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Subjective Experiences in a Community-Based Student Learning Project

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Abstract: Students in an undergraduate applied research methods class were given the task of assisting two community organizations in doing a survey to provide data on the need for affordable housing in the local community. Students helped design and implement the survey and reported on the results. As part of the evaluation process, using a modified nominal group technique, students wrote essays about their experience in the class which they shared with all others in the class who had an opportunity to comment on each of the essays. After all had an opportunity to examine and comment on other students' essays they were given the opportunity to write any additional comments. This peer to peer feedback provided an extensive concourse about their experiences from which a Q sample was developed. The results indicated that among the nine students there were four factors indicating that the students experienced the class in quite different ways. The different perspectives included: the Disgruntled Learners, the, Satisfied but Not Unblemished, the Sociable, and the Critical Defender. The study also suggests the benefits of this evaluation process to enhance future pedagogy and communication in the classroom.

Introduction

Current work on educational assessment has generated a good deal of impassioned debate among academics about what should be assessed, how it should be assessed, who should do the assessing, and what should be done with all these assessments. (Baas, Rhoads, & Thomas, 2016) The focus of the pro-assessment advocates (Ewell, 2009) is on what Wilfred Bion (1961) would call the "work" function of the classroom/group where attention is directed to the learning and development of knowledge. Objective indicators are developed to measure this learning and assessments are made as to how well various learning objectives and outcomes have or have not been achieved. There is a growing amount of literature on assessment (Baas, Rhoads, & Thomas, 2016; Campus Compact, 2017) and there has emerged a virtual cottage industry of experts and consultants readily available to help develop an assessment process that will satisfy various accrediting agencies. In most of this activity, however, what has been ignored is how the student actually experiences a particular class. Looking at this behavior changes the focus from the development of objective indicators to an examination of a more

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subjective level where students, from their own perspective, describe how they experienced the class. This change of emphasis opens the door for an examination of other "behavior" and dynamics that affect the classroom, while at the same time providing another assessment of learning. The study presented here directs attention to this "other level" of the classroom and uses Q methodology to examine and make public the subjective experiences of students after they completed a community-based learning course. In the class they designed and implemented a survey to assist local organizations interested in developing affordable housing in the community. The following also presents a discussion of how a concourse can be developed to facilitate the examination of these subjective experiences.

The Department of Political Science at Valparaiso University operates the Community Research and Service Center (CRSC). The primary goals of the CRSC are to provide research assistance and other services to government, not-for-profit organizations, and in some instances businesses in Northwest Indiana while providing opportunities for undergraduate students to act in integral ways in the process of developing and executing applied research projects. One of the CRSC's earliest, large-scale projects involved doing a survey of the community to assess the need for affordable housing. The local Community Development Corporation (CDC) was applying for a grant from the Indiana Department of Commerce to fund affordable housing in the community. Critical to securing the grant, the CDC needed to provide current data on the need for affordable housing, how many persons in the community would qualify for affordable housing, and how many persons in these categories were interested and might move into these houses if they were built. Additionally, the Porter County Builders Association (PCBA), who would be involved in building the housing, needed to know what type of housing persons in this category would desire. The CDC and PCBA approached the CRSC and asked them to do the survey and answer these questions.

The specifics of the project have been reported elsewhere (Balkema & Baas, 1998). As a result, only a brief overview of the project will be presented here. The primary focus of this manuscript will be on the process of evaluating this undertaking as a student-learning project. It was decided that the survey would be done in the applied research class in which nine students were enrolled. The city planner became involved in the project and she was also a key figure in the CDC. She helped explain the purpose and other issues and served as a consultant throughout the project. In conjunction with assigned readings and lectures, students were given the responsibility to design the study, write the questions, draw the sample, make the phone calls, code, input, analyze the data, write up the results, and give the oral report to the CDC and PCBA. These were all done under the careful supervision of the instructor. It should be noted that several undergraduate students who were paid assistants in the CRSC worked on the project as well. With the exception of some minor issues generally associated with a project like this, all parts of the survey went quite smoothly and the project was completed in a timely manner and both the CDC and PCBA were very pleased with the results. The grant application was successful, the funding was received, and eventually a dozen small, lower-cost houses were constructed. Students also were given a standard, required class evaluation and the instructors were all evaluated positively as was the class as a whole. By all objective indicators, the class and the project were a success.

