Art science and politics of program evaluation: A chronicle of an evaluation of the Montana Conservation Corps

Jennifer Haubenreiser

The University of Montana

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The Art, Science, and Politics of Program Evaluation:
A Chronicle of an Evaluation of The Montana Conservation Corps

by

Jennifer Haubenreiser

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Dean, Graduate School

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This is an applied thesis and is comprised of two elements. The primary component is a "chronicle," or story of an independent program evaluation of the Montana Conservation Corps (MCC) Inc., conducted in 1993. Written as graduate student of sociology, this chronicle depicts the first attempt at applied research. Using the perspective of a novice, the intention is to shed light on some of the problems and difficulties facing inexperienced program evaluators. This is a valuable, yet often overlooked, perspective. Stories of research are useful to readers, particularly those lacking an understanding of what is entailed in the "real" world of evaluation research. The chronicle demonstrates the art and science of evaluation research, as well as the political environment in which it is generally conducted.

The second component of the thesis is the actual evaluation report submitted to the State of Montana in 1994, which appears as the appendix. This report is presented as a demonstration of small-scale program evaluation, conducted independently as a student. It is used also as a basis for discussion throughout the story.

This thesis is directed towards two audiences: students entering the field of program evaluation, and "consumers" of evaluation research—namely, program or agency personnel using evaluation reports for program planning and improvement. Each chapter addresses some of the problems encountered during the MCC evaluation. For instance, new evaluators are likely to face the problems of "political time" and learning to write for an agency. They also must learn to handle the complexities involved in understanding an organization's goals. The methods and methodology of evaluation research are discussed, as well as the difficulties faced trying to operationalize and measure social concepts. The story ends with advice and a number of "morals," both for students and for consumers of evaluation research.
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CHAPTER 1: INTRODUCTION

Logic-in-Use and Reconstructed Logic

Abraham Kaplan (1964) takes up the issue of logic in social inquiry. In the social sciences, there are prescribed ways of doing things, a logic—which is to say "what scientists do when they are doing well as scientists" (Kaplan, 1964). Students of sociology are familiar enough with this, as it is evident in the numerous texts and journal articles on theory and methodology. From these, social science appears to go about in an articulate, seemingly straightforward fashion in terms of how researchers go about their business.

What is often not apparent, however, is the notion of two distinct elements of research. The first, termed "logic-in-use," involves the discovery and learning process. This refers to how researchers have dealt with the problems, confusion and frustrations that so often accompany social science research. The second element, the "reconstructed logic," reflects how the research is ultimately presented. This "reconstruction" is what students are more likely to be familiar with.

As an example of this, one can think about the beginning of a hypothetical group research project. People are likely to come in with different ideas of how to proceed, different perspectives of the topic, and different conceptions as to the best way to go about the work. Difficulties are inevitable: disagreements, encountering dead ends, or finding out that needed data are unavailable. Yet, these kinds of problems can be
beneficial because they prompt imagination and creativity, along with teaching the value of compromise.

Ultimately, the project is completed and a paper submitted. Everything is presented in a logical, sequential order, leading to a well-supported conclusion. The "logic-in-use," the things discovered and learned along the way are replaced by the "reconstructed logic." And to the reader, the difficulties, frustrations, and confusion experienced along the way may never be known. To the reader, research appears to go along in an unfettered, logical manner. Yet experienced researchers understand that logic is not perfect, and even the best research can wander (Kaplan, 1964).

An Applied Thesis

This "applied" thesis follows this notion by presenting two elements of my own research in the field of applied sociology. This thesis (1) demonstrates how I applied sociological methods to conduct a program evaluation of the Montana Conservation Corps (MCC) for the State of Montana in 1993. And (2), it recounts my own story of discovery--shedding light on my own "logic-in-use." This thesis is both a presentation of the finished product of evaluation research, and a behind-the-scenes look at my first attempt at an independent research project. Over time, I came to find my experiences, along with the lessons I had learned and discoveries I had made, to be as interesting, if not more, than the actual results of my evaluation. I have come to see these experiences as data--data as worthy of attention as the "literal" data I had collected.
The story of the MCC evaluation includes many of the lessons I learned, both during and after the project. It includes some of the frustrations and confusion I experienced, along with some of the discoveries I made along the way. And while this story represents a somewhat personal statement, it is my intention that others can learn and benefit from my experiences. I would hope that this inclusion would be of use to others. Through demonstration of actual research and through recognition of specific, academically recognized problems based on my own experiences, a better understanding of the "real" world of evaluation research can be made more clear.

My story follows the tradition of what is known as a "chronicle" of research. Chronicles have been depicted by such professional sociologists as David Riesman, Peter Blau, and Robert Bellah (See Hammond, 1967). It also follows C. Wright Mills’ noted appendix On Intellectual Craftsmanship in The Sociological Imagination.¹ Social researchers are "craftsmen" in their pursuit of knowledge or in the study of something of interest (Mills, 1959). In the beginning, mistakes are likely to be made; new and better directions will be discovered along the way.

Paul Lazarsfeld has emphasized the importance of biographies, or chronicles of research.² Rather than being merely anecdotal, these behind-the-scenes stories can enlarge and enrich the reader’s understanding and appreciation of the endeavors involved in social research. Social scientific studies, including evaluation research, are filled with

¹See appendix of The Sociological Imagination, 1959, page 195.
²See endnote #4 in the introduction of Sociologists at Work, 1967, edited by Phillip E. Hammond.
moments of discovery--new ideas and breakthroughs. This perspective is an important and useful one, although it is often overlooked (Hammond, 1967). The act of research is a human activity and should be understood and presented as such.

The Audience

This thesis is directed towards two general audiences. First, I believe this narrative will be of use to students who are leaving the comfort of academic life to work within the field of evaluation research. Second, I am speaking to the "consumers" of evaluation research, namely, funding agency personnel and program directors. These are people who will be using evaluations for program planning or decision making but may be unfamiliar with some of the more important principles of social science.

By attempting to promote a better understanding of program evaluation, both for students conducting evaluations and the people hiring them, my hope is that the outcomes of evaluation research will be more fruitful. After reading this thesis, students should have a better sense of what they are going to be involved in. Consumers should have a better idea of what they are getting for their money.

Thesis Organization

In essence, this thesis is both a document and a story about a document. It is the actual report of the MCC evaluation that I wrote and turned in to a state agency, and the story of how I conducted it. The following four chapters will focus on many of the things that I encountered and felt were important but were beyond the scope of the agency
report. The actual report turned into the state appears as the appendix of this thesis. It is the basis of this effort, and it will be referred to throughout.

At this point, the report should be read in order to gain a better understanding of the program, its background and its goals, and to become familiar with the design, methodology, and outcomes of the evaluation. The story will focus on varying aspects of the evaluation; understanding the "big picture" is necessary to facilitate this learning. Reading the report will also serve as a demonstration of how program evaluations are typically conducted, and how I was able to use my formal training in sociology to conduct one.

Chapter two takes a broader look at the "messy world" of program evaluation. This includes a number of issues, from coming to terms with varying and sometimes conflicting goals within the organization, to dealing with "political" time. Professionals in the field of evaluation research have identified many problems specific to program evaluators. My story will illustrate how I encountered some of them during the MCC evaluation.

Chapter three extends the story to the more academic issue of sociological methodology. This chapter is not intended as an introductory course in social scientific methods but is intended to illustrate the challenges involved in trying to apply scientific methodology to the applied field of evaluation research.

Chapter four focuses on the difficulty of measuring social concepts. I give two examples of how I encountered and attempted to deal with concepts that I believed to be
pertinent to the program and its participants, both during the MCC evaluation and during a literature review of theoretical information.

Finally, chapter five closes the story by summarizing and offering potential solutions to some of the problems encountered during the MCC evaluation. While the primary topic of my narrative deals with difficulties and frustrations, it is my intent to use my experiences and the lessons I learned to enhance the field of evaluation research.

Woven throughout the story of the MCC evaluation are two underlying themes. First, evaluation research can be a perplexing undertaking. It is both an art and a science, and it is generally conducted within a busy and changing political environment. The second theme deals with how I learned to do the best job possible with the resources I had available. This may seem simplistic, but working within the field of evaluation research, acknowledgment and acceptance of this simple idea may be the key to getting the job done.

The MCC Evaluation

The story begins in the spring of 1993 when I received a contract from a state agency to perform the MCC evaluation. At the time, MCC was a relatively new program geared toward improving the lives of Montana’s youth, while making valuable improvements to Montana’s natural environment. MCC can be included among the many

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3 The evaluation was stipulated by the federal grant funding the program. Since funding was limited, the state agency opted to hire a graduate student to conduct the evaluation. The contract also stipulated that I would have access to any data I collected for use in my master’s thesis.
federal and state funded youth service programs that have gained popularity and public support throughout the country.4

These are not intended to be merely "jobs" programs; youth participating in the program are supposed to benefit both personally and socially, while being engaged in meaningful work (oriented toward conservation and community service). Program participants within MCC, termed "corpsmembers," were intended to benefit, i.e., "develop," via participation in the program. This development was to come about through meaningful work combined with program education. The focus of the evaluation was to be on this particular aspect of the program--termed "corpsmember development".

The program sounded interesting and I was excited to have the chance to evaluate it. I felt then, and do now, extremely fortunate to have such an opportunity. As a fledgling, I was, and still am very aware of the value of practical experience in terms of future employment. Within a short period of time my summer employment was resolved and my future looked bright. Not only would I be gaining practical experience in a real life situation, I would be getting paid to collect material for a master's thesis. What I did not expect was to learn as many lessons as I did or to grow as much as a sociologist.

The Politics of Evaluation Research

Many experienced evaluators can probably remember a point when they experienced their first real dose of professional reality. This happened for me during the

4See appendix, starting on page 2, for more details of MCC's 1993 program. The program has since changed, as the source of funding has changed. At the time of this writing, MCC is funded by the federal Americorps program, and is thus known as MCC/Americorps.
early stages of the MCC project. Looking back, I believe the events that occurred after I was hired are probably not all that uncommon. But, like Voltaire’s *Candide*, graduate students can be overly naive—expecting "all is for the best in the best of all worlds." As I vocalized frustrations to some of the professors I knew, I received many knowing smiles along with statements to the effect of "welcome to the real world."

Immediately after I was hired by the state for the MCC project, the whole organizational structure of MCC began to unravel. The primary conflict between MCC and the state agency appeared to be centered over control of the program’s funding. Initially, the state agency held the position of overseeing the program, including the financial aspects. This was challenged by some of the members of MCC’s board of directors, and a political struggle ensued. This did not threaten my evaluation, as money had already been set aside for my project. Regardless, the changes that began to take place were disconcerting, and I felt that I was placed in an uncomfortable position. My "employer" (the state agency) and the object of my study (MCC) were at odds with one another, and I felt that I was placed in the middle.

In the end, the state agency lost the fight, and the individual at the agency who had hired me and oversaw the program (along with claiming responsibility for initiating the program) lost his job. His position was dissolved as the state agency was removed from the organizational structure of MCC during the final hours of a legislative session. What this meant for me was that I was left without any direct supervision. The person who was to have assisted and directed me through the evaluation was not going to be replaced. In the words of an agency employee, I was left with "a very long leash."
I had come into the project naively assuming that everyone involved was working solely for the benefit of the program. It was troubling to hear about the alleged, unseemly political maneuvers taking place in Helena: secret meetings, personal favors being called in from high state officials, the fight for financial control, the alleged "back-stabbings." Despite this, I went ahead with confidence that I could do what I had been taught in school and attain sound results. In the end, I believe that the lack of guidance, the political conflicts, and, most of all, my inexperience, set me up for a number of troubles that I had to learn to cope with along the way.

**Conducting the Study**

As the evaluation report mentions, MCC's goal of corpsmember development entailed measurement of a number of attitudes: corpsmembers' feelings toward themselves, their environment, their work, and others. These are difficult concepts to measure under the best circumstances. Aside from my inexperience and the lack of direct supervision, I was further limited by working alone, with a limited budget, and only one summer to collect data. Moreover, I was not officially hired until the spring prior to the summer program, which gave me roughly a month to complete my semester's school work, design a questionnaire, and figure out my plan of attack.

Due to the time limitations, I ended up modifying an existing survey instrument that had been developed by an evaluation firm in Maryland.⁵ These were used in both

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⁵My thanks to Apt Associates, Inc., for providing a copy of the survey instrument they had developed to measure the impact of the American Conservation and Youth Corps program (Subtitle C) on individual participants. This was funded by the Commission on National and Community Service.
a pretest at the beginning of the summer program, and a posttest at the end of the summer. 6 This procedure was intended to assess whether attitudes had changed in the direction stated by MCC's goals during the course of the program. 7

I also interviewed approximately forty corpsmembers and ten crew leaders during the course of the summer. I was confident that between the survey and the interviews, I would be able to draw a clear picture of whether the program was succeeding or failing to meet its goal of corpsmember development. Even though I was aware from the onset that financial and time constraints would limit the scientific rigor of the study, I believed that I could do a reasonably good job.

The next chapter picks up the story as I entered the "messy" world of program evaluation for the first time. There are a number of problems specific to the field of program evaluation, and due to the lack of experience (or even a class on evaluation research), I learned about some of them first hand. Moreover, since I had to scramble to pull the project together, I never took the time necessary to understand the goals of the program completely before attempting to evaluate it.

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6 There were already four six-month crews in operation when I was hired. Since pretesting these individuals was not feasible, they ended up taking the survey along with the summer corpsmembers. I suspected that there would be a difference between six month and summer crews, yet I did not have the opportunity to fully assess this aspect.

7 See appendix, pages 4 and 26, for a description of the design and methodology used for the evaluation.
CHAPTER TWO: ENTERING THE MESSY WORLD OF PROGRAM EVALUATION

Learning the Ropes

Going into the project, I had not expected to encounter the confusion and frustration that I did. I expected the hardest part of the study to be the initial planning and coordination of the project; from that point on, it would be just a matter of following a plan. However, by the time the data were collected and the report was filed, I came to realize that the hardest part for me had been learning the role of a program evaluator. I had to learn to work within a different, more political, environment than I was used to in school. I also learned that assessing the goals of even a relatively small program like MCC can be a perplexing undertaking.

Once the restructuring was over and political disputes had died down, the state agency was out of the picture (for a time). Despite my early uneasiness, I did not dwell on the absence of the state agency and commenced to apply myself to the project. The MCC directors, personnel, and crew leaders were all very accommodating and showed a great deal of interest in what I was doing. They were very anxious for information as to how their program was working, and did everything they could to help me along. Moreover, I knew I had the support of my thesis advisor and other faculty members. In general, I felt confident in my abilities and positive about the work I was going to accomplish.
Dealing With "Political Time"

As a program evaluator, I was immediately faced with a dilemma known as "political time" versus "evaluation time" (see Rossi and Freeman, 1989). This notion is not unique to evaluation research, but is a problem faced by many social science researchers. Good, i.e., rigorous evaluations take time, especially when trying to assess something as complex as the impact of a social program on its participants. The stronger the design and methodology, the more time will be necessary to carry out an evaluation properly.¹

As do most evaluators, I found out that the political world moves at a fast pace. Both the state agency and the MCC directors were impatient to acquire information and to find out whether the program was working. In terms of a completed evaluation, these people were thinking in months rather than years. This resulted in pressure to complete the evaluation quickly—more quickly than a stronger design would permit.

As mentioned before, I had very little time to pull the study together. I had barely a month to get a survey questionnaire together and plan how to administer the survey to seventeen crews scattered throughout Montana during the first week of the program.² I was able to accomplish this, but I was forced to rely on the help of the crew leaders, which may have compromised the results of the survey.

¹For example, one larger-scale study of youth service organizations was conducted by Public/Private Ventures of Philadelphia. With a full staff, this company spent three years assessing nine programs simultaneously.

²See the map preceding the evaluation report.
Being an overly eager graduate student, I collected far more data over the summer than could be properly analyzed in the short period of time I had to complete the work. As is not uncommon with graduate students, I left few stones unturned; I did not want to miss anything that might prove important later on. I believed that in order to understand the program, I needed to spend a lot of time with corpsmembers and crew leaders. This meant that I would need even more time to process what they had said, how they acted, along with how they had responded to the questionnaires.

Throughout the evaluation, I was concerned more about collecting enough data than the amount of time it would take me to later analyze them. However, I did begin to worry when I got a phone call in September (a month after the program was over) from a member of the state agency. This person had just been "handed my case," and wanted to know how if I had completed the evaluation. The agency wanted to have the project completed and a report filed, thus they would be expecting a "finished product" from me soon.

Understanding the Organization's Goals

Aside from the time problem, I now believe one of my biggest obstacles stemmed from not really understanding the goals of the program. I collected a good deal of data without knowing how the data would help me assess the goal of corpsmember development. Coming into the project, I felt that I had a pretty fair idea of what youth development...
service programs, like MCC, were trying to accomplish. I knew that corpsmember development was one of the primary goals of MCC, and that my job was to see whether the program provided social and personal development to the youth involved. What I did not understand was what this development was, in terms of how MCC corpsmembers would experience it.

I was able to glean more specific ideas from an MCC brochure, for instance, the notions of "tolerance of diversity" and "social responsibility." But I was wrong to assume that I understood the goal of corpsmember development well enough to actually measure it. Partially due to the lack of time, and partly because I did not know any better, I neglected to spend time with the program directors before the evaluation. I needed to find out what they expected the program to accomplish in terms of corpsmember development, or for that matter, what they considered corpsmember development to be.

I did see that some of the program components connected to development would be relatively easy to assess. For instance, I knew that corpsmembers were to receive an average of eight hours of program education per week. All this would entail would be to ask corpsmembers how much education time their crew had been involved in. But other, broader, and more nebulous ideas of development were going to be much trickier to assess.

Conceptualizing "Diffuse" Goals

In fact, understanding a program's goals, or goal conceptualization, is a particular problem in the field of program evaluation, especially when dealing with social programs like MCC. These programs tend to have relatively diffuse goals: goals that lack concrete
and specific descriptions of the desired outcomes (Miller, 1965). For instance, MCC's goal statement at the time of the evaluation was as follows:

The Montana Conservation Corps brings together Montana's commitment to its people and to its natural resources by enhancing citizenship and employability through stewardship of our lands.

Assessing this goal required me to understand such notions as "enhancing citizenship" and promoting "stewardship of lands." Even the more specific goals (as found in MCC's brochure), for instance, providing "educational development," required that I understand some highly complex social processes.

Moreover, during the evaluation, I began to see how the goal of corpsmember development was construed differently by different levels within the organization. I found myself working at all of these levels at different times, and I came to recognize not only the complexity of the goal, but also a multiplicity of meanings that existed within the one goal of corpsmember development. Aside from what the goal actually entailed, I had to consider what the goal meant from different levels within the organization.4

Goals at the "Technical Core"

The first place I looked to assess the program was the "technical core" of MCC--the corpsmembers and work crews. At this level, the goal of corpsmember development tended to be relatively specific; for instance, crew leaders were responsible for teaching corpsmembers to get to work on time, or making sure they spent adequate time writing in their personal journals. What this meant for corpsmembers was that the goal of

4See Scott (1989), pages 22-26, for further discussion of this idea.
corpsmember development was often a matter of following a prescribed set of activities and rules.

Also at this level, crew leaders had their own set of goals. They were responsible for holding the crew together in order to enable sufficient production (meeting the goals of the project sponsors, e.g., building trails). In addition, they were to keep their crew safe, relatively free from contention, and working in an atmosphere conducive to personal development.

Interestingly, this diverse set of goals put MCC crew leaders in a unique and problematic position. They were given specific work projects to accomplish, along with deadlines from project sponsors. But they also functioned as facilitators of corpsmember development. Problems ensued when the daily work goals were impeded by the alternate, but equally important, goal of providing for the development of their crew members. For instance, crew leaders often had to delay production in order to see that corpsmembers received the required amount of program education.

Goals at the "Managerial" Level

During the evaluation I was, finally, able to spend some time with the program directors of MCC. They tended to conceptualize corpsmember development in a broader sense. The MCC goal statement above is a good example of a goal used at this level. This perspective served the MCC program directors by providing both a source of identification and motivation for corpsmembers. For instance, MCC corpsmembers were

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5Crew leaders typically faced the project sponsors on a daily basis. They were accountable for the daily production as well as the quality of the work.
told from the onset that MCC is a special organization. Rather than merely being hired for a job, membership within MCC was portrayed as following in the tradition of Roosevelt's well-respected and successful CCC (Civilian Conservation Corps). Corpsmembers were persuaded to identify with this ideal and to act accordingly.

Goals at this level also function as a way of ensuring that the program will continue to survive. Aside from espousing the value of membership, MCC's goal statement invited continued participation from much needed project sponsors. Sponsors were a vital source of funding, the source of work projects (intended to be conservation oriented), and they provided many of the materials and the necessary technical training. Without them, the program could not exist. MCC's goal statement allowed project sponsors to benefit by way of being publicly involved in a program that is perceived to benefit Montana's youth and environment.

As with the crew leaders, I found that MCC directors were also faced with competing goals. The directors' primary task was to hold the program together, dealing with corpsmember and crew leader problems, while promoting development. Yet they were also accountable to the demands of the board of directors and project sponsors. MCC directors were often in a position of having to choose whose needs should receive priority.

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6 MCC's 1993 program relied on project sponsors for partial support of the crews. Sponsors (typically agencies, such as the Forest Service) paid for approximately one third of the cost of running a crew.
Goals at the "Ecological" Level

Finally, at the "ecological" level, or the level dealing most directly with the social and political environment, MCC's board of directors conceptualized the goal of corpsmember development in terms of its significance outside the organization (e.g., to taxpayers and those able to disburse federal grants).

From my perspective, MCC's board of directors used the idea of corpsmember development as a basis of justifying and enhancing MCC's ability to garner public support and legitimacy. They also relied on the program's goals to acquire the necessary numbers of new corpsmembers to participate in future programs. I found the notion of corpsmember development at this level even more vague and ideological than at the managerial level. The points to address are the benefits of youth service programs in general, thus creating an environment in which MCC would be likely to thrive.

