An Applied Introduction to Qualitative Research Methods in Academic Advising

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Academic advising research aids faculty members and advisors in detecting, explaining, and addressing macro-level trends beyond their local campus. It also helps legitimize the professional nature of academic advising, moving it beyond mere prescriptive models that focus on rules and course selection. Due to the erroneous belief that skills in advanced statistical analysis or complex research methodologies are needed, many advisors fail to undertake major research projects. We introduce qualitative research in academic advising, compare and contrast qualitative and quantitative research, and discuss three well-recognized qualitative methodologies: ethnography, appreciative inquiry, and case study. We explain the characteristics and give examples of qualitative research questions appropriate to the three qualitative methodologies and in an advising context.

KEYWORDS: advising profession, field of inquiry; advisor as researcher; appreciative inquiry; case studies; ethnography

Colleges and universities have at least two important roles in society: knowledge dissemination and knowledge creation. Each role is important as neither can exist in the long run without the other. While many campuses emphasize one role or the other, individuals within a campus are often encouraged to balance both knowledge creation and knowledge dissemination.

Research is the primary vehicle for knowledge creation in academics. In NACADA, the term *scholarly inquiry* is often used to emphasize the growth of research and its importance. The NACADA Board of Directors endorsed the following definition (Hagen, 2010, p. 13):

> NACADA views research as scholarly inquiry into all aspects of the advising interaction, the role of advising in higher education, and the effects that advising can have on students. It regards consuming and producing research as the collective responsibility of all members of the higher education advising community, including advisors, faculty, administrators, and students.

Boyer (1997) suggested a four-part taxonomy for scholarship: discovery, integration, application, and teaching. Regarding the scholarship of discovery, he pointed out that (p. 17) it "comes closest to what is meant when academics speak of 'research.' No tenets in the academy are held in higher regard than the commitment to knowledge for its own sake." The scholarship of integration, according to Boyer, focuses on (p. 18) "the need for scholars who give meaning to isolated facts, putting them into perspective." Boyer's articulation of scholarship of application extends "the investigative and synthesizing traditions of academic life" (p. 21) to explain the ways theories and ideas apply to real-world problems. The scholarship of teaching involves the critical study and analysis of pedagogical techniques and related matters.

While possibly falling into any of Boyer's four groups, advising research is perhaps most applicable to teaching, and because it is a form of teaching, advising can and should be scrutinized with well-designed and thoughtfully executed research projects. Advising research provides an evidence-based rationale for actions and decisions made in the advising milieu. Yet, many advisors are reticent to engage in research for a variety of reasons—not the least of which is the perception that research must always involve heavy doses of statistics. There is, however, an entire body of research approaches that requires few or no statistics: qualitative methods. We provide an introduction to three qualitative methods and demonstrate the ways they are applied in an advising context.

The paper is divided into four parts. First, we address the nature of qualitative research, then we offer a few general principles about it. Next, we give three examples of qualitative research methods: ethnography, appreciative inquiry, and case study. We conclude the paper with additional examples for each method.

The Nature of Qualitative Research

Aiken-Wisniewski (2010) offered the following comments about the nature of qualitative research (p. 86):

> Qualitative researchers are focused on answer-

ing a question based on the words and actions of people who become participants or respondents for a study. The researcher engages individuals in conversation, observes their practices and behaviors, or gathers relevant objects to gain deeper understanding of a phenomenon or process from a human perspective. Once data in the form of transcripts, field notes, or artifacts are collected, he or she must uncover the meaning of these data for answering the question and contributing to the body of knowledge in the area of interest.

Those conducting qualitative research do not choose participants randomly. Rather, they choose those with the characteristics of interest. The qualitative researcher must select and engage participants in a deep and meaningful way that goes beyond survey responses or experimental observations. While the level of researcher engagement can complicate the study, it is critical in qualitative analysis. However, the qualitative researcher must be highly aware of his or her biases, acknowledging them unflinchingly when reporting the results of the project.

