A way to assess the large volume of student data generated in an introductory graduate-level course in qualitative research in education is described. Primary attention is given to assessing the technical aspects of field data collection, and only secondary attention is given to the consideration of the substantive aspects of the field data. In the research course at Washington State University, students are taught basic research knowledge and skills as they are guided through an independent and original qualitative research study from initiation to completion. The first part of the course is concerned with problem conception, proposal development, and field data collection. The second section concentrates on the analysis of field data, and the final section is concerned with reporting the study as a formal technical report with an oral presentation. Throughout the data collection phase, students see examples of research studies and present their own work in progress for assessment. They display their field data after the first 5 weeks of the course for evaluation by other students and the teacher. The display of the data makes the student accountable to others in the class, and this accountability raises student production of quantity, quality, and organization of field data to a higher level than would otherwise be the case. (Contains 4 figures and 3 references.)

(SLD)
ASSESSING STUDENT YIELD DATA IN TEACHING QUALITATIVE RESEARCH

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ASSESSING STUDENT FIELD DATA IN TEACHING QUALITATIVE RESEARCH

Introduction

An introductory course in qualitative research for beginning qualitative researchers in education can have at least two different orientations. One orientation is concerned with teaching individual research skills associated with qualitative research. In this orientation, general and specific skills and related knowledge associated with the qualitative research enterprise are taught relatively independently of one another. Categories of these skills include proposal writing, field entry and data collection, data analysis, and report writing and presentation. A second orientation is concerned with teaching students how to conduct and report a qualitative research study. In this orientation, students are guided through a complete, yet limited, qualitative research study. In the process of conducting and reporting the study, students are taught the research, analytic, and writing skills necessary to initiate, conduct, and complete an individual qualitative research effort. During the data collection phase of the studies, special attention is placed on teaching interview processes, participant observation, document collection, photographic techniques, and other traditional field data collection methods.

In this paper, it is the second orientation to teaching an introductory course in qualitative research for graduate students in education that is the point of reference. Because graduate students in education typically have not had much in-depth training in physical, biological, or social sciences, they have little experience with and knowledge of how to conduct and report educational research. They are research novices in the true sense of the word. Hence, very basic research knowledge and skills cannot be taken for granted and must be explicitly taught. Such basic research knowledge and skills concerned with the appropriate data collection materials and equipment and the organization and management of extensive field data must be explicitly taught in an introductory qualitative research
course specifically designed for graduate students in education. Equally important, if not more important, are the knowledge and skills associated with collecting rich, in-depth field data.

With respect to knowledge and skills regarding data collection materials and equipment, field data entry and organization, and the substance of the field data itself, two important categories of related problems arise for the teacher of an introductory graduate level course in qualitative research in education. One of these categories of problems is concerned with instruction; the other is concerned with assessment. The instructional problem is concerned with how to instruct students in the knowledge of and skills concerned with the technical aspects of data collection and management as well as with the substantive aspects of the field data itself. The second problem is concerned with how to assess student knowledge of and skills in these same areas. Although both problems are of critical importance to teachers of qualitative research, the latter is weighted by the sheer volume of data and the necessarily rapid turnaround time associated with assessing individual field data in a class of ten-to-twenty graduate students.

Consistent with assessment problems, the purpose of this paper is to describe an efficient yet effective way in which a large volume of student field data in an introductory graduate level course in qualitative research in education may be assessed and simultaneously and/or subsequently evaluated. The focus of this paper is primarily concerned with assessment practices; related instructional methods are also described but not in as much detail. Within the area of assessment, primary attention is given to assessing the technical aspects of field data collection; this is to say, organization and quantity of the data. Only secondary attention is given to the consideration of the substantive aspects of field data.

Following this introduction and consistent with the purposes of this paper, the paper is divided into three substantive sections and one theoretical section. The
first substantive section provides an overview of the course and the students typically enrolled in the course. The second section is concerned with instruction; the emphasis in this section is on the specific instruction provided regarding data collection materials and equipment, field data organization, and field data quality. The third substantive section is concerned with assessment. Here the emphasis is on efficient and effective assessment practices. And, the fourth section of the paper examines assessment from a theoretical perspective. Following the theoretical section, the paper ends with a brief conclusion. The final section contains a list of the references cited in the paper.

