellence in research in the scholar's area of investigation or specialization.

Keywords: Research originality, literature review, Benjamin Bloom, taxonomy, remembering, understanding, applying, analyzing, evaluating, creating.

¹ Paper presented at a capacity building workshop organized by the Faculty of Arts, University of Nigeria, Nsukka on November 27, 2014.

Introduction

In this paper, literature review or review of the relevant literature cannot be discussed without reference to research in tertiary institutions such as the University of Nigeria, Nsukka (UNN). Like their counterparts in other universities across the world, UNN lecturers and postgraduate students carry out research on a regular basis in various faculties such as arts, agriculture, business administration, education, engineering, law, medicine, pharmacy, social sciences, etc.

Research is defined as a “methodical investigation into a subject in order to discover facts, to establish or revise a theory, or to develop a plan of action based on the facts discovered” (*Encarta Dictionary* 2009). Essentially, the purpose of research is to study a subject or product carefully with a view to discovering new facts about it. Hence, the close correlation between research and development in various fields of human endeavour. In French, *la recherche savante* in the university system refers to scholarly research in various disciplines in the arts, social sciences, pure and applied sciences. On this note, the National Universities Commission (NUC) organizes periodically *Nigerian Universities Research and Development Fair (NURESDEF)*. In 2010, the University of Nigeria (UNN) hosted the 4th Edition of NURESDEF Exhibition with the theme “Research and the Realization of Vision 20-2020” and the Faculty of Arts and others participated in the research exhibition (See Uguru and Ezeonu, 2010). In the university system, therefore, a good research project should have a clear and well focused literature review, aims and objectives, theoretical framework and methodology that are geared towards national and international development in line with the vision and mission of the institution.

What is literature review? What role does it play in the research process? What is the role Benjamin Bloom’s taxonomy in the process of reviewing the related literature and writing a literature review? This paper will try to proffer answers to these questions through our discussion on the use of Benjamin Bloom's taxonomy in the literature review process.

Purpose and Focus of the Literature Review

What is the purpose of literature review or review of the related literature? Its purpose is to examine all previously published material in the researcher’s area of investigation, that is, the contributions of other researchers in the area, thereby making it possible for the researcher to “introduce the reader to the subject [and] cite gaps that the present study would fill” (Adogbo and Ojo 2002: 35). In other words, according to Nwabueze (2009: 44), “the main aim is to the reader with the present state of scholarship in the area of investigation and assess their contribution to the advancement of knowledge in the area generally and on the topic particularly”. With a focus on research previously concluded on a particular subject by different researchers, which include university lecturers and

postgraduate students in different parts of the world, the review of related literature enables the researcher to avoid *des sentiers battus* or “beaten tracks” in the proposed area of investigation:

La recherche est une construction à long terme, tel un édifice auquel participe plusieurs architectes. C’est pourquoi il convient, avant d’ajouter sa propre pierre à l’édifice, d’examiner ce qui a été réalisé jusque-là [...] étape préalable à toute nouvelle construction, afin que l’étudiant chercheur ne se trouve dans la situation inconfortable de celui qui refait à l’identique une étude déjà menée, parfois par des chercheurs bien plus chevronnés (Guidère 2004 : 27).

Research is a long-term construction project like a mighty building under construction by several architects. For this reason, before getting involved in the construction work, the researcher needs to know what has been done in the area of investigation [...]. It is the first step in every new construction project, and this ensures that the student researcher does not repeat any previously concluded study such as a research project already completed by more experienced scholars in the area. [A translated version of the above text in French by the author of this paper].

Research is comparable to a long-term building project involving the activities of several participants as a team. In their *Playbook for Research Methods: Integrating Conceptual Frameworks and Project Management*, Shields and Rangarajan (2013) use “football as a metaphor to examine aspects of empirical research often overlooked in typical research methods texts” (electronic version). To participate effectively in the teamwork, the researcher has to demonstrate that he or she has adequate background knowledge in the area of investigation, that is, sufficient knowledge of the literature surrounding the topic. Dawson (2007: 59) clearly states as follows: “If there is other work which has covered this area, you need to show how your work will build on and add to the existing knowledge. Basically, you have to convince people that you know what you’re talking about and that the research is important”. On the other hand, if there is no previously published material in the area, you also have to say so, explaining how your proposed research will fill this gap.