Conflicts existed at the ecological level as well. For instance, after spending time in the field, I told one of the board members that some of the crew leaders had identified particular corpsmembers that they felt had potential to grow within the program. The crew leaders wanted these individuals to be hired back the following summer, not only to have the chance to develop further, but also to serve as "seeds" for new corpsmembers.

This idea was questioned as it conflicted with the board's goal of "servicing" as many of Montana's youths as possible. In this sense, MCC's board emphasized the value of quantity--giving opportunities to larger numbers of youth--over the quality of the
development, or crew experience. This placed the goals of one level directly against those of the other.

Dealing With Unreal Expectations

Aside from what the goals meant within MCC, something became very apparent to me during the evaluation. I was faced with a problem stemming from the tendency of organizations—or in this case social programs—to adopt unreal, or overstated goals. When I looked into the history of youth service organizations prior to the evaluation, I could not miss the plethora of statements that "rationalized" and idealized the existence of these types of programs. The MCC goal statement is also a good example of this.

These statements, or what I came to recognize as unrealistic goals or expectations, are actually beneficial to programs; they help programs garner necessary public legitimacy and support. In fact, such goals may be essential for the very survival of these types of programs. I found a number of explicit examples of this notion appearing in recent publications addressing the benefits of National Youth Service programs. For instance:

National service is America's way of changing America.

-- Bill Clinton

7 This notion is well accounted for in Meyer and Rowan's (1977) concept of "rational myths." Rational myths are easier to understand in terms of their function: to increase an organization's survivability and gain legitimacy within a specific social, economic, and political environment. These myths play a particularly important role for organizations relying on public support, like MCC.
National service will harness the nation's most vital resources--the energy, enthusiasm, and idealism of youth.

-- Charles Moskos

National service is essentially an instrument of developing human values.

-- General Dr. M. L. Chibber

The Problem for Program Evaluators

As strong as statements such as "...essentially an instrument of developing human values" appear, these ideas should not be considered complete fiction. There are likely to be some elements of sustainable truth to these statements. Moreover, they play on seemingly "rational" notions of what youth service organizations, like MCC, hope to accomplish. Yet the problem for me, as a program evaluator, came when I was obliged to either substantiate or refute these ideas. Based on my experience, I believe these statements tend to overstate or exaggerate what a program can reasonably expect to accomplish. For me, the question nagged throughout the project: What can MCC reasonably hope to accomplish, in terms of changing the attitudes of young adults during the course of one summer?

I was in a difficult position. Since I knew MCC relied on public support and continued sponsorship to survive, I was concerned that if my results did not directly support these expectations, the existence MCC may be threatened. My interest was in helping MCC meet its goals, not in discrediting or threatening the existence of the program.8

8Another interesting idea is that organizations may be driven more by their rational myths than by efficiency or effectiveness (Meyer and Rowan, 1977). For instance, a good deal of time and money was directed toward promulgation of the
Assessing "Success"

Yet another problem I encountered was determining which criteria I should use to assess whether MCC had achieved its goal of corpsmember development. I later recognized that there were two ways of going about this: (1) was I going to make judgments based on the end result, or outcome of the program, or (2) would I focus on the processes, or the way in which the program went about achieving its goals?9 Looking back, I can see that I had assessed both during the MCC evaluation. My survey was measuring corpsmember development in terms of outcomes. The interviews and field observations were measuring the processes of development.

Program Outcomes and Processes

The actual "outcomes" of MCC were the corpsmembers who had successfully completed the program. However, in assessing only this aspect, I was able to recognize an issue that could easily be a problem. The outcomes of a program are very likely to be a function of the inputs, that is, incoming corpsmembers. Thus, the success of MCC's goal of corpsmember development will vary according to the type of individuals recruited for membership. Since MCC made an effort to recruit youth considered "at-risk," the quality of "outputs" would likely be different if they did not include this population.10

See Scott (1989), pages 353-357, for further discussion of this idea.

Ideally, the pretest/posttest design would have resolved this problem, as changes occurring over the course of the program would have been measured, not just the outcomes. Unfortunately, I suspect the timing and administration of the questionnaires prevented me from achieving this. Moreover, many of the youth considered "at-risk" left

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10Ideally, the pretest/posttest design would have resolved this problem, as changes occurring over the course of the program would have been measured, not just the outcomes. Unfortunately, I suspect the timing and administration of the questionnaires prevented me from achieving this. Moreover, many of the youth considered "at-risk" left
Timing is another problem involved in assessing outcomes. How did I know that corpsmembers who showed no measurable "improvement" (i.e., attitude change in the direction stated by MCC's goals) at the end of the program would not show evidence of development months, or even years later? The follow-up survey sent out a few months after the program was over supported this idea. Accurate assessments of long-term effects of the program would require a far more extensive longitudinal study. This was not possible for the MCC evaluation, nor is it likely to be feasible for most evaluation research.

Along with outcomes, I found I was also focusing on the "processes," that is, the quality and quantity of activities carried out by MCC to engender development. During interviews and field observations, I was looking at the efforts put forth by crew leaders and program directors rather than the end effect of the program. I was also assessing processes, such as crew leader training and the program education corpsmembers were receiving. I was assessing whether MCC had activities in place and occurring at a rate in which corpsmember development would likely occur.

Still, problems exist when evaluating processes as well. For one, assessing processes assumes that MCC, or anyone else, actually knows which activities will be most likely to result in development. Another difficulty is the fact that watching corpsmembers involved in program education or talking to them about their crew the program early or came in late, which further hindered my ability to assess whether the program had any effect on these individuals.
experiences is likely to influence their behavior or their remarks made during the interviews.

**Partially Successful Programs**

An important point that I never considered while trying to determine the success of MCC was the practical certainty that no program will ever prove to be a total success or a complete failure. When the evaluation of MCC was finished, the various data I had collected suggested, in essence, that the program had met some of its goals for some of its participants. In spite of a few problems, my personal feeling (based on the evaluation) was that the program provided a positive experience for most of the youth involved—especially when compared to other jobs young people would likely have, such as at a fast-food restaurant. Yet as an evaluator, I was expected to provide statements specifying success or failure. Changes were either "statistically significant" or not. I found these "black and white" determinations difficult to make in light of the complex nature of the program.

I came to realize that MCC, like other programs of its kind, can probably best be described as a "partially" successful program. There will inevitably exist a continuum: some participants will benefit a great deal, some not as much, some not at all. Some may even have a negative experience (Light, 1980). Moreover, program "success" is likely to vary from year to year. In many cases, it may come down to what crew leaders called "luck of the draw." Some years the corpsmembers may be more or less responsive to the

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11See appendix, page 11, for further discussion.
program, showing more or less evidence of development, regardless of what the program does.

**Understanding my Role**

One of the biggest frustrations came when I began writing the final report. I expected that all of my concerns would be acknowledged and my suggestions for improvement would be followed. I did not realize what the role of program evaluator meant to the state agency or the program directors. What became apparent to me later, was what Rossi and Freeman (1989) identify as the process of weighing, assessing, and balancing the evidence that I provided -- either to support, or fail to support the goals of the program.

The role of program evaluator can be likened to that of an "expert witness." I was testifying to the degree of MCC's effectiveness in attaining its goal of corpsmember development. The state agency personnel and program directors represented the jury of decision makers. In the end, the jury makes the final decisions, not the witness. My role was to contribute the best possible knowledge, and make the most informed assessment I possibly could. My advice could be heeded or ignored, but either way, the final decisions were out of my hands.

**Split Loyalties**

Moreover, I was again aware of being between two entities--the state agency and MCC--both of which appeared to hold separate agendas in terms of what they expected
to see in the finished evaluation report. Bad feelings between the two were still apparent, and I came to feel that I was expected to support one side over the other.

The agency personnel knew that I had spent a great deal of time with MCC people over the summer, which led them to question my objectivity. From MCC’s perspective, a stranger had come into their world and learned a great deal about a program—one they had invested a great deal of time and personal effort. The program directors were understandably skeptical of my results (see Neff, 1965).

In short, I was working in a situation filled with strong emotional undercurrents. I experienced frustration, split associations, and feelings of inadequacy on several fronts. I was being paid by the state, and thus felt obliged to satisfy their needs. I was anxious to provide them with professional work. Yet I had also come to care about the success of the program, and wanted to provide the MCC directors with positive criticism that could be used to improve the program.

Aside from this, I was also worried about how my study would be judged by the faculty members of my department. I continued to hold the images and catechisms of my formal training, and I did not want my work to appear shoddy to my professors. All in all, this emotional component of evaluation research was something I never expected, nor was it something that I was prepared for.

**Moving Ahead**

The next chapter will take a more academic look at the MCC evaluation in terms of the methods and methodologies I used. I went into the project expecting to be able to
use the knowledge I had gained over the years in my formal education. What I ended up learning were ways of fitting this knowledge into the real world. The world was certainly not willing to fit my methods.
First Draft of the Evaluation Report

The first draft of the evaluation report for the state agency included a detailed description of the design and methodology I used, along with a rather lengthy discussion of the possibilities of spurious or confounding results. If the resources necessary to employ a more rigorous design were not available, I was at least professionally responsible to include what I knew to be the limitations of my study.

I had accepted the fact that I had done the best I could, and I was no longer trying to justify the way I went about the study. Moreover, I believed that much of what I had learned was valid and would prove useful to future programs. Yet I continued to feel strongly about discussing the problems and limitations of my work. My concern was that state agency personnel and MCC directors would take the results of the evaluation at face value—and make decisions based on those results—without consideration of the apparent shortcomings of the evaluation.

Deaf Ears

In short, my exhortations on design and methodological limitations fell on "deaf ears." The agency was not interested in this aspect of the study. In fact, after reading my first draft, they told me that any detailed discussion of methodology should either be "moved to the back" (i.e., put in an appendix), or taken out completely. They told me they "never wanted to have to read that [type of discussion] again." To them, this section of the report was dry and unmeaningful.
Initially, I was surprised by this reaction. How could they not understand the importance of sound methodology? How could my report be taken seriously without a thorough discussion of possible alternative explanations? What I had failed to consider was the fact that the agency personnel to whom I was writing were not trained as social scientists. These individuals were busy running a government office; they were paying me to find cogent information and make useful suggestions. How I did so was my own problem.

Writing for an Agency

An important lesson for me, as a program evaluator, was discovering what the state agency expected to see as a final product. This was, in any case, different from that expected in my academic department. The agency wanted data presented in their simplest, most straightforward form. They wanted only the facts, i.e., What did you do? What did you find? What would you suggest? What I had come to perceive among agency personnel as a lack of interest, was actually the lack of time, along with an understanding of social science methodology.

In addition, one of my professors had advised me to make a "strong" case for my findings. I was told that evaluators should not weaken their points by presenting every flaw or weaknesses in their methodology and design. Moreover, a strong, concise report would be more likely to prompt decision makers into action (see Rossi and Freeman 1989). Yet as a student of social science methods, I knew that without careful consideration of the possible confounds and the likelihood of spurious results, the
decisions made based on my data could be poor ones (as far as determining the success of the program).

Simple, straight-forward reports do have advantages. Evaluation projects, such as the MCC evaluation, can be done quickly and relatively inexpensively. And due to frequent funding shortages, small-scale studies may be the only option for many programs. Even modest attempts at evaluation are better than no attempt at all (Babbie, 1989). However, my concern was, and still is, that this kind of "fast and dirty," or "canned" approach could reduce the profession of sociology, or more specifically evaluation research, to persons merely following a prescribed set of methods. This is not what science means to me, and it was not what I was trained to do.

**Discovering the Methods of Evaluations Research**

In reality, the methods used to conduct program evaluations are likely to differ from those used in more scientific sociological research (see Rossi and Freeman, 1989). The design I used for the MCC evaluation was suggested by the state agency and approved by everyone involved. Yet, in the back of my mind, I was concerned about the fact that there had not been enough time to find a suitable control or comparison group, and there was no random sampling. I later came to learn that this is commonplace in program evaluations, especially small-scale studies like mine.

I went into the MCC project feeling like a trained scientist. I did not expect to be doing anything other than what I had been taught in my methods classes. But looking back, I can now see that program evaluations operate in a different environment than
more scientific social research. Programs are operating in the real world, one which is highly political and subject to societal changes. Evaluators have to learn to fit into this world; they cannot expect the world to adapt for them.

Taking on the relatively small-scale (in terms of time and funding) study of MCC required that I make do with the resources available.¹ Therefore, my evaluation, rather than an exercise in text book science, represented my best efforts to meet both the needs of MCC and others who had some investment in the program.

Methods and Methodology

Keeping in mind that my audience includes agency and program personnel, I should define some of the terms that I use throughout this section.

Methods: These are the actual tools or techniques an evaluator uses to gather data, for instance a microscope or a public opinion poll (Bailey, 1987). However, methods are more than tools. They are means of acting within the world that will make the world meaningful to others. Whatever methods are used in research -- scientific experimentation, survey research, or field studies--each will lead to an understanding of a particular feature of reality. They make research both available to the public and provide the means for future replication (Denzin, 1970).

Methodology: In contrast, this term represents the overall way in which researchers approach and then act within their world (Denzin, 1970). Methodology has more to do with the philosophy behind the research process. In other words, methodology incorporates selecting methods that embrace the ideology and values of the researcher. It serves as a rationale behind the way data

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¹Rossi and Freeman (1989) note that evaluations have been subject to criticisms from scientists, who often see evaluation research as unscientific, or "sloppy." Rossi and Freeman point out:

In some cases, evaluations may justifiably be undertaken that are "good enough" for answering relevant policy and program questions, even though from a scientific point of view, they are not the best design.
are gathered and interpreted: for instance, how a researcher will approach a study, what criteria will be used to determine the success of a program, or the importance of particular research findings (Bailey, 1987). As an example, some researchers feel that methods emphasizing empathetic understanding may be the best ways to understand group conduct (Bailey, 1987).

Using Two Methodologies

I approached the MCC evaluation with a combined methodology, employing both "quantitative" (survey questionnaires) and "qualitative" methods (interviews and field observations).² While designing the study, the state agency had specified that I incorporate a survey of the entire corps (i.e., a census). They wanted to know if questionnaire scores would "go up," indicating improvement in terms of MCC’s goal of corpsmember development, during the course of the program. The agency personnel were not particularly interested in the qualitative methods I had proposed, yet they had no problem with me using them if I wanted. I felt that using a combined methodology would allow me to attain a better understanding of what was really going on: how the program was working, and how it was being experienced by the participants.

The problem with combining methodologies as I did, is that it requires far more time than using only one methodology. It complicated my data analysis as well. After running statistics on the pretest and posttest questionnaires, I found that the results of the quantitative methods conflicted with the results of the qualitative methods. That is, what

²The "Evaluation Design" section included in the final report can be seen in on page 4 of the report. A discussion on the limitations of the evaluation can be seen in the appendix of the report on page 34.
corpsmembers said during the interviews often contradicted their responses on the survey questionnaires.³

This is not the kind of dilemma a newcomer to program evaluation wants to encounter. It caused me to raise doubts about my efforts. But upon reflection, however, I was later able to realize that disagreement among different methods was, in fact, an important observation. As I perceived it, either method alone was not fully assessing the goal of corpsmember development.

This disagreement also forced me to think about the strengths and weaknesses of the methods I used. I could see that corpsmembers were reacting differently to different methods, and I began to suspect that a number of alternative explanations were likely (which will be covered in a following section).

**Qualitative Methods**

The chief advantage of the qualitative methods I used--interviews and field observations--is that they allowed me to obtain rich, descriptive data, that could not be attained any other way. While I was interviewing corpsmembers or crew leaders, I was able to make sure they understood my questions, and I was able to probe for clearer, or more complete answers. Moreover, corpsmembers and crew leaders had the chance to bring up their own issues: things that they considered important, some of which I had not even considered.

³Pretest and posttest questionnaires were individually coded in order to match them for analysis. Thus, I was able to compare what a corpsmember said during his or her interview with how he or she responded to the questionnaires.
But, these methods do have disadvantages. Interviewing and observing the corpsmembers was time consuming and an often inconvenient venture. For instance, I was forced to limit interviewing and field observations to crews that were easily accessible.\textsuperscript{4} These methods were also problematic in that I could not "quantify" the remarks. This would have allowed for statistical manipulation which would make generalizations possible. Moreover, I had to worry that the conclusions I drew from this data would be prone to my own subjective interpretation. There is a good likelihood that another evaluator conducting the same study would not reach the same conclusions that I did.

\textbf{Quantitative Methods}

As is common in evaluation research, I used survey questionnaires to assess "corpsmember development," and when properly executed, I believe they are an effective tool. Survey data allowed me to conduct statistical analysis of different aspects of MCC, such as demographic information and changes in questionnaire scores. I was then able to convert the data into tables and graphs--condensing complex information to a concise form (the form that the state agency personnel were most interested in seeing). A table conveys a great deal of information at a glance, which is a great asset to busy agency

\textsuperscript{4}Many of the crews were either too far away (hundreds of miles), or were difficult to find, entailing driving dangerous roads or walking long distances up remote mountain trails. After a few frightening experiences, I limited the interviewing to crews that were easy to access. Unfortunately, this excluded some of the crews, in particular, the Indian crews.
personnel. In addition, the survey was relatively inexpensive to conduct; this method did not require the amount of time the qualitative methods did.\textsuperscript{5}

However, I did recognize certain limitations to the surveys. Primarily, they left open the possibility of a number of alternative explanations. Moreover, if the questions I included on the survey were not relevant to MCC corpsmembers, the resulting data would be of little use, or worse, lead to erroneous conclusions.

These became important considerations for me during the course of the project. Not only did I suspect my methods, I began to distrust my questionnaires and the fact that I was forced to rely on the crew leaders to administer them to their respective crews. I was certain that this had an effect on the outcome of the survey. Without careful planning and administration, and without the scientific rigor of experimentation, I was left to wonder what my quantitative methods had really measured.

\textbf{Quasi-Experimentation}

The design I used to collect quantitative data is one commonly used in evaluation research. Since evaluations take place outside of controlled, laboratory settings, I relied on what is known as a "quasi-experimental" design. These designs are intended to simulate more scientific ones, yet they differ from scientific experimentation by their lack

\textsuperscript{5}With the help of the crew leaders, all corpsmembers were included in the survey. But as mentioned before, not all corpsmembers were interviewed.
of randomly selected control groups—which are not feasible in much of social research (Cook and Campbell, 1979).

Some quasi-experiments do utilize comparison groups instead of randomly selected control groups. For instance, my evaluation would have been stronger had I found a group of people similar to MCC corpsmembers, but who were not involved in the program. These people would have been given the surveys at the same time as the corpsmembers, and their scores could have then been compared with those of the corpsmembers'. This would have helped determine the effects of the program, while controlling for things such as increased maturity.

As it was, I did not have the time to find a suitable comparison group before the program started. Instead, I used one of the more common quasi-experimental designs: the one-group, pretest-posttest design, diagramed as the following: \( O_1, X, O_2 \) (Cook and Campbell, 1979). Pretest observations were taken \((O_1)\) from all of the corpsmembers at the beginning of the program. This was followed by a posttest observation \((O_2)\) at the end of the program. The "treatment" \((X)\) was the program itself. Any changes from the first observation to the second could thus be attributed to the treatment.

This design is a common one, probably because it is an easy and quick way to assess a program, as I found it to be for the MCC evaluation. But the design left open the possibility of a number of alternative explanations for the results of the quantitative

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6In essence, this means that subjects are randomly assigned to one of two groups: one receiving treatment, the other not (or receiving a placebo). By random selection, members of each group have the same chance of being selected for one group as the other. This "controls," or checks for possible alternative explanations, for example, age, gender, or education.
component of the study. These were the points that I wanted to address in the report I submitted to the state agency but was largely unable to do so.

**Alternative Explanations**

Cook and Campbell (1979) point out some of the obvious alternative explanations resulting from the quasi-experimental design I used for the MCC evaluation. I found these to be important considerations for state agency personnel and program directors who were looking at the numbers to see whether MCC had achieved its goals.

I first began to question the survey results when I began hearing remarks, such as, "oh no, not another evaluation." Corpsmembers appeared to be at an age in which anything resembling schoolwork was likely to induce a negative reaction. Follow-up interviews supported this suspicion; corpsmembers told me that they liked the program, but there was "too much paperwork." They did not like "being forced to do evaluations." In contrast, they had little trouble talking to me. In fact, many really enjoyed talking about themselves and their work.

Cook and Campbell (1979) mention a number of other alternative explanations for the results of surveys conducted without an appropriate comparison group. What follows are some of things I suspect affected the outcome of my survey, but were not fully addressed in the main body of the evaluation report:

**History:** This happens when the change measured between a pretest and posttest is due to "history." That is, an event may occur outside of MCC which could affect corpsmembers' responses. These could include political events, or family problems--which I found were not uncommon among MCC corpsmembers.

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7These problems are not limited to evaluation research, but are problematic for quantitative social research in general.
Statistical Regression: In essence, regression means that extreme scores evident on the pretest, either high or low, will naturally tend to "regress" toward a group mean. For instance, many of the corpsmembers scored very "high" on the pretest questionnaire -- sometimes getting the "highest" score possible. Unless they made the exact same responses on the posttest, the only place to "go" would be down.⁸

Maturation: "Improvements," as per MCC's goals measured at the end of a program could also be attributed to corpsmembers simply maturing. I was not certain that change occurred as a result of MCC, or simply from being a bit older, or having worked steadily at a job (any job).

Testing Effects: This occurs when the act of taking the pretest affects the responses on the posttest. I suspected that corpsmembers' posttest scores could have been affected by having taken the survey only eight weeks earlier.

