Through a series of focus group interviews, 63 students at George Mason University (Virginia) related their academic and student life experiences. The goal of the researchers was to find a means of reporting the findings in a way that retained the integrity of the contextual data (student voices) and maximized audience impact. Three ways of reporting the findings were explored: written report; slide show with or without video inserts; and video. The two basic advantages to reporting via written text were that it maximized the use of the transcribed data and increased the usefulness of the data since there were no technical constraints except degrees of word processing proficiency. The main disadvantage was the written report's minimal degree of impact. Reporting research findings using a slide show presentation had three main advantages: (1) information can be organized and disseminated quickly through a bullet format; (2) major points can be highlighted easily and quickly; and (3) video clips can be incorporated with contextual data. The disadvantages are that bullets alone lose the richness of the written text and the contextual data, and that video clips need large amounts of computer memory. One of the major advantages of the video format is that a researcher can maximize the impact of findings by reaching a larger audience more quickly; in addition, text can be connected to a speaker. However, video reporting is very time consuming; the most salient disadvantage is that technology often increases the potential for altering the message. (AEF)
Meaning and Media: Understanding the Relationship

by

Sondra K. Patrick
Office of the Provost

James J. Fletcher
Office of the Provost

and

Sara Looney
Department of Communication

George Mason University
Fairfax, Virginia 22030
(703) 993-8773
(703) 993-8871 (fax)

Submitted to:
Conference on Qualitative Research in Education
1996 Conference Proceedings

January 1996

BEST COPY AVAILABLE
Meaning and Media: Understanding the Relationship

Introduction

Our presentation at the 1996 Conference on Qualitative Research in Education accomplished two goals. First, it demonstrated the benefits of incorporating video inserts into a slide show presentation. Second, it examined the relative utility of three different ways of reporting findings for a qualitative study - written report, slide show presentation, and video. In the course of preparing the reports we were also able to assess the role of technology in the reporting process.

Miles & Huberman (1994) and Dey (1993) argue that the method through which a researcher reports research data plays a critical role in how the findings are perceived and used by an audience. In preparing the initial report of our qualitative study, we were very aware of our audience. Because we knew their time was limited and that our findings could be of value to them in the institution's decision making process, we carefully thought about our reporting strategy. Our first report consisted of a 23-minute video tape supplemented by a 5-page written text. Later, we turned to presentation software capable of handling video inserts to maximize the impact of our contextual data in a slide show presentation. Through our exploration of these three methods of reporting research results, we found that technology,
though facilitating the analysis and reporting process, imposed constraints that often limited the usefulness of segments of data. The following discussion will describe the project's background, data collection method, findings, reporting strategies, and what we learned about the impact of technology on research reporting.

**Background**

Like many institutions, George Mason University (GMU) regularly collects information about its students through large scale surveys. These quantitative survey instruments provide university administrators with a general picture of students' experiences. Frequently, however, they do not provide the richness and depth of information needed to make effective administrative decisions that impact today's demographically diverse student populations. To gain a more holistic picture of our student population, we incorporated qualitative research methods into our institutional research process.

Our research study began in 1992 when the President of our University funded a research study designed to identify the characteristics of students who have a good academic experience at GMU. Because we already had student data from large quantitative studies, we decided to capitalize on the strengths
of qualitative research to provide us with an in-depth description of our students' experiences in their own voices. Through a series of focus group interviews, students told us about their academic and student life experiences at GMU. They voiced their concerns and brought to light key issues facing students today. The components of our research design are explained below.

Data Collection

From January to August 1993, we conducted 12 focus group sessions with 63 George Mason University students. These one-hour interview sessions were held at various locations on campus and involved a representative sample of our diverse student population including representation across different categories of student involvement such as campus athletes, student leaders, commuters, and campus residents. Student participants were obtained by public announcements for volunteers in classrooms, at student organizational meetings, and through university offices such as the Minority Student Services Office, Student Housing Office, University Scholar's Office, and Athletic Services Office.