The Course and Students

The Course

The course, Introduction to Qualitative Research in Education, is offered by the Department of Educational Leadership & Counseling Psychology in the College of Education at Washington State University. It is a three semester-credit course and has been offered regularly since the late 1970s. The course is the first in a sequence of courses concerned with qualitative research in education. The second course in the sequence is entitled Advanced Qualitative Research in Education; the third course in the series carries the title of Special Topics in Qualitative Research in Education. The introductory course, about which this paper is concerned, is offered twice each year, whereas the subsequent two courses are only offered once each year. During the regular academic year, the introductory course is offered fall semester as a sixteen-week course which meets once per week in the later afternoons. The introductory course is also offered during the summer session as a six-week course which meets daily during the early evening. Although over the years a number of different texts have served as the foundational reading for the introductory course, Robert C. Bogdan's and Sari Knopp Biklen's text (1992), entitled Qualitative
Research for Education: An Introduction to Theory and Methods, has served as the primary text for the course for the past five years.

The Students

Typical graduate students in the introductory course are enrolled in a variety of degree programs. Only about one-half of them are actually enrolled in degree programs in the Department of Educational Leadership & Counseling Psychology. But, most of the students are enrolled in degree programs in the College of Education. However, the course also attracts a numbers of graduate student beyond the College of Education. About two-thirds of the students are enrolled in doctoral programs, while the remaining third are enrolled in masters programs. Typical of graduate students in education, they have had little or no direct experience with empirical research in general or educational research in particular other than some exposure to reading about educational research, reading a few reports of educational research studies, and perhaps having taken an introductory course in statistics.

Since the establishment of the course in 1979, enrollment has steadily increased to where, as noted above, the course is currently offered twice each year.

Orientation and Goal of the Course

As described above, the course is oriented toward guiding students through an independent and original qualitative research study from initiation to completion. As students are guided though the different phases of a qualitative research study, instruction is provided in particular areas of knowledge and specific skills associated with qualitative research including proposal and problem development, data collection methods, data analysis, report writing, and oral presentation. The assumption which stands behind the course orientation is that for students to become competent, qualitative researchers, they must each first and foremost formulate, conduct, and report a qualitative research study rather than learning the variety of skills associated with qualitative research relatively
disengaged from the actual process of conducting a study. Hence, consistent with
the orientation of the course, the primary goal of the course is for each student to
produce an individual and original qualitative research study. This includes
formulating, conducting, reporting, and presenting an original qualitative research
study.

Divisions of the Course

To achieve the primary goal of the course, the course is divided into three
related and somewhat overlapping sections. The first section is concerned with
problem conception, proposal development, and field data collection. The second is
concerned with analysis of field data. The third and final section is concerned with
the reporting of a qualitative research study as a formal technical report combined
with an oral presentation. In terms of the sixteen week (plus one vacation week)
calendar of the course, about one-third of the time is devoted to each section of the
course. During the sixteenth and final week of the course, students are required to
sit for a final course examination.

It is during the first section of the course that instruction is provided
regarding field data collection materials and equipment, field data organization and
management, and the substantive character of field data. It is also during the initial
section of the course that assessments are conducted first regarding data collection
materials and equipment, secondly regarding field data organization and quantity,
and thirdly, and to a lesser extent, regarding field data quality.

Instruction

Field Data Materials and Equipment

It is during the initial class meeting that instruction regarding appropriate
field data collection materials and equipment is provided. Students in the course
are provided with a list of the field data collection materials and equipment each
must have for the course and are instructed to secure the required materials and
equipment on the list. A copy of the list is presented in Figure 1. The list includes important materials and equipment such as paper, pens, folder, stamps and stamp pad, tape recorder with blank tapes, camera and film, and an album for photographs. Most of the items on the list are required; however, some are optional. Along with the presentation of the list, student are shown physical, individual examples of the materials and equipment on the list. Additionally, students are shown and are instructed to individually inspect real examples of several complete sets of appropriately catalogued and bound and/or filed field data. Following the display of individual items on the lists and examples of field data, the student are instructed to bring their own required materials and equipment to the second meeting of the course for an individual display.

It is important in this paper to mention the quality and character of the instruction given regarding field collection data materials and equipment. On the one hand, instruction is explicit and directive. Each student must have each item on the list. On the other hand, instruction implicitly attempts to convey a sense of flexibility. Students sometimes claim they will be unable to secure particular items within the week, often for good reasons. The teacher's response here is, "Just try to get the items by next week."

