

TEACHING SURVEY RESEARCH BY FABRICATING RESULTS

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ABSTRACT

A project-centered approach to teaching applied survey research is proposed and critiqued that is especially efficacious at the undergraduate level and when time is scarce. In lieu of requiring students to gather real data for a class project, it allows them to write dummy reports based on fabricated results.

INTRODUCTION

Assignments that require students to plan and execute a sample survey afford potentially rich, invaluable, hands-on learning experiences. Unfortunately, requiring each student or small team of two or three students to gather enough primary data to conduct meaningful analyses has serious drawbacks. For instance, to render the data gathering task reasonable without encouraging students to investigate issues superficially, research problems must be chosen that lend themselves to short questionnaires and relatively small samples. Furthermore, students often resent having to administer questionnaires over the phone or in person (Valentin 1993), and gathering real primary data tends to consume time that could be spent more productively.

One solution to making data gathering manageable entails dividing it among the entire class so that each student is required to administer only a few questionnaires. Accordingly, it entails developing a single, common questionnaire and a corresponding database. The requisite questionnaire may be constructed by turning the entire class into one big research team that, in a communal spirit, designs the study, develops the questionnaire, administers questionnaires, and analyzes data. Or, the workload may be divided so that a few students specialize in designing the study, a different few in developing the questionnaire, and so forth. However, the communal approach is likely to get only a few students deeply involved, while the specialization approach poses coordination problems and limits what each student learns about survey research from start to finish.

Another option entails turning the class into a single research team only for the data gathering phase. When this approach is used, students submit questionnaires individually or in small groups; and the project questionnaire is chosen or synthesized from the various submissions. All other phases of the

research project (e.g., developing a proposal, analyzing data, and reporting results) can be performed independently by individual students or small teams. This approach overcomes some shortcomings inherent in the communal and specialization approaches. However, imposing a questionnaire places tight constraints on data analysis and requires most teams to adopt research designs they did not develop. Allowing each team maximum freedom to explore design alternatives seems preferable.

Another potential difficulty with research projects is that students may be rushed into designing studies and questionnaires in order to leave time for interviewing respondents and analyzing data (Dommeyer 1986). Time tends to be especially scarce when research is taught as a four-hour one-quarter course, when it is taught during the summer, and when statistical analysis must be reviewed thoroughly.

This article delineates a coaching-oriented learning-by-doing way of teaching applied survey research, particularly at the undergraduate level, that conserves time and affords an attractive alternative to more common approaches. Its key elements are a problem scenario and five assignments, which entail developing (1) a thumbnail sketch of the research approach, (2) a research proposal, (3) dummy tables, (4) a structured questionnaire, and (5) a research report.

The thumbnail sketch and the dummy tables assignments are coaching exercises. As such, they are critiqued thoroughly, but are not weighted heavily in determining final grades. They are intended mainly to prepare students for developing the more consequential proposal, questionnaire, and report. The research proposal and questionnaire are highly conventional. However, the final report is unconventional insofar as it is a dummy report based on fictitious results, not real data. The merits and drawbacks of writing such reports are examined after the aforementioned scenario and assignments are discussed. Although students can be required to complete assignments individually, encouraging them to work in self-selected teams of up to three members works well.

THE PROBLEM SCENARIO

The problem scenario is distributed in class and provides a backdrop for the study to be designed by students. For example:

Larry Miner, the owner of a local Ford car dealership, wants to improve customer loyalty, or retention. He has hired you to conduct a survey that will help him identify what he should do. He can provide names, addresses, and telephone numbers of customers since 1990. Ways of modifying and embellishing this rather simple scenario are discussed in a later section.

THE THUMBNAIL SKETCH

Given the problem scenario, each team is instructed to develop a thumbnail sketch of its intended research approach – a sketch that vividly conveys and justifies the underlying rationale. Teams are advised to proceed as follows:

1. Identify the managerial problem to be resolved.
2. Derive a corresponding research problem.
3. Envision several approaches to a survey that would provide insight into ways of resolving both the managerial problem and the research problem.
4. Choose the best approach, and explain its gist in a brief memorandum. Describe very clearly what you intend to do, delineate the key issues you intend to address, and substantiate that your approach makes good sense. The reader must be able to envision what you have in mind and must be convinced that your approach meshes with the research problem and would help resolve the managerial problem.