By comparison, quantitative research uses statistical methods to reject the null hypothesis with some degree of confidence that the questions are related to the tested phenomenon. It is focused almost exclusively on hypothesis confirmation while qualitative research can be used both to generate and to confirm hypotheses. For example, an advisor may notice that an early intervention program produces better results for business students than it does for science students. Rather than establishing an a priori null hypothesis and conducting research to confirm or support it, the advisor might interview a group of business students and a group of science students to determine some of the root issues for the observation. In a well-designed project, the data could stand on their own; they could also be used as a basis for future quantitative, hypothesis-confirming research. Thus, the two research techniques are not mutually exclusive.

Guiding Principles for Qualitative Research

Although qualitative research is more open ended and flexible than quantitative research, those conducting it must follow well-established protocols and methods to ensure its validity. Without such diligence, the results become little more than anecdotal stories of the work on a particular campus, which provide encouragement or inspiration, but no real insight. Anecdotal recollections add minimally to the body of intellectual, academic contributions to advising.

Good qualitative-research questions embody at least four characteristics. First, like all good research questions, they are specific and focused. The researcher must determine in advance the characteristics of interest in the studied group and design a method through which they can be assessed. In the course of a well-designed qualitative study, other issues often emerge, but the qualitative researcher stays focused on the original research problem. Other issues, while potentially interesting and worthy of study, should be left for follow-up projects.

Second, good qualitative research questions must focus on measurable attributes. The researcher must have a good plan for operationalizing variables such as motivation, enjoyment, interest, or achievement.

Third, good qualitative questions frequently start with *how* or *why*. This feature may stand in sharp contrast to quantitative studies, where the research question is often stated in terms of "the effect of X on Y" or "a comparison of X and Y." Those using qualitative methods typically do not create a null hypothesis and subsequently collect data with which to perform statistical tests to accept or reject it within a particular range of confidence.

Finally, even more so than in quantitative studies, a good qualitative research question relates to a group of people or phenomena interesting to the researcher. If the question involves people, the researcher will want to engage with them on a deep, fundamental, and sometimes personal level. If the people in the study sense that the researcher is not genuinely interested in them or their opinions and experience, they may not provide the honest, detailed feedback essential to informative qualitative studies.

In addition, qualitative researchers must be aware of at least four potential pitfalls in carrying out a research study. First, by their very nature, qualitative studies may span weeks, months, or (in some rare cases) even years. Because the researcher neither relies solely on surveys or experimental conditions nor selects the participants randomly, as in a quantitative research design, data collection can be time consuming.

Second, the qualitative researcher must be constantly cognizant of the threat of bias or involvement both in carrying out the study and interpreting its results. Qualitative researchers collect data by engaging directly with the people of interest—not solely by distributing a survey or setting up an

experimental and control condition. That is, it takes place in a living laboratory, and the researcher's involvement with the participants is a potentially confounding factor. Because qualitative research results often are expressed and interpreted verbally (as opposed to numerically), the researcher must be wary of seeing results unsupported by the data. Many qualitative researchers, in fact, work in teams to address that kind of potential bias.

Third, although the *NACADA Journal* is an exception, many journals are reticent to accept even well-designed qualitative studies for publication. Qualitative researchers should consider potential publication outlets for similarly designed studies. Every journal sets a tone focusing on a specific, well-defined audience.

Finally, qualitative researchers must avoid dismissing traditionally quantitative tools, such as surveys, without consideration. Good qualitative studies may involve surveys, particularly as a starting point for focus groups or other kinds of discussion-based data-collection research projects.

Table 1 compares quantitative and qualitative research methodologies from the perspective of the overall design, the survey instrument, the researcher's role, and the respondent's (surveyed individual's) participation.

We chose to feature ethnography, appreciative inquiry, and case study even though they may not be the best of the many possible qualitative methods in every situation. We explore these methods because they are widely applicable and easy to understand; they also represent a good starting point for the novice qualitative researcher. In explaining each methodology, we examine the same research question and how a researcher may approach it under each means.