Each one-hour focus group session contained 2 to 14 students and was held in a conference room where the students and
moderator sat around a large table. As an icebreaker, each session began with informal introductions and a brief description of the research project. Basically the same 12 questions were asked to each group except for minor variations for returning adult students and campus athletes. The moderator was free to probe as students responded with new and interesting avenues of related discussion. In addition, each session was videotaped and audiotaped for later transcription and analysis. [We did request written permission from each interviewee at the beginning of each session before taping.]

Our data sample consisted of 63 students (54% Males, 46% Females, 65.3% Whites, 15.8% African Americans, 17.4% Asians and 1.5% Hispanics). Our data source was the entire student population (N=20,829) of George Mason University in Fairfax, Virginia. We tried to accurately represent the diversity of our student population in organizing the focus groups. African American and Asian students actually constituted a somewhat larger proportion of our student sample than their numbers at the university. Also, our sample reverses the actual gender status at GMU. In 1992, our entire student population consisted of 45.7% males and 54.3% females. Of this group, 5.6% were African Americans, 9.8% Asians, and 3.7% Hispanics.
Findings

Through these 63 student voices, we moved a step closer to understanding the needs and expectations of our diverse student population. Some of the findings gave us a picture of the type of student who has a successful experience at our institution. Other findings complicated the picture with issues indicative of a changing society such as the need for more cultural representation in classroom curricula and textbook selection. In fact, one African American student brought a 'world' literature textbook to the focus group interview and stated emphatically that 'his world' was not represented in it. Not surprising, we also found that retention and campus life were closely intertwined. Students who got involved from the start of their years at the university were less likely to transfer and more inclined to have a positive college experience.

Although many of our findings confirmed what we already knew about our students, it was the first time that the confirmation came directly from the students themselves in their own voices. We felt that this was an important contribution of our study to our academic community. When we thought about ways to report our findings, our goal was to find a reporting strategy that both
retained the integrity of the contextual data (student voices) and maximized audience impact.

Ways of Reporting

We explored three ways of reporting our findings: Written report, slide show with or without video inserts, and video. As noted by Elliot Eisner in his Keynote Address, there are many other ways of reporting; however, these are the three ways most widely used on our campus. The use of video as a research reporting tool is one of the most recent ways of reporting research findings on our campus and it began with our project. As stated in the introduction, our findings were first reported on a 23-minute VHS video tape accompanied by a written executive summary. Later, we produced a slide show presentation using PowerPoint presentation software with video inserts.

Although technology positively enhanced the reporting process for us, it also posed some important concerns. The concerns primarily focused on the ways in which technology imposed restrictions on data collection, data analysis, data usage, and data reporting. The following discussion will examine what we found to be the advantages and disadvantages of each of these three ways of reporting and the impact each had on the message.
Written Report. Obviously, the written report is the most common way of reporting information. We first wrote an executive summary to accompany the video then later wrote a longer report. We found two basic advantages to reporting via written text. First, the written text maximized the use of our transcribed data, allowing us to use as many excerpts as necessary to get our message across. Second, it increased the usefulness of the data since we had no technical constraints except our degree of wordprocessing proficiency. Our report could be as long as we wanted and there were no restrictions on the number of themes or topics we could cover. In this sense, we found the written report to be the most information laden of the three ways of reporting. Conversely, the main disadvantage of the written report centered on the degree of impact. After careful consideration of our target audience, we knew that a long, written text would not be read by many members of our audience. Today more than ever, we are experiencing information overload in almost every aspect of our lives. Duplicating a long, written text (30-50 pages) then distributing it widely via campus or electronic mail knowing that few would actually read it seemed very inefficient and ineffective. Since we wanted to share our findings with a large portion of our target audience, (i.e., we
wanted to maximize the impact of our findings) we turned to technology.