The aforementioned Larry Miner scenario served as the basis for an assignment a few years ago. Nowadays, it provides the backdrop for an illustrative thumbnail sketch, which is distributed in class and is shown in Exhibit 1.

Students are told that no research design is perfect and that practical designs always require researchers to make tradeoffs. However, the approach delineated in Exhibit 1 can be improved substantially. For instance, as the first noted weakness implies, the study could be expanded to also measure the importance of the various performance dimensions. Better yet, it could be focused more directly on identifying factors that divert previous Larry Miner customers to competing dealers.

The thumbnail sketch is not given much weight when calculating final grades, even though it is critical. It serves mainly to prepare students for developing the proposal, questionnaire, and report. Upon receiving their thumbnail-sketch grades, accompanied by comments on audio tape, students are encouraged to

refine their work and resubmit revisions for further feedback. Accordingly, the thumbnail sketches facilitate coaching via constructive criticism. Such coaching seems preferable to giving students only one chance to develop a coherent research approach and to providing so much guidance that little conceptual work is required of students.

EXHIBIT 1

Excerpts From an Illustrative Thumbnail Sketch

MANAGERIAL PROBLEM: Improve customer retention
RESEARCH PROBLEM: Identify obstacles to retention
RESEARCH APPROACH: We propose conducting a telephone survey of 500 previous Larry Miner customers. Respondents would be asked how satisfied they are with (1) the last car they bought from Larry Miner Ford, (2) the price they paid, (3) . . . Their answers would be recorded on a seven-point scale ranging from -3=very dissatisfied to +3=very satisfied. We would advise Larry Miner to work on improving factors under his control that received low average satisfaction ratings.
CRITICAL ASSUMPTIONS: (1) Customer satisfaction has a substantial impact of customer retention; (2) . . .
STRENGTHS: Straightforward research design.
WEAKNESSES: (1) Although improving anything that is not perfect might improve retention, this survey may not identify the most critical retention factors because it does not address how important the noted performance dimensions are to customers; (2) focusing exclusively on mean satisfaction ratings may obscure . . .

The thumbnail sketches induce students to think about research design early on and to refine their initial rudimentary ideas as their comprehension increases. They promote developing proficiency in designing studies and avert rushing past critical conceptual matters, which often is necessary if data are to be gathered and analyzed before the term ends. Moreover, they promote involvement by presenting students with a challenging puzzle to which they can find increasingly sophisticated solutions as they gain knowledge and insight.

The thumbnail sketches also bring catastrophic flaws in students' reasoning to light long before weighty assignments must be graded. For example, students commonly say they intend to study differences between two groups, such as loyal and disloyal customers, but design studies that entail surveying only one of the two groups.

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THE RESEARCH PROPOSAL

The research proposal each team is required to write conforms closely to illustrative proposals found in many marketing and business research texts (e.g., Churchill 1999; Davis 2000; Zikmund 2000). Accordingly, the proposal must be preceded by a letter of transmittal and must address or enumerate (1) the purpose of the study, (2) the research rationale, (3) the focal issues to be investigated, (4) methodology, (5) the research schedule, (6) costs and pricing, and (7) the research team's qualifications. Contrary to advice offered in some textbooks, students are instructed to exclude questionnaires from their proposals for several reasons – e.g., proposals often do not include questionnaires because resources invested in developing questionnaires cannot be recovered if the proposal is rejected. Moreover, addressing questionnaire development after proposal development seems preferable from a pedagogical standpoint because it encourages students to formulate cogent, guiding research rationales before tackling details. It averts making research questionnaire-driven.

DUMMY TABLES

The second coaching exercise requires each team to submit one or more dummy tables that reflect the key issues noted in their proposals and show clearly how findings will be presented in the final research report (Zikmund 2000). Students are told that dummy tables must be congruent with the questionnaire they will develop, that questionnaires must consist mainly of scaled items rather than open-ended essay questions, and that roughing out a questionnaire in parallel with developing dummy tables is advisable. Dummy tables must show everything that the final tables will show, except numerical values. Accordingly, they must include descriptive titles, as well as row and column labels, explanatory footnotes, etc. Also, students must provide brief written explanations of what their tables are intended to show and how they relate to the research and managerial problems.