Ethnography

Ethnography is rooted in cultural anthropology and sociology. At its most basic, it literally reveals a "portrait of the people" (Harris & Johnson, 2006,

Table 1. Comparison of quantitative versus qualitative research methodologies

Method	Quantitative Research	Qualitative Research
Boyer's taxonomy	Discovery, integration, application, and teaching	Application and teaching likely best for advising
Research question	Typically the null hypothesis	Typically a query
Research hypotheses	Hypothesis confirmation or rejection	Generates and confirms hypotheses
Statistical methods	Cause-effect statistics Co-relational statistics	Tabulations and percentages
Data format	Survey instrument responses	Transcripts, field notes, and interview responses
Population surveyed	Randomly selected and often anonymous	Known population selected for a particular attribute being studied
Interview instrument	Often close ended	Often open ended
Survey sample size	Requires statistically appropriate sample size; typically sampled groups must be of similar size	Researcher discretion; may be very small and unequal group sizes
Survey instrument	Mail survey, electronic survey, and interview	Typically interview—either individuals or focus groups
Timing of the study	Relatively short	Can involve years, especially with field work
The researcher	Detached and independent	Ranges from distant observer to participant

Table 1. Comparison of quantitative versus qualitative research methodologies (continued)

Method	Quantitative Research	Qualitative Research
Researcher biases	Easily eliminated	Significant involvement requiring acceptance and accommodations
Respondents	Typically distant and not personally involved	Frequently personally involved and a participant in the production of the research product

p. 14). The ethnographer's role can be anywhere along a continuum from distant observer to participant. Aiken-Wisniewski (2010, p. 89) discussed ethnography in the context of academic advising:

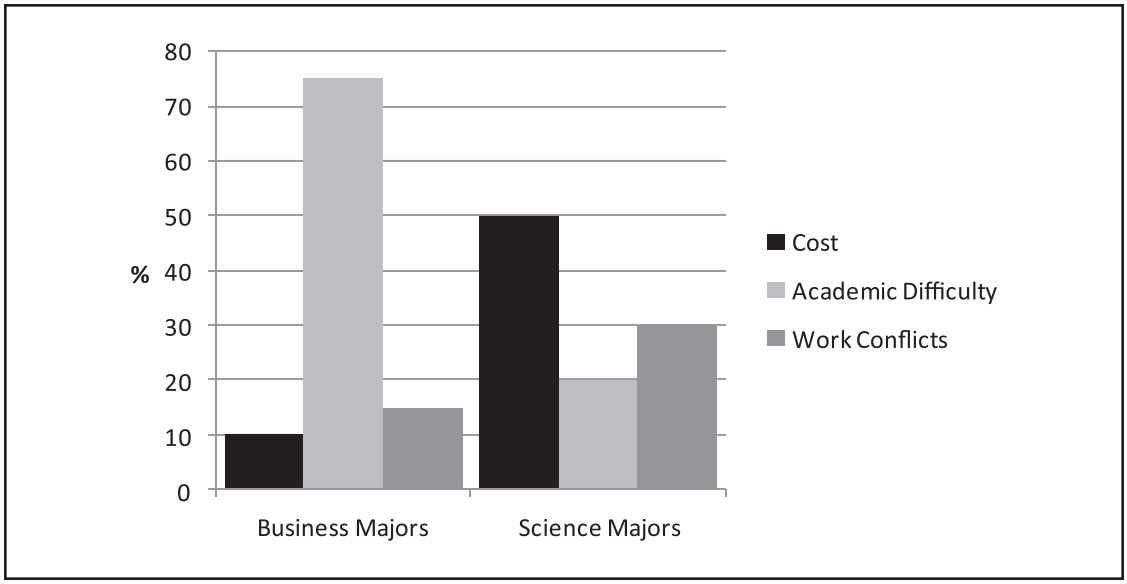
> Academic advisors continuously strive to understand the culture of the student populations they serve. Their ethnographic studies could include the cultures of women in medical school; Latinos in science, technology, engineering, and math majors; or students who utilize social networks, such as Facebook.

Our own context provides an environment and population for ethnographic study. Although in different academic departments within the same College of Business Administration, we both have responsibility for advising early-warning students. Those students have grade-point averages (GPAs) between 2.0 and 2.2 (out of 4.0). The university places an electronic registration hold on their records, requiring them to see an advisor. The early-warning program gives the staff an opportunity to intervene with at-risk students before their situation deteriorates and they are placed on academic probation.