**Slide Show Presentation.** Reporting research findings using bulleted text with or without video inserts can be an effective means of reaching a larger audience. We identified three advantages to this reporting method. First, information can be organized and disseminated quickly through a bullet format. Second, major points and key issues can easily and quickly be highlighted. Third, since most presentation software packages allow the user to insert video clips, we were able to incorporate the advantages of this reporting procedure with our contextual data. Not only could our audience quickly understand the key elements of our study, they could hear the voices and see the faces of our students. The interplay between text and video in slide show presentations has the potential to disseminate information quickly without totally losing the contextual features of qualitative research methods. It is, however, a fairly recent method of reporting that carries with it some important disadvantages. Although a slide show format is an effective communicator of information, bullets alone lose the richness of both the written text and the contextual data. Inserting video clips into a slide show presentation can help
address this issue. However, video clips need large amounts of computer memory, limiting the number that can be used. We found that we could insert only four 30-second video clips into our presentation. These two minutes of video used approximately 140 megabytes of memory in addition to the slide presentation software. For our presentation we used a 486 PC with an 850 MB hard drive running at 75mhz. A slower computer would probably not be able to synchronize a video clip's sound and image. Obviously faster computers with larger memory capacities would allow for more video inserts thereby increasing the use of the contextual data.

**Video Presentation.** Initially our findings were reported in a 23-minute non-linear video format. We chose this format with our target audience in mind. We knew that time could prevent many members of our audience from reading a long written report. One of the major advantages, then, to the video format is that a researcher can maximize the impact of research findings by reaching a larger audience more quickly. Another important advantage is that the video enabled us to connect the text to a speaker. This connection gave life and importance to the data. It was no longer just another institutional research study, it was rich insight into the lives of our students. Their voices
were heard not interpreted through the words of a university administrator or faculty member. This way of reporting can have a powerful impact on an audience.

Video reporting is not, however, without its disadvantages. Videos are extremely time consuming to create. In addition to transcribing and analyzing large amounts of contextual data, they require additional time to edit. We had over 20 hours of video tape. Many hours were spent reviewing video clips before we were able to reduce the 20 hours to 23 minutes without compromising or interfering with the data-to-message relationship. Video reporting also requires specialized knowledge. We had to learn to video edit and we had to rely heavily on our technical support people. The art of video editing takes many years of experience to master. For most of us, the availability of technical support is critical: The most salient disadvantage to video reporting is that technology often increases the potential for altering the message. Many of our students made important points during the focus group interviews but for technical reasons such as background noise, poor positioning of the camera, or poor audio quality, we were unable to use their video clips in the final video report. To minimize this disadvantage, our video was
framed by a spoken text that incorporated many of these potentially lost points.

The following chart summarizes the relationship we found between impact and information using these three ways of reporting data.

<table>
<thead>
<tr>
<th></th>
<th>Video</th>
<th>Slide Presentation</th>
<th>Written Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Impact</td>
<td>High</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Low Information</td>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>

**Lessons Learned**

There are five important lessons that we want to share:

1. Careful initial planning of any research study remains critical. Although we decided early in the project development stages that we wanted to use video to report our findings, we lacked the experience necessary to fully understand what that meant to the project design. If you think you are going to use video as a reporting strategy, you need to think ahead about the availability of appropriate computer and audiovisual equipment, technical support/expertise, research subjects, transcribers, and appropriate space for videotaping interviews. We found
space to be an important factor. It must be large enough to accommodate videographers with cameras, the interview table with 8-10 chairs, and be free of obtrusive noises from air conditioners, telephones or outside voices.

2. As with all research studies, the reporting format must be tailored to your audience. Our immediate audience was our executive administration. Sensitive to the demands on their time, we felt that it was appropriate to produce a text of not more than 5 pages or a video of not more than 30 minutes.