THE QUESTIONNAIRE

Each student or team of students is required to submit a questionnaire that consists predominantly of scaled items and is congruent with the dummy tables submitted earlier or with revised dummy tables, which must be submitted with the questionnaire. Pertinent instructions for interviewers, cover letters, and the like must be included.

THE (DUMMY) RESEARCH REPORT

The research report is conventional, except that results are fabricated. Accordingly, a letter of transmittal must accompany the report; and the report must have a proper cover page, a table of contents, an executive summary, and sections that address the purpose of the study, methodology, results, and recommendations. A questionnaire (the one submitted earlier or a modified version) must comprise one appendix. Optional appendices may present peripheral information.

Before students submit research reports, they will have developed dummy tables that imply analytical techniques and allude to structured questionnaire items. Students are asked to reevaluate their dummy tables and to revise them, if they wish, before they develop their reports. Once they are satisfied with their dummy tables, they must insert contrived values. Students are advised not to generate and analyze dummy data matrices, but merely to fabricate quantitative results that are plausible and congruent with their dummy tables, questionnaires, and chosen analytical techniques. For instance, they may present findings via contingency tables and corresponding chi-square tests, whose practical implications they must explain. They are advised that simple correct analyses are preferable to complex incorrect analyses and that their work will be graded accordingly.

MERITS AND DRAWBACKS OF DUMMY REPORTS

Several difficulties that commonly arise when term projects require students to gather actual data were noted in the introductory paragraphs of this article. Furthermore, results from statistical analyses of real data often are not readily interpretable by novice researchers, and having to conduct interviews over the telephone or in unsafe neighborhoods makes many students uncomfortable. Allowing students to fabricate results alleviates such difficulties and the temptation to cheat. In lieu of spending many hours conducting interviews and entering data, students can concentrate on the more challenging and more critical conceptual aspects of research, particularly planning projects, developing questionnaires, and choosing analytical techniques. Further, students can revise their thinking and corresponding manifestations (e.g., research rationales and questionnaires) until the final report is submitted. Allowing such flexibility seems preferable to forcing students to implement research designs and questionnaires that were designed before they gained a holistic understanding of pertinent subject matter.

The main drawback to fabricating results is that no actual statistical analyses are required. To fill that void, students are given homework that entails analyzing data using statistical packages available in the school's computer lab (e.g., Minitab or SPSS).

MODIFICATIONS AND EMBELLISHMENTS

The scenario structure can be altered in several ways that affect the five noted assignments and what students derive from them. For instance:

- Managerial issues to be resolved can be presented less directly than in the Larry Miner scenario so that students gain further experience in extracting researchable questions from clients' requests, which often are quite vague. Also, multiple issues can be embedded in the scenario so that students must design a more complex study or prioritize issues and develop defensible arguments for limiting the scope of the study.
- Issues can be embedded in the scenario that should be grounded in theory or empirical research reported in scholarly journals. For instance, if customer satisfaction is the key issue, then students may be required to develop research approaches, proposals, and reports that draw from recent customer satisfaction research (e.g., Jones and Sasser 1995; Parasuraman, Zeithaml, and Berry 1985; Reichheld 1996). Requiring background research serves to convey that even applied studies can benefit greatly from referring to pertinent streams of basic knowledge.

A NOTE ABOUT THE TOPIC SEQUENCE

I begin with an overview of the research process, the research proposal, and the research report. Once students have an idea of what they are expected to produce, I cover means. Statistical analysis is reviewed before questionnaire development is addressed to remind students that choices regarding levels of measurement, the types of samples selected, and so forth limit the statistical techniques that can be applied. Although it usually is inadvisable to choose a statistical technique and then design other aspects of a study accordingly, it also is inadvisable to develop questionnaires without giving forethought to ways of analyzing the data they produce.

A NOTE ABOUT FEEDBACK ON ASSIGNMENTS

Each team is required to submit an audio tape for feedback with each of the five noted assignments.

Providing recorded feedback seems more effective than scribbling comments directly on students' papers because, in a given amount of time, one can say much more than one can write.

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