However, all these indicators seemed to have missed something. In doing a project like this you work very closely with the students and develop a closer relationship than you would in the general class setting. In this particular case, a lot of the work was done in the small CRSC office where a good deal of time was spent in the evenings and

weekends making phone calls, coding and entering the data. During those times many, many conversations about all kinds of things, including the class, took place. These conversations suggested that the usual indicators did not reveal a complete picture of how the students experienced the class. So, it was decided to do some further investigation of just how students actually experienced the class. Q methodology seemed to be extremely well suited for tapping the subjective experience of students in this class.

Method

Developing the Concourse of Communication

In order to create a comprehensive concourse of communication about the class, after completing the class project students were instructed to openly discuss and evaluate their classroom experience. The goal was to get students to comment and reflect on the aspects of the class they thought were relevant. As a vehicle for getting students to express their evaluation of the experience, a modified nominal group technique was used as suggested by Dennis Kinsey and Teresa Kelly (1989). As part of that process, each student was given a legal notepad and asked to write out their evaluation of the project and they were encouraged to comment on any aspect of the class. After each student had written as much as they wanted, their essay was then passed to the student next to them. That student read the essay and was encouraged to write about anything related to the project that was stimulated by the previous student's comments. That student's comments could include criticism of what the previous person had written or whatever new thoughts that were triggered by these comments. Once each student had completed this second set of comments, the cumulative essays were given to the next person and that process was continued until each person in the class had an opportunity to read and comment on the essay of each other person in the class. Because the comments were not completely anonymous, it was determined that students might not reveal some of their thoughts and experiences so at the end they were given the opportunity to write any additional comments that would not be seen by any of the other students. The completed essays were then given to the instructors and were kept completely anonymous.

The use of the modified nominal group technique and peer to peer essays resulted in nine lengthy, subjective commentaries on the experience in working on this project. This dialogue constituted the concourse. The students' narratives were divided up into what were considered complete thoughts about a specific aspect of the project. The students' language was not altered except in a few rare instances where the hand writing was not clear. Over 150 specific statements were extracted from this concourse.

In going over the extensive commentary several themes began to emerge. First, students talked about the project as a learning experience. Second, there was discussion of the purpose of the project. Third, there was discussion of the interpersonal interactions that went on in the class. And fourth, the various specific activities that were involved in the project were discussed. Combining these four categories with whether they were positive, negative, or ambivalent/neutral yielded the following typology presented in Figure 1. In a very general sense this framework guided the selection of the final Q sample. Within each of the categories in this framework efforts were made to select statements as diverse as possible. Several other statements dealing with logistics and university and classroom policy that did not fall neatly into these categories were also included to make sure that other issues were represented. In

addition, there was an effort to make sure that each student had about the same number of their comments included in the final Q sample.

Figure 1: General Typology for the Selection of Statements

A. Topics   a) Learning   b) Purpose   c) Interpersonal   d) Activities

B. Valence   e) Positive   f) Neutral/Ambivalent   g) Negative

Procedure

Eventually 48 statements that were thought to best represent the entire concourse (Stephenson, 1970) of communication about the project were selected. These 48 statements were then randomly numbered and typed on cards. This sample (Stephenson, 1953; Brown 1980; McKeown & Thomas, 2013) was then given back to each student and they were asked to rank the statements following usual Q-technique procedures on a scale from +5 to -5 as indicated in Figure 2. Thus, each student was asked to find 3 statements they agreed with the most and give them a +5, and then 3 they disagreed with the most and give them a -5. Of the remaining statements, they were then asked to find the 4 they agreed with the most and give them a +4 and then the 4 they agreed with the least and give them a -4. They were to repeat this back and forth process until they had scored all of the statements following the continuum in Figure 2.

Figure 2: Continuum for Q Sample

	Most Disagree								Most Agree		
Score	−5	−4	−3	−2	−1	0	+1	+2	+3	+4	+5
Statement	(3)	(4)	(5)	(5	(5)	(6)	(5)	(5)	(5)	(4)	(3)

Each individual ranking was then correlated, factor analyzed using centroid factor analysis, and judgmentally rotated to a position approximating "simplest structure" (Brown, 1980). This process resulted in 4 factors and the factor loadings for each of these persons is presented in Table 1. Factor loadings in Table 1 followed by an X are statistically significant, p. < .0 1.