In an ethnographic study of students with early-warning status, the researcher might attempt to determine the factors that contribute to students' academic challenges. Toward the distant observer end of the ethnography continuum, the researcher might gather groups of students from both Science and Business who received an early warning notice and ask them to discuss the factors that have contributed to their slipping GPAs in individual cases. For such a study, researchers might employ the Delphi technique, in which individual participants generate a list of factors. The entire group then receives the complete list and ranks or weighs the importance of each factor. Figure 1 illustrates the results in a hypothetical situation in which the "difficulty of doing college-level work" was articulated as a significant problem for business students and the "cost of education" was indicated as a significant challenge for science majors.

The researcher might adopt an approach similar to Nathan (2005) in her study of first-year stu-

Figure 1. Early-warning contributing factors



dents. Aiken-Wisniewski (2010, p. 89) summarized Nathan's study as follows:

> An anthropology faculty member conducted her fieldwork by living in residence halls and enrolling in classes for one year. During this field experience, she observed, recorded, and interpreted the customs, behaviors, and language of people who were "college students." She offers the advisor an interpretation of the culture of students that includes the concepts of building community, academic integration, and cultural competency.

While the participant approach is much more time intensive and arduous for the researcher, it often produces data obtainable in no other way. The researcher who lives through an experience can study and appreciate it deeply and uniquely.

Appreciative Inquiry

Cooperrider and Whitney (2011) explained the nature of appreciative inquiry (AI) as follows:

> Appreciative Inquiry is about the co-evolutionary search for the best in people, their organizations, and the relevant world around them. AI involves, in a central way, the art and practice of asking questions that strengthen a system's capacity to apprehend, anticipate, and heighten positive potential. It centrally involves the mobilization of inquiry through the crafting of the "unconditional positive question." AI seeks, fundamentally, to build a constructive union between a whole people and the massive entirety of what people talk about as past and present capacities . . . and visions of valued and possible futures. Taking all of these together as a gestalt, AI deliberately, in everything it does . . . assumes that every living system has many untapped and rich and inspiring accounts of the positive.

AI has been applied in diverse contexts (Gonzales, 2010) and can easily be employed in qualitative academic-advising research.

Structured in four phases, AI features a unique theme. AI is best conducted with groups of five to seven participants at a time, although multiple groups can be involved sequentially or simultaneously if AI is properly facilitated. The four phases of an AI inquiry, along with illustrative phrases and descriptions, are as follows:

- Discovery—appreciate what is. In the discovery phase, researchers encourage participants to think about and discuss past successes related to the broad area of the research question. Those discussions put the participants in an appreciative or positive frame of mind, allowing them to complete subsequent phases more easily.
- Dream—imagine what might be. Participants turn their attention formally to the research question. Their discussions are akin to brainstorming sessions where they suggest ideas without regard to their practicality.
- Design—determine what should be. In the design stage, research participants generate a list of ideas generated during the dream phase. At this point, they begin thinking about and discussing the ideas from the list that can be implemented.
- Destiny—create what will be. The last phase of AI is all about creation. Based on the implementable ideas from the third phase (design), the researcher guides participants to create solutions to problems or respond to the research question.

AI might be useful in designing the most effective or ideal early-warning advising system. In this case, the researcher selects a group of early-warning students and leads them through the four phases of AI. Although often addressed in a series of four separate meetings, the phases could be condensed provided both the participants and the researcher had sufficient motivation and energy. The researcher guides the discussion through questions that might include following:

- Tell me about your past academic successes. What accomplishments bring you a special sense of pride and achievement? (Discovery)
- If you could have anything you wanted to help you get back on track academically, what would you ask for? What would be the perfect tools to assist you? (Dream)
- Consider the list of ideas you generated in the last session. Which of them are the most practical? Why? With our current budget constraints on funds and staffing, which ideas could actually be implemented? (Design)
- Think about the list of practical ideas we developed in our last meeting. What would an ideal advising system, based on those ideas, look like? (Destiny)

The end result of AI might be a practical, effective system designed by the students who could benefit from it. The output of an AI study can take many forms. Table 2 suggests key elements that could emerge from the early-warning study.