Absolute Answers

In short, I discovered that the methods I used, both qualitative and quantitative, did not give me any absolute answers to all of the questions posed in my study. I was able to generate ample data, yet the results were not always clear, and in some cases, the results of one method did not agree with the results of another. Moreover, since the MCC evaluation lacked a comparison group, I had ample reason to doubt the confusing results of the survey. The warning remains: without careful consideration, a careless reader, i.e., agency or program personnel, might be tempted to assume that a program failed or succeeded to meet its goals based solely on the numbers, which may not be an accurate assessment.

The next chapter picks up the story with the measurement of social concepts, both during the evaluation, and later in research of a potential thesis topic. The purpose of the

⁸This problem can be handled by eliminating extreme scores -- either high or low. However, in my case, there were many "extreme" scores, and eliminating even some of these would have decreased the N size, making the results even more ambiguous.
methods and methodologies I used was to measure something, i.e., concepts, occurring in a real life setting. Aside from how I measured them, the issue remains as to what I actually measured.
CHAPTER FOUR: FACING THE PROBLEM OF ANALYZING CONCEPTS: "TOLERANCE OF DIVERSITY" AND "SOCIAL COHESION"

Understanding and Defining Social Concepts

In this chapter, the word concept is used as a technical term that indicates a mental idea of something (Babbie, 1989). Concepts are merely words that represent the myriad of images people hold of some phenomena. However, concepts are not absolute; they are not inherently real. In research, "a scientific concept has meaning only because scientists mean something by it" (Kaplan, 1964).

Most concepts have a least some common sense meaning to most people. For instance, when I was first introduced to MCC, I had an idea of what corpsmember development would likely entail. I knew that youth involved in the program were supposed to "improve" somehow, or "grow up." Later, looking through MCC's brochures, I learned that MCC's goal of corpsmember development consisted of a number of specific "improvements," mostly in terms of corpsmembers' attitudes toward themselves, their work, and other people.

In essence, the goal of corpsmember development is actually a concept, which is composed of several sub-concepts (such as "social responsibility," "tolerance of diversity," "self-esteem," and so on). Thus it is fair to say that the task of understanding and defining the goal of corpsmember development would be a complex undertaking, necessitating more time than I took to do so.
Trying to Measure a Concept

This chapter will tell two stories: (1) how I dealt with social concepts in my evaluation of MCC, and (2) my discovery of how other social scientists have attempted to deal with them in their own research. For students, this will serve as a reminder that measuring social concepts in the real world is not as easy as it may appear in a classroom setting. And for the agency personnel and MCC program directors, this aspect of the story makes a crucial point. Just because data indicate that a concept (i.e., the goal of corpsmember development) has been measured, does not mean that it has been done so accurately.

The first problem I had trying to measure a social concept became evident following the statistical analysis of the MCC survey questionnaires. "Tolerance of diversity," which I understood to be one of several "indicators" of corpsmember development, was measured via a scale on the questionnaires.1 The end results of the survey were confusing, prompting me to look at the concept of tolerance more closely.

The second example I give looks at the concept of "social cohesion." I was interested in this notion and how it might be related to levels of corpsmember development.2 This led to a review of professional literature on the concept of social cohesion.

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1See appendix, page 5, for the concepts I used as indicators of corpsmember development. The survey questionnaires included separate scales intended to measure each of these concepts.

2Cohesion was not formally considered an attribute of corpsmember development by MCC. However, they were interested in the concept (and have continued to be). I included a number of cohesion scales in the questionnaire to use for future analysis.
cohesion. What I found was not clarification of the concept, but an ongoing debate as to what cohesion is and how it should be measured.

I had not really worried about measuring concepts during the MCC evaluation, as it was easy enough to find an ample number of pretested scales to include in my questionnaire. From Apt Associates I obtained what looked to be adequate scales to measure the various concepts involved in corpmember development. From the professional literature, I found a number of scales to measure social cohesion. Thus armed, I proceeded with confidence that I would be able to extract data with which I could accurately evaluate the program (and use for further research).

At the time, I saw no need to question these scales, since they were used by a reputable evaluation firm or published in a professional journal. I believed that they should certainly suffice for my project. I can now see that this was erroneous. One of my first thoughts should have been to gain an understanding of the concepts as they existed in the world I was to study. This is an essential step before attempting to put them into a form that will yield empirical data.

"Operationalization"

In everyday life, it's easy to speak of concepts in terms of common-sense meanings. But within the MCC evaluation, as in other research, I had to turn this mental
image into something that would produce empirical data representing the concept. This is the procedure of "operationalization," and it is what makes concepts measurable.\(^3\)

For instance, during the MCC evaluation, I attempted to measure tolerance of diversity, and levels of crew cohesion. These were determined by corpsmembers’ questionnaire scores. This is the way evaluation research is typically done, and while seemingly straightforward, there is likely to be a good deal of room for error.\(^4\)

**A Multitude of Scales**

What I did, as do many researchers when they want to measure a concept, is rely on preexisting "tried and true" scales. The individual from the state agency who hired me loaned me a rather large volume of social psychological scales to choose from (see Robinson and Shaver, 1973). From this, I found scales to measure everything from "Anomia" to "Machiavellianism." I was fascinated at the sheer volume of scales available to measure social concepts.

These scales may, in fact, be good ones. The point is not that preexisting scales are not valid or reliable. A great deal of work has gone into constructing them, and they may have worked well for the various researchers developing and using them. The key, however, is that just because they worked for one, or several pieces of research, does not mean they will automatically work for all research. Most of the scales that I used

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\(^3\)Once a concept has been operationalized it is better understood as a "social construct." A concept is some naturally occurring phenomena, say, crew cohesion. A construct is how social researchers measure it, for instance, scores on a cohesion scale.

\(^4\)According to Merton (1957), there is seldom a one-to-one correlation between the conceptualized variable (i.e., a scale) and the concept it is meant to symbolize.
(from the preexisting questionnaire) had been developed to measure the outcomes of National Youth Service programs. But could they effectively measure "corpsmember development" within MCC? If they worked in one setting, one program, would they work in all programs? By not considering this point, I was faced with confusion over the concept of tolerance of diversity.

Problem #1: "Tolerance Of Diversity"

According to one of MCC's brochures, corpsmember development included the idea that corpsmembers working with people of a different race, ethnicity, gender, or background, would learn to appreciate or "tolerate" cultural and ethnic diversity. This goal is common among many of these types of programs throughout the country.

I went into the project knowing that statistically about twenty percent of MCC's corpsmembers would be non-white, and around a third would be from disadvantaged backgrounds (youth considered "at risk"). To me, this appeared to constitute adequate diversity to allow tolerance to be developed. Moreover, as I conducted interviews, corpsmembers did, in fact, say that they were learning to "tolerate different people on their crew." The notion of tolerance really seemed to stand out in their minds; many indicated that this was probably the best thing they had learned during the program.

Therefore, I was surprised at the results of the survey. Overall, corpsmembers scored lower on the posttest scale measuring tolerance of diversity, indicating that they had "less" tolerance at the end of the program than they had at the beginning (as measured by the pretest scale). My concern stemmed from the fact that they had told me
that they had developed tolerance. Thus, I could not understand why the survey indicated otherwise.

Finally, after rereading the transcriptions of the interviews, I came to see that when corpsmembers spoke of "tolerating" different people, they simply meant other people: people similar to themselves but with different personalities. Program directors might consider this a worthy characteristic of development, but it was a different concept than the one I had attempted to measure.

**The Wrong Conclusions**

The problem continued when state agency personnel and program directors began looking at the results of the survey. To them, the numbers indicated that MCC had not achieved its goal of developing tolerance of diversity. My point was that tolerance may be an outcome of MCC, but not in the way that I had measured it. MCC corpsmembers were learning to tolerate diverse personalities. Yet what I measured via the survey questionnaires was a different concept (tolerance of cultural or racial differences).

**Concepts that are Feasible**

It would have been easy enough to have simply said that MCC did not achieve its goal of promoting tolerance of diversity. But there were more than enough methodological flaws to lend doubt to this conclusion. Moreover, the outcome of the survey brought up another important (and often overlooked) consideration when dealing with concepts in program evaluation—their feasibility in terms of the specific program being evaluated.
Montana is a very large area. And scattered throughout it during the 1993 program were seventeen crews, many being in remote rural areas. Most of the corpsmembers I spoke with had either grown up around their crewmates, or attended the same high school. Generally speaking, the crews appeared to be relatively homogeneous. Ethnic and economic differences were not readily apparent, and I did not feel that gender differences would be much of a factor if corpsmembers were acquainted prior to the start of the program.

Racial differences within the crews were also minimal. Almost all of the American Indian corpsmembers worked on one of the two Indian crews. And despite MCC's efforts to mix white crews with Indian crews, geographic limitations allowed only minimal interaction. It was simply not feasible to get the Glendive crew together with the Blackfeet Indian crew working in Glacier Park (over 700 miles away).

Corpsmembers from white crews that were able to visit the Indian crews indicated that they had really enjoyed learning about another culture. But the few days spent together, out of an entire summer, were not likely to have that much of an impact. Thus the concept of tolerance of diversity, in terms of how I measured it on my questionnaires, may be viable in some settings, for instance youth service programs in large, ethnically diverse areas, but was not a feasible one to measure in Montana.

See the map preceding the evaluation report.

When some of the male corpsmembers were asked about the female members of their crew, they tended to cite feelings based on experiences outside the program, for instance, how females performed in school sporting events.
Measuring Subtle Changes

Another observation I made was that the questionnaires did not appear to be measuring the subtle, or relatively small changes realistic for an eight-week program. A good example of this came when I was interviewing a corpsmember from a rather rural, isolated background. This person was a self-proclaimed "redneck," and did not hide his feelings toward women or individuals of a different race. Yet after spending a few days with one of the Indian crews, he told me that "some of the guys weren't all that bad--for Indians."

While this may not appear to be a significant change (certainly not in terms of statistical significance), it was a positive change in one individual, and may be the best that the program could do in such a short period of time. The point is that the scales I used were probably not sensitive enough to measure subtle changes in attitudes that were feasible for this program.

Problem #2: Social Cohesion

The second example of "sticky" concepts is a more academic illustration of how other researchers have attempted to grasp the concept of social cohesion. Before and during the MCC evaluation, I began searching the academic literature for studies on social or group cohesion. As I have mentioned, my interest was in using the data from

7It should be pointed out that I substantially shortened the questionnaire provided by Apt Associated, which was 21 pages long. Neither the state agency nor the MCC directors wanted my questionnaire to be as lengthy as this (mined turned out the be 8 pages). This alteration certainly affected the ability of the instrument to detect subtle changes in attitude.
the evaluation to continue with a more theoretical analysis. I was interested in the relationship between levels of cohesion among MCC crews and how these were related to other aspects, such as corpsmember development, safety, and production. Ultimately, I decided not to do this, based on my doubts about the data.

I did, however, learn how professional researchers have struggled, as did I, with social concepts. What follows is a brief and somewhat historical look at the confusion over a concept--as experienced by professional sociologists. This is a good example for students in sociology to see.

**The Small Work Group**

The nature of small work groups within organizations has long fascinated social scientists. Characteristics of these groups, particularly those linked to job effectiveness and efficiency, have been of most interest to organizations and evaluation researchers. According to the literature, social cohesion has been linked with productivity, conformity, behavior change, and the overall success of the group (Zacarro and Lowe, 1988; Stogdill, 1972; Greene, 1989; Evans and Jarvis, 1980; Gross and Martin, 1952). The questions of interest to me included: Is cohesion an essential element of a successful MCC work crew? How does cohesion influence corpsmembers to change their behavior? Are there different kinds of cohesion, and can cohesion actually reduce levels of safety and productivity within MCC?

**Definitions and Operationalizations of Cohesion**

Interest in small group cohesion hit its peak in the 1950s, particularly in the field of social-psychology, but died out somewhat in the mid 1960s. More recently, it has
reemerged as one of the most talked about but least understood concept in social science (Mudrack, 1989; Dresher, et al., 1985). Yet despite over thirty years of concentrated study and contemplation of this concept, an integrated picture of cohesion, what causes it, and what the effects of it are, has yet to be established (Dresher, et al., 1985).

What I found is that defining cohesion constitutes a long standing disagreement among scholars (Gross and Martin, 1952; Dresher, et al., 1985; Mudrack, 1989; Summers, et al., 1988; Zacarro and Lowe, 1988). Traditional definitions encompass a wide variety of intuitive definitions, such as "stick-togetherness," or group members who are bonded to one another and to the group. Other notions, such as solidarity, commitment, and harmony are sometimes used to define cohesion (Mudrack, 1989).

What was to become one of the more common definitions of cohesion emerged from Festinger, Schacter and Back's 1950 housing study (Dresher et al. 1985; Jones and Gerard, 1967). The study focused on the role that cohesion (measured by the amount of time persons spent with other members of their "court") played on attitudes toward a political issue. This early study was seminal in illustrating the effect of a close knit group on individual attitudes. Festinger ultimately defined cohesion as "the total field of forces which act on members to remain in the group" (Jones and Gerard, 1967).

Festinger's work led to the popular operationalization of cohesion in terms of "attraction" to the group and other group members. This has been adopted by subsequent researchers who accepted "attraction" as a good substitution for cohesion (Jones and

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8 Interest in group cohesion has been discussed more recently accompanying the controversy over integration of homosexuals in the military.

Using measures of attraction is also used in the popular method of "sociometric" questionnaires. These ask group members to indicate which other members they would most like to associate with, as well as those they would most want to exclude from the group. However, this is believed to be most effective in identifying sub-groups or cliques within a group, rather than assessing the broader concept of cohesion (Jones and Gerard, 1967; Stogdill, 1972).

The "Legacy of Confusion"

As the concept of cohesion continued to gain popularity over the years, more and more definitions and operationalizations began to appear, which were followed by more more criticisms. All of this, as one author put it, has led to a "legacy of confusion" surrounding the concept of cohesion (Mudrack, 1989).

Gross and Martin (1952) were among the first to offer substantial criticism of Festinger et al.'s definition of cohesion. They pointed out the that Festinger's definition of "the total field of forces" requires that researchers know what the "field of forces" are. Attractiveness is pegged as being the crucial factor, but it may be only one force out of many. And to use this as a sole measure cohesion would be an error.

Other researchers also began to reject the standard way of looking at cohesion, pointing out important and substantive differences between attraction and cohesion. Others felt that cohesion should be defined in broader terms, representing the "gestalt" aspect of a group (Evans and Jarvis, 1980). Measuring a group phenomenon by averaging individual measures of attraction assumes that the whole is no more than the sum of its
parts (Evans and Jarvis, 1980). Even I found a problem with this notion, as it disagrees with my own field research. MCC corpsmembers were quick to point out that they could accomplish a lot more working as a team than they could working individually.

**Ease of Use**

What all of this is meant to illustrate, is that most definitions of social cohesion are too vague to be able to apply precise and consistent measuring techniques (Dresher, et al., 1985). This is most likely the reason researchers have typically adopted attraction as a substitute. It is relatively easy to measure individual attitudes toward other group members and the group itself. However, group membership may be attractive to all the members of particular group, but still lack cohesion (Gross and Martin, 1952).

This also left me in a state of confusion as to what I had measured in terms of cohesion during the MCC evaluation. My results were ambiguous and I was not sure how to use them. I found that membership within MCC was attractive to most corpsmembers, but the question of "why" yet remains. It may have been a source of income for one, a social outlet for another, or some complex combination of reasons. Attraction was easy to measure, but I am not certain that it captured the concept of cohesion adequately (see Mudrack, 1989).

**Concluding the Story**

The final chapter of this thesis will attempt to put some closure on my story by looking for ways to cope with some of the problems I experienced. Certainly, I cannot include all the answers. Entire texts have been dedicated to addressing these kinds of
problems. Instead, I offer a few suggestions to those who will be entering the field of evaluation research and to others, who will be utilizing these evaluations in the future.
CHAPTER FIVE: LESSONS LEARNED AND CONCLUDING NOTES

The End of the Evaluation

The final draft of the MCC evaluation report was completed and turned in to the state agency in February 1994. My efforts fulfilled the requirements of the grant funding the program, and in that sense the project was over. I did not hear from them again, but I did receive feedback from the MCC directors regarding some of the results of the evaluation. Initially, they expressed a few concerns over the final report. Regardless, for the subsequent program (the 1994 summer program), I noticed that some of my recommendations, such as those for program education improvements, had been taken.

Program directors from several other states have since expressed interest in this evaluation, as they have been planning small-scale evaluations of their own programs. Most of the attention seems to be directed toward the questionnaires I developed. Directors from other programs have apparently been looking for relatively short questionnaires that can be used to assess how participants are benefiting from their programs. In spite of my warnings about my questionnaires, people are still planning to use them. Little else is available; as did I, program directors have little time to develop anything better. Should funding continue to be available in this area, there are a great many opportunities for future evaluation design and instrument improvements.

The end of the MCC evaluation project was the beginning of this thesis, which has been a journey of discovery in itself. It has been a chance to reflect on my own problems, and see how others--professional evaluators--have dealt with them. It has also
been an opportunity for me to illuminate the experience of evaluating a program—this, from the perspective of a novice social researcher. By choosing to tell my story along side the finished product, this thesis should give readers a more complete picture of the field of evaluation research.

Coping with Common Problems

Based on my experiences, there are a few points I would like to make clear. Throughout the process of conducting the MCC evaluation, I was able to learn from my mistakes and find ways of coping with many of the problems I encountered. Perhaps this insight will serve other students entering the field, as well as agency and program personnel interpreting the results of a program evaluation.

Coping with Methodological Problems

I have come to appreciate the wisdom of several noted sociologists. Most would acknowledge that methodological problems can potentially be serious, yet they can also be handled. As I found, there are plenty of "cookbook" ways of conducting evaluations, along with ample numbers of scales and indices to measure concepts. But program evaluators should avoid adopting and utilizing any type of methodology in a rote, automatic fashion (Denzin, 1970). Moreover, just because an agency expects a certain type of end product (i.e., tables of statistical data) does not mean evaluators are free from their responsibility to find the ways that will work best given their own situation.

Herbert Blumer (1969) points out that understanding the nature of the empirical world, via social scientific methods, is not an easy task. It requires "careful and honest
study." Forcing the object of study into some preset scheme of methodology does not represent a genuinely honest approach. Program evaluators are social scientists, and are thus professionally responsible to use the best methods in the best, most faithful manner as possible.

"Triangulation"

As I have said, different methods tend to measure different aspects of a phenomenon (Denzin, 1970). And since different methods can lead to different findings, it follows that there is an inherent danger of data being more of a reflection of the method used, rather than being a true reflection of what is going on in the real world (Babbie, 1989).

One solution to some of the methodological problems in evaluation research lies in utilizing multiple methods known as "triangulation." For me, applying different methods made a better research strategy. According to Denzin (1970):

If each method leads to different features of empirical reality, then no single method can ever completely capture all the relevant features of that reality; consequently, sociologists must learn to employ multiple methods in the analysis of the same empirical events.

For the MCC evaluation, I used both quantitative and qualitative methods to assess corpsmember development. Had I relied on only one kind of method, for instance the survey questionnaires, I would not have discovered the issue of tolerance, mentioned in the previous chapter. Triangulation helped me to understand the subtle and complex nature of the program.
Moreover, by combining multiple methods, each having its own limitations and biases, I believe I was better able to come to more insightful, and meaningful conclusions. As I found to be the case in the MCC evaluation, the different methods I used resulted in two different conclusions. Using only one method to evaluate a program can only result in a partial reflection of what is going on.

In another sense, the two methodologies I used complemented each other, one providing insight into the other. As I have said, the interviews helped me to understand the results of my survey. In return, the survey data led me to question my questionnaire design, leading me to conduct follow-up interviews to deal with points I had not previously addressed.

**Coping with Social Concepts**

Another lesson involved learning to understand the meaning of the concepts before attempting to measure them. It is vital to find out what concepts mean to the specific group of people being studied. What social researchers believe a concept to be, and how it is actually experienced in the real world can be different. Thus, in order to measure concepts existing in a particular world, I must know how concepts are actually being experienced—in that world. Even for students, it is easy to imagine concepts are "real," that concepts appearing in social research are true reflections of reality. Yet to accept arbitrarily some given definition of a concept as catching the full meaning of a phenomenon is not good science (Blumer, 1969).

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¹See appendix, page 11, for the conclusions based on both quantitative and qualitative data.
"Sensitizing Concepts"

One thing that would have helped me conduct a better evaluation is the notion of "sensitizing concepts" (Denzin, 1970). What this implies is that program evaluators should not operationalize the concepts they intend to measure without first spending time in the field—assessing the specific meanings attached to concepts by the specific group being studied. This includes understanding which criteria (i.e., outcomes or processes), and from which level of the organization the goals of a program will be assessed. Once the meaning of a concept has been understood (e.g., as the program's participants understand it), then scales or other methods can be employed to measure its characteristics. Had I understood how corpsmembers experienced "tolerance of diversity," I would have included different questionnaire items or found a scale more appropriate to MCC.

Coping with the Messy World

One of the key ways of coping with the world of evaluation research, in general, requires gaining a good understanding of both the needs of the funding agency and the specific goals of the program to be assessed—before even planning the evaluation. This involves spending time with key agency and program personnel, or others that are likely to be involved.

For instance, had I spent time with the MCC directors during the planning phase of the evaluation, I would have had a better idea of what the goals of the program were, and what my direction should be. Likewise, I would have saved a lot of time by knowing what the state agency expected in terms of a final report, rather than wasting time writing a series of lengthy and inappropriate drafts.
Moreover, agency and program personnel have been found to have more respect for evaluations when they had been included in the initial design (Rossi and Freeman, 1989). By including the MCC directors in the initial planning phase of the evaluation, they would have gained a better appreciation and understanding of the tasks involved in evaluating the program.

The Morals of the Story

Any story of leaning ends with a moral. This story ends with two kinds: some for the consumers of evaluation research, and some for students entering the field of evaluation research. These morals are offered as final advice based on my own personal experiences in the trenches.

