Chapter 4

CHAPTER 4

Research design and methodology

4.1 Theoretical framework

4.1.1 Introduction

Every type of empirical research has implicit, if not explicit, research design. In the most elementary sense, the design is a logical sequence that connects empirical data to a study's initial research questions and ultimately, to its conclusions. In a sense the research design is a blueprint of research, dealing with at least four problems: what questions to study, what data are relevant, what data to collect, and how to analyze the results (Yin, 1994). It is much more than a work plan because the main purpose is to help to avoid the situation in which the evidence does not address the initial research questions. Hence the research design deals with a logical problem and not a logistical problem, and also specifies how the investigator will address the two critical issues of representation and legitimization.

Furthermore, a research design describes a flexible set of guidelines that connects theoretical paradigms to strategies of inquiry and methods for collecting empirical material. It situates researchers in the empirical world and connects them to specific sites, persons, groups, institutions, and bodies of relevant interpretive material, including documents and archives. This chapter covers the methods of the study. In the main, it deals with data collection and covers how data is derived from primary and secondary sources. The chapter also details the approach used and conditions under which the various stages of investigations were carried out, development of initial contacts, pilot survey, and design of main research instrument (questionnaire), which were used to collect the primary data. It further indicates how issues of validity and reliability were addressed through triangulation.

4.1.2 Case study as a qualitative research

The qualitative approach to research is typically used to answer questions about the nature of phenomena with the purpose of describing and understanding them from the participants' point of view. Creswell (cited in Leedy, 1997:104) defined a quantitative study as 'an inquiry into social or human problems, based on testing a theory composed of variables, measured with numbers and analyzed with statistical procedures in order to determine whether the predictive generalizations of the theory hold true'. In contrast, he defined a qualitative study as 'inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting'. Denzin & Smith (1998:3) added that: 'Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter'. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret phenomena in terms of the meanings people bring to them.

As a form of qualitative research, case studies are defined by interest in individual cases, not by methods of inquiry used. They draw attention to the question of what specifically can be learned from the cases. Case studies are used when the researcher intends to support his/her argument by an in-depth analysis of a person, a group of persons, an organization or a particular project. The case study approach is not limited in value; rather, it provides an in-depth analysis of a specific problem. Naoum (1998), and Gall, Borg, & Gall (cited in Leedy, 1997) classified case study design into three groups. The Gallo and Horton study (1994), (cited in Box 4A, below) illustrates a descriptive case study, Kos's (1991) research provides an example of an explanatory case study, and an evaluative case study is illustrated by Butler's (1995) work.

Yin (2003) identified at least six kinds of case studies based on a 2x3 matrix. First, case study research can be based on *single-* or *multiple-case* studies; second, whether single or multiple, the case study can be *exploratory* (what Leedy cites as evaluative), *descriptive*, or *explanatory* (causal). A single case study focuses on a single case only, while a multiple case study may include two or more cases in the same study. An exploratory case study (whether single or multiple) is aimed at defining the questions and hypotheses of a subsequent study (not necessarily a case study) or at determining the feasibility of the desired research procedures. A descriptive case study presents a complete description ('tell it as it is') of a phenomenon within its context. An explanatory case study presents data bearing on cause-effect relationships, explaining how events happened.

Box 4A: Case study types

- 1 The purpose of this study was to examine and describe the personal and educational interactions of a group of high school teachers who had direct and unrestricted access to the Internet from their classroom desktop computers (Gallo & Horton, 1994:17). [Descriptive case study]
- 2 This multiple case study explored the perception of four reading-disabled middle school students for the purpose of uncovering factors that may have prevented these students from progressing in their reading development (Kos, 1991:875). [Explanatory case study]
- 3 The research described here investigated the effectiveness of an intervention model designed to promote self-regulated and strategic learning. This study comprised six parallel case studies (Butler, 1995:170) [Evaluative case study]

Source: Leedy, 1997:157

Almost any phenomenon can be examined by means of the case study method. Whereas some researchers focus on the study of one case because of its unique or exceptional qualities, other researchers study multiple cases to make comparisons, build theory, and propose generalizations. For example, a researcher can conduct an intensive study of one high school teacher's use of literacy activities to teach chemistry; another can compare the cases of four teachers involved in an innovative staff development program to examine the program's impact. In both of these examples, the researchers defined their 'cases' in terms of people. In contrast, a third researcher may define each of three junior high schools studied as a case. Others have defined cases in terms

of entire programs, organizations, or communities. Each of these studies is an indepth study of the phenomenon of each 'case' in its natural context and including the point of view of the participants.