In other words, through a comprehensive analytical review of the related literature, the researcher elucidates the state of research in his or her area of investigation. The relevance of research is determined by the focus and quality of the literature review, among other important factors, given that “literature review is a text of a scholarly paper, which includes the current knowledge including substantive findings, as well as theoretical and methodological contributions to a particular topic. Literature reviews use secondary sources, and do not report new or original experimental work” (http://en.wikipedia.org/wiki/Literature_review).

On the issue of research focus in literary criticism, for instance, a topic like “Organization of Space in African Literature” appears to be too vast. This broad literary corpus (novels, short stories, poetry and drama written in various languages from different parts of Africa, from the colonial era to present) is rather inadequate and it would be quite difficult, if not impossible, to tackle the challenges of doing a good literature review in the proposed subject of investigation. Hence, it will be necessary to

adjust the topic and focus, situating them within the framework of literary production in a particular African sub-region, specific period and literary genre, for example: “Organization of Space and Political Discourse in Francophone West-African Novel: 1980-2010”. We can see clearly that this topic delimits the scope of the previous one, and that it will go a long way in sharpening the focus and objectives of the research project.

Literature Review in the Research Proposal

Apparently, review of the related literature is one of the most important processes of the research methods. Hence, the researcher has to present a summary of the literature review in a dissertation or thesis proposal before proceeding to discuss it in a chapter of the research project. Nwabueze (2009: 40) rightly points out as follows: “There is need to provide a brief summary of major research previously concluded in the area of investigation. This will pave the way for a more comprehensive review of scholarship which will ultimately occupy a chapter in the proposed study. This brief review of related literature [in the proposal] stands as an assurance that the researcher is familiar with the state of research in the area of investigation”.

Literature Review and Use of Benjamin Bloom’s Taxonomy

Shields and Rangarajan (2013) and Granello (2001) make useful connections between the activities involved in the literature review process and “Benjamin Bloom's revised taxonomy of the cognitive domain”. The latter comprises six interrelated ways of thinking applicable to the process of doing a literature review as follows: “Remembering, Understanding, Applying, Analyzing, Evaluating and Creating” (http://en.wikipedia.org/wiki/Literature_review). At this point, let us to discuss each of them in turn.

Remembering

Remembering is the first category. It is the beginning of the literature review process which involves recognition, retrieval and collation of various sources of information on the subject of investigation such as books, journals, conference proceedings, dissertations and theses, bibliographic databases, the internet, etc. The expert researcher does not rely solely on the internet because a high proportion of the relevant material is not there, especially most journal articles, books, book chapters, monographs, conference proceedings, etc. On this note, Rugg and Petre (2007) state that “browsing alone runs the risk of missing key literature, but it does give you a chance to find something useful by serendipity” (50). Moreover, it is advisable to use the web carefully and sensibly for research purposes because anybody can publish information about a topic over the internet, and some of this information may be misleading or incorrect. Hence, the use of websites run by reputable and trustworthy organizations is strongly encouraged.

Examining the above delimited topic “Organization of Space and Political Discourse in Francophone West-African Novel: 1980-2010”, for example, a number of previous scholarly publications on the subject of investigation are available on the internet and library shelves as follows:

L'Espace dans le roman africain francophone des origines à 1987 : visions du monde et idéologies by Iwuchukwu (1989/1991), a pioneer study on space in Francophone African literature or novel, followed by *L'Espace discursif du roman africain francophone post-colonial* by Paré (1996), *L'Espace dans le roman africain francophone contemporain: 1970-1990* by Paravy (1999), *L'Espace dans le roman africain francophone: valeurs, visions et ideologies* (2002), "Espace romanesque et discours politique dans *Une aube si fragile* d'Ibrahima Signaté" (2008) and "Functional Organization of Space and Discourse on Governance in Signaté's *Une aube si fragile* and Ousmane's *15 ans, ça suffit!*" (2009) by Iwuchukwu, etc. Literature review in the proposed area of investigation should therefore explore all published books, chapters in books, conference proceedings and journal articles with a focus on space in literature, especially space in African literature, space in Francophone African literature, space in Francophone Caribbean literature, etc. with emphasis on the novel.