Moral #1 to Consumers: "Buyers Beware"

Like any consumer, people need to know what they are getting for their money. Agency personnel and program directors do not need to be experts in sociological methodology, but they do have the responsibility of making good decisions. At the very least they need to be aware that a good evaluation is dependent on good data—which necessitate the use of good planning, methods and operationalized concepts. Resources used to this end is money well spent.

The moral for agency and program personnel is simple: buyers beware. Any decision based on the results of an evaluation should be done carefully. Taking results at face value, or thoughtlessly accepting what may be faulty data can lead to poor decision making or program planning.
Moral #2 to Consumers: Accept Responsibility

Aside from knowing what they are buying, program and agency personnel need to have a willingness to accept responsibility for the findings. Ultimately, funding agencies and program directors need to trust the efforts of the evaluators they employ to assess their programs. Once agency and program personnel accept responsibility for the results of an evaluation, they can then focus their energy on more productive matters: assessing the strengths and weaknesses of the evaluation, determining the implications of the data, and preparing for future program improvements.

This can be done in a group setting, for instance, including program or agency personnel, crew members, and the program evaluator. By combining these diverse perspectives and different areas of expertise, decisions are likely to be more effective ones. Accepting responsibility will lead to an atmosphere of cooperation, rather than indifference or defensiveness.

Moral #1 to Students: Stay True to the Data

One of my most frustrating lessons occurred some time after the evaluation was over. I had spent a great deal of time on the project, and as a student, I was anxious to hear how I had done. In short, the feedback I received was not all positive. After MCC read the final report, they told me that I had over-emphasized the negative aspects of the program, ignoring the particularly positive cases. Prior to this, some agency personnel had indicated that they thought I was being "too easy" on MCC, citing that I may have lost
my objectivity by spending too much time with them. I was surprised by these reactions, and it led me to begin doubting myself and my efforts.²

But upon reflection, I realized that my ultimate responsibility, as a program evaluator, was to stay true to the data. This is the ultimate responsibility of any social scientist. I was not obliged to be loyal to either side. Yet I could not help feeling uncomfortable. I was being paid by the state agency and felt responsible to please them. But I had also grown to care about the program, and I did not want to put the directors at risk of losing future funding.

By staying true to the data, I was able to overcome both my own doubts and the disapproval of others. For instance, after explaining this position to the MCC directors, they came to accept my conclusions, as well as to understand some of the complexities involved in evaluating the program.

**Moral #2 to Students: Do Not Rely on "Protocol"

Herbert Blumer (1969) points out that in the social sciences, there exists a pressure to conform to a scientific protocol. He feels that much of social science research has become preoccupied with the sophisticated mathematical models, and the tendency to emphasize elegance as the model of design.

I agree with the value of methods rendering statistical data. Done properly, these methods allow evaluators to make general and concise observations of the whole program. Yet the problem lies in the widespread acceptance of the notion that adhering to the

²Rossi and Freeman (1989) point out that this is a common reaction. Evaluators often feel "set up," disappointed to find themselves in a position in which they cannot please anyone.
proper protocol of science alone automatically yields results that are true reflections of the empirical world being studied (Blumer, 1969). There is no guarantee that this will be the case. According to Blumer (1969):

> Inside the 'scientific protocol,' one can operate unwittingly with false premises, erroneous problems, distorted data, spurious relationships, inaccurate concepts, and unverified interpretations. There is no built-in mechanism in the protocol to test whether the premises, problems, data, relations, concepts, and interpretations are sustained by the nature of the empirical world.

From my experiences, I can agree with Blumer's assertion that "Reality exists in the empirical world and not in the methods used to study that world." The purpose of methods is to get in, identify, and understand the empirical world. Their value lies how well they do this (Blumer, 1969; Kaplan, 1964).

Any method or methodology has room for improvement. There is more than one way of doing a good job. This is a particularly important point for evaluation researchers, as the conclusions evaluators make have the potential to impact the lives of many people.

**Moral #3 to Students: Accept a Negotiated Reality**

The final bit of advice I have for students is to understand that there is no absolute truth or reality in evaluation research. No matter what credentials an evaluator holds or what methods are used, different players in an evaluation are likely to grasp different interpretations of reality. Ultimately, the result of an evaluation, as it was in my case, is a negotiated reality. I had my own sense of what the program was about, the program directors had theirs, and agency personnel had yet another version of reality. I had to accept a middle ground—a compromise—in which different versions of reality could converge and be used for program improvement.
It is important for program evaluators to be able to come to terms with this. For instance, in my final report, I presented two sets of conclusions: conclusions based on the quantitative data, and conclusions based on the qualitative data. I did not feel that either of these versions alone was a complete assessment of MCC. Still, I could not control which version others chose to accept (if they accepted either one of them). It appeared to me that the state agency took the quantitative results, and the program directors tended towards the qualitative. The point is that reality was not up to me. I had to be satisfied with a negotiated version, and leave it at that.

**A Concluding Note: The Art, Science and Politics of Evaluation Research**

In the end, one of my principal discoveries during the MCC project was the nature of evaluation research itself. I found that it is not only a science but a form of art as well (see Rossi and Freeman, 1989; Nesbit, 1976). Moreover, evaluation research requires knowing how to handle this science and art in a potentially lively or even hostile political environment.

The notion of art may make some of the more scientific researchers uneasy. Over the years, social scientists have dealt with criticisms of being too "soft" by attempting to identify with purer forms of science and adopting their methods (Nesbit, 1976; Merton, 1957). Yet art and science are not really all that disparate. In fact, art and science are likely some part of every profession, including sociology. Nesbit (1993) asserts:

...I stand on the position that there is an art element in sociology as well as in poetry and painting, and that anyone who denies himself his innate intuitions and his own artistic insights merely to parade statistical
capacities is emphatically not in spiritual company with the Durkheims, Webers, and Simmels.

The common perception holds that science seeks an objective truth, whereas art is merely to express something beautiful or present some substitution of the truth. Yet Nesbit asserts that the primary concern of both art and social science is to paint a picture of reality, explore some unknown, or interpret the worlds of humans (Nesbit, 1976).

I found this to be no truer than in the field of evaluation research. Program evaluators are more likely than other researchers to be working in a suspicious or hostile environment. Evaluators are likely to be confronted with political agendas, and be obliged to comply with external expectations.³

Evaluation research requires imagination and creativity. Creativity comes in as the evaluator seeks to use good social scientific methods in a world that is not likely to make it easy. The imagination plays in by way of continually looking for better and more appropriate ways in which to open the "windows" to the world of human experience.

Post Script

Throughout the writing of this thesis, I have identified specific errors made during the MCC evaluation. Yet, I now understand that these were honest mistakes, some of which were unavoidable. At the time, I was doing the best job I could with what I had

³Rossi and Freeman (1989) point out that evaluators are often more limited in their work than other social scientists. For instance, program evaluators are hired by outside agencies to perform work determined by the agency. Evaluators may or may not have a personal interest in the topic of research.
available. And in an applied field, such as program evaluation, this may be the best that can be done.

I now know many of the limitations and impediments to science involved in evaluation research. I also know that the challenge remains in finding the ways that will work best: the means that will give the best insights into the ways the daily world is constructed, whether it be the MCC program, or anything else. I know I never found the "truth," but I was able to find a compromise, an educated and thoughtful version of it.

The story of the MCC evaluation does not really end. As it turned out, the MCC program directors were sufficiently confident in my efforts, and interested in my concerns to invite me to continue working with them. This continuing involvement will allow me to utilize my understanding of the program to improve existing questionnaires and make plans for further evaluations.

As I gained experience in the real world, I had many frustrations, experienced much confusion, and I found ample opportunities for self-doubt. Program evaluation proved to be an emotional experience for me, as an evaluator. Yet in the end, I found the work challenging and satisfying. I was forced to think and be creative; the experience compelled me to want to continue my efforts, continue to learn. I have come to understand that I can practice reasonably good science and obtain useful information in the process.
BIBLIOGRAPHY


APPENDIX:

THE FINAL EVALUATION REPORT OF THE MONTANA CONSERVATION CORPS
AS SUBMITTED TO THE STATE OF MONTANA, FEBRUARY 1994
Montana Conservation Corps Inc.

1993 Program Evaluation

Assessment of Corpsmember Development

By Jennifer Haubenreiser, Program Evaluator
Montana Department of Fish, Wildlife, and Parks
February 1994
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SUMMARY

Renewed interest in the value and efficacy of youth service programs has lead to the initiation of numerous state-run programs throughout the U.S. These programs have largely adopted the traditional philosophy of national service: to call young people to serve in programs that will benefit the land, as well as improve their own life chances through the acquisition of personal and social skills. Program education is typically incorporated, along with service-oriented work, in the goal of enhancing youth development and educational skills. These benefits of enrollment, termed "corpsmember development," are of particular interest and are likely one of the primary selling features of youth service programs.

This evaluation focused on the personal, social and educational development of corpsmembers participating in Montana Conservation Corps (MCC) Inc., a summer and six month program involving youth from both disadvantaged, and non-disadvantaged backgrounds. MCC Inc.'s goal of corpsmember development is presumed to follow accomplishing meaningful work within crews throughout Montana. This investigation asked a number of specific questions: Did corpsmembers work within an atmosphere that was conducive to development; and did corpsmembers acquire educational, personal, and social development as a result of participating in the program? Corpsmember development was defined in terms of a number of attitudinal measurements, and assessment incorporated both written and verbal accounts of how corpsmembers and crew leaders experienced development within the program.

The results of the evaluation were mixed. The primary statistical analysis rendered unexpected results. Rather than showing the expected "improvement" (in terms of MCC Inc.'s goals), some attitudes appeared to have "worsened" during the course of the program. Still others reflected improvement while others showed no substantial change. Other statistical results indicated more positive outcomes, indicating satisfaction with the program, improvements in attitudes, and acquisition of skills as a result of enrollment in the program. Interviews and observations were also mostly positive. They indicated that corpsmembers were learning and benefiting from the program, and that they worked within environments that were conducive to development. However, this was found to vary according to the work project and the composition of the crew at the time. Non-conservation oriented work and problem corpsmembers were both found to hamper development within the crew. Crew leaders provided valuable insight into the development process within MCC Inc. They believed their crew members were benefiting from the program, but they recognized problems as well.

In general, limitations to corpsmember development were determined to be largely due to the short duration of the program, the relative homogeneity of the crews (crews lacking racial and cultural diversity), the variation existing among corpsmembers coming into the program, and the lack of systematized intervention. Development was also found to be occurring, but in more subtle ways than could be measured by the survey instruments. This is an important consideration for future evaluations.
Educational development was also questioned within the program. While basic educational skills were largely not addressed, some corpsmembers appeared to benefit in other ways, for instance, building self-confidence. However, some corpsmembers, while aware of having education, were unable to recollect what it was, and others did not appear to be getting the required eight hours per week.

Overall, MCC Inc. was successful in providing a positive work environment, in which young people were able to achieve social and personal development -- especially in light of other types of employment available to youth. Corpsmembers seemed to benefit the most in terms of self-confidence and learning to work with other people on a job. Most experienced personal and group pride in the work they accomplished, and felt they had gained skills that would be of use to them in the future. As MCC Inc. is a complex program consisting of numerous sets of interactions, general conclusions of success were difficult to make. Development varied, as did corpsmembers, which is reasonable to expect within social programs such as these.
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I. INTRODUCTION

In the current political environment, the idea of national and community service has once again caught on and become a topic of public interest, in the U.S. and worldwide. In 1990, the National and Community Service Act passed, which spawned a renewed interest in youth service programs, including state and local corps. These programs have largely adopted the philosophy of national service: to "renew the ethic of civic responsibility in the United States...[and] call young people to serve in programs that will benefit the Nation and improve the life chances of the young through acquisition of literacy and job skills" (Eberly, 1992).

Programs of this type are believed to be at least partial solutions to growing social problems, particularly those involving America's youth. Their goals are to provide benefits, not only to the country and community served, but to the youth involved. Benefits include attaining work skills and experience, improving self-perception, and forming new attitudes toward work, authority, and other people (Eberly, 1992). Opportunities for future education are also enhanced through program education and the availability of college stipends. Of primary interest is the extent to which these service-based programs are able to instill certain socially desired values. This aspect of national and community service, that of value transmission, may be one of the primary "selling" features of national youth service, and the various state programs following in its wake.

II. PURPOSE OF THIS EVALUATION

Multiple criteria exist with which the efficacy of organizations, such as youth service programs, may be determined, for instance cost/benefit analyses or assessments of organizational design. This report focuses on the experiences of program participants, along with the benefits made available to them by one youth service organization -- Montana Conservation Corps Inc. (MCC Inc.). This evaluation assesses the social, personal and educational skills acquired by MCC Inc. participants (corpsmembers), as per MCC Inc.'s goal of corpsmember development.

**Goals of MCC Inc.:**

At present, the goals of MCC Inc. can be summarized as follows:

1. To accomplish meaningful work that will provide visible and valuable improvements to Montana's public lands (that the market would not otherwise be able to support).

2. To generate employment for Montana's youth, as well as provide an appropriate climate in which social and personal development may occur -- both for youth considered "at risk" (educationally or economically disadvantaged), and youth from the general population.

This second goal, termed "corpsmember development," is presumed to follow as a result of accomplishing meaningful work, within well supervised, cohesive, and productive crews. Benefits are intended to be both immediate and long-lasting. Aspects of corpsmember development include the following:

- attaining a sense of social responsibility.
- gaining an improved sense of self-worth and future outlook.
- acquiring a tolerance and appreciation for people of a different ethnicity and/or culture.
❖ improving basic educational skills that will enhance and further education.
❖ acquiring a stronger personal work ethic.

These aspects tie in directly with the goal of this evaluation: to assess and measure perceived
corpmember development, as per MCC Inc.'s goals.

This evaluation seeks to answer the following questions:

1. Did participation in MCC Inc. engage youths in (1) meaningful work within (2) well
   supervised, cohesive, and productive work crews (suitable environments in which
development is considered possible).

2. Did both job skill acquisition and educational development follow successful
   participation in the program?

3. Did membership in MCC Inc. lead to:
   a. increased social skills, such as:
      1. tolerance of diversity
      2. teamwork
      3. social responsibility
      4. appreciation of the environment, and
   b. personal development, such as:
      1. improved self-esteem
      2. improved future outlook
      3. a more defined work ethic

4. Were the above benefits manifested during enrollment in MCC Inc., and did they endure
   past the point of the program's completion?

Certain benefits of the program were explicit enough to be presumed, and thus not addressed in
this report. These include providing youth employment opportunities and job experiences. Corpmembers successfully completing the program were further presumed to have gained some
mastery of certain tools and equipment (those necessary to complete the work). College stipends,
were made available to corpmembers in good standing, thus encouraging higher education.
However, other, more implicit benefits, such as personal and social development, were not as
apparent and thus more difficult to determine.

III. MONTANA 'S SERVICE CORPS PROGRAM

MCC Inc. Background:

In 1989, Montana's state legislation demonstrated its support of youth service by authorizing the
creation of a conservation corps. This program was intended to provide improvements to public
lands, while providing opportunities for Montana's citizens. At this point, the Montana
Department of Fish, Wildlife and Parks (DFWP) started a pilot program to provide employment
for disadvantaged youth by having them work in the state park system. Efforts continued into the
1990's which formalized the conservation corps programs for the state of Montana.

In 1991, area Human Resource Development Councils (HRDC's), recognizing the potential of
these programs, formed a private non-profit corporation: Montana Conservation Corps Inc.
Through this program they would be able to employ youths considered "at-risk" in community service, that would benefit the state's natural resources as well. Together, the DFWP and MCC Inc. successfully obtained a grant from the National Commission on Community Service in 1992. This grant, along with state and local funds, enabled MCC Inc. to employ over 150 youths in 1992 to do work for a number of state and private organizations. While enrollment included youths from all socio-economic backgrounds, opportunities were targeted toward disadvantaged and minority youth.

1993 Program:

In 1993, approximately 135 youths were enrolled in MCC Inc. Area HRDC's were used to refer "at-risk" youths, and they provided wages and health benefits for these individuals (as Job Training and Partnership Act (JTPA) participants). MCC Inc. recruited and paid the costs of the remaining non-JTPA participants. Through the federal grant, MCC Inc. was able to provide a $50 per week educational stipend for all corpsmembers (both JTPA and non-JTPA), on the basis of satisfactory performance. Agencies that provided the work projects (project sponsors) were charged for approximately one third of the cost of running a crew.

1993 Program Participants:

Demographic and descriptive composition of the 1993 program participants can be seen in Table #1. Most corpsmembers were between sixteen and nineteen years old. Nearly 66 percent were male, and approximately 36 percent were JTPA participants (considered "at-risk"). Most corpsmembers classified themselves as White (80 percent). Over 16 percent classified themselves as American Indian; nearly all of these individuals were members of one of two reservation crews.

Seventeen crews consisting of four to eight corpsmembers operated throughout Montana (see the map preceding this report): thirteen were summer (eight week) crews, and the remaining were six month crews. As MCC Inc. is a non-residential program, members of each crew were recruited from the same geographical area. They reported to, and returned home from work most nights (with the exception of occasional "spike" camps). Two American Indian summer crews operated on the Blackfeet and Ft. Belknap reservations. Another summer crew employed physically and developmentally challenged individuals.

Each crew had a crew leader who worked alongside the corpsmembers. Leaders were not only responsible for getting the work done, but acted as mentors as well. Most crews also contained an assistant crew leader, either hired at the onset or promoted from the crew during the program. This individual provided general assistance to the crew leader and took charge when the crew leader was away.

The Work:

Corpsmembers were paid minimum wage for 40 hours per week: 32 hours of actual labor, and eight hours of corpsmember education. Project sponsors (mostly public agencies) provided a wide variety of work projects, most of which entailed general construction and maintenance to public areas (e.g., parks, campgrounds, trails). Work was intended to be conservation-oriented, that is, relating to the preservation of Montana's public lands. Work of this nature was hoped to imbue corpsmembers with an appreciation of nature and their local environment. Work was also
intended to be physically challenging, require the use of specialized tools, and necessitate a team effort. Safety on the job was of utmost priority. Safety training and daily safety talks, as well as hard hats, gloves, eye and ear protection, were to be implemented and enforced within each crew.

**Corpsmember Education:**

The federal grant stipulated that MCC Inc. provide corpsmembers with an average of eight hours of education per week. This could be fulfilled either by "saving up" for big events, such as multi-crew weekend gatherings, or could be provided on a daily or weekly basis. With the exception of multi-crew gatherings, crew leaders and project sponsors were responsible for organizing most of the corpsmembers' education.

Education within MCC Inc. was intended to develop corpsmembers in a number of ways. One goal was to provide basic educational skills that would help further their education outside the program. For instance, journaling activities were intended to improve corpsmembers' ability to express themselves, as well as improve basic writing skills. Lectures and activities oriented towards conservation issues were intended to increase corpsmembers' awareness of local habitats and environmental problems. Activity-based education was intended to improve individual self-confidence, promote trust in others, and initiate teamwork.

### IV. EVALUATION DESIGN

**Basis for Design:**

This report focused specifically on the social and personal development of corpsmembers over the course of their enrollment, and some time after. The design incorporated two types of methods to gather the necessary data: quantitative and qualitative. Each method was intended to measure and assess different aspects of corpsmember development within the program. Also, the use of different methods was intended to lend support and insight into all methods used in the design; findings from one method should corroborate findings from another. Thus, the validity of this evaluation was enhanced by using multiple means to determine the existence of corpsmember development within MCC Inc. A detailed description of the methodology used is found in Appendix A.

1. **Quantitative methods:** Quantitative methods are standard program evaluation strategies. Survey questionnaires are useful in obtaining attitudinal measurements and to assess whether changes have occurred as a result of participation in the program. For this evaluation, three measurements were taken: at the beginning of the summer program (the pretest), at the program's conclusion (the posttest), and again, a few months after the program was over (the follow-up). The first two measurements were expected to show a "positive" change from the beginning of the program to the end. The follow-up measure was used to consider the longevity of the change, that is, whether the benefits lasted. Other quantitative data included demographic information and other categorical items.

2. **Qualitative methods:** These methods included personal interviews, field observations, and open-ended questionnaire items (in which corpsmembers wrote in their own responses). Corpsmembers and crew leaders were allowed to express in their own words how they experienced or observed development within the program. Field observations were made of
crews at work and during program education. These methods tend to assess more "processual" features of development -- the nature and ways in which development is manifested over the course of the program -- rather than making distinct measurements at specific times. While the results from these methods cannot be generalized to the whole program, they do provide a more "human" note, along with promoting a better understanding of how corpsmember development is experienced within the program.

**Participants in the Evaluation:**

This evaluation was initially designed for the summer program participants; however corpsmembers from both programs participated in most parts of the evaluation (only corpsmembers who successfully completed the program are included in the statistical analysis). Time did not permit members of the six month program to be tested at the beginning and end of the six month program. Instead they took the survey along with the summer program participants at the beginning and end of the summer program. Also, six month corpsmembers did not receive the follow-up survey (they were still working when the follow-ups were sent out). However, corpsmembers from both programs were included in the pretest/posttest analysis of this report, as well as the field observations and interviewing process (see Appendix A).

**The Survey Instruments:**

Again, this evaluation made use of three survey questionnaires: (1) a pretest and (2) posttest questionnaire, followed by, (3) a mailed follow-up survey (copies of all three are found in Appendix B). The pretest and posttest questionnaires contained identical indices that measured the following attitudes (defined as aspects of corpsmember development):

1. feelings about past educational experiences (educational outlook)
2. social responsibility (feelings toward the environment and helping those in need)
3. tolerance of diversity (appreciation of people of a different race, gender or culture)
4. perceived ability to communicate
5. personal work ethic
6. self-perception (attitude towards life)
7. crew cohesion:
   a. The pretest measured how corpsmembers expected to feel about their crew.
   b. The posttest measured how corpsmembers actually felt about their crew at the end of the summer. Three additional measures of cohesion were included.