Once operational, researchers could conduct additional qualitative or quantitative research studies to determine the effectiveness of the early-warning system and adjust it as needed.

Case Study Research

In an extensive discussion, Yin (2008, p. 8) argued that case studies are the best way to address how and why questions. Case study research does not require control of behavioral events as would be necessary in an experimental setting. It typically focuses on contemporary events so is an ideal tool for advising research.

A case study is not a simple description of the working of a particular organization nor is it based on limited circumstances. As in all qualitative research, case study participants have the characteristics that interest the researcher, who typically looks at multiple groups with different characteristics. To study the early-warning system, the researcher using a case study might employ a four-group design, differentiated by major and length of time in early-warning status, as follows:

- Group 1 consists of business majors with one or two terms in early-warning status.
- Group 2 contains science majors with one or two terms in early-warning status.
- Group 3 consists of business majors with more than two terms in early-warning status.
- Group 4 is made up of science majors with more than two terms in early-warning status.

Through such a study, the researcher might examine the reasons that the early-warning system is

Table 2. Example of appreciative inquiry outcomes for an early-warning system

Appreciative Inquiry Phase	Key Phrase	Possible Results
Discovery	Appreciate what is.	A list of courses or assignments with high grades, strong motivation
Dream	Imagine what might be.	An advisor on call 24 hours a day 7 days a week An artificial intelligence system for course selection and other advising issues Additional financial aid
Design	Determine what should be.	A system that requires students to • think critically and thoughtfully about factors that contributed to their early-warning status • visit campus offices to locate additional information and resources • attend a developmental advising session to discuss their work and strategies for improving their grades
Destiny	Create what will be.	An advising system, deployed through course management software, based on students' suggestions

effective with some students but not with others. In this case, the researcher would define effectiveness but might focus on the number of terms a student continues in early-warning status. Table 3 lays out a potential case study design.

Unlike some quantitative methods, an equal number of participants in each group is not a requirement; rather the number in each group is based on the researcher's judgment. The output of a case study analysis consists of a list of factors that differentiate the four groups and could serve as an impetus for additional research projects.

Similar to ethnography, case study research portrays people. It is also like AI because the data are often based on interviews, discussions, and focus groups. However, it is different than these other methods because case study researchers preselect participants based on the characteristics of interest and because it is not characterized by the four well-defined phases of AI. In case study research, interview questions are open ended, and the researcher must take diligent notes for later analysis. Themes typically emerge in the analysis, but additional data collection from previous or new participants may be needed to complete the analysis.

First-Year Experience Research Question Examples

To illustrate the importance of matching qualitative research questions to the appropriate research methodology, we examine three different questions related to one common research topic: the first-year experience (FYE). We chose unique research questions most effective for each research method.

Manufacturing businesses must complete production of their goods prior to delivering them, but students who complete just one course at a college or university are considered alumni. However, universities do not want students to leave after taking a few courses, but to persist in a curriculum that leads them to graduate. That is, the successful product of a university is a graduate, not a person who has completed some of the courses toward a degree. Therefore, educational leadership measures success by the persistence of students: the percentage of students who continue to the second year after the first year. Persistence rates are measures for each of the levels through the undergraduate degree program: freshman, sophomore, junior, and senior.

"Only 15-25 percent of all institutional departures arise because of academic failure" (Tinto, 1993, pp. 81-82). The most dramatic loss of students (and thus the area of greatest concern for administration) is characterized by poor persistence rates from freshman to sophomore standing. Using national-level data, Leppel (2001) used persistence rates to identify the relationship between gender and college major and found that women with business and undecided majors were less likely to persist than other women while men with education and undecided majors were less likely to persist than other men.

Nationally, universities have embarked on campaigns to increase the persistence rate with life-long learning skills programs via FYE programs geared to improve academic success. In her seminal article on FYE, Betsy O. Barefoot (2000) stated, "Beginning around 1980 and continuing to the present, higher education in the United States has witnessed what Lee Upcraft and John Gardner term a 'grass—roots movement' to improve the first college year" (p. 12). She refers to the strategy that involves giving college students survival skills to cope successfully during their first year of college so they will advance to their second (and subsequent) years and thus earn a college degree.