Table 1
Student Factor Loadings

	A	B	C	D
1.	64X	18	−11	−17
2.	54X	−02	−20	−14
3.	52X	−08	−03	−20
4.	51X	13	13	00
5.	05	50X	32	01
6.	10	44X	−10	−06
7.	06	43X	−13	−14
8.	25	−21	56X	−11
9.	−26	32	13	89X

As indicated in Table 1, factor A includes 4 persons, factor B 3 persons, and factors C and D 1 person each. Factor scores were then computed for each factor and one weighted-average Q sort computed that best represents the perspective of that factor. With respect to factors C and D this "composite" represents only the Q sorts of students 8 and 9 respectively, but on the others, it does reflect a synthesized view of those with significant loadings. These factor scores were then examined to explain these 4 perspectives. The existence of 4 factors indicates a good deal of diversity in the evaluation of this project and the experience associated with it. The following is an effort to summarize these various perspectives.

Results

Factor A: Disgruntled Learners. Students 1-4 have significant loadings on this factor. The sentiments expressed by these persons came somewhat as a surprise to us and may never have been uncovered utilizing other methods. It is clear that these students thought they were going to go out and help "poor" people get housing and were disappointed when, from their perspective, this did not happen. There was a basic misunderstanding between the students and members of the organizations as to what "affordable housing" and being "poor" was all about. As a result, they were quite dissatisfied with the project's end-product and were quite "disgruntled" by this aspect of the experience. It should be noted, however, that 12 1,000 square foot houses were built that sold for around $80,000. This, according to these persons, was not "affordable housing." It is interesting to note that nearly all the persons on this factor were "minority" students and that may account for their differing conceptions of "affordable" and the way they experienced the class. The rankings given to the following statements indicate these sentiments. The numbers following the statements in parentheses indicate the rankings given to these statements by factor **A**, B, C, and D respectively.

2. It was somewhat disappointing to realize that the people who really need affordable housing won't be getting it regardless of our efforts. Makes one wonder what the real purpose was. (**5**, 2, 0, -2)

16. At first, we were all excited because we thought we would be helping poor people, but later when we found out that the CDC was not interested in poor people we all felt like we wasted our time and were led astray. (**5**, -3, -1, -2)

38. We have to look at the hidden agendas of everybody in a project like this. They're not going to build really cheap houses because everybody wants to keep the property values up. So what I consider affordable, they consider ridiculous. (**5**, -I, -2, -5)

Despite the theme of disgruntlement, it is important to note that these persons believed they learned quite a bit and evaluated the learning experience quite favorably. Similarly, they reject the notion that they would like to be taught by more traditional methods.

41. I now appreciate much more how difficult some research really is. It was much more work than I expected. (**4**, 5, 4, -1)

35. I feel like I got more than just a grade in the class. I got experience dealing with

different types of people and seeing how some things operate. (**3**, 1, -3, 1)

15. We learned how to do a phone survey and do some computer analysis. (**3**, -1, 2, 1)

17. In general it was a good learning experience because we learned the process of getting public opinion and evaluating it. (**3**, 3, 4, 0)

48. I would have preferred a more traditional teaching method where I could have learned more methods and statistics. (**-5**, -5, -5, 4)

Factor B: Satisfied but Not Unblemished. It is apparent that Students 5-7 had an entirely different experience in the class than did persons 1-4. While persons on factor A were unhappy with the political implications of the outcome of the project, persons on B were not troubled by this issue. Overall, persons on B were quite satisfied with the experience and they felt they learned quite a bit, particularly relating to doing a survey, evaluating public opinion, and completing a very large project. Likewise, they gained an appreciation for how hard research in the real world is and they would not have preferred a more traditional approach to teaching. They did, however, recognize some of the problems, including being assigned one part of the project and not learning as much on how to do the other parts of the survey, and the less than admirable work habits of some of their colleagues. These concerns are indicated in the rankings of the following statements. Once again, the numbers following the statements indicate the respective rankings by factor A, **B**, C, and D.