Most items for the pretest/posttest were drawn from a survey instrument developed by Apt Associates for their study of the American Conservation and Youth Corps programs. As this questionnaire was considered too lengthy for the scope of this evaluation, only selected items were drawn (some items being revised to suit Montana's youth). Cohesion items were taken from a number of other sources. Both surveys contained a number of open-ended and categorical items which were designed to ascertain how corpsmembers felt about the program and their experiences in it. They also provided descriptive information, such as race and gender.

The follow-up survey questionnaires were substantially shorter, but designed to measure similar attitudes to those measured on the pretest/posttest questionnaires (social responsibility, tolerance of diversity, etc.). The follow-up items specifically linked attitudes with participation in the
program, for instance, "Working for MCC has made me more aware of nature." As MCC Inc.'s goals stipulate that benefits will be long lasting, these surveys were useful in assessing corpsmembers' attitudes over time. The follow-ups were also useful in ascertaining whether corpsmembers' feelings toward MCC Inc. had changed since leaving the program, that is, whether they felt more positive or negative toward the program after having been away from it for a while.

V. RESULTS

Below are the results of the evaluation, as outlined above. The results are presented as quantitative and qualitative information. Quantitative results include the statistical analysis of the pretest/posttest questionnaires (using a "matched-pair t-test"), the follow-up surveys, and responses from the categorical questionnaire items. Qualitative results include assessments based on both corpsmember and crew leader interviews, field observations, and open-ended questionnaire items.

Quantitative Information -- categorical items, t-test and follow-up results:

The results from the quantitative methods were mixed. Categorical items indicated that corpsmembers felt positive toward MCC Inc. and their experiences within the program. Statistical analysis, however, indicated that while some attitudinal scores indicated the desired "improvement," others had "worsened," in terms of MCC Inc.'s goals. The follow-up results contradicted the negative results somewhat, indicating a positive change in attitudes as a result of enrollment in the program.

1. Categorical questionnaire items: Categorical items from the posttest questionnaires measured corpsmembers' satisfaction with the program, the work they accomplished, their feelings about their crew, and how they had benefited from the program. The results of these items are as shown in Table #2. Nearly 70 percent of corpsmembers responding would work for MCC Inc. again; almost 94 percent would recommend MCC Inc. to a friend. Over 84 percent are satisfied or mostly satisfied with the work they accomplished, and about 88 percent are at least somewhat sure they learned skills that will help them in the future. Crew cohesion was also evident, as over 67 percent of the corpsmembers felt that they were definitely a part of their crew (over 20 percent felt included in most ways).

2. T-Test Results: Simply put, the matched-pair t-test assessed whether a corpsmember's attitude score on his or her pretest differed (i.e., "improved") significantly from the score on his or her posttest. Each attitude scale was scored from one to five, five representing the most desirable response. Thus, higher scores reflected improvement. Since the scales used to measure attitudes were identical on both tests (with the exception of the cohesion scale), differences were attributed to participation in the program. A total of 82 matched-pairs resulted from the pretest/posttest analysis, and can be seen on Tables #3 and #4. These tables display the mean scores for both the pretests (before) and posttests (after) on each of the seven attitudinal scales: (1) educational outlook, (2) social responsibility, (3) tolerance of diversity, (4) communication skills, (5) feelings about work, (6) self-perception, and (7) cohesion. (See Appendix A for a description of the matching process).

Table #3: This table displays the scores for all 82 pairs combined. The combined posttest scores for both the social responsibility and tolerance of diversity scales went down, and
the differences were statistically significant. That is, instead of the expected improvement in these areas, the scores reflected a worsening of these attitudes. Conversely, the combined posttest scores on the self-perception scale went up, indicating a statistically significant improvement. The remaining scores did not indicate significant changes; educational outlook, work ethic and cohesion scores went up only slightly.

- **Table #4:** This table shows separate t-test results for each individual crew (seventeen crews total). Some differences between a crew's pretest and posttest scores were found to be statistically significant; however, significance should be questioned as the N size (number of corpsmembers per crew) is too small to allow for valid statistical results. Still, the result of the analysis run separately for each crew is useful in illustrating the variability that existed among MCC Inc. crews, both in terms of how each crew felt coming into the program (crew's mean "before" scores), and how they felt after the program (crew's mean "after" scores). This table also contains the mean scores for three additional measures of cohesion found on the posttest: CLOSE -- a rating of crew closeness; CREW -- measuring feelings about the crew; and SEMA -- a semantic differential scale, again measuring perceptions of the crew. These items also illustrate the variability existing among crews in terms of perceived crew cohesion.

3. **Follow-up Results:** The follow-up surveys were sent to corpsmembers completing the summer program approximately three months after the program had concluded. Over 65 percent were returned, which is considered a good return rate. Thus, these findings were considered good indicators of corpsmember attitudes (similar attitudes as measured on the pretest/posttest, such as tolerance of diversity and social responsibility) some time after the program's completion. The results of the follow-up survey are presented in Table #5. Each item is listed with the percentage of corpsmembers who agreed ('yes'), disagreed ('no'), or either had no opinion or didn't understand the item ('?'). Of those responding to the survey:

- Seventy percent felt the work they did within the program helped the environment.
- Over 92 percent of the respondents reported that MCC Inc. helped them to like people different from themselves.
- Over 77 percent of the respondents would feel more comfortable applying for a job now after having worked for MCC Inc.
- Over 70 percent reported higher self-confidence for having participated.
- Almost 64 percent reported that their feelings toward MCC Inc. had changed, i.e., are more positive since completing the program.

As the follow-up items were different from those used in the pretest and post-test, direct comparison with the matched-pair analysis is not possible. However, these findings contradicted some of the t-test results, suggesting that attitudes have changed (i.e., improved) since the time of the program's conclusion. See Appendix D for a further discussion of the quantitative results.

**Qualitative Information -- open-ended items, interview and observation results:**

1. **Open-ended questionnaire item results:** The posttest questionnaires contained a number of open-ended items in which corpsmembers wrote in their own responses. The most common responses are summarized in Table #6. As all corpsmembers did not answer these items, they can be neither quantified nor generalized to the entire program. However, they do point out
what some corpsmembers saw as being important and meaningful parts of their experience. Most of the responses to these items reflected positive attitudes; however, a small number of female corpsmembers mentioned problems with authoritarian and/or sexist crew leaders. Serious problems such as these, while not common, should be noted.

- **What things did you learn over the summer?** Corpsmembers listed technical skills, such as trail work and tool use, most often. Many also listed social and personal skills, such as learning teamwork, leadership, and patience.

- **What was your favorite education?** By far, the most popular education was the rock climbing activity. This was followed by CPR and first aid training, as corpsmembers perceived this as being of future value. Corpsmembers also enjoyed education that involved interaction with other crews.

- **What was your favorite / least favorite part of the MCC experience?** Corpsmembers reported enjoying the social aspects of crew work the most. Most enjoyed working with other people (especially outdoors), and were able to make new friends while in the program. Some corpsmembers did not have a 'least favorite' part; those that did listed getting up early, the rain, and the paper work (i.e., too many evaluations) as their least favorite part of the program. Other negative aspects included disorganized sponsors (having to wait around) and arguments within their crew, but these were not common.

- **What did you learn this summer that you feel will benefit you in the future?** Corpsmembers identified learning to work with others as being the most beneficial skill they had learned. Tool use and first aid/CPR training were also common responses. Assistant crew leaders identified learning leadership skills as being the most likely future benefit.

2. **Interviews:** Both corpsmember and crew leader interviews provided valuable insights into the ways in which corpsmember development was experienced and observed. With some exceptions, corpsmembers were easy to talk to and willing to share their feelings. Interviewees were asked about their experiences within MCC Inc., and their feelings about corpsmember development. However, all were allowed to bring up any topic concerning the program that was meaningful and/or important to them. See Appendix C for excerpts from these interviews.

Overall, corpsmember interview responses were positive, and indicated good attitudes toward the program and their experiences within it. Crew leader responses were also positive, but included more negative aspects of crew life as well. They were able to recount specific successes and failures within their crew, and had many suggestions for program improvement. All crew leaders interviewed were enthusiastic about the potential of corpsmember development within the program, but they recognized some of the practical limitations to it as well.

a. **Corpsmember interviews:**

- When asked what they were getting from the program, corpsmembers most often spoke of feelings of personal and group pride in the daily work accomplished, along with learning to work with other people on their crew. Even the crew with the "worst" job expressed pride, not only in their work, but in having a crew that was "more like a
family than a crew." However, most corpsmembers indicated that feelings about the program and their work fluctuated depending on the project, and who was in the crew (as new members came in, or problem members quit or were terminated). All corpsmembers queried said they would prefer working outdoors with other people, to working alone or working indoors. Many reported that, "MCC is the best job I've ever had."

- Questions related to the nature of their work project revealed that most corpsmembers enjoyed hard physical labor and believed that their work was of value to the environment. However, these feelings again tended to vary with the project. Corpsmembers felt that their development was not enhanced, even inhibited, by tedious, non-conservation oriented projects. They were further discouraged by having to wait for disorganized project sponsors, or sponsors that showed no interest in them. Corpsmembers were pleased when sponsors took notice of their work and offered assistance and feedback.

- When asked about their supervisor, most corpsmembers reported being satisfied with their crew leaders; some even looked up to them as role models. Characteristics that corpsmembers admired the most in their crew leader included being fair (not playing favorites), being hard-working (corpsmembers did not tend to mind the hard work when crew leaders were working as hard, or harder, along side them), being able to relate to corpsmembers on their level (joking around with them), and complimenting them on jobs well done. Corpsmembers did not like it when their crew leaders were "bossy" or frequently absent, tending to paper work or obtaining materials.

- One of the favorite aspects of the program for many corpsmembers were activities involving other crews. Long distances and vehicle problems were problematic for some crews, but most corpsmembers enjoyed this interaction. For example, corpsmembers that were able to visit the reservation crews were highly enthusiastic about the experience. They felt they had learned a great deal about Indian history and culture.

b. Crew leader interviews:

- When asked what they believed corpsmembers were getting from the program, crew leaders were highly positive about the prospect of corpsmember development, and were able to identify particular "success stories" within their crew. All crew leaders interviewed felt that MCC Inc. was an appropriate vehicle in which to help youth develop. Crew leaders also claimed to have grown a great deal themselves, and felt that they played an important role in helping their crew members grow as well. Based on their own experiences, crew leaders identified specific improvements that they believed would enhance the goal of corpsmember development.

- When asked about their own crews, however, several crew leaders recounted having at least one problem crew member that resulted in problems for the whole crew. Leaders felt that the daily work, as well as the other members of their crew were affected when attention had to be continuously directed to one individual. They further reported having difficulty in determining the best action to take. While they wanted to
help problem individuals develop, they also felt obligated to the other members of the crew, and to the project sponsors as well.

- Frustration was also expressed in the amount of personal time crew leaders felt was necessary to complete MCC Inc. business, such as weekly reports and vehicle maintenance. Many set their own limits as to the amount of time they were willing to "contribute," but felt that their performance suffered from doing so.

- Crew leader interviews were useful in raising important questions for future consideration. For instance, they brought up questions related to the ways in which development could be promoted in their crew, such as, should corpsmembers be given "a bottom line," and terminated when they go past it? Or should problem youth be kept in the program regardless of their behavior to avoid causing them further discouragement?

**Corpsmember Education:** Both corpsmembers and crew leaders were asked questions about corpsmember education. Responses varied a great deal from crew to crew. When asked to talk about program education, most corpsmembers were not sure of the role that education was to play within MCC Inc. Specific goals, such as how much and what type of education they were to be receiving, was not clear to many corpsmembers. When asked to tell about the education they had received so far, some were quick to name and show great enthusiasm about a specific education (such as particular field trips or the rock climbing). But other responses express less certainty: "we had some kind of talk, but I don't remember what it was about"; "when we get tired, we sit down and call for some education."; and "education? I don't think we had that yet."

Crew leaders reported having difficulty deciding on, and then coordinating education that their crew would enjoy. For instance, some crew leaders had no access to a phone during the day in which to make calls. Crew leaders who had skills or knowledge of their own that could be used for education felt lucky in avoiding some of the logistical problems experienced by other leaders. Other problems included finding education that their crew would be interested, and thus involved in. Most felt that their crew members did not enjoy the more "formal" types of education, such as lectures, writing, or reading. Efforts of the part of crew leaders also varied. In spite of the difficulties, some crew leaders made nearly continuous efforts to attain meaningful education for their crew; others made only minimal efforts.

3. **Field Observations:** MCC Inc. crews were not always easy to find, as they often worked miles from any access roads. Yet they were easy to identify as they were outfitted in green MCC T-shirts and wore either yellow hard hats, or MCC baseball caps, depending on the work they were doing. In general, the crew ambiance was observed to be amicable and informal (lots of "crew talk"), as well as safety conscious and work oriented. Break time and lunch appeared to be high points of the day. Members of some crews had been given nicknames and had assumed roles within the crew, such as "the clown" or "the hard-core worker."

- The amount and intensity of work was seen to vary from crew to crew (and from project to project). Many projects (for instance, trail work) required intense physical involvement, while some were less physically demanding, yet required more concentration or mental stamina (for instance, roofing). Some projects were clearly conservation oriented, while others were less so. The way the work was accomplished varied as well. In some crews,
corpsmembers worked in groups of two or three. In others, individuals worked alone on separate tasks. One crew made use of an "assembly line," exemplifying the spirit of teamwork within a crew.

❖ Two scheduled educational segments were observed: a lecture and slide show on area wildlife, and a half-day course on tracking. Both were well prepared and presented; although, interest on the part of the corpsmembers was observed to be mixed. Some appeared to be bored by the lectures, while others appeared very interested in what was being said, asking a lot of questions. Everyone seemed to enjoy the education requiring physical participation, such as handling animal skeletons or practicing the "fox walk." Other education was observed in more impromptu settings, for instance, when projects were finished early or supplies had run out. One crew, having finished early one day, sat down and together compiled a list of everything they had learned over the summer that could be included in a job resume.

VI. CONCLUSIONS

MCC Inc.'s goals stipulate that corpsmembers will be involved in meaningful work that will encourage both social and personal development during enrollment in the program. Conclusions, based on the results of the quantitative and qualitative information collected for this evaluation, are mixed, but for the most part favorable. However, it should be understood that making broad conclusions regarding corpsmember development within MCC Inc. was difficult to make due to the unique and complex nature of this, and other similar programs. Corpsmembers were not merely enrolled in MCC Inc., but were members of specific crews. Moreover, corpsmembers came into the program with their own personalities, expectations, and sets of past experiences.

As variation was found (and is reasonably expected) to exist among different crews, it follows that corpsmember development among individuals will vary as well. Differences in crew leader characteristics, the work projects assigned, or simply the personality differences among the individuals recruited was likely to lead to different outcomes. Several crew leaders recognized this when stating that they had "gotten lucky" getting a "model" crew, while others claimed to have "been dealt a bad hand." Furthermore, limitations of the evaluation design left room for a number of possible confounds, or alternative explanations (see Appendix D). Regardless of this, the information obtained during this evaluation was reasonably fruitful in assessing and providing insight into corpsmember development within MCC Inc., and providing suggestions to improve it.

Conclusions Based on Quantitative Data Analysis:

Results from the quantitative information indicated that MCC Inc.'s goal of providing a positive work atmosphere, conducive to development, most likely existed. However, evidence of corpsmember development was mixed. Statistical analysis suggested that attitudes in some areas had improved (i.e., changed in the desired direction, as per MCC Inc.'s goals) while others appeared to have worsened. Other attitudes showed no substantial change. This evidence suggests that corpsmember development within in MCC Inc. did occur, but was limited and more likely to occur in some areas than others.

❖ T-test results from the pretest/post-test questionnaires indicated that attitudes in one area may have improved, while others appeared to have worsened over the course of the
program. Statistical analysis indicated improvement in self-perception (happiness and future outlook), while attitudes of social responsibility (attitudes toward the environment and the needy), and tolerance of diversity appeared to have worsened during the program. These results question the scope in which corpsmember development occurred within MCC Inc. They also pointed to an absence of systematic interventions, targeted toward specific attitudes.

1. Tolerance of diversity: MCC Inc. is a non-residential program, and thus crew composition was found to be relatively homogeneous (in terms of race and ethnicity). Nearly all of the program's minority members (i.e., American Indians) were in the two reservation crews. Interaction with these crews was positive, but limited, and unlikely to induce substantial corps-wide differences in attitudes toward people from different cultures.

2. Social responsibility: Questionable results in this area could be attributed to the nature of the work projects and the lack of program education targeting social issues. Crews working in projects that were not conservation-oriented (or if the conservation aspects of the project were not brought out) were not likely to adopt conservation ideals. Without specific intervention, MCC Inc.'s assumption that merely working in nature would affect attitudes is most likely unrealistic. Moreover, relatively few corpsmembers reported having education directed specifically toward social or environmental issues.

The results of the follow-up survey suggest that corpsmember attitudes improved as a result of enrollment in MCC Inc. They also indicated that attitudes are likely to shift: from the beginning to the end of the program, and again, after being out of the program for a while. Attitudes that appeared to worsen according to the t-test analysis at the end of the program (social responsibility and tolerance of diversity), showed improvement according to the follow-up survey a few months later. For instance, most corpsmembers responding to this survey said they had learned to appreciate the environment and the needs of others during their enrollment in MCC Inc. They also indicated that participation in the program had helped them learn to tolerate people that were different from themselves. Since more than half of the respondents indicated that they felt more positive toward MCC Inc. since leaving the program, corpsmember attitudes may likely be prone to fluctuation, becoming more positive over time (see Appendix D for further discussion).

Conclusions Based on Qualitative Data:
Conclusions based on the qualitative information are mostly positive. Varying levels of social and personal development were reported to have taken place during the program. Most corpsmembers completing the program appeared to benefit from their enrollment, some a great deal, others, not as much. While some specific problems were reported (mostly by crew leaders), most corpsmembers were happy with their enrollment in MCC Inc. Questions were raised, however, as to the effectiveness of MCC Inc.'s corpsmember education, in terms of the quantity and quality of education corpsmembers received.

The open-ended items indicated that corpsmembers are exposed to, and learn many things during the course of the program. Corpsmembers reported learning social, personal and technical skills during their enrollment in the program. The social aspects of the program were
the most meaningful part of the program to the corpsmembers. Many also recognized the future value of skills they had learned during the program. "Action" or adventure-type education was the most memorable, but activities involving other crews were also largely enjoyed by corpsmembers.

❖ According to corpsmember and crew leader interviews, corpsmembers achieved varying levels of social and personal development as a result of their experiences within the program. For many, corpsmember education also provided opportunities for development, but in areas other than basic educational skills. Corpsmember development was evident, but was found to vary during the interviewing process, in a number of ways. Learning to construct a scaffold as a team, and then acquiring the confidence to work on top of it, provided an opportunity for one crew's social and personal growth. Many learned that getting through the work day required being able to put up with the other people that were not necessarily their friends. Program education was also found to benefit some corpsmembers, but not in terms of enhancing basic educational skills.

1. Variation in social and personal development: While interviews indicated that corpsmembers were likely to achieve some amount of development during the program, the amount and type of development was found to vary from individual to individual, and from crew to crew. Crew leaders were aware of growth within their crew, but most often in particular individuals. Many pointed out that development should be looked at as being relative. Corpsmembers' attitudes may have changed during the program, but it depended on many things -- most importantly the individual's attitudes coming into the program. Changing sixteen or seventeen year olds within an eight week period of time, crew leaders felt, was too much to expect.

2. Education: Since corpsmembers tended not to like, and thus not respond to more 'academic' forms of education, such as lectures, reading, and writing, basic educational skills were largely not addressed, and thus not developed as a result of enrollment in MCC Inc. However, some corpsmembers did feel they had benefited from their education. For instance, some Indian corpsmembers participated in tribal customs, such as the Sun Dance and the Buffalo Ceremony. Corpsmembers who were involved in the rock climbing activity felt they had learned to do something they never thought they could.

However, some corpsmembers did not appear to be receiving the required eight hours (average) of education per week. One crew reported not having any at all. Crew leaders were largely responsible for setting up the education, and many faced difficulties trying to coordinate quality education while supervising their crew at the same time.

3. Alternative measures of development: The qualitative information was useful in pointing out issues that were not addressed in the quantitative measurements used for this evaluation. For instance, corpsmembers gave many verbal and written accounts of learning to "tolerate different people" while in the program. However, when talking to them, it became apparent that "different" to them simply meant "other" people. Thus, tolerance may have been developed during the program, but in terms of learning to work with other people, rather than learning to appreciate people of a different race, gender or culture.
Field observations indicated that corpsmembers work within crew environments that are conducive to development. All of the crews observed appeared to work within a safe and productive crew atmosphere. Crew members were observed to get along well, and crew cohesion was apparent. The clothing and equipment worn, along with crew and program rituals and ceremonies, served as a source of identification for corpsmembers, and gave their membership within MCC Inc. meaning and value. These aspects of the program were important in enhancing development and satisfaction within the program.

Summary:

MCC Inc. is a complex program involving numerous sets of interactions, thus generalized statements were difficult to make. Overall, the findings of this evaluation offered a mixed set of conclusions. MCC Inc. was successful in providing a positive work experience for most of the corpsmembers involved. Corpsmembers reported personal and group pride in their accomplishments, largely enjoyed working with the other members of their crew, learned new things via training and program education, and found much of their work to be of value. Crews were observed to be safe, well-supervised and cohesive. In general, corpsmember development seemed to be most evident in terms of improving self-confidence and teamwork skills.

However, development in terms of other socially desired attitudes, such as social responsibility and tolerance of diversity, was questionable, and most likely limited. The lack of specific, corps-wide intervention, and the homogeneous nature of the crews most likely limited the amount and type of development corpsmembers could have reasonably attained in these areas. Other evidence suggested that development may be occurring in ways that were not addressed by the quantitative methods used for this evaluation (i.e., learning to work with other people, rather than learning to appreciate diversity).