Appreciative Inquiry

The following is an appropriate qualitative research question for a study: "How do FYE programs provide longitudinal value for college students?" Using this question as a guide, the researcher might select a focus group of senior students who, as freshmen, completed a FYE program. The focus group articulates and codifies a list of experiences that provided them the necessary skills to successfully navigate the pathways through their educational experience. The list produced by the students constitutes the discovery stage of AI. Providing the students some direction,

Table 3. Case study research structure

Major	Number of Terms in Early-Warning Status	
	One or Two	More Than Two
Business		
Science		

the researcher asks students to relate each item on the compiled list to their personal FYE program history and to articulate what-if scenarios of an ideal FYE program; that is, using the dream stage approach, the participants discount concerns about budgets, technology, or practicality, and create the perfect FYE program. Using the third stage of AI, design, the students ground the ideas presented in the dream stage into a realistic situation and thus produce a FYE program description that could be designed and delivered!

In the last stage of the AI methodology, destiny, the university leadership would implement the focus-group created FYE program. In a feedback loop, the researcher or another interested party, could revisit the seniors 4 years after the original data collection and readdress the identical research question, asking them if their created version was an improvement of the version they had experienced. This effort demonstrates that continuous process improvement in academia (employing either quantitative or qualitative research methodologies) may take time: 4-year cycles in this particular instance.

Case Study Research

In case study research two groups are typically compared. An appropriate research question for a case study on the FYE program is "How should FYE programs be designed to improve effectiveness for students from different academic fields?" Sophomores who have just completed their FYE programs constitute the optimal target audience because their recollections of the experience are fresh. The researcher might create focus groups from different colleges or from groupings of colleges to form two case analysis populations. For example, sophomore students from the professional colleges aggregated from the Colleges of Engineering, Science, Environmental Design, and Business might form the first cluster and sophomore students from the more traditional academic colleges such as Letters and Social Science and Education could constitute the second comparative cluster. The researcher then interviews or surveys the focus groups of sophomores to identify the elements of the FYE program that worked the best. She or he might ask: "What did you value? What were the best sessions? What did you find the most useful?"

A listing of common themes from the sophomores might reveal that FYE elements that helped one group of students assimilate were less effective for the other group. The researcher might then propose a modification and customization of the FYE programs such that content delivery differs to maximize the benefit to each group. This research could be repeated year after year using college sophomores to continually improve, modify, and tailor a university's FYE to maximize effectiveness for the students of different majors or colleges.

Ethnographic Research

An ethnographic research question could target the topic of interest, retention, most directly: "Why do students drop out of the FYE?" While challenging to find and entice to participate, former students who dropped out as freshmen would make up the best focus group for addressing the question. Researchers may need to consider offering a significant incentive for participation to help potential volunteers overcome feeling the social stigma of dropping out of college. Although many colleges require FYE course attendance, many others do not. Therefore, the researcher must carefully ensure that those who dropped out meet the other criteria for study (withdrawal from the university).

The data collected from this group via personal and telephone interviews (conducted in groups or as individuals) as well as e-mail surveys could reveal factors uncontrollable by a university or they could provide guidance about FYE curricula that might be included or changed within the orientation programs of the university. For example, if the primary issue articulated by students who had dropped out is the lack of funding, then programs providing information regarding loans, scholarships, and other monetary sources might improve persistence rates. If the primary reason for attrition involves the need to take on family responsibilities (ill parent, grandparent, etc.) the college may consider extending the leave period granted for continuing students. The results of an ethnographic research project could reveal insight into many areas as well as the effectiveness of a FYE program.

Conclusion

A well-defined, properly executed research project offers many advantages for the field of academic advising. Research is one of the hallmarks of an academic profession and it legitimizes advising as an area worthy of academic study. Well-crafted research also helps advisors generate knowledge, not merely anecdotes. It disseminates a language understood by academic administrators, many of whom may neither understand nor appreciate the nature of developmental advising. We encourage readers to work with colleagues within and outside their own institutions to design, complete, and

publish research projects that will impact both the theory and practice of academic advising.

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