National Community-Based Research Networking Initiative

Summary of Student Learning Themes
For Development of CBR Outcomes Survey
by
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BACKGROUND TO THE STUDY

Up to now, small-scale (usually qualitative) studies have documented students' experiences in Community-Based Research (CBR). However, there has been no broad survey of the means by which students experience CBR, nor any quantification of outcomes experienced by undergraduates who participate in CBR nationwide.

The CBR Outcomes Study explores the relationship between well-designed community-based research (CBR) activities and factors that are known to have positive influences on students' learning (e.g., being engaged academically and with community-identified needs, developing interpersonal skills, forming positive relationships with faculty members and peers, and forming visions for their possible future careers.)

This paper reports on an exploratory study that was conducted from Fall 2007 – Spring 2008. The findings are derived from individual interviews and focus groups conducted at six CBR institutions affiliated with the National Community-Based Research Networking Initiative (NCBRNI), funded by Learn and Serve America. Data analysis and the writing of this report took place in summer and fall 2008.

HOW WAS THE DATA COLLECTED?

Phase 1: Fall 2007-Fall 2008

Phase 1 of the study involved a sample of 6 institutions that, taken together, represented the range of different delivery types across NCBRNI. These delivery types were identified from the questionnaire that each institution completed in spring 2007.

I visited each of the 6 institutions for 1-2 days and conducted over 30 individual and focus group interviews with undergraduate students who have experienced these different delivery types. I asked the students to talk about their CBR experiences and the short- and long-term benefits they have experienced, as well as any challenges. Each discussion lasted from between 30-60 minutes. Interview questions focused on the extent to which the project contributed to their academic, personal/social-emotional, and interpersonal development, and the extent to which the experience contributed to their thinking about future coursework and career choices. Questions included:
  - What experiences have had a strong impact on you during your college years? What was it about these experiences that impacted you so positively?

- Why did you become involved in CBR?
- How would you define CBR?
- What kinds of CBR activities have you have participated in?
- What outcomes have you experienced? Short-term/immediate? Long-term?
- How have these activities contributed to your learning in or out of class?
- What skills have you acquired or improved through CBR?
- In what ways has CBR helped you to understand your major/minor?
- In what ways has CBR contributed to your thinking about or interest in research?
- Are there any other learning or other related benefits that you have received from CBR?
- What has been the hardest thing(s) about CBR? What has challenged you?
- In what ways do you feel you've experienced the most growth?
- If you had a friend considering doing CBR, what would you tell her or him?
- What advice do you have for your school to make CBR opportunities even more meaningful?
- Is there anything else you'd like to say about what and how you've learned from CBR?

Each interview was digitally recorded, transcribed, and summarized for analysis. Using the constant comparison technique, themes were developed related to the questions about student learning, and condensed into this report. To ensure confidentiality, all identifying information has been removed.

Phase 2 (Fall 2008/Winter 2009)

In Phase 2 of the study, which will be overseen by Gary Lichtenstein, we will invite students to complete a (pilot) survey about their CBR experiences. The items on the survey will be built from the themes identified through the interviews and described in this report. The survey is intended to be short and focused on CBR outcomes, in order to facilitate potential distribution nationally. All data will remain anonymous. The pilot survey will include all NCBRI institutions.

WHO WERE THE PARTICIPANTS?

Interview participants were undergraduate students from a wide range of majors, including the sciences, social sciences, humanities, psychology, and business. Several of the students had already made a significant commitment to community service in their undergraduate programs through community service programs and/or service learning classes. They desired to connect their academic experience with surrounding communities, and on occasions they enrolled in a class knowing that CBR was an integral part of it. However, in other cases, students signed up for a class without knowing that it contained a CBR project experience.

SUMMARY OF STUDENT LEARNING OUTCOMES OF CBR EXPERIENCES

The interviews revealed a broad range of outcomes arising out of CBR experiences. However, these outcomes differed in strength and type across settings. At the strongest level, students' involvement in CBR projects students heightened their appreciation of the relevance of their course material and their major. They cared about producing a high quality project for their community partners. Project experiences often made vivid impressions on the students. They appreciated the relevance of the experience, which increased their motivation to learn specific material, particularly research skills and methods. Students' personal development was also impacted by CBR; they described feelings of competence and self-