The logic underlying a multiple case study is that each case must be carefully selected so that it either (a) predicts similar results (literal replication) or (b) produces contrasting results but for predictable reasons (a theoretical replication). Sometimes called a collective case study or 'multi-site qualitative research' by Herriott & Firestone (cited in Stake, 1998:105), a multiple case study may have a distinct advantage as evidence from the 'cases' is often considered more compelling. This study combines all three case study types as it investigates how effective the presses have been in terms of what they have been set up to do—publish scholarly works; and examine and describe their policies and programmes amid the challenges they face as developing country presses. It is explanatory as it revealed factors besides what are already known to stifle growth in African publishing industry.

4.1.3 Validity and reliability issues

It is the view of Yin (1994), Janesick (1998) and Donmoyer (cited in Janesick, 1998) that a fatal flaw in doing case studies is to conceive of statistical generalization as a method of generalizing the results of the case. This is because cases are not 'sampling units' and should not be chosen for this reason. Under these circumstances, the method of generalization is 'analytic generalization' in which a previously developed theory or observation is used as a template with which to compare empirical results of the case study. As the nature of the case study focuses on one aspect of a problem, the conclusion drawn will not be generalized but rather related to one particular event.

Triangulation, used in all types of qualitative research, refers to the process of using multiple data collection methods, data sources, analysis, or theories to check the validity of the findings. Denzin (cited in Janesick, 1998:46) identified four basic types including data triangulation, which is the use of a variety of data sources in a study. Qualitative research is inherently multi-method in focus (Denzin & Smith, 1998) and the use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question. To them, triangulation is not a tool or a strategy of validation, but an alternative to validation. The combination of multiple methods, empirical materials, perspectives and observation in a study is best understood, then, as a strategy that adds rigor, breadth, and depth to any investigation.

Through the process of triangulation, any finding or conclusion is likely to be much more convincing and accurate if it is based on several different sources of information, following a corroboratory mode. This research is a multi-site case study of the operating policies and practices of African university press publishing and was meant to gather evidence relating to the peculiar challenges of this genre of publishing from six presses located in five sub-Sahara African countries. It borrowed heavily from the methods of case study research.

4.2 Research instruments

The study adopted the data triangulation technique by using a combination of data sources with the effect that the strengths and weaknesses in each source are compensated when used together. The aim was to improve the validity of the findings. The literature is full of examples of this approach as seen by Caraway (1995), Jones (1998), Lekau (1998), and Parsons (1987). Caraway used a survey questionnaire followed by on-site personal interviews with university press directors and press staff members. Parsons, for example, relied on several methodological tools including on-site study of a single university press, in-person interviews with directors and acquisitions editors, and a survey of the leading university presses in Texas. Jones used a diversity of methods including a survey questionnaire and a series of semi-structured interviews to allow for triangulation. In addition to questionnaires and interviews as main instruments,

Lekau supplemented these methods with documentary analysis and informal observation.

4.2.1 Data sources

Data collection for case studies can rely on many sources of evidence including documents, archival materials, interviews, direct observation, participant-observation, and physical artifacts. No single source has complete advantage over all the others. In fact, the various sources are highly complementary, and a good case study will therefore want to use as many sources as possible. For case studies, the most important use of documents is to corroborate and augment evidence from other sources, in verifying the correct spellings and titles or names of organizations, and in drawing inferences about the nature of the organization. Participant observation and physical artifacts, as two other sources of evidence, have no potential relevance to the present study.