1. In general the project seemed to go pretty well, but there were a few rocks and bumps along the way. People got out of the project what they wanted. (2, **5**, 0, 3)

30. I feel that I learned a lot, but I don't think I learned enough about each part to be able to do a similar survey myself. (-3, **5**, 1, 3)

41. I now appreciate much more how difficult some research really is. It was much more work than I expected. (4, **5**, 4, -1)

3. The project was successful in accomplishing our goal and I learned a lot. (-I, **4**, 2, -1)

8. It was more work than expected because some people did not pull their own weight. (-3, **4**, -5, 1)

37. I feel that people felt that the project was going to do itself. That there would be no way Professor Baas would let something crappy get presented; and some individuals took advantage of that and let others do the work. (0, **4**, -4, 5)

23. I believe that the opportunity was available for people to learn as much or as little about the project as they wanted. It all depends on one's attitude and how hard one wants to work. (1, **3**, -2, 2)

9. The project taught us how to do a survey and how to start and finish a project. I am happy with the outcome. (-2, **3**, 0, -1)

17. In general it was a good learning experience because we learned the process of getting public opinion and evaluating it. (3, **3**, 4, 0)

48. I would have preferred a more traditional teaching method where I could have learned more methods and statistics. (-5, **-5**, -5, 4)

Factor C: The Sociable. Factor C consists of only one person and in most studies it probably would not be given serious consideration. Yet, in this evaluation, the primary concern is recording the subjective experiences of all the students. The ultimate goal is to understand and improve all aspects of the experience for all students. Therefore, the opinion of one person who emerges on a factor alone is important.

Once again it is clear that student 8 did not experience this class the same way as Students 1-7. For the lone person on C, the class was assessed much more in terms of interpersonal relationships. The interaction with other students was enjoyed and the class worked well together as a team. Overall, it was viewed as a good learning experience that helped bring individuals together in pursuit of one goal. These beliefs are indicated by the rankings of the following statements. Once again, the numbers following the statements indicate the respective rankings by factor A, B, **C**, and D.

22. I enjoyed the interaction with other students during the project. I felt part of a team and thus learned the importance of teamwork. (-2, -2, **5**, -3)

42. The project was a good learning experience that helped to bring together several individuals towards one goal. (0, -1, **5**, -1)

12. The class worked well as a team. In my opinion, everyone gave as much to the project as they could. (0, -5, **4**, -3)

There also was some concern expressed about how hard some persons worked at various stages of the project, but the conclusion was that once it got going, that all pulled together and the project turned out well.

18. People put into the project what they wanted. Not everyone had schedules that allowed them to participate all the time, but they could have made some sacrifices, including myself. (1, -2, **4**, -2)

24. In the beginning not everyone worked the same amount, but in the end people seemed to get together to get the project done. Probably because each of us knew exactly what we were responsible for doing. (0, -4, **3**, 2)

In the final analysis, according to C, the project went well, all did the best they could, much was learned, and this method of teaching was preferred to more traditional methods.

45. We did the best we could and that's that. I think it could have been better, but it did work. (3, -1, **5**, -2)

17. In general it was a good learning experience because we learned the process of getting public opinion and evaluating it. (3, 3, **4**, 0)

41. I now appreciate much more how difficult some research really is. It was much more work that I expected. (4, 5, **4**, -1)

48. I would have preferred a more traditional teaching method where I could have learned more methods and statistics. (-5, -5, **-5**, 4)

Factor D: The Critical Defender. Like factor C, there is only a single person on factor D and the lone person on this factor obviously experienced the project much differently than others. It is difficult to put a concise label on this perspective, but it appears that D stood somewhere on the outer perimeters of the class and from that vantage point was a defender of the purpose of the project — therefore critical of those persons on Factor A — and at the same time, critical of the efforts of others in the class, as well as the way the class was conducted.

Factor D is obviously at odds with those on factor A about the benefits of the survey. D does not feel like the project was set with little input from students. Similarly, D did not see any "hidden agenda" on the part of the organizations and feels that the project will be helpful to provide data for a grant application and will help some people get "affordable housing." The problem, according to D, is that some persons simply have too much debt and are not in a financial position to purchase a home. These sentiments can be seen in the ranking of the following statements. Note, in particular, the difference between the rankings given to these statements by A and D. Once again, the numbers following the statements indicate the respective rankings by factor A, B, C, and **D**.