The extent to which program education benefited corpsmembers was also not clear. Both quality and quantity of education were found to vary from crew to crew. For the most part, development of basic educational skills, such as reading and writing skills, were not addressed. However, program education may have benefited youths in ways other than basic educational skills; many reported being exposed to new and potentially beneficial things during their education. Of chief concern was the variation in the amount of education corpsmembers received. Some corpsmembers did not appear to have received the required eight hours of education per week.

While evidence generated by this evaluation found that corpsmembers had good experiences, benefited, and developed during their enrollment, it also indicated that MCC Inc.'s goals may be overly optimistic. Eight weeks is most likely insufficient to achieve significant differences in social attitudes. Moreover, development was subject to variations that were found to exist: among crews, among work projects, and among individuals enrolled in the program. This too limited the amount of development that could be achieved via enrollment in MCC Inc. -- crew leaders recognized and acknowledged these limitations. For instance, when asked what he hoped his corpsmembers would leave the program with, one crew leader summed up the sentiment of many:

"...the best you can hope is that they're being exposed to it, which is good, and it will broaden them a little bit. That's what I hope for. Eight weeks is a short period of time but if you can just get them exposed to things, and get things started in their head that are different, they can think about it later...They're intelligent enough people and they'll catch on to some things."
VII. RECOMMENDATIONS

**MCC Inc. program improvement:**

Crew leaders were especially helpful in providing program recommendations. They were able to draw on their own experiences and identify improvements that would help them facilitate development within their crew. Using these ideas, along with conclusions generated by this evaluation, the following suggestions are offered for MCC Inc.'s consideration to help achieve their goal of corpsmember development.

❖ The educational component within MCC Inc. needs to be redefined, organized and made available to all corpsmembers. Suggestions include:

1. Stating explicitly what the goals of corpsmember education are. That is, in what ways are corpsmembers expected to benefit as a result of education within the program.
2. Developing a specific curriculum, complete with teaching aides and materials for each crew leader. Flexibility should be allowed in order to facilitate each crew's interests, but guidelines and limits should be set and followed.
3. Providing the necessary support and direction to crew leaders so they can properly plan and coordinate quality education for their crews.
4. Regularly check to make sure that all corpsmembers are receiving the appropriate amount and quality of education. This could be accomplished by having each crew establish an educational curriculum which could be checked off as it is completed.

❖ Specific interventions should be systematically initiated, through education and/or the work projects, in order to achieve MCC Inc.'s desired development. For instance:

1. Provide work that corpsmembers will associate with conservation to the environment or service to others. Use education to address specific social problems and issues.
2. Provide more opportunities for corpsmembers from different cultures or backgrounds to interact and share customs. Also, education should be incorporated that will help corpsmembers understand how other people live, their customs, and their specific problems.

❖ Provide each crew with a qualified assistant crew leader, prior to the start of the program. Starting with a good assistant would:

1. Provide excellent opportunities for the assistant to development, in terms of leadership, communication, and decision making abilities.
2. Allow crew leaders more flexibility and time away from their crews to do paper work and to coordinate education.
3. Provide MCC Inc. with a pool of potential, experienced crew leaders.

❖ Clearly define the means used to deal with corpsmember and/or crew leader problems. These should be available and understood by all participants of the program. Suggestions include:

1. Assigning someone within MCC Inc. the role of liaison. This individual would be responsible for dealing with specific problems and complaints within the crews.
2. Maintain and make known the criteria for termination, suspension, etc., and demonstrate a willingness to act in a timely manner.
3. Improve recruitment efforts in order to increase the number of applicants from which to choose from. Every effort should be made to hire enrollees that are suitable and most likely to benefit from this type of program.

4. Utilize and update the existing corpsmember handbook with specific procedures, policies and expected behaviors. Crew leaders should have their crew refer to these often, and should add additions of their own.

5. Crew leaders, as a group, need to develop more standardized policies regarding acceptable corpsmember behavior and ways to deal with problems.

❖ Continue efforts to improve initial crew leader training. Training should also continue throughout the course of the program. Suggestions include:

1. Hold regular crew leader meetings, as a group, throughout the program to address and discuss problems as they come up.

2. Incorporate formal training in specific areas, such as diversity, gender and authority issues, to help sensitize crew leaders to the needs of their crew. Crew leaders could participate in the training, for instance, by finding recent articles addressing these issues and presenting them to the others.

3. Investigate training methods used in other youth corps program. Draw on past experiences and share experiences and information found within this program.

❖ MCC Inc.'s goals should be restated to reflect more reasonable and realistic expectations of development. As indicated by this evaluation, MCC Inc.'s goals of corpsmember development appear to be overstated, in some cases and unreasonable to realize in an eight week period of time. For instance:

1. Since most corpsmembers did not respond to the more 'traditional' approaches to education, educational goals should be stated to reflect attainable results. For instance, improving self-confidence, or providing practical knowledge, are more feasible than improving basic educational skills.

2. Rather than promoting an increased tolerance for diversity, in terms of race, gender or ethnicity as a benefit of enrollment in the program, simply providing the opportunity to learn to working with other (similar) people may be a more reasonable goal.

3. Inspiring young people to embrace the idea of service may also be overstated. Given the opportunity, some corpsmembers will develop, some will not. Simply providing the opportunity to serve, and providing some exposure to the value of service may be the best the program can offer.

Recommendations for future evaluations:

Continuous evaluations are an important part of program improvement and should be supported. Furthermore, programs and agencies supporting these types of program should encourage continuous interaction and information sharing among agency and program personnel. In so doing, programs such as MCC Inc. will continue to grow and improve, which will create more opportunities for youth. The following recommendations pertain to future evaluations, and offer improvements for prospective evaluation designs.

❖ This design would be greatly enhanced with the implementation of a proper control or comparison group. This would require more funding and time, but would enhance the validity
of the findings considerably. Without a comparison group, changes measured in during the course of the program will be vulnerable to alternative explanations (see Appendix D).

❖ A more detailed survey instrument is recommended for short term projects, such as MCC Inc.'s summer program. While brevity was desired (and was easier on the corpsmembers), short questionnaires, like those used in this evaluation, may not be sensitive enough to detect the subtle changes feasible for an eight week period of time.

❖ Timing of the survey questionnaire administration should be carefully considered to avoid the so-called "idealistic" nature of new corpsmembers. For instance, incoming corpsmembers could receive a pretest immediately after being hired, before they've been "sold" on the benefits of the program. The posttest should be given in a more controlled environment (i.e., not immediately before another, more interesting activity), and follow-up surveys should follow at least six months to a year after the completion of the program.

❖ Persons administering the survey should be unassociated with MCC Inc. to avoid the tendency corpsmembers to give socially desired responses. This is likely to be a particular problem for this group, as they are not likely to be in the habit of freely expressing their feelings, especially in front of their boss.

❖ Since the feasibility of development in an eight week program was questioned, separate evaluations should be conducted for both the six month and summer programs. This would allow an assessment of differences, in terms of corpsmember development and cohesion, between these two types of programs.
### Table #1
MCC Inc. Corpsmember Characteristics *

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<th>RACE</th>
<th>AGE</th>
<th>GENDER</th>
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<td>WHITE: 80.0%</td>
<td>16: 19.0%</td>
<td>MALE: 65.7%</td>
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<td>AMERICAN INDIAN: 16.2%</td>
<td>17: 19.0%</td>
<td>FEMALE: 34.3%</td>
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<td>HISPANIC: 1.0%</td>
<td>18: 24.8%</td>
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</tr>
<tr>
<td>ASIAN: 1.0%</td>
<td>19: 14.3%</td>
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<tr>
<td>OTHER: 1.8%</td>
<td>20: 10.5%</td>
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* data taken from pretest questionnaire

N = 105
Table #2
Categorical Item Responses *

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<th>Question</th>
<th>Response</th>
<th>Percentage</th>
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<td>Would you work for MCC, INC. again?</td>
<td>yes</td>
<td>69.6%</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>6.5%</td>
</tr>
<tr>
<td></td>
<td>don't know</td>
<td>19.6%</td>
</tr>
<tr>
<td></td>
<td>other</td>
<td>4.3%</td>
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<td>Would you recommend MCC, INC. to a friend?</td>
<td>yes</td>
<td>93.5%</td>
</tr>
<tr>
<td></td>
<td>no</td>
<td>2.2%</td>
</tr>
<tr>
<td></td>
<td>don't know</td>
<td>2.2%</td>
</tr>
<tr>
<td></td>
<td>other</td>
<td>2.1%</td>
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<tr>
<td>How satisfied are you with the work that your crew accomplished?</td>
<td>very satisfied</td>
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<td>mostly satisfied</td>
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<td></td>
<td>no opinion</td>
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<tr>
<td></td>
<td>very dissatisfied</td>
<td>4.3%</td>
</tr>
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<td></td>
<td>other</td>
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<td>Do you feel that you gained skills that will help you in the future?</td>
<td>definitely</td>
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<td></td>
<td>perhaps</td>
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<td>I doubt it</td>
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<td>I doubt it</td>
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<td>other</td>
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<td>Did you feel that you were really a part of your crew?</td>
<td>really a part of my crew</td>
<td>67.4%</td>
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<td></td>
<td>included in most ways</td>
<td>20.7%</td>
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<tr>
<td></td>
<td>sometimes yes, sometimes no</td>
<td>4.3%</td>
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<tr>
<td></td>
<td>don't really feel like I belong</td>
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N = 92
* data taken from post-test questionnaires
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* = significant at the .05 level
N = 82 matched-pairs
df = 81
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## TABLE #4 - CONTINUED

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<tr>
<th>INDEX:</th>
<th>EDUC</th>
<th>SQCRS</th>
<th>TOLER</th>
<th>COMM</th>
<th>WORK</th>
<th>SELF</th>
<th>COHES</th>
<th>CLOSE</th>
<th>CREW</th>
<th>SEMA</th>
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<tbody>
<tr>
<td>(max. score)</td>
<td>45.00</td>
<td>40.00</td>
<td>30.00</td>
<td>15.00</td>
<td>20.00</td>
<td>30.00</td>
<td>45.00</td>
<td>10.00</td>
<td>40.00</td>
<td>56.00</td>
</tr>
</tbody>
</table>

**CREW #**

(BEFORE SCORE)

(AFTER SCORE)

<table>
<thead>
<tr>
<th>CREW #</th>
<th>(BEFORE SCORE)</th>
<th>(AFTER SCORE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>#11-SUM</td>
<td>40.00</td>
<td>32.00</td>
</tr>
<tr>
<td>#12-SUM</td>
<td>34.20</td>
<td>33.20</td>
</tr>
<tr>
<td>#13-SUM</td>
<td>-----</td>
<td>'SPECIAL CREW' EXCLUDED FROM ANALYSIS</td>
</tr>
<tr>
<td>#14-SUM</td>
<td>32.40</td>
<td>27.80</td>
</tr>
<tr>
<td>#15-SIX</td>
<td>37.25</td>
<td>36.00</td>
</tr>
<tr>
<td>#16-SUM</td>
<td>37.33</td>
<td>32.00</td>
</tr>
</tbody>
</table>

#17-SUM |

----- | NOT ENOUGH MATCHED-PAIRS FOR ANALYSIS

**SUM** - Summer (8 week) crew

**SUMAI** - Summer American Indian crew

**SIX** - Six month crew

**N** = 80 matched-pairs

* = significant at the .05 level
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Working for MCC helped me to like people that are different than me.</td>
<td>92.5</td>
<td>2.5</td>
<td>5.0</td>
</tr>
<tr>
<td>2. Looking back, I really liked working with my MCC crew.</td>
<td>100.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>3. I believe I grew as a person during my time with MCC.</td>
<td>95.0</td>
<td>0.0</td>
<td>5.0</td>
</tr>
<tr>
<td>4. In my opinion, MCC doesn't really have much to do with helping the environment.</td>
<td>0.0</td>
<td>92.5</td>
<td>7.5</td>
</tr>
<tr>
<td>5. I don't think our crew got much done last summer.</td>
<td>2.5</td>
<td>92.5</td>
<td>5.0</td>
</tr>
<tr>
<td>6. It would be fun to have a reunion with some of the other MCC crews sometime.</td>
<td>87.5</td>
<td>2.5</td>
<td>10.0</td>
</tr>
<tr>
<td>7. I believe the environment can take care of itself.</td>
<td>10.0</td>
<td>72.5</td>
<td>17.5</td>
</tr>
<tr>
<td>8. While working for MCC, I learned that even people from different backgrounds can learn to like each other when they have to work together.</td>
<td>85.0</td>
<td>5.0</td>
<td>10.0</td>
</tr>
<tr>
<td>9. I would feel more comfortable applying for a job now than I did before working for MCC.</td>
<td>77.5</td>
<td>10.0</td>
<td>12.5</td>
</tr>
<tr>
<td>10. I have kept in touch with at least one member of my MCC crew since last summer.</td>
<td>65.0</td>
<td>35.0</td>
<td>0.0</td>
</tr>
<tr>
<td>11. Working for MCC has made me more aware of nature.</td>
<td>80.0</td>
<td>7.5</td>
<td>12.5</td>
</tr>
<tr>
<td>12. I would rather work only with people that are pretty much like me.</td>
<td>5.0</td>
<td>82.5</td>
<td>2.5</td>
</tr>
<tr>
<td>13. I didn't feel very safe working with my crew last summer.</td>
<td>2.5</td>
<td>92.5</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%yes</td>
<td>%no</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>------</td>
<td>-----</td>
</tr>
<tr>
<td>14. I feel that the work we did last summer is of lasting value.</td>
<td></td>
<td>85.0</td>
<td>5.0</td>
</tr>
<tr>
<td>15. I never did feel like a part of my MCC crew.</td>
<td></td>
<td>0.0</td>
<td>95.0</td>
</tr>
<tr>
<td>16. The work I did for MCC made me feel like I was helping the environment.</td>
<td></td>
<td>70.0</td>
<td>20.0</td>
</tr>
<tr>
<td>17. Over all, my experience with MCC was not all that good.</td>
<td></td>
<td>0.0</td>
<td>95.0</td>
</tr>
<tr>
<td>18. While working for MCC, I learned to enjoy helping people who really need it.</td>
<td></td>
<td>70.0</td>
<td>10.0</td>
</tr>
<tr>
<td>19. I wish we had gotten more recognition from the work we did.</td>
<td></td>
<td>40.0</td>
<td>40.0</td>
</tr>
<tr>
<td>20. During the summer, my crew leader taught me a lot.</td>
<td></td>
<td>77.5</td>
<td>10.0</td>
</tr>
<tr>
<td>21. I miss being in my MCC crew.</td>
<td></td>
<td>77.5</td>
<td>7.5</td>
</tr>
<tr>
<td>22. MCC provided me a job but that's about it.</td>
<td></td>
<td>5.0</td>
<td>87.5</td>
</tr>
<tr>
<td>23. I think my self-confidence is higher now than before working for MCC.</td>
<td></td>
<td>70.0</td>
<td>15.0</td>
</tr>
</tbody>
</table>

**Have your feelings about MCC changed since last summer?**

- Yes, I feel more positive towards MCC. 64%
- Yes, I feel more negative towards MCC. 0%
- No, I feel the same about MCC. 34%
- Other. 2%

N = 44
### Table #6 -- Open-ended Questionnaire Responses

**THINGS LEARNED OVER THE SUMMER (top responses):**
- how to work with others (i.e., tolerating other corpsmembers)
- trail construction and maintenance (all aspects)
- CPR and first aid
- tool use and safety (e.g., Pulaskies and chain saws)
- about nature (e.g., plants, flowers, trees and wild animals)
- endurance, patience, responsibility

**FAVORITE EDUCATION (top responses)**
- rock climbing (by far the favorite)
- CPR and first aid
- end-of-season gathering at Birch Creek
- Indian culture and reservation history
- tracking skills

**FAVORITE PART OF THE MCC EXPERIENCE (top responses)**
- making new friends
- working with others
- meeting new people
- having education at work
- end-of-season gathering at Birch Creek
- working outdoors
- gaining a sense of accomplishment
- traveling

**LEAST FAVORITE PART OF THE MCC EXPERIENCE (top responses)**
- getting up in the morning
- the rain
- boring projects
- the paper work
- arguing and fighting in the crew
- waiting around to work (i.e., unorganized sponsors)

**FUTURE SKILLS LEARNED DURING THE PROGRAM (top responses)**
- being able to work with others
- experience with various tools
- leadership experience
- knowing first aid and CPR
- trail & construction skills
- better communication skills
- learning responsibility
APPENDIX A -- METHODOLOGY

Multiple Methods

Social science has generally recognized the particular limitations and affects that any given methodology may have on the outcome of research. Different methods tend to measure different aspects of a phenomenon (Denzin, 1970). For instance, questionnaires are often used to measure attitudes, but merely allow assessments of attitudes at one point in time. The processes involved in attitude formation are not typically addressed with this method. Conversely, interviews lend insight into the processes of attitude formation, but specific outcomes are difficult to quantify, and thus cannot be generalized to the whole group. There is, in fact, an inherent danger of research findings being mere reflections of the methodology, rather than true reflections of what is going on (Babbie, 1989). The use of multiple methods, or "triangulation," is one way to address this problem. Measuring the same phenomenon using different methods is believed to make a better research strategy. Therefore, for this evaluation both quantitative and qualitative methods were utilized to better understand and evaluate corpsmember development within MCC Inc.

Quantitative Data Collection

Survey questionnaire research is a popular method used in program evaluation. It is particularly useful in providing demographic data describing the population, but can render explanatory findings as well (Babbie, 1989). This evaluation made use of three survey questionnaires: a pretest, posttest, and a follow-up survey (see section on evaluation design). Funding limitations did not allow for implementation of a control or comparison group, which is a necessary component in true scientific research; thus, the design used for this evaluation was not scientific, but considered "quasi-experimental." Regardless, the survey questionnaires provided a good deal of useful information. See Appendix B for specimens of the questionnaires used.

The survey questionnaires were designed specifically for the summer program. However, six month corpsmembers took the surveys along with the summer corpsmembers, even though they had already been working prior to, and continued to work after the completion of the summer program (they were not involved in the follow-up survey). Statistical analysis was limited to corpsmembers that participated in both the pretest and the posttest survey. Pretest questionnaires completed by corpsmembers who had quit, or had been terminated, were not included in the analysis. Furthermore, it was determined that one crew, consisting of physically impaired members, should be excluded from the analysis, so as not to affect the combined results of the more "typical" crews.

Survey Administration: Logistical limitations required the assistance of crew leaders in survey administration. During the pre-season crew leader training, crew leaders received an orientation on the nature of the evaluation, and were told how to properly administer the questionnaires. Each crew leader gave the pretest to their crew during the first week of the summer program (June 14 - 18). To maintain consistency, crew leaders also administered the posttest questionnaires at the end-of-season gathering in Dillon (August 12).
Each questionnaire was coded so that the pretest and posttest could be individually matched for statistical analysis. Every effort was made to ensure corpsmember confidentiality. Crew leaders did know the individual codes in order to give the appropriate questionnaire to each corpsmember; however, neither the crew leaders nor any member of MCC Inc. had access to the completed questionnaires. Corpsmembers sealed their completed questionnaires in blank envelopes, which were returned to the principal investigator. Corpsmembers were assured of their confidentiality and were encouraged to answer honestly and openly.

Coding procedures were followed incorrectly by two crew leaders, so individual matching was not possible for these crews. Instead, pretests were randomly matched with posttests to form "matched" pairs. Furthermore, around twenty corpsmembers who had taken the pretest, but were not present at the end-of-season gathering in Dillon (where the posttest was given) received the posttest by mail with a stamped return envelope. Ten of these were returned. In total, sixteen crews participated in the statistical analysis yielding a total of 82 individually matched pairs.

Approximately three months following completion of the summer program, follow-up questionnaires were mailed to 67 summer corpsmembers, who had successfully completed the eight week program. Over 65 percent were returned, which is considered a good return rate. These measures were used as indicators of the longevity of perceived corpsmember development, and to assess whether attitudes had changed since the time of the program's completion.

**Statistical Analysis:** Statistical analysis of the questionnaires included both descriptive statistics (i.e., percentages) and a matched-pair t-test, which was employed to assess the differences between the pretest and posttest scores. Attitude scales used on the pretest and posttest were identical so that the differences between the two scores could be attributed to the program. Descriptive elements of the posttests (i.e., categorical item responses) were used to determine levels of satisfaction within the program and how corpsmembers perceived their experience in terms of percentages. Follow-up surveys also provided descriptive statistics, which allowed assessments of attitudes after the program was over. Items on this survey were different from those used on the pretest and posttest (due to the problem of "testing" effects), but were designed to measure similar aspects of corpsmember development as before.

**Qualitative Data Collection**

The strengths of qualitative methods, i.e., interviews and field observations, lie in their ability to consider the processes and interactions involved in corpsmember development. Results were "grounded" in the world in which the corpsmembers existed; responses tended to be more meaningful representations of MCC crew life. However, since not every corpsmember and crew leader could be interviewed, and since responses were based on a more subjective questions, this data could not be generalized to the entire program. Corpsmember may have perceived some things differently than others, yet many similarities were found to exist among both corpsmembers and crew leaders. Through the interviews, specific problems were identified, as well as some of the more successful
elements of the program. The qualitative component of this evaluation also consisted of
open-ended questionnaire items, in which corpsmembers wrote in their own responses.

**Interviews:** Interviews and observations were conducted on ten job sites and at the Dillon
retreat. In total, 9 crew leaders and 29 corpsmembers were interviewed over the summer.
Interviews were taped and subsequently transcribed; they varied in length from 10 minutes
to 2 hours. Corpsmembers were told the purpose of the evaluation, and while this may
have influenced some of their responses, knowing the nature of the study was intended to
help respondents share ideas and experiences that were relevant to the investigation.