The method adopted for this study involved extended on-site visits to the three presses in Accra, Harare, and Pretoria, and in-person interviews with directors of these presses, followed by a mail survey. The three presses in Cape Town Lusaka, and Nairobi were covered by mail survey only using the same set of questionnaire. Primary data were obtained from the preliminary and main questionnaires, and on-site visits, interviews and observations at the presses. Administrative documents (proposals, progress reports, and other internal documents) and records (such as organizational charts and budgets) of the presses and their parent institutions were used to supplement these sources.

Interview and observations following the questionnaire were used to clarify and fill in possible gaps in the completed questionnaire. For primary data the combination of methods ensured thorough coverage in as far as resources could go. Secondary data covered library research for relevant literature from all possible sources and formats, including journal articles, books, theses, the Internet and expert contacts. The pilot survey was necessary for adequate questionnaire coverage, and to ensure clarity of the questions.

4.2.2 Development of the survey instrument

Press-specific policy issues like mission statement, structure and main departments, list building (areas of specialization), staffing, co-publication, rights, funding and unique information about each press were included under Administration. The rest of the questions followed the flow of work in a press house: starting from the Editorial Department (acquisition, copy editing), to Production (design, illustrations, production), followed by the Marketing Department (promotion, advertising, distribution, and warehousing). The set of questions under 'General' solicited views on a range of general policy and practical publishing-related issues.

Questions relating to acquisition and selection processes, editorial procedures, author/press relationships, and role of the editorial board were covered under the section on Acquisitions/Editorial. Funding levels, marketing strategies, information on sales figures, royalties, promotional methods, warehousing and distribution came under the section on Marketing. The section on Production brought together questions on design, subject areas, publishing outputs and scholarly journals. Open-ended questions were included to solicit views, opinions and comments on funding, marketing, application of new technologies, and trends in the scholarly publishing.

4.2.3 The choice of the cases

Publishing in Sub-Saharan African universities started with the University of Ibadan Press in 1955, a confirmation that Nigeria has one of the most successful book publishing industries in black Africa. South Africa, after a change in the political process in 1994, joins Zimbabwe, Kenya, Ghana, and Zambia as countries that have strong publishing culture (Zell, 1992; Teferra, 1998; Altbach, 1998a). Of the ten African country-members of the International Publishers

Association represented by their national publishers associations, all the countries except Zambia, are listed together with Egypt, Morocco, Sudan, Tanzania and Uganda. This is a further indication that these countries are among those with the most vibrant publishing activities on the continent (IPA, 1998).

One press was selected from each of the countries, except South Africa from which two were selected because it is rated as having the largest economy among the five countries and also because of its proximity to Botswana where I live and work. This was economical in terms of time and money. In alphabetical order of their locations the Presses are: (Accra) the Ghana Universities Press, (Cape Town) University of Cape Town Press, (Harare) the University of Zimbabwe Press, (Lusaka) University of Zambia Press, (Nairobi) University of Nairobi Press, and (Pretoria) University of South Africa Press. The Presses' current status were confirmed through the results of a preliminary questionnaire¹, which indicated that all six have active publishing programmes but they all do not have printing facilities.

A university press need not own a printing house because printing is a separate industry that has become highly technological. The 1979 report of the National Enquiry into Scholarly Communication in the Unites States revealed that while in 1948 only eleven out of thirty-five university presses in the United States had their own printers, in 1968 eight out of sixty-nine and in 1978 one out of every ten did so. The trend is the same in England and other European countries. However, even if a university owns a printing house, it need not be part of its publishing house (Agoulu & Agoulu, 1998:124).

4.2.4 Preliminary questionnaire

This was sent to six presses asking for their staff strengths, founding dates, ownership of printing press, and annual publications output over the 5-year

¹See Appendix 4B

period –1995 to 1999. The purpose was to find out how viable each of the press houses was and to establish that they are not dormant. Four of the presses that had e-mail facility were sent the questionnaire by email. The questionnaire was sent to the remaining two by post together with international return postal slips and self-addressed envelopes. All were dispatched in May 2000 and within a week two had been returned by email. After about a month a reminder was sent by e-mail to the two other presses.