Student responses to this unambiguous and directive instruction are varied. Some claim they will be unable to purchase the required materials during the week because they have other obligations. Others claim they have the appropriate equipment, but that they have loaned it out and will likely not be able to retrieve it in a week's time. It is interesting to note that seldom do students claim that bringing their materials and equipment for display is an unnecessary and degrading activity. In fact, most students willingly and with mild enthusiasm follow the instructions.
Figure 1: Field Data Materials and Equipment Assessment Form

Introduction to Qualitative Research in Education
Donald B. Reed

Name: _____________________________ Date: ________________
(Print last, first, middle initial)

Indicate whether you have secured the following data collection materials and/or equipment by circling YES or NO for each item.

<table>
<thead>
<tr>
<th>Item</th>
<th>Secured</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Field Notebook Cover with Metal Fastener for 8 1/2&quot; x 11&quot; Paper</td>
<td>YES  NO</td>
</tr>
<tr>
<td>2. Field Note Recording Paper, 8 1/2&quot; x 11&quot;</td>
<td>YES  NO</td>
</tr>
<tr>
<td>3. Notebook Dividers, four</td>
<td>YES  NO</td>
</tr>
<tr>
<td>4. Pen, Black or Dark Blue</td>
<td>YES  NO</td>
</tr>
<tr>
<td>5. Pen, Red</td>
<td>YES  NO</td>
</tr>
<tr>
<td>6. Pen, Green (optional)</td>
<td>YES  NO</td>
</tr>
<tr>
<td>7. Manila Envelope, Large, for Field Documents</td>
<td>YES  NO</td>
</tr>
<tr>
<td>8. Date Stamp (optional)</td>
<td>YES  NO</td>
</tr>
<tr>
<td>9. Stamp Pad (optional)</td>
<td>YES  NO</td>
</tr>
<tr>
<td>10. Tape Recorder</td>
<td>YES  NO</td>
</tr>
<tr>
<td>11. Tape Recording Tapes, 60 Minute</td>
<td>YES  NO</td>
</tr>
<tr>
<td>12. Camera</td>
<td>YES  NO</td>
</tr>
<tr>
<td>13. Film for Camera</td>
<td>YES  NO</td>
</tr>
<tr>
<td>14. Album for Photographs (optional)</td>
<td>YES  NO</td>
</tr>
<tr>
<td>15. Brief Case, Top Loading (optional)</td>
<td>YES  NO</td>
</tr>
</tbody>
</table>

If certain materials and/or equipment have not been secured, indicate below when each will be secured.

________________________________________

________________________________________

________________________________________

________________________________________
Field Data Substance and Quality

Instruction regarding the substance and quality of field data begins with the second meeting of the class. During the six-week data collection phase, instruction is provided regarding traditional field data collection processes and associated data gathering techniques. Techniques included various types of interviewing, participant observation, document collection, photographing, and conducting limited surveys. In class meetings during the data collection phase, students are instructed to give weekly, short oral reports regarding their studies and field data collection. During these reports, students are asked to read excerpts of their field data. The teacher critiques each excerpt in terms of richness and level of inference. Also, during the data collection phase, the teacher reads excerpts from his own research data to provide examples of quality and richness of data and low level of data inference. Additionally, during this phase, student read about four reports of qualitative studies. These reports are discussed in class, and the teacher asks students to identify examples of rich data in the studies. Hence, it is through direct instruction and models, and to a certain extent assessment, that students are instructed in the processes of collecting high quality field data.

Assessment

Field Data Materials and Equipment

During the second class meeting, students are instructed to display their required field data collection materials and equipment. Along with their display, they are asked to indicate on the Field Data Materials and Equipment Assessment form whether they do in fact have each listed item or not. (A copy of the form is presented in Figure 1.) If an item is not present, then students are instructed to indicate at the bottom of the form when they will have the missing items. The completed forms are set by their displays.
Classe sessions are three hours long. Typically, there is a break about half way through each session. Before the break, students are instructed to clear their tables of personal items and display their materials and equipment on the tables during the break. It is after the break the assessment takes place. The assessment process takes about one-half hour for a class of about fifteen students.

After displaying their materials and equipment, students are instructed to examine the displays of other students. During this time, the teacher examines each display and completed list. Following each examination, the teacher comments to individual students about appropriate, inappropriate, and/or missing items. As noted above, when items are missing, students are instructed to indicate on the form when items will be secured. Complete forms are collected.