Corpmember and crew leader interviews were "unstructured," that is, questions were
directed toward their experiences and feelings relating to corpsmember development, but
specific questions were not asked to every respondent. Respondents were encouraged to
bring up any topic related to corpsmember development and the program that they felt
was important or meaningful to them. This was intended to provide a better understanding
of the processes involving corpsmember development, as told from the point of view of
the people directly involved.

**Field Observations:** Field observations of the work sites allowed assessment of not only
the type of work and activities corpsmembers were involved in, but how corpsmembers
interacted within their crew. It had been determined that corpsmembers were supposed to
be working in an atmosphere that was safe and production-oriented -- an environment
conducive to development. Field observations were intended to assess this. Corpmember
education was also observed, including two half-day educational seminars, as well as more
impromptu education. These observations allowed assessment of what corpsmembers
were being exposed to and how they reacted to it.

**Limitations of Research Methods**

While both methodologies were useful in understanding and measuring MCC Inc.'s goal of
corpmember development, all methods have limitations that must be pointed out. In
general, quantitative methods have the advantage of being more "reliable." By using
standardized questionnaires and making measurements at specific times, other researchers
should be able to replicate the study and find similar results. Moreover, these methods
result in information that can be quantified and thus more easily generalized to the entire
program. Qualitative methods, on the other hand, while not as reliable, tend to be stronger
in terms of "validity." That is, the results are more meaningful in terms of the specific topic
of research (MCC Inc., as opposed to another youth program). Findings are thus more
"real"; however, they cannot usually be generalized: to other corpsmembers, other crews,
or to the rest of the program. Specific weaknesses of the design used for this evaluation
are discussed further in Appendix D.
APPENDIX B -- SURVEY QUESTIONNAIRES:

Pretest -- original green, double-sided
Posttest -- original yellow, double-sided
Follow-up -- original blue, double-sided
Thank you for participating in this survey. How you feel is very important to us. What you have to say is valuable and will help make this program better for you and others like you. Participation is voluntary, that is, you do not have to fill out this form if you do not wish to. If you feel uncomfortable about answering a question, leave it blank or ask your crew leader for help.

All of your answers will be kept confidential; you will not be identified to any member of this organization and your job will not be affected in any way, regardless of how you answer. Please be honest, we really want to know how you feel so that we can continue to make this program better.

Thank you for your help!

To start with, please tell us something about yourself...

1. Please list your favorite activities, such as sports or hobbies that you like to do in your spare time (list your top 5).

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. What is your sex?
   □ male
   □ female

3. How old are you?

___________
4. Please check each area below that you have some knowledge about or that you would feel comfortable doing today (check all that apply):

- fire fighting
- bookkeeping
- supervising a work crew
- search and rescue
- basic auto care
- CPR
- heavy equipment operation
- farming
- carpentry
- electronics
- working with horses
- swimming instruction
- small equipment and tool use
- photography
- landscaping
- first aid
- typing
- working on computers
- construction
- tending plants and/or trees
- baby-sitting
- other skills you have, please tell us

Below are a number of statements about different topics. They were gathered from different people and they reflect a lot of different opinions. There are no 'right' or 'wrong' answers. Lots of people agree or disagree with each item. Circle the answer that tells best how you feel about each statement: either if you find the statement true for you (or not true) or if you agree or disagree with the statement.

The following statements are about how some people feel about education and about getting a job. Circle the answer that best fits how you feel.

1. When it comes to education, I can go as far as I want.

2. I have all the intelligence I need to finish my education.

3. I get mostly bad breaks when it comes to education.
4. When I have trouble in school, it's because the teachers or staff don't like me.

very true for me  somewhat true for me  don't know if this is true or not  not really true for me  not true at all for me  I don't understand the statement

5. If I don't finish my education, it's because I haven't had the chances others have had.

very true for me  somewhat true for me  don't know if this is true or not  not really true for me  not true at all for me  I don't understand the statement

6. If I want to get a good job, I have to know the right people.

very true for me  somewhat true for me  don't know if this is true or not  not really true for me  not true at all for me  I don't understand the statement

7. I can get a good job if I try hard enough.

very true for me  somewhat true for me  don't know if this is true or not  not really true for me  not true at all for me  I don't understand the statement

8. Getting a good job is mostly a matter of luck.

very true for me  somewhat true for me  don't know if this is true or not  not really true for me  not true at all for me  I don't understand the statement

9. I would not feel comfortable applying for a job at this point in my life.

very true for me  somewhat true for me  don't know if this is true or not  not really true for me  not true at all for me  I don't understand the statement

The following sentences are about how different people feel about various issues. Remember, there are no right or wrong answers. Circle the answer that best describes how you feel.

10. Taking care of people who are having difficulty caring for themselves is everyone's responsibility, including mine

I strongly agree  I sort of agree  I have no opinion on this  I sort of disagree  I strongly disagree  I don't understand the statement

11. When it comes down to it, people's jobs should always come first before the environment.

I strongly agree  I sort of agree  I have no opinion on this  I sort of disagree  I strongly disagree  I don't understand the statement

12. Keeping the environment safe and clean is something that I feel personally responsible for.

I strongly agree  I sort of agree  I have no opinion on this  I sort of disagree  I strongly disagree  I don't understand the statement
13. The problems of pollution and toxic waste are not something for which individuals, like me, are responsible for.

- I strongly agree
- I sort of agree
- I have no opinion
- I sort of disagree
- I strongly disagree
- I don't understand the statement

14. Recycling cans, bottles, and other things is too much of a hassle for me.

- I strongly agree
- I sort of agree
- I have no opinion
- I sort of disagree
- I strongly disagree
- I don't understand the statement

15. Helping a person in need is something people should do for everybody, not just only for friends or relatives.

- I strongly agree
- I sort of agree
- I have no opinion
- I sort of disagree
- I strongly disagree
- I don't understand the statement

16. Soil erosion is a problem in Montana.

- I strongly agree
- I sort of agree
- I have no opinion
- I sort of disagree
- I strongly disagree
- I don't understand the statement

17. Campers don't have to worry about what they do to their campsite because people are paid to come in and fix things up.

- I strongly agree
- I sort of agree
- I have no opinion
- I sort of disagree
- I strongly disagree
- I don't understand the statement

The statements in this section are about how people feel about others. Circle the answer that best fits how you feel. Please answer honestly.

18. I don't think I could be close friends with a person with disabilities.

- I strongly agree
- I sort of agree
- I have no opinion
- I sort of disagree
- I strongly disagree
- I don't understand the statement

19. A person who takes charity even though he or she could work shouldn't be allowed to vote.

- I strongly agree
- I sort of agree
- I have no opinion
- I sort of disagree
- I strongly disagree
- I don't understand the statement

20. It would not bother me to work for a person whose race or culture was different from mine.

- I strongly agree
- I sort of agree
- I have no opinion
- I sort of disagree
- I strongly disagree
- I don't understand the statement

21. Men and women can do most jobs equally well.

- I strongly agree
- I sort of agree
- I have no opinion
- I sort of disagree
- I strongly disagree
- I don't understand the statement
22. I would not make friends with a person who had very different manners and clothes from most of my other friends.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

23. People of different races or ethnic groups should get together at parties and social events.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

The following sentences are about how people communicate with each other. Circle the answer that best fits how you feel about yourself.

24. It's hard to talk to someone you don't know.

very true somewhat don't know if this not really true not true at all for me I don't understand the statement for me for me for me for me for me the statement

25. I am usually pretty good at describing things in writing.

very true somewhat don't know if this not really true for me not true at all for me I don't understand the statement for me

26. People find it hard to figure me out from what I say.

very true somewhat don't know if this not really true not true at all for me I don't understand the statement for me

These statements are about how different people feel about the work they do. There are no right or wrong answers, so please answer honestly.

27. At work I try as hard as I can to do my best.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

28. People only work because they have to, either to get money to live on or to do things they enjoy.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

29. It bothers me when I don't do something well.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement
30. I don't really care how well I do at work.

I strongly agree  I sort of agree  I have no opinion  I sort of disagree  I strongly disagree  I don't understand
the statement

Now we'd like to know a little about how you feel about yourself and your life. Circle the answer that best describes how you feel on most days.

31. I get a lot of fun out of life.

very true for me  somewhat true for me  don't know if this true or not for me  not really true for me  not true at all for me  I don't understand the statement

32. Mostly I think I am quite a happy person.

very true for me  somewhat true for me  don't know if this true or not for me  not really true for me  not true at all for me  I don't understand the statement

33. Other people seem to be happier than I am.

very true for me  somewhat true for me  don't know if this true or not for me  not really true for me  not true at all for me  I don't understand the statement

34. I feel apart from everyone, even when I am around friends.

very true for me  somewhat true for me  don't know if this true or not for me  not really true for me  not true at all for me  I don't understand the statement

35. I've had more than my share of troubles.

very true for me  somewhat true for me  don't know if this true or not for me  not really true for me  not true at all for me  I don't understand the statement

36. The future looks very bright to me.

very true for me  somewhat true for me  don't know if this true or not for me  not really true for me  not true at all for me  I don't understand the statement

These sentences talk about how people feel about working with other people in a small group. Circle the answer that fits best with how you feel.

37. I won't be able to trust the other people in my work group.

I strongly agree  I sort of agree  I have no opinion  I sort of disagree  I strongly disagree  I don't understand the statement

38. Working on a job with others will be more fun than working alone.

I strongly agree  I sort of agree  I have no opinion  I sort of disagree  I strongly disagree  I don't understand the statement
39. I expect that my work group will get along well.

I strongly agree  I sort of agree  I have no opinion on this  I sort of disagree  I strongly disagree  I don't understand the statement

40. Given the choice, I would rather work alone on a job.

I strongly agree  I sort of agree  I have no opinion on this  I sort of disagree  I strongly disagree  I don't understand the statement

41. Supervisors are not of much help in a small work group.

I strongly agree  I sort of agree  I have no opinion on this  I sort of disagree  I strongly disagree  I don't understand the statement

42. I will feel safer working in my crew than I would working alone.

I strongly agree  I sort of agree  I have no opinion on this  I sort of disagree  I strongly disagree  I don't understand the statement

43. It wouldn't make any difference to me what group they put me in.

I strongly agree  I sort of agree  I have no opinion on this  I sort of disagree  I strongly disagree  I don't understand the statement

44. I want to work in a group that I can really be proud of.

I strongly agree  I sort of agree  I have no opinion on this  I sort of disagree  I strongly disagree  I don't understand the statement

45. I don't expect to feel much pride in the work finished by my group.

I strongly agree  I sort of agree  I have no opinion on this  I sort of disagree  I strongly disagree  I don't understand the statement

Finally, we would like to know a little bit more about you...

1. What is your race?
   - White
   - Native American
   - Hispanic
   - Black
   - Asian
   - other, please tell us

2. Were you in school this last spring?
   - no
   - yes
   if yes, what grade in school?

OVER
3. Where do you live most of the time?
□ inside a town or city
□ in the country
□ just outside a town or city
□ not sure

4. Who do you usually live with? (check all that apply)
□ one parent
□ both parents
□ friend or friends
□ your husband or wife
□ alone
□ relative or relatives
□ foster home
□ other, please tell us

5. How would you rate your overall physical fitness, as of today?
□ very good
□ okay
□ sometimes good and sometimes bad
□ often poor
□ very poor

6. Have you ever worked with a small group of people on a job before?
□ no
□ can't remember
□ yes, please tell us briefly what you did.

7. Mostly, how do you see yourself doing in school?
□ always very well
□ mostly pretty well
□ sometimes well and sometimes poor
□ mostly fairly poor
□ always very poor

8. Sometimes people tend to have trouble in school. If you do, please check the areas that give you the most trouble, that is, the areas that seem the hardest for you (check as may apply to you):
□ reading
□ homework
□ taking tests
□ writing papers
□ math
□ current events
□ library work
□ speaking in front of the class
□ listening to the teacher
□ working in groups
□ other, please tell us

9. In general, how do you feel about the agency that you are working for (the sponsor of the project you are doing)?
□ I don't like this agency much
□ I really don't have an opinion on this
□ I like this agency
□ I don't know who the agency is
□ other, please tell us

Thank you again for your help! Good luck this summer.
Montana Conservation Corps
Summer 1993
Corpsmember Evaluation

Survey Questionnaire
To start with, please tell us a little bit about your summer...

1. Please list at least 5 things that you learned over the summer (or during your time in the program) that you didn't know before.

2. What was (or has been so far) your favorite education during the program?
Below are a number of statements about different topics. They were gathered from different people and they reflect a lot of different opinions. There are no 'right' or 'wrong' answers. Lots of people agree or disagree with each item. Circle the answer that tells best how you feel about each statement: either if you find the statement true for you (or not true) or if you agree or disagree with the statement.

The following statements are about how some people feel about education and about getting a job. Circle the answer that best fits how you feel.

1. When it comes to education, I can go as far as I want.

2. I have all the intelligence I need to finish my education.

3. I get mostly bad breaks when it comes to education.
4. When I have trouble in school, it's because the teachers or staff don't like me.

very true somewhat don't know if this not really true not true at I don't understand for me true for me is true or not for me for me all for me the statement

5. If I don't finish my education, it's because I haven't had the chances others have had.

very true somewhat don't know if this not really true not true at I don't understand for me true for me is true or not for me for me all for me the statement

6. If I want to get a good job, I have to know the right people.

very true somewhat don't know if this not really true not true at I don't understand for me true for me is true or not for me for me all for me the statement

7. I can get a good job if I try hard enough.

very true somewhat don't know if this not really true not true at I don't understand for me true for me is true or not for me for me all for me the statement

8. Getting a good job is mostly a matter of luck.

very true somewhat don't know if this not really true not true at I don't understand for me true for me is true or not for me for me all for me the statement

9. I would not feel comfortable applying for a job at this point in my life.

very true somewhat don't know if this not really true not true at I don't understand for me true for me is true or not for me for me all for me the statement

The following sentences are about how different people feel about various issues. Remember, there are no right or wrong answers. Circle the answer that best describes how you feel.

10. Taking care of people who are having difficulty caring for themselves is everyone's responsibility, including mine.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

11. When it comes down to it, people's jobs should always come first before the environment.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

12. Keeping the environment safe and clean is something that I feel personally responsible for.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement
13. The problems of pollution and toxic waste are not something for which individuals, like me, are responsible for.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

14. Recycling cans, bottles, and other things is too much of a hassle for me.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

15. Helping a person in need is something people should do for everybody, not just only for friends or relatives.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

16. Soil erosion is a problem in Montana.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

17. Campers don't have to worry about what they do to their campsite because people are paid to come in and fix things up.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

The statements in this section are about how people feel about others. Circle the answer that best fits how you feel. Please answer honestly.

18. I don't think I could be close friends with a person with disabilities.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

19. A person who takes charity even though he or she could work shouldn't be allowed to vote.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

20. It would not bother me to work for a person whose race or culture was different from mine.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement

21. Men and women can do most jobs equally well.

I strongly agree I sort of agree I have no opinion I sort of disagree I strongly disagree I don't understand the statement
22. I would not make friends with a person who had very different manners and clothes from most of my other friends.

<table>
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<tr>
<th></th>
<th>I strongly agree</th>
<th>I sort of agree</th>
<th>I have no opinion on this</th>
<th>I sort of disagree</th>
<th>I strongly disagree</th>
<th>I don't understand the statement</th>
</tr>
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</table>

23. People of different races or ethnic groups should get together at parties and social events.

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<th></th>
<th>I strongly agree</th>
<th>I sort of agree</th>
<th>I have no opinion on this</th>
<th>I sort of disagree</th>
<th>I strongly disagree</th>
<th>I don't understand the statement</th>
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</table>

The following sentences are about how people communicate with each other. Circle the answer that best fits how you feel about yourself.

24. It's hard to talk to someone you don't know.

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<tr>
<th></th>
<th>very true for me</th>
<th>somewhat true for me</th>
<th>don't know if this is true or not</th>
<th>not really true for me</th>
<th>not true at all for me</th>
<th>I don't understand the statement</th>
</tr>
</thead>
</table>

25. I am usually pretty good at describing things in writing.

<table>
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<tr>
<th></th>
<th>very true for me</th>
<th>somewhat true for me</th>
<th>don't know if this is true or not</th>
<th>not really true for me</th>
<th>not true at all for me</th>
<th>I don't understand the statement</th>
</tr>
</thead>
</table>

26. People find it hard to figure me out from what I say.

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<thead>
<tr>
<th></th>
<th>very true for me</th>
<th>somewhat true for me</th>
<th>don't know if this is true or not</th>
<th>not really true for me</th>
<th>not true at all for me</th>
<th>I don't understand the statement</th>
</tr>
</thead>
</table>

These statements are about how different people feel about the work they do. There are no right or wrong answers, so please answer honestly.

27. At work I try as hard as I can to do my best.

<table>
<thead>
<tr>
<th></th>
<th>I strongly agree</th>
<th>I sort of agree</th>
<th>I have no opinion on this</th>
<th>I sort of disagree</th>
<th>I strongly disagree</th>
<th>I don't understand the statement</th>
</tr>
</thead>
</table>

28. People only work because they have to, either to get money to live on or to do things they enjoy.

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<tr>
<th></th>
<th>I strongly agree</th>
<th>I sort of agree</th>
<th>I have no opinion on this</th>
<th>I sort of disagree</th>
<th>I strongly disagree</th>
<th>I don't understand the statement</th>
</tr>
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</table>

29. It bothers me when I don't do something well.

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<th></th>
<th>I strongly agree</th>
<th>I sort of agree</th>
<th>I have no opinion on this</th>
<th>I sort of disagree</th>
<th>I strongly disagree</th>
<th>I don't understand the statement</th>
</tr>
</thead>
</table>

30. I don't really care how well I do at work.

<table>
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<tr>
<th></th>
<th>I strongly agree</th>
<th>I sort of agree</th>
<th>I have no opinion on this</th>
<th>I sort of disagree</th>
<th>I strongly disagree</th>
<th>I don't understand the statement</th>
</tr>
</thead>
</table>
Now we'd like to know a little about how you feel about yourself and your life. Circle the answer that best describes how you feel on most days.

31. I get a lot of fun out of life.

| very true for me | somewhat true for me | don't know if this is true or not for me | not really true for me | not true at all for me | I don't understand the statement |

32. Mostly I think I am quite a happy person.

| very true for me | somewhat true for me | don't know if this is true or not for me | not really true for me | not true at all for me | I don't understand the statement |

33. Other people seem to be happier than I am.

| very true for me | somewhat true for me | don't know if this is true or not for me | not really true for me | not true at all for me | I don't understand the statement |

34. I feel apart from everyone, even when I am around friends.

| very true for me | somewhat true for me | don't know if this is true or not for me | not really true for me | not true at all for me | I don't understand the statement |

35. I've had more than my share of troubles.

| very true for me | somewhat true for me | don't know if this is true or not for me | not really true for me | not true at all for me | I don't understand the statement |

36. The future looks very bright to me.

| very true for me | somewhat true for me | don't know if this is true or not for me | not really true for me | not true at all for me | I don't understand the statement |

These sentences talk about how you feel about working with other people in a small group. Circle the answer that fits best with how you feel.

37. I wasn't really able to trust the other people in my work group.

| I strongly agree | I sort of agree | I have no opinion on this | I sort of disagree | I strongly disagree | I don't understand the statement |

38. Working on a job with others is more fun than working alone.

| I strongly agree | I sort of agree | I have no opinion on this | I sort of disagree | I strongly disagree | I don't understand the statement |

39. My work group gets along well.

| I strongly agree | I sort of agree | I have no opinion on this | I sort of disagree | I strongly disagree | I don't understand the statement |

40. Given the choice, I would rather work alone on a job.

| I strongly agree | I sort of agree | I have no opinion on this | I sort of disagree | I strongly disagree | I don't understand the statement |
41. Supervisors are not of much help in a small work group.

I strongly agree I sort of agree I have no opinion on this I sort of disagree I strongly disagree I don't understand the statement

42. I feel safer working in a crew like mine than I do working alone.

I strongly agree I sort of agree I have no opinion on this I sort of disagree I strongly disagree I don't understand the statement

43. It wouldn't make any difference to me what group they put me in.

I strongly agree I sort of agree I have no opinion on this I sort of disagree I strongly disagree I don't understand the statement

44. I am really proud of my group.

I strongly agree I sort of agree I have no opinion on this I sort of disagree I strongly disagree I don't understand the statement

45. I don't really feel much pride in the work finished by my group.

I strongly agree I sort of agree I have no opinion on this I sort of disagree I strongly disagree I don't understand the statement

This section deals with how you feel about your crew. Put an 'X' on the line between the two words or statements at the mark which best describes how you see your crew. For example: SUNNY |-------1-------1-------1-------1-------1-------1| CLOUDY = a mostly cloudy day.

1. Cold |----------|----------|----------|----------|----------|----------| Warm

2. Unpleasant |----------|----------|----------|----------|----------|----------| Pleasant

3. Dislikeable |----------|----------|----------|----------|----------|----------| Likeable

4. Courteous |----------|----------|----------|----------|----------|----------| Discourteous

5. Undependable |----------|----------|----------|----------|----------|----------| Dependable

6. Friendly |----------|----------|----------|----------|----------|----------| Unfriendly

7. Bold |----------|----------|----------|----------|----------|----------| Cautious

8. Funny |----------|----------|----------|----------|----------|----------| Serious

9. On a scale of 1 to 10, how close was your crew? (1- not close at all; 10- very close)

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
10. What was (is) the level of performance expected of you by your group?

Very little expected of me | ————| ————| ————| ————| ————| A great deal expected of me

Circle the answer that best describes how you feel about your crew.

