

eGranary Project: A Mixed Method Analysis

Dr. Tarrell Portman

Lesley Fonseca-Irizarry

Mimi Getachew

Arie T. Greenleaf

Robert Laroco

Procedures

The eGranary project's team consisted of four graduate students and a faculty member. Two of the students are doctoral student in the Rehabilitation Counselor Education program; one is a doctoral student in the Counseling and Supervision Program and one Master student in the Urban and Regional Planning department at the University of Iowa. The faculty member is a professor in the Counseling, Rehabilitation, and Student Development. The team held weekly meeting to discuss steps in the data analysis.

Data Collection

Our sample population came first from those who had updated their e-mail addresses with us. We felt we had a better chance of getting a high rate of return from these individuals and sites. Also, we wanted to quickly determine if this was a well structured survey with questions that would actually give us the kind of data we needed.

The next four mailings covered everyone in our database whether the addresses were updated or not. Each administrator/librarian/technician survey recipient had to be assigned a special ID number since the surveys were not anonymous. Each recipient received this ID number when they were entered into the Web Surveyor program; this was the method of data collection. The Web Surveyor program then assigned a random WHO key number to this ID number. The surveys were sent out in batches as we completed the number assignments. Three reminder letters have been sent out to all of the people since the initial request letter. After the second mailing, we fixed our program so that we could track responses for that specific mailing. The last one was at the end of October when 362 reminders were sent out. From that mailing, we had 6 responses. You wondered how to get to what content on the eGranary is most useful.

We are hoping we will be able to get some of this information from the logs. You asked, also, about survey question #23 and which population was using the eGranary. Our reading of the survey answers was that teachers and university students used it the most. However, we want to correlate this data with locations as we think it will be more interesting to track it by university, hospital, etc.

Data Analysis

Data were co-analyzed by Mimi Getachew, Robert Laroco, Lesley Fonseca-Irizarry, Arie Greenleaf, and Tarrell Portman. While Robert was in charge of the quantitative analysis of the data, the rest of the team conducted the qualitative analysis section of the data.

Open Coding

The team first divided up the question and each team member coded about twelve questions. There were a total of 87 participants and a total of 47 questions; 31 questions were qualitative in nature and 16 questions were quantitative. Each member coded significant responses from each of the participants. Once each team open coded the participants responses for each answer. Once each member coded all the data, a different team member was chosen to conduct member check. Than that team member compared their coding to the current coding of each question. Once all the data was open coded twice then the team moved to selective coding. During this open coding each team member begin to identify teams in the data they coded.

Selective Coding

The team met to review each data set that was coded twice. During this process themes begin to emerge for each question. As a team the entire data was scanned for themes that emerged for each question. Once those larger themes were identified, each team member

scanned their data set again to collapse responses into the larger themes. As a team overall analyses begin to occur around certain themes and ideas. From this process several themes have been identified: *Installation, training, technical support, functioning difficulty, cost, requested improvements, ordering process, electricity availability, and identified users.*

Identified Themes

A major theme to emerge from the qualitative data is the category of **Installation**. Respondents' comments regarding the ease of installation of eGranary were mixed. Some found eGranary "not very difficult to install particularly with IT background" (0907001ag) (0907001mg). Another said that it is "possible to install it smoothly" (2307002ag)(2307002mg), and that the "instruction manual is very clear" (2307001ag) (2307001mg). However, despite the few positive remarks, the overwhelming majority of respondents found installation to be "very time consuming and difficult" (3907001ag)(3907001mg), "a real hassle" (0807002ag)(0807002ag). Respondents targeted much of their dissatisfaction with the installation process on a lack of installation documentation. These instructions were found to be "scanty" (5808001ag)(5808001mg) and "incomplete" (3829b001li). In at least one example the respondent "did not find the installation documentation" (0608001ag) (0608001mg). As a result of the "limited" (36008001ag)(36008001mg), or even possibly non-existent installation documents, some users "had to research how to set up the eGranary" (1329a002li). The confusion surrounding the installation of eGranary resulted in one case where it took "many months to get it up and running" (2807002ag)(2807002mg). In addition to the issues with the installation documents, respondents also noted more general concerns with the installation of eGranary. One respondent expressed that it was "unclear from the outset what other hardware we needed to purchase to get the eGranary up and running on the network" (1329a001li). Another

said that "having it installed has really interfered with other security concerns and installation of other programs which is frustrating" (7207001ag)(7207001mg). Summing it up, one respondent wrote "I would recommend a more detailed manual to be made available instead of the four page documentation we received" (5829b001li)

Another theme to emerge from the data is the category of *Training*. The respondents' comments expressed a consistent desire for more comprehensive training in how to effectively use eGranary. Despite the existing training materials, respondents asked for "tutorials for new users"(1345004mg)(1345003li), and for eGranary professionals to "hold training sessions."(2045001mg)(2045001li). Others asked for "more student training" (4245001mg)(4245001li), "more time and training for the staff" (3945001mg)(3945001li) and further assistance to "train more students and patrons to use the EGranary digital library"(7745003mg)(7745003li). In conjunction with the respondents' requests for enhanced training, some expressed the sentiment that they feel isolated or on their own to figure out how to use eGranary. Consequently, they requested greater "cooperation between us and the service provider."(4530003mg), and "a better connection with people at WiderNet"(6545001MG)(6545001li).