Understanding

A list of previously published books, journal articles and conference proceedings, etc. like those cited above are read and understood from the point of view of aims and objectives, theoretical framework, methodology, data analysis, research findings, lacunae and contribution to knowledge in the area of specialization or investigation. This second step is crucial in the literature review process in the sense that the understanding of the new terminology in these aspects of previously concluded work enables the researcher to equip himself or herself with the much needed background knowledge of the subject in the research project.

Applying

In Bloom's third category *applying*, the researcher makes connections between the previously published material and his or her larger research project. This exercise is facilitated by the understanding of the texts read, especially in the case of empirical research where the literature review will constitute a chapter. Equipped with the background knowledge of the subject of investigation at this stage, the researcher begins sharpening the theoretical and methodological orientations of the proposed study in line with its focus.

Analyzing

At this point, the scholar has to identify, organize and analyze different parts of the scholarly material under review in a coherent order. A critical analysis of the related literature enhances the relevance and quality of citation, acknowledgement of sources, logical presentation of ideas, thoughts and arguments in the chapter dealing with literature review and subsequent chapters of the research project. In other words, the fourth category, *analyzing*, enables the scholar to present a feasible research outline and to develop frameworks for a comprehensive analysis in the proposed study.

Evaluating

The fifth step in Bloom's taxonomy, *evaluating*, enables the researcher to make a comprehensive and systematic critical appraisal of the relevant scholarly material analyzed with a view to pointing out the strengths and weaknesses or lacunae in the theoretical framework, methodology, findings, presentation of ideas, thoughts and arguments, as well as in the structure, written expression, documentation methods or styles, etc.

Creating

Creating is the last category but not the least in Benjamin Bloom's taxonomy. Apparently, this final step is one of the most important in the literature review process because, as the term *creating* suggests, the special skills developed in the above tasks and ways of thinking inject a measure of creativity and originality into the process of doing a literature review. The importance of creativity in empirical research is highlighted in *A Playbook for Research Methods: Integrating Conceptual Frameworks and Project Management* (Shields and Rangarajan 2013: Ch.8).

The creativity of the researcher at this stage will determine somewhat the quality and relevance of the proposed study. The researcher is capable of injecting metacognition into the literature review process. This will enable him or her to identify any possible gap, find and formulate a fresh and original research question, and make connections between the literature review and other parts of the research project.

Writing a Literature Review

Following the last category in Benjamin Bloom's taxonomy, the researcher proceeds to write a comprehensive and systematic literature review as an integral part of the proposed study, adopting an appropriate method of organizing the scholarly material collected as well as the points noted for the review. Nwabueze (2009: 44-46) stresses the need to make a logical presentation of the material by taking into consideration four organizational methods, discussing each of them in turn: "chronological arrangement, thematic arrangement, methodological arrangement and categorical arrangement".

Conclusion

In this paper, we discussed the process of doing a literature review through the use of Benjamin Bloom's taxonomy (ways of thinking) as follows: remembering, understanding, applying, analyzing, evaluating and creating. The study explored the use of the six categories in Bloom's taxonomy, showing that literature review is one of the most important processes of the research methods in the sense that it enables the researcher to determine the state of research in his or her area of investigation. The background knowledge acquired in the course of the research enables him or her to make connections between literature review and other parts of the proposed research, ensuring that the lacunae in the previously concluded research are addressed and that any possible gap is filled by the present study.

Hence, the study has shown that doing a review of the related literature is a serious business aimed at enhancing the quality and relevance of the research focus, theoretical framework,

methodology and findings, thereby helping to promote originality and excellence in research in the scholar's area of investigation or specialization.

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