Follow ups were made to the Unisa and the University of Ibadan Presses by posting the questionnaire with return postage slips and self-addressed envelopes. By July 2000 two of the presses had responded bringing the total to four. The fifth was returned in December 2000 leaving the last which did not respond even after several reminders including two sent with enclosed postage return and self-addressed envelope. The University Presses of Maiduguri and Ahmadu Bello (Zaria), both in Nigeria were identified as substitutes but they responded to the preliminary questionnaire only. The University of Zambia Press, which had been revitalized in 1996 (Kasankha, 1997), came in as the eighth press.

4.2.5 Pre-testing the Survey Instrument and pilot survey

A lecturer in publishing studies at the Department of Information Studies, University of Pretoria checked the questionnaire for its general content, content validity and thoroughness. Her noteworthy advice and comments were incorporated in the final survey instrument. My Advisors further checked the instrument before it was finally administered. The pilot instrument was reviewed by two prominent publishers², both with over fifteen years experience and who are directors of their own local publishing companies. The questionnaire was pretested and piloted to ensure that the questions were unambiguous and answerable. The final preparation for data collection was the conduct of a pilot

²Personal communications from Chief Victor Nwankwo of Fourth Dimension Publishing, Enugu, Nigeria; and Mr. Woeli A. Dekutsey of Woeli Publishing Services, Accra, Ghana.

study, which was chosen for reasons such as geographical convenience and similarity to the real cases.

The pilot helped to refine the data collection plans with respect to both content and the procedures to be followed. It also provided a trial run for the questionnaire, which involved testing the wording of the questions, identifying ambiguous questions, testing the technique that was used to collect the data, measuring the effectiveness of the respondents, etc. Bell (cited in Naoum, 1998:87) described a pilot study as

getting the bugs out of the instrument (questionnaire) so that subjects in your main study will experience no difficulties in completing it and so that you can carry out a preliminary analysis to see whether the wording and format of the questions will present any difficulties when the main data are analyzed. Bell went further and said; ask your guinea pigs the following questions:

How long did it take you to complete the questionnaire? Were the instructions clear? Were any of the questions unclear or ambiguous? If so, will you say which and why?

Did you object to answering any of the questions? In your opinion, has any major topic been omitted? Was the layout of the questionnaire clear/attractive? Any comments?

To determine clarity of questions, ease of responding, and optimum length of the questionnaire, a scholarly press within the sub region was selected for the pilot case study. This was because it was likely to reflect identical experiences of the presses being studied. The pilot case press house was the Fourth Dimension Publishing³ in Enugu, Nigeria. Even though it is not a university press, it was a good stand-in for the pilot because it publishes scholarly materials; besides none of the selected university presses responded to the pilot survey. The responses to the questions and the various comments were used to improve upon the final survey instrument.

³Chief Victor Nwankwo was brutally murdered in August 2002, two months after the pilot survey.

4.2.6 Administration of main questionnaire

Three of the presses were served with the questionnaire followed by personal on-site visits. Copies of the questionnaire were posted to the remaining presses who were asked to complete and return them. The combined effect was to reduce cost since all the presses could not be visited because of time and money constraints. The advantage in the on-site visits was to cover the lack of qualitative depth to answers obtained through questionnaire by achieving more complete responses and further probing and prompting which were not possible with posted questionnaire. Through the visits and observations, supplemented by interviews with the directors, there was room for discussions and the recording of respondents' opinions and views on their publishing programmes, policies and procedures. Respondents of the main research instrument were the University Presses of Ghana, Cape Town, Harare, Nairobi, Unisa, and Zambia.

Summary

This chapter covered the methods of the study and dealt with data collection and their derivation from primary and secondary sources. The chapter also detailed the approach used and conditions under which the various stages of investigations were carried out from the development of initial contacts, the choice of the cases, preliminary questionnaire, pilot survey, and design and administration of the research instrument (questionnaire). It further indicated how issues of validity and reliability were addressed through the use of several data gathering methods. Use of the multiple case study approach was also justified. The method adopted for this study involved extended on-site visits to the three presses in Accra, Harare, and Pretoria, and in-person interviews with directors of these presses, followed by a mail survey. The three presses in Cape Town Lusaka, and Nairobi were covered by mail survey only using the same set of questionnaire.