

Encouraging Students to Think About Research as a Process

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Review Essay:

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Abstract: In *Research Design in Social Research*, David DE VAUS presents a wonderful opportunity for research design students and practitioners to think more about the planning and process of research design. DE VAUS structures his text by presenting introductory research design tools followed by sections on experimental, longitudinal, cross-sectional, and case study designs. Each section presents types within each category, issues in conducting these types of research, and data analysis recommendations. The text is accessible to a variety of audiences, from beginner to experienced, regardless of the discipline. What makes this text stand out as highly useful for the classroom is the author's continued insistence that "there is no right way of developing ideas" (p.23), and that researchers must continue to think about what they are doing rather than blindly doing it.

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1. Overview

It is no small task to introduce students to the mechanics and artistry of social science research. Most students in introductory courses are new to the experiences of designing, conducting, analyzing, interpreting, and writing about research. They usually call for structure and "answers" to questions they have. They are often looking for "how to do" research. With limited time, many professors are hard pressed to disappoint them, stressing mechanics and "getting the job done." The artistry many of us express through our research is often left out or minimized in the classroom experience. This artistry and *thinking about research* is exactly what DE VAUS stresses in his text, *Research Design in Social Research*. [1]

2. Organization of Text

The book is structured around five main sections: (a) an introduction to research design, followed by four parallel sections describing (b) experimental, (c) longitudinal, (d) cross-sectional, and (e) case study research. Each of the latter four sections discusses types of designs for that particular category, issues in conducting research in that category, and analysis options for that category. The systematic treatment of each category of research stresses their similarities, and at the same time highlights the unique aspects of each. Students are presented with the structure they need when learning new information, and seasoned practitioners can flip to a particular section for a quick refresher. [2]

As an example, the section on case study designs first gives an overview of thinking about case studies. Next, DE VAUS examines how to define a case. This introduction is followed by a very well-organized discussion of the relationship case studies have to theory: "without a theoretical dimension a case study will be of little value for wider generalization" (p.221). He then goes on to describe how theory can be used in the design process, including a discussion of designing case studies for theory testing, theory building, and understanding a case through theory use. DE VAUS also includes a section on descriptive case studies and their relationship to theory use. Finally, Figure 13.2 in the text lays out an excellent grid relating additional considerations in the case study methodology such as single/multiple cases, parallel/sequential studies, and retrospective/prospective studies. The succeeding chapters in this section of the text cover design issues such as internal and external validity, sampling, access, and ethics, along with a detailed description of data analysis options such as pattern matching, time series, statistical analysis, and analytic induction. [3]

DE VAUS states in the beginning of the text, "it is erroneous to equate a particular research design with either quantitative or qualitative methods" (p.10). This is important, as it again stresses the importance of first developing a *question to address* and then designing a study to address that question, without worrying about what label to place on the study (i.e., "phenomenological" or "quasi-experimental"). As the researcher considers various aspects of the study's design, these labels will emerge; the researcher can then go to sources more specific to these traditions for further assistance. This is important to consider when reading the text, as one will not find reference to a variety of qualitative paradigms (other than the case study section described above) such as grounded theory or ethnography. [4]

3. Unique Contributions to Research Design

The most exciting aspect of DE VAUS' introduction to research design is in his description of the basic process of research. It is in these early phases of learning about research that students are particularly hungry for "rules" and specifics. DE VAUS does an excellent job fulfilling students' needs, with one important and unique caveat. In my experience evaluating texts for class, rarely have I found an author who encourages readers to think about *what* they are doing with research,

as opposed to thinking about how they will carry out the research. Indeed, one basic premise of DE VAUS' text is that "technology has assisted greatly in the conduct of social research. But some of the basic thinking about the *logic of research* is still missing in research" (p.xvii, emphasis in original). [5]

Frequently we present students with options in an introductory research course: options for how to write research questions, options for how to select participants, options for how to collect data, and options for how to analyze data. These options are typically geared toward helping students design the mechanics of a study, or *how* they will carry out the research. DE VAUS consistently encourages readers to think beyond these issues: "how the data are collected is irrelevant to the logic of the design" (p.9, emphasis in original). Readers are encouraged to *explore* alternatives and *think logically* about their research, so that the suggestions and mechanics DE VAUS presents are not meant to be "rules" for doing research, but rather areas for consideration, as "research design refers to the *structure* of enquiry: it is a logical matter rather than a logistical one" (p.16, emphasis in original). Thus students are encouraged to reflect on the process of design and the study as a whole, rather than working from step to step to just complete the study. Under this model, specific methods for collecting data are not discussed as "quantitative" or "qualitative" but rather as options for any type of design. The reader will see, for example, that DE VAUS mentions observations (typically considered a "qualitative data collection method") as one type of data used in experimental research (typically a more "quantitative" design). [6]