1. I trust this group completely.
   - I strongly agree
   - I sort of agree
   - I have no opinion on this
   - I sort of disagree
   - I strongly disagree
   - I don't understand the statement

2. My crew members do not really understand each other.
   - I strongly agree
   - I sort of agree
   - I have no opinion on this
   - I sort of disagree
   - I strongly disagree
   - I don't understand the statement

3. I like this group much more than other groups I have worked with.
   - I strongly agree
   - I sort of agree
   - I have no opinion on this
   - I sort of disagree
   - I strongly disagree
   - I don't understand the statement

4. I really enjoy this crew.
   - I strongly agree
   - I sort of agree
   - I have no opinion on this
   - I sort of disagree
   - I strongly disagree
   - I don't understand the statement

5. This group is not very close at all.
   - I strongly agree
   - I sort of agree
   - I have no opinion on this
   - I sort of disagree
   - I strongly disagree
   - I don't understand the statement

6. The members of this group share a lot in common.
   - I strongly agree
   - I sort of agree
   - I have no opinion on this
   - I sort of disagree
   - I strongly disagree
   - I don't understand the statement

7. There is often anger or hostility among the members of my crew.
   - I strongly agree
   - I sort of agree
   - I have no opinion on this
   - I sort of disagree
   - I strongly disagree
   - I don't understand the statement

8. We (the crew) share some private ways of communicating with each other.
   - I strongly agree
   - I sort of agree
   - I have no opinion on this
   - I sort of disagree
   - I strongly disagree
   - I don't understand the statement
For this section, circle the response that best describes how you see your crew in comparison to the others.

**In comparison to the other MCC crews.**

1. my crew gets along together ________.
   - Much better
   - Better
   - About the same
   - Somewhat less
   - Worse

2. members of my crew help each other out on the job ________.
   - Much better
   - Better
   - About the same
   - Somewhat less
   - Worse

3. members of my crew seem to share common beliefs ________.
   - Much better
   - Better
   - About the same
   - Somewhat less
   - Worse

4. members of my crew tolerate deviant (different) members ________.
   - Much better
   - Better
   - About the same
   - Somewhat less
   - Worse

5. the sense of security shared within my crew is ________.
   - Much better
   - Better
   - About the same
   - Somewhat less
   - Worse

6. my crew sticks together ________.
   - Much better
   - Better
   - About the same
   - Somewhat less
   - Worse

**Just a few more questions...**

1. Would you like to work as an MCC corpsmember again?
   - yes
   - no
   - uncertain at this time
   - other, please tell us

2. Would you recommend MCC to a friend?
   - no
   - yes
   - don't know
   - other, please tell us

3. All in all, how satisfied are you with your crew leader?
   - very satisfied
   - mostly satisfied
   - don't really have an opinion on this
   - often dissatisfied
   - very dissatisfied
   - other, please tell us
4. All in all, how satisfied are you with your assistant crew leader?  
- very satisfied  
- mostly satisfied  
- don't really have an opinion on this  
- very dissatisfied  
- often dissatisfied  
- other, please tell us  

5. All in all, how satisfied are you with the work that your crew accomplished?  
- very satisfied  
- mostly satisfied  
- don't really have an opinion on this  
- often dissatisfied  
- very dissatisfied  
- other, please tell us  

6. How would you rate your overall physical fitness, as of today?  
- very good  
- okay  
- sometimes good and sometimes bad  
- often poor  
- very poor  

7. Briefly, what was (is) your favorite part of your MCC experience?  

8. What was (is) your least favorite part?  

9. Do you feel that you have gained any skills that will help you in the future?  
- I doubt it  
- Don't know  
- Perhaps  
- Definitely, for example:  

10. In general, how do you feel about the agency that you worked (or are working) for (the sponsor of your projects)?  
- I don't like this agency much  
- I really don't have an opinion on this  
- I like this agency  
- I don't know who the agency is  
- other, please tell us  

11. Did (or do) you feel that you are really part of your crew?  
- Really a part of my crew  
- Included in most ways  
- Included in some ways, but not in others  
- Don't really feel like I belong  
- I don't know  

12. If you had the chance to do the same kind of work for the same pay, in another work group, how would you feel about moving?  
- Would want to move very much  
- Would rather move than stay where I am  
- Would make no difference to me  
- Would rather stay where I am than move  
- Would want very much to stay  
- Not sure  

Thank you again for your help! It couldn't be done without you!
**MARK EACH ITEM WITH AN 'X': YES IF YOU AGREE WITH THE STATEMENT, NO IF YOU DON'T AGREE, AND '?' IF YOU'RE NOT SURE OR DON'T UNDERSTAND THE STATEMENT.**

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<tr>
<td><strong>yes</strong></td>
<td><strong>no</strong></td>
<td><strong>?</strong></td>
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<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>Working for MCC helped me to learn to like people that are different than me.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>Looking back, I really liked working with my MCC crew.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I believe I grew as a person during my time with MCC.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>In my opinion, MCC doesn't really have much to do with helping the environment.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I don't think our crew got much done last summer.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>It would be fun to have a reunion with some of the other MCC crews sometime.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I believe the environment can take care of itself.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>While working for MCC, I learned that even people from different backgrounds can learn to like each other when they have to work together.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I would feel more comfortable applying for a job now than I did before working for MCC.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I have kept in touch with at least one member of my MCC crew since last summer.</td>
</tr>
<tr>
<td>□</td>
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<td>□</td>
<td>Working for MCC has made me more aware of nature.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I would rather work only with people that are pretty much like me.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I didn't feel very safe working with my crew last summer.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I feel that the work we did last summer is of lasting value.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I never did feel like a part of my MCC crew.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>The work I did for MCC made me feel like I was helping the environment.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>Over all, my experience with MCC was not all that good.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>While working for MCC, I learned to enjoy helping people who really need it.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I wish we had gotten more recognition from the work that we did.</td>
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<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>During the summer, my crew leader taught me a lot.</td>
</tr>
<tr>
<td>□</td>
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<td>□</td>
<td>I miss being in my MCC crew.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>MCC provided me a job but that's about it.</td>
</tr>
<tr>
<td>□</td>
<td>□</td>
<td>□</td>
<td>I think my self-confidence is higher now than before working for MCC.</td>
</tr>
</tbody>
</table>
Place an 'X' by the areas that you feel MCC most helps corpsmembers develop.

__ working as a team
__ learning about the environment
__ learning the benefits of helping people
__ learning job skills
__ tolerating different people on a work crew
__ learning skills that will help people in school
__ learning how government agencies work
__ learning the value of hard work
__ developing physical strength

__ learning self-discipline
__ learning respect for nature
__ developing communication skills
__ developing leadership skills
__ learning safety skills
__ learning how to follow instructions
__ developing close friendships

others:

Have your feelings about MCC changed since last summer?

☐ no - I feel the same about MCC.
☐ yes - I feel more positive towards MCC.
☐ yes - I feel more negative towards MCC.
☐ I don't know how I feel about MCC.
☐ other, please explain:

________________________________________

Again, thank you for helping us. Your opinions are very important to us. Be sure to send this back right away – you could be a winner! Have a safe and happy holiday season.
Administering the Questionnaire

Make sure the questionnaires are coded and given to the right person.

1. On Thursday, June 17, pick a time sometime during the day to administer the questionnaire. Ideally, try to find a time when the crew won't be too anxious to finish, for instance quitting time. First thing in the morning might be best or just after lunch. Plan on a half an hour, although it should not take this long.

2. Spread the crew out in a way in which they cannot easily see how the others are responding. Make sure they have something to write with. Explain the purpose of the survey: it is required by the CNCS grant, which will be used to fund this program, and that the results will help improve this as well as future programs. Explain to them that the questionnaires have to be coded for statistical purposes but that their answers will be kept confidential; they will not be identified personally to any member of the MCC organization. Neither they, nor their job will be in any way affected. Even though you, the crew leader, will know their code number, you will not have access to their completed questionnaires. Participation is voluntary, but explain that this is an important part of their job with MCC; their feelings and opinions are extremely valuable in evaluating this program. Tell them not to answer the way they think we want them to and not to answer the way they think their friends want them to. We want to know how each individual corps member feels. It is very important that they be honest.

3. Read the entire questionnaire to them, leaving enough time between items for them to answer. Some of the items may take longer than others. For the Likert items (the statements) you will probably only need to read the responses once; however there are two different sets of responses - I strongly agree and very true for me. The meanings of the responses are not substantially different, but it would be a good idea to read them at least once for each section. As suggested at the meeting, a good double check for the corps members would be to have them repeat the statement to themselves beginning with the response they have chosen. This will assure that they answered the way they meant to.

4. You may re-read the items as often as necessary. If a corps member does not understand a word that can be substituted with a simpler word, go ahead and tell them the simpler word. Remember, it is vital that you do not 'lead' them in any way. Do not offer any words that may have an negative or positive feeling. If they do not understand what the statement means, have them select the 'don't understand' response. Also, try not to notice their responses. They must feel comfortable answering each item.

5. When everyone is finished, have them seal their questionnaire in the white envelopes provided and deposit them in the large self-addressed stamped envelope. If you can, fill out the bottom portion of the coding form (make sure the corps member's names and their codes have been recorded) and send it back with the questionnaires the same day. Tell me where and when you administered the survey and any problems or questions that came up.

If something comes up that I didn't address, just use your best judgment. You are in a better position than myself to know what is going on, just let me know what you did so I will have record of any differences. My success in this study will rely a great deal on your expertise and cooperation; I am greatly appreciative of your efforts!
APPENDIX C -- EXCERPTS FROM CORPSMEMBER AND CREW LEADER INTERVIEWS

A. Selected corpsmember interview responses:

How do you feel about working with other people on a job?

"...one thing that's really cool about the work is you get to meet a lot of cool people that you normally wouldn't meet. Yeah, I like all the people in my crew and we really get along...even though a lot of people, you know, their life styles are really different. It's like sports, or any kind of team or group, the harder you work together, the easier it is to communicate with each other."

"...I think working by myself is harder because I only focus on the work, and so I'm thinking 'oh this is boring and its dragging, and da da da.' But the people I work with, they put up pretty good conversation, you know, we all joke around but we get stuff done. So it's pretty good working with these guys."

"...I think it depends on the group you're in. I mean, if the group you're in is like my crew, where most of us are outgoing, good work ethic type people, if you have good work ethic and you're willing to put effort into it, then you'll be a good crew member and you'll like it."

How do you feel about the work you're doing for MCC?

"...I like the work a lot. It's tough work. At the end of the day I'm tired but I like that. You feel better, you sleep better. That's what I want. I mean, I can't work inside..."

"...Well the trees and you're helping mother nature. You're helping the forest cause the forest needs it. You're helping out. You're just, what's the word, you're cleansing it or something. You're trying to make everything happy. The trees happy, and you think they can all feel and you just want to make them happy."

"...Well I found the satisfaction to mainly lie in when we were planting trees because we were helping the environment and giving something alive... This [re-roofing job] to me is something I've always done so I don't get special pleasure, although I put the last shingle on and I thought that was kind of cool..."

"...We've been talking about going back in a few years to the area that was planted and seeing it. You can say, 'hey, I put that tree there.' It might not be a big deal to some people, but I look forward to that."

Describe what it feels like when you get a project done.

"...you're always going to have your self-pride, it doesn't matter if you're on a team or not. But its group pride too cause you have all of those different self-prides and you say to each other, 'good job man'. You can see it; people are happy. When
you drive away at the end of the day and say 'wow, its really starting to look like a fence.' You feel good."

"...It's important to me. It might not be to other people but it is important to me to get the things done..."

"...It's kind of like, 'Yes, we're here. All this time working and we're done.' I mean, you just turn around and pat each other on the back and you appreciate it. I mean, cause you can't appreciate yourself doing all the hard work if you can't appreciate someone else...cause everybody else is putting in their time.

"...It's a group sense of accomplishment because we've all been a part of it. We've all shared in an equal part. Even if you did something yourself there were people that told you what to do and where to go. You can't separate jobs in a thing like this. You can't say, like you work to this line and you work to here. It all blends in."

**How is it working with people different from yourself?**

"...Well you can notice it; one guy is really slow, you know, but I mean there's no problem with that. You just deal with it. He's a nice guy..."

"...Well, you realize that everyone has their own limits and their own pace and you just work around that cause that's all you can do. You can't push someone too hard. You can't get angry at someone if they're trying their best. People here seem to be trying their hardest."

"...the individualism, you know the diversity...a couple of people would have a problem with it and really focus on it...a lot of people had some difficulty [with some aspect of another crew member] but they would go home and they would accept that about other people and come back with better attitudes the next day; the people that didn't, like I said, they didn't have the right kind of attitude for this kind of work and so they were gone.

**How do you feel corpsmembers benefit from this kind of program?**

"...I think one of the biggest things is even though you do a lot of work, labor, its just as much that the job is centered around you. I mean, in the end the job, I think, is made more, not to just build a trail or build a fence but to help you instead of the other things."

"...MCC is real hard working and we accomplish a lot. So we're getting a job that will give us a great recommendation. You're a real hard worker, you do a variety of things, like carpentry, and the planting and seeding, and then you get background in painting, trail work, construction. Even working with other people.

"...like toward the end of it, after like 4 weeks of being on a mountain trail and you've done 180 water bars and you have got 20 left to go. You're just sick of it and you've walked in 4 miles and you have to walk out 4 miles to get 2 hours worth of work in and you've only accomplished 10 of those water bars. It was
difficult but it proved our endurance and persistence and enthusiasm; important qualities for the working world."

B. Selected crew leader interview responses:

**How do you try to incorporate the corpsmember development aspect into your crew life?**

[six month crew]"...I've tried to be really goal oriented but that's not working...At the onset, you know, when I talked to them, they all seemed to have goals in their personal lives. For most of them that has changed completely. They are at the point now were they don't know what to do. So I don't know if we helped them or not; we probably did.

"...some of the things coming out of them are what I had intended them to get out of it...so I was like, o.k., some stuff is getting through and I think that this is the way it is with this kind of work. It may be 10 years before some of the things that I've taught them are actually observable."

"...So I guess I'm trying to encourage N. and the rest of the crew to accept the fact that people are different and not everyone can fit the puzzle. The people you work with aren't necessarily your friends. That a pretty important lesson to be learned."

[regarding a corpsmember that was fired just prior to the end of the program] "...well, I think you're teaching them there is a consequence and you committed yourself...maybe she learned the most from anyone on the crew this year. Maybe we did a service to her by giving her a bottom line, you know, and she can look back on it and say 'I wish I didn't and next time I won't, or next time I won't get involved with something that I can't commit myself to...I just don't know.

"...my style is to always have them ask questions, give them choices on how to do something...to make their own judgments, their own choices, and if they can't, the skills to communicate that. Sometimes I'm really stumped and need help myself. Most times I want them to think, 'well how are we going to do it?'. If it's a safety issue I come in and say you're doing it this way, but basically they can run their own show. I'm one of those that don't believe in strong authority. 'Do this, do that'; I think that's insulting...

"...this is totally different, this is a program that's, half of it at least, tries to develop these young people into better individuals. They are working toward adulthood and it's their first job and they don't have many real vested interests, so to speak. In other word, they haven't worked before and they have to figure out what getting and keeping a job means...so the production is very important but at the same time I want to try and keep these kids in the program so that we can help them become good workers and improve their ethics and make them realize that you can't just take a job and quit tomorrow. If you ever want to get anywhere, you've got to stick with it, learn some ethics and get through the hard stuff...It's only 8 weeks, its going by like 2 days, you can do it.
"...And even if they don't become friends or buddy-buddy over this summer, at least, maybe, they'll understand each other a little better and I think that definitely happened on my crew."

**What kind of education did your crew get? How did your crew respond to it.**

"...A lot of it has been practical, like chain saw training, first aid and water safety. A lot of the other things, like a sponsor talk, they have totally forgotten and if you pressed them, I'm sure if they brain-storm long enough that they would remember the 1 to 2 hour talk we had on the Clark Fork River, but when they're asked, all they ever say is 'well, we don't remember half the stuff we have done.' They seem to enjoy it, as much as not to have to work for an hour.

"...A lot of it wasn't necessarily resource oriented ...like I got the group involved in a discussion about politics, one day, and democracy and how this county operates. These kids have no idea, you know, and they're going to be involved someday, or should be involved in the process, so we spent a whole hour on it. I was trying to get into their heads the importance of how this country is supposed to operate and if they want to change...they say that you can't change anything, that the government did that so no one can do anything about it. I said you are the government"

"...we did some fun educational things, like we went to a visitor center...I gave them a test on it later, just to see how observant they were. They mostly observed the receptionist, so the first three question were about her and they did good on those...Then, like A., I asked him to name three cities in Canada, and he had no clue,...I don't think he can read much, so he came out of there without even knowing a single city in the whole county of Canada...He said 'I don't know nothing about Canada.'
APPENDIX D --
DISCUSSION OF THE EVALUATION AND ITS LIMITATIONS

Some findings of this evaluation are likely to be of concern, chiefly those from the matched-pair t-test analysis involving attitudes toward tolerance of diversity and social responsibility. These attitudes were not expected to have "worsened," in terms of MCC Inc.'s goals as a result of participating in the program. In fact, measurable improvement was expected and yet apparently failed to happen. Without careful consideration, one might ask if the program had somehow brought about some kind of decline in corpsmember values.

Alternative Explanations

While no absolute justifications for these findings exist, a number of factors do point to alternative explanations that need to be mentioned. While the evaluation design used for this study was determined to be suitable for smaller-scale studies, it did provide ample opportunities for confounding results. Funding and time limitations did not allow for a more rigorous evaluation design: most importantly, a control, or comparison group was not implemented in this study.

A comparison group of youth similar to MCC Inc. corpsmembers, with the exception of participation in the program, would have eliminated some of the possible alternative explanations. They would have received the same survey questionnaires as the program participants, which would have allowed a comparison between individuals participating in the program and individuals that did not. Unfortunately, small-scale program evaluations often do not have the resources needed for this, and rely on simpler strategies, such as the design used for this evaluation. While not scientific, simpler designs can still be useful: yielding fruitful data while disclosing weak areas in the program. Still, problems inherent in these simpler designs should be pointed out.

Testing Effects

One common problem associated with the pretest/posttest design (without a control) is termed the "testing effect." In short, this occurs when the act of taking the pretest affects the responses on the posttest. Identical attitude scales were used in both questionnaires in order to determine whether attitudes changed as a result of the program. However, corpsmembers taking the posttest could easily have remembered items from the pretest, and thus altered their responses somehow -- particularly since only eight weeks had transpired between the two questionnaires. The testing effect does not pose as much of a problem when longer periods of time are allowed to elapse between questionnaires, allowing respondents time to "forget." Thus, the design used for this evaluation is probably better suited for longer programs.

Cycle of Attitudes

The results of the follow-up survey may be evidence of a natural cycle existing among measurements of attitudes. Literature exists that supports this idea, especially when
idealistic attitudes are involved. For instance, one study measured attitudes of first year medical school students entering medical school. Their attitudes measured high on a number of idealistic attitudes, such as the value of helping people. One year into their program, these same attitudes showed a dramatic drop, as "idealism" was replaced with more realistic views (see Becker and Geer, 1958).

While this is more anecdotal evidence than scientific, several crew leaders supported the idea. One leader, in particular, reported "literally selling" incoming corpsmembers on the program, emphasizing the "value" of the work they would be doing. The pretest questionnaire for this evaluation was administered during this time. Eight weeks later, corpsmembers had been involved in long hours of work, and could have been less optimistic about the program, about service, and about their fellow crew members. At this point, they took the posttest. The follow-up results found that well over half of the summer corpsmembers felt more positive toward MCG Inc. three months after finishing the program. This points to a shift in attitudes, in this case, feeling more positive about the program over time.

**Previous Evaluation Results**

Results from another study of youth service corps programs provided additional insights into some of the results of this evaluation. Public/Private Ventures (PP/V) conducted a four-year study of nine youth service corps. Some of their conclusions supported those of this report. For instance, PP/V concluded that:

"Observation of all nine corps suggests that changes in attitudes and behaviors are not realized in the absence of carefully implemented, specific strategies. This runs counter to the idea that a sense of service will be developed simply by doing useful work and corpsmembers will develop tolerance for people of other races or sexes simply by working with them..."

"...Dealing with the substantial educational deficits of many corpsmembers, however, requires formal youth development components, which have been implemented less successfully... youth corps face serious challenges: a great variety of needs, corpsmembers who enter and exit in an unpredictable manner, and competition between the work schedule and education time.

High baseline (pretest) scores were also identified as a problem in the PP/V study. What this implies is that scores on the pretest were relatively high, thus "leaving little room to detect any improvement that might have resulted from participation." Thus, if corpsmembers are coming into the program with the desired values, and if this is reflected by very high scores on the pretest, improvement on the posttest will not likely be evident. In fact, posttest scores may even go down, naturally "regressing" toward a mean score. This "regression" tends to reflect badly on the program.

**Defining Success**

Of broader concern, for this program and other like it, is how concepts such as "success" and "development" are operationalized. In order to evaluate any program, clear and
concise definitions of the program's goals must be determined. This is especially problematic as the concepts used to evaluate social programs tend to be vague, for instance, "corpsmember development," "success," and "improvement." These are subjective terms making them difficult to define and measure. "Success" is a value judgment. What might be considered success to one group, might not be to another. Moreover, success is often politically defined.

An interesting question regarding the "success" of the program was raised. One crew leader, concerned over having to terminate a particular corpsmember, felt that the program had somehow "failed" to help this individual develop. However, the question remained as to whether the person might somehow benefit (i.e., develop) as a result of being fired. Termination is generally considered a failure, but some individuals may actually benefit from the experience, making the program a success in some way.

Moreover, it is difficult to determine the specific time in which corpsmember development is actually realized. While corpsmembers' attitude scores on the pretest/posttest analysis may not have reflected significant improvement, their attitudes could have been altered enough to change some future behavior. Assessment of this would be very difficult and require an extensive longitudinal study; unfortunately, many evaluations are limited in their ability to do this. But as long as the limitations are recognized and addressed, subsequent evaluations can be extremely valuable in generating additional knowledge and information that will allow programs to continue improving.
References