In addition to improving the training options for eGranary, another theme to emerge from the data is the need for better *Technical Support*. The consensus is that "technical support needs to be enhanced."(2243001mg)(2243001li). Respondents who sought technical support from eGranary staff reported that the "overall response was poor" (2831001li), and that "it took quite sometime to get someone out to fix our problems" (7231001li). Others reported that they "did not receive a solution" to the problem (4431001li) or were still "waiting for the response" (5331001li). Satisfaction with technical support was described by one respondent as

“somewhat” (3931001li). To improve the quality and availability of technical support, one eGranary user recommended that more funds be spent “updating it content for technical support services” (6714001ag) (6714001mg). Similarly, another respondent suggested that he or she “would be willing to pay for technical support along with my annual fee” (7214001ag) (7214001mg).

One of the areas of concern of the respondents of the survey and that emerge as a major theme was *functioning difficulty*. Between the responses we found comments like “eGranary no longer operational” (0809001ag)(0809001mg) “I found it not working as expected” (0616002ag)(0616002mg), “often faced problems”(3340001mg)(4033001li), and “fairly reliable while it lasted” (0833001mg)(0833001li). They also expressed difficulties with the access “we can't open its page” (5328001li), “due to the missed files may be there seems to be less security” (1928001li), “when you try accessing some material the links asks you to consult your system administrator” (5128002li).

Another theme emerged was the *cost* of the program. Some of the respondent considered the *cost* “perhaps a bit too high” (1313001ag)(1313001mg), “\$500 would be more reasonable” (1313002ag)(1313002mg). Other respondents made reference to specific situations like “Ok for its worth but expensive for developing countries” (3813001ag)(3813001mg). Also was identified the cost of the initial product and then the cost of the updates: “There are two issues here... a) the initial purchase and b) the facility to provide updates” (2814001ag)(2814001mg). Among the comments there was a suggestion “Widernet should identify donors who can assist with monies” (3014002ag)(3014002mg).

Another important area of concern or major theme was **Requested Improvements to eGranary**. Some of the comments under this theme emphasized improving the updating process; some examples are comments like "alternative method of updating will help" (3914001ag)(3914001mg), "If u add latest books and journals it will be very nice" (2316001ag)(2316001mg). "We need newer version of eGranary"(0245001mg)(0245001li). The respondents also comment on the possibility to add information; for example "ability to add more materials by our selves here"(6445001MG)(6445001li), and the ability to divide the information according to interest: "customized information directly related to user interests"(1645001mg)(1645001li).

One area that it was commented by a few of the respondents was **ordering process**. In general they described the process as an excellent one. Some of the comments were "I appreciated it functionality" (0616001ag), "delivery and training was excellent" (1616001ag)(1616001mg). There was only one comment about the payment process that it was confusing for the consumer "credit card processing was confusing" (7016001ag)(7016001mg).

Electricity Availability was another important theme or factor that plays an important role in the responses and the evaluation of the program. Most of the respondents indicated that their electricity availability was stable or have some type of back up electricity service which allows the continuing use of the program. Some examples of the comments include: "electricity supply is stable" (0618001ag)(0618001mg), "we have stable electricity supply" (4418001ag)(4418001mg), "power cuts are 'normal'" (0818001ag)(0818001mg). But there were also respondents that their electricity service is very unstable. Some of their comments were: "less than 4hrs a week" (4118001ag)(4118001mg), "frequently we experience days with no

electricity" (6018001ag)(6018001mg), and "never is there a day where there is constant electricity for an entire work day". (6019001li).

Identified users was the final theme that emerges from the data. Most of the users identified in the survey were college related; examples included: "university lecturers" (0624001li), "researchers" (0224001li), and "university academic staff" (3224001li). The medical field was one of the fields using this program some examples are "college of medicine staff and students" (2924003li), and "local district hospital staff" (2924004li).

Recommendations

In addition to the themes that emerged from the qualitative analysis of the eGranary survey, the data revealed the need for more clear and concise questions. A number of comments were inconsistent with the questions asked. It appears that a breakdown in communication occurred between the intended meaning of the question and the respondent's interpretation. Despite the shared use of the English language, cultural differences, as well as, the likely use of British English on the African continent, likely led to the misinterpretations. Thus, the researchers recommend that all future questions on surveys, or in focus groups, be stated as explicit and straightforward as possible.