As a professor of educational research, and indeed even as an educational researcher, I find the organization of the text to be one of DE VAUS' greatest contributions to the profession. For example, most of the traditional research design texts (e.g., CRESWELL, 2002; CHARLES & MERTLER, 2002; GAY & AIRASIAN, 2000; WIERSMA, 2000) describe internal and external validity in a separate chapter. DE VAUS weaves these issues into each section of his text, covering unique questions and decisions researchers must attend to for each category of research. This helps students understand that validity is not a generic research topic, but idiosyncratic to a variety of settings. Ultimately, DE VAUS creates a reader who is ready to think about, plan, and logically create a research study that he or she will *continue to evaluate and reflect* on as the study is underway. This is an exciting contribution, as it encourages students and practitioners to remain artists, focusing on the overall journey of research rather than the final destination. My own thinking has changed after reading DE VAUS' text, so that I now spend more time *thinking* about my research studies as I am *doing* them. [7]

4. Applications and Audiences for Text

I am currently in the design phase of a study exploring the cultural aspects of the introductory statistics classroom. Individual classrooms will be observed and videotaped, students and professors will be interviewed, and artifacts such as notebooks, assessments, overheads, and textbooks will be analyzed. DE VAUS' description of case study designs in Part V has guided me as I begin to formalize my description of the study and attempt to focus my data collection and analysis plans. In particular, helping me clarify my final goal, which is to "build of a full picture of [the statistics classroom], its subunits ... and its context" (p.231), help to give me an overall structure to what can often be a complex type of study. [8]

DE VAUS continues in his treatment of case study design to discuss specific issues in case study design such as internal and external validity, selection and screening of cases, cost, access, and ethics. These sections have been particularly helpful for me for a number of reasons. First, DE VAUS clarifies that case studies are not generally developed to achieve *statistical generalizability* (i.e., through random sampling of a large number of units), but can strive for *theoretical generalizability* through replication and the use of a guiding theory or set of theories in the design phase. Further, depending on my accessible population of introductory statistics classrooms (44 in my pilot study), careful attention to the selection and screening of potential cases is important. Initially I worked more toward the (perhaps naive) goal of capturing as many classrooms as I could. My current access challenge is securing instructor permission to be in the classrooms. Looking forward to the ways in which data can be analyzed and the theoretical implications of my work, I have been able to be more clear in my proposal writing – in part because DE VAUS has focused my reflections on the overall purpose of case study research as well as the details faced along the way. [9]

It is not my place to say who should and should not read this text, but I must encourage those who teach introductory research design courses in any field to consider DE VAUS' text. I currently use the text along with examples of published research studies from fields relevant to my students' majors. For example, a large percentage of my students are special education majors, so I incorporate one or two published articles in special education that fall under one of DE VAUS' four categories (experimental, longitudinal, cross-sectional, or case study). Each article is used to demonstrate not only what a completed study might look like, but also how readers can evaluate a research study to determine if it successfully addressed its questions and to determine if it meets their own needs as background for their own research. These evaluations are done using DE VAUS' text as a guide, with ample time given for students to consider and discuss alternatives to the research that was done. [10]

As a practicing educational researcher, I also find DE VAUS' text a helpful refresher for the varieties of research I conduct. I have already used various sections of DE VAUS' book to help guide my thinking about the logic of a study I am planning. Each step along the planning path, I now refer to DE VAUS for suggestions and considerations. When planning my own research, DE VAUS'

reminder that "there is no right way of developing ideas" (p.23) helps me remember that I am not simply writing a recipe for conducting a research study. [11]

5. Summary

As a researcher and professor, I have found comfort in DE VAUS' suggestions and consistent writing style throughout the book. It is a highly accessible and reader-friendly text that encourages us to remember what research is really about: the *process*, not just the product. It is this process that I enjoy introducing to my students in educational research courses, and it is the *logic* of this process that is the most important lesson I could impart on them. DE VAUS has become, for me, an indispensable partner in my teaching and research efforts through his clear and organized format. I find it especially valuable to have a partner there to remind me to *think* about what I am doing before I do it, and together we help students develop this thought process. [12]

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