**Field Data Organization and Quantity**

At the end of the first five weeks of the course, students are requested to prepared their field data for display during the following class session. Students are given a form entitled *Field Data Assessment* which lists the characteristics of complete and well organized field data in term of various categories. (A copy of the form is presented in Figure 2.) Student are also instructed to prepare their field data for assessment in terms of the characteristics on the form. Additionally, students are asked prior to the next class meeting to assess and evaluate their field data in terms of the characteristics listed on the form. Students are instructed to include their completed forms with their field data displays. Photographs of previous displays are shown to the class. During the sixth class session, as with the displaying of the field data collection materials and equipment, students are instructed to remove all personal items from the classroom tables and arrange their displays during the class break. Following the break, assessment takes place. Students are instructed to examine each other’s displays in terms of individual and inventive
**Introduction to Qualitative Research in Education**  
Donald B. Reed  

**Figure 2: Field Data Assessment Form**

Employing the following categories, assess your field data in terms of each category by circling the appropriate numerical rating.

<table>
<thead>
<tr>
<th>Category</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Field note binder flat and fileable</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>2. Field note paper substantial</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. Notebook dividers, four</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. Notes recorded in dark ink</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. Extensive and detailed notes</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. Pages of field data bound</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>7. Title page included</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>8. Table of contents included</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>9. Pages dated</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>10. Pages numbered</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>11. Margins wide</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>12. White spaces within notes included</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>13. Diagrams included</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>14. Notes filled-in with colored ink</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>15. File for field documents</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>16. Field documents dated</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>17. Field documents titled</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>18. Surveys contained in document file</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>19. Photographs included</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>20. Tape recordings labeled and indexed</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>21. Research Journal included</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>22. Interview note included and filled in</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>23. Field observation notes included and filled in</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

Calculate average assessment
ways in which others have organized and managed their field data within the specifications contained in the assessment form.

Assessment takes about forty-five minutes. During the assessment period, students at various times attend their own displays and examine the displays of the other students in the class. Students are interested in explaining the inventive ways in which they each have organized, catalogued, and filed their own field data. Similarly, students are interested in observing the ways other students have met the course standards for field data collection and presentation in unique and personalized ways. It is not uncommon for animated conversations regarding various ways of organizing and presenting field data to occur during the field data display.

While the students are examining other students' displays, the teacher systematically examines each display. First the assessment form is examined. Then the filed data is examined in terms of the assessments on the form. The presence and absence of categories of data are examined. The volume of data within categories is also examined. Students are asked to explain categories in which they have given themselves low ratings. It is not uncommon for students to point out deficiencies as well as unique ways they have invented to organize and file their field data. In some cases, students seemingly assess their field data too harshly or too leniently. In these cases, the teacher suggests that changes be made on the assessment forms. When the assessments are completed, the teacher photographs the displays and members of the class. Figures 3 and 4 are photographs of field data displays conducted in several of the introductory qualitative research classes. The completed assessment forms are collected by the teacher following photographs at the end of the display period.

Field Data Substance and Quality

Assessment of the quality of individual student's field data is only in part conducted during the assessment period. Neither time nor the very individual way
Figure 3: A Student Displaying Her Field Data
Figure 4: Field Data Displays in a Classroom
in which students write and present field notes allows for much examination of the substantive quality of their field data. During the assessment period, however, the examination of the presence or absence of various categories of data, the volume of data in the various categories, as well as the presence of detailed diagrams do indicate the substantive quality of students' field data. During the data collection phase of the study, it is through the class activities presented above that the quality of students' individual field data is also assessed. The final report of a study as well as the public oral presentation of the report and distribution of the report also provide evidence of the quality of students' individual field data.

A Theoretical Perspective Regarding Assessment

Theoretical Concepts

Classroom teaching involves both production and maintenance activities (Mitchell & Spady, 1977). The student production of an independent and original qualitative research study involves both instruction and assessment. It is important to examine briefly the assessment process from a theoretical perspective.

*Instruction* is the process whereby a teacher intentionally attempts to encourage students to acquire information and/or knowledge. Instruction may involve presenting information and/or knowledge to students, or it may involve guiding students through new and different experiences so that they construct their own knowledge (Jackson, 1986).

*Assessment* is the examination of evidence of production. *Evaluation* is a term frequently used along with assessment, as in assessment and evaluation. Evaluation occurs when a *judgment* is made during or following an assessment by an individual who is both required to and has the expertise to make a judgment of the quality of a production. Evidence is judged employing a variety of standards, typically organizational regulations, professional or academic norms, technical standards, or the personal values of the individual evaluating. Usually evaluations
are documented and filed, and the substance of evaluations is confidential. When evaluation occurs, it is assumed that an individual or individuals will formulate a production to conform with organizational regulations, professional norms, technical standards, and/or the personal values of others. Conformation occurs because those who are judging the production can sanction both the production and those involved in the production, and/or because the individual, group, or organization engaged in production wants its production to conform to certain internalized standards.