38. We have to look at the hidden agendas of everybody in a project like this. They're not going to build really cheap houses because everybody wants to keep the property values up. So what I consider affordable, they consider ridiculous. (5, -1, -2, **-5**)

5. I did not feel like my suggestions or those of my classmates were taken seriously. I felt like cheap labor. The survey was already drawn up. All they needed were some suckers to do the work. (2, 0, -1, **-5**)

25. We need to keep in mind that it is expensive to build houses. Unfortunately there are many people so deep in debt that no one could build a house for them and expect that they would be able to afford it. I think that the houses the CDC builds will help out a lot of people. (-4, 1, 0, **5**)

19. I don't think the survey was all set up by the CDC. We thought a lot about the questions. There's only so much you can do when you're trying to answer a specific question. (-3, 2, 2, **4**)

Additionally, D is not altogether happy with the work of others in the class because some were irresponsible and did not do their share of the work. D was also not happy with some matters related to the way the class was conducted. More time was needed to make the project better and tighter restrictions and clear consequences for failure to meet deadlines were needed. Contrary to everyone else in the class, D would have preferred a more traditional method of teaching. These sentiments can be seen in the ranking of the following statements. Once again, the numbers following the statements indicate the respective rankings by factor A, B, C, and **D**.

6. I think if we would have had more time, we could have tested the survey and then reworked the questions. But we did the best we could in the amount of time we had. (1, 0, 0, **5**)

13. Pointing fingers is useless, but people should have been more responsible. I don't think people realized what a big undertaking this project really was and that accounts for the lack of commitment. (2, 2, -3, **3**)

37. I feel that people felt that the project was going to do itself. That there would be no way Professor Baas would let something crappy get presented. And some individuals took advantage of that and let others do the work. (0, 4, -4, **5**)

47. There should have been tighter restrictions on when things were due and how much each individual should do. (0, 3, -4, **4**)

48. I would have preferred a more traditional teaching method where I could have learned more methods and statistics. (-5, -5, -5, **4**)

Discussion and Conclusion

What do we learn from an evaluation such as this? First and foremost, using the modified nominal group technique and Q methodology allowed students to express, from their own subjective point of view, their evaluation of the entire classroom experience and provide data not generally obtained from a typical evaluation. For example, the department and university's standard evaluation consists of a series of Likert scales developed by faculty and administrators where students rate the instructor and course. Averages of each item are computed and reported. Overall grades for each course and instructor are then determined. The results in the current study, however, not only focus on a different dimension of the class, but also result from a description of the class based on the student's own subjective experience and provide complete narratives on the way in which the course was experienced. It also is important to emphasize, in this context, how the development of the concourse and the eventual Q sample as done here, helped drive this assessment in an authentic way because the language and thoughts, as well as their interpretation, came directly from the students and not from the thoughts and language of teachers, administrators, and the pro-assessment advocates. The results obtained using the modified nominal group technique and Q methodology certainly provide distinct advantages in allowing student perspectives of their experience to emerge.

In sum, this information provides useful data in understanding the underlying dynamics taking place in a class that may not normally be observed and can substantially affect learning. It also provides a guide in structuring future projects. For example, it is evident there needs to be greater emphasis on communication between the students and the organizations as to the purpose of the project in order to prevent the appearance of factor A again. Similarly, it is clear that more careful, specific task assignments need to be made and that these need to be coupled with deadlines and specific consequences for not meeting these deadlines. This is not meant to suggest that the same factors/perspectives would appear in other courses, but that the factors that would emerge can provide similarly useful information.

An evaluation like this reminds us how students may experience the same project and same class quite differently. In this instance, some viewed the project as a political task and were disappointed when their political goals were not met. Others evaluated the class primarily in terms of what they learned or did not learn, while one student experienced it more in terms of a social event, and another student took a somewhat critical stance. How differently the same project may be experienced by students is important to keep in mind in all classroom activity, but particularly in an area where you are attempting to provide students with a somewhat different type of learning experience. And this is particularly the case in a community-based learning project like

this where there is much less formal classroom structure and students are given greater "freedom," and individual responsibility. Understanding these dynamics is also important because in a project like this, it is much more of a group effort and all students need to be pulling in the same direction. Knowing in this instance that some in the class had a political agenda, while others had considerably different motivations and experiences, is important in order to prevent these dynamics from getting in the way of other learning objectives. Uncovering, with Q methodology, the variety of subjective experiences of these students in this project is an important example of how these other dynamics and activities can be made public and examined.

Finally, despite the variety of different ways the project was experienced, all but one — as one might expect, the critical outsider — preferred this method of teaching to other more traditional methods.

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