3. We used focus groups as the format for data collection. Carefully planning for each focus group session is important. We recommend that you think carefully about setting and location since the video's message will include the focus group environment. You may want to consider using the same room for all focus group interviews and pay particular attention to arrangement of chairs, pictures on walls, and outside noises such as ringing telephones or hall traffic. If you have set up focus groups before, you know how time consuming the process is. We found it necessary to call students frequently and remind them about an upcoming session, emphasizing the importance of their contribution to
the research study. Even then many did not show. Although we did not pay students for their participation, we did provide refreshments. Finally, we recommend that all interviewees sign a permission form at the beginning of the interview session giving permission for their image and comments to appear in future video reports.

4. The video taping process is also one that requires careful attention to detail. Work closely with the videographer. He/she needs to understand the nature of the research project and how the video tapes might be used. We started our study with only one microphone positioned in the middle of a conference table and soon discovered that we needed more to increase the audio quality. We would recommend viewing video tapes early in the study so that changes could be made to enhance audio and video quality if needed. This step will maximize the useful of your data for future video reporting.

5. Our final lesson learned relates to the cost/benefit ratio. Using some forms of technology to report research findings can be both costly and time consuming. Our direct and indirect costs included the purchase of presentation software (Microsoft PowerPoint), the need for a 486 laptop
computer with an 850 MB hard disk to support video inserts and external speakers, and the use of the Video Cube ($50,000) for digitizing all VHS tapes. In addition, we needed the services of a videographer ($20/hour) and the expertise of our technical support people. Our expenditures in time consisted of hours spent transcribing and analyzing tapes, learning new software, learning video editing procedures, and editing/producing both the video report and slide show presentation.

Conclusion

As we explored the uses of technology in reporting our findings, we felt that we were on an expedition into unknown territory. At every turn, we discovered something new and unexpected that caused us to continually reflect on the relationship between the data, the message, and the medium. We are encouraged, though, because we see many ways in which our experience with this project will enhance future research studies at our university. We hope that our presentation and this report will help others who are exploring new ways of using technology in the educational research process.
References


I. DOCUMENT IDENTIFICATION:

<table>
<thead>
<tr>
<th>Title:</th>
<th>Meaning and Media: Understanding the Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s):</td>
<td>Patrick, S.K., Fletcher, J.J., and Looney, S.</td>
</tr>
<tr>
<td>Corporate Source:</td>
<td>George Mason University</td>
</tr>
<tr>
<td>Publication Date:</td>
<td>Summer 1996</td>
</tr>
</tbody>
</table>

ii. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

<table>
<thead>
<tr>
<th>Level 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY</td>
</tr>
<tr>
<td>Sample</td>
</tr>
<tr>
<td>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</td>
</tr>
</tbody>
</table>

The sample sticker shown below will be affixed to all Level 2 documents

<table>
<thead>
<tr>
<th>Level 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY</td>
</tr>
<tr>
<td>Sample</td>
</tr>
<tr>
<td>TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)</td>
</tr>
</tbody>
</table>

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

*Hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.*

<table>
<thead>
<tr>
<th>Signature:</th>
<th>Sondra K. Patrick, Associate Director</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization/Address:</td>
<td>George Mason University</td>
</tr>
<tr>
<td></td>
<td>4400 University Drive</td>
</tr>
<tr>
<td></td>
<td>Fairfax, Virginia 22030</td>
</tr>
<tr>
<td>Telephone:</td>
<td>703-993-8775</td>
</tr>
<tr>
<td>FAX:</td>
<td>703-993-4300</td>
</tr>
<tr>
<td>E-Mail Address:</td>
<td><a href="mailto:spatrick@gmu.edu">spatrick@gmu.edu</a></td>
</tr>
<tr>
<td>Date:</td>
<td>2/11/97</td>
</tr>
</tbody>
</table>
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC Clearinghouse on Assessment and Evaluation
210 O'Boyle Hall
The Catholic University of America
Washington, DC 20064

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
1100 West Street, 2d Floor
Laurel, Maryland 20707-3598

Telephone: 301-497-4080
Toll Free: 800-799-3742
FAX: 301-953-0263
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com