The term accountability, although not usually used along with the term assessment, can be linked with the term assessment, as in assessment and accountability. Here the term accountability means the provision for public or semi-public scrutiny of evidence of production. Scrutiny of the evidence is voluntary, not mandatory. Public scrutiny may or may not be limited to an organization, a profession, or a group. As with evaluation, evidence is judged employing a variety of standards; typically organizational regulations, professional or academic norms, technical standards, or the personal values of an individual or individuals. Accountability does not require documentation. Similar to evaluation, when accountability processes are employed, it is assumed that an individual or individuals will formulate a production to conform with organizational regulations, professional norms, technical standards, and/or the personal values of others. Here again, conformation occurs because those who are judging the production can sanction both the production and those involved in the production and/or because the individual, group, or organization engaged in production wants production to conform to certain internalized standards.

It is important to note that during instruction, assessment usually takes place. As instruction proceeds, teachers confirm or disconfirm students' knowledge.
Following disconfirmation, typically new instruction occurs. Also, it is important to note that during assessment, instruction may take place. Through assessments, students may gain knowledge from their teachers or others.

**Assessment and Instruction**

Within the assessment of field data collection materials and equipment and the assessment of completed field data, there is a reciprocal *instructional* component as well as the more obvious *assessment* component. Within the instructional component of the assessment process, there are three distinctly different types of instruction.

When students display, first, their data collection materials and, secondly, their complete field data, they examine their own displays. These examinations are conducted in terms of an assessment form. While completing the assessment forms, students instruct themselves regarding the salient aspects of appropriate data collection materials and equipment and of appropriately completed and organized field data. Also, when students display, first, their data collection materials and, secondly, their complete field data, they examine each other's displays. This examination gives rise to conversations between and among students. Through the examinations and related conversations, students *instruct* each other regarding appropriate data collection materials and equipment as well as appropriate ways to organize and present field data. Additionally, as the teacher examines each student's display, the teacher provides specific *instruction* in terms of *confirmation* and *disconfirmation*. Where disconfirmation occurs, further instruction is provided.

**Assessment and Evaluation**

In this section of the paper and the one which follows, only the assessment of field data will be discussed. Because the assessment and evaluation of field data collection materials and equipment is very much a truncated process of the
assessment and evaluation of the field itself, only the assessment of field data with respect to evaluation and accountability will be presented.

Within the assessment process itself, there are two different types of assessment which occur simultaneously. Related to each of the types of assessment is a type of evaluation. As students display their productions (their completed field data) they assess their own displays; then the teacher assesses each student's display. Following the assessment, students are required to evaluate their own work by completing an evaluation form. The teacher evaluates student production by examining and judging the completed field data in terms of the evaluation form. Each student's evaluation form and completed field data are assessed by other students in the class, but the students do not conduct evaluations.

Assessment and Accountability

It is during the semi-public display of field data, that students become accountable to others in the class for the character of their field data. As students examine each display, they make judgments about each other's field data. These judgments are not required but nonetheless are made. The judgments are taken seriously because the students regard each other as more than novices with respect to field data character and organization. Student displays which do not meet, or barely meet, standards are immediately recognized but with little or no comment from others. Displays which clearly meet the standards are noticed. However, it is the students who develop, within standards, interesting, unique, and useful ways to organize and present their field data who are recognized and praised by other students.

Quality and Substance of Field Data

Although the purpose of this paper is not to discuss assessment, evaluation, and accountability with respect to the quality and substance of field data, some discussion of the substance and quality of field data with respect to assessment,
evaluation, and accountability can be presented. As noted above, the assessment of field data in terms of quality and substance is very difficult because of the length of time such assessments take and because of the very idiosyncratic way in which field data are recorded. The teacher does examine and assess samples of field data for quality during the data display period and offer tentative evaluations. However, it is through the four drafts of a report of the study and the final semi-public oral presentation of the report that assessment and evaluation of the quality of the field data for individual students are made. It is also through the semi-public presentations and the availability of all the individual reports of the qualitative studies that students feel held accountable for the quality of their field data.

Conclusion

Class displays of field data for individual qualitative research studies provide a way for both teacher and individual students to assess and evaluate their field data. Perhaps more importantly, class displays of student field data provide a means whereby individual accountability for field data with respect to peers in terms of both technical and substantive qualities can take place. It is accountability which raises student production of quantity, quality, and organization of field data to a higher level than otherwise would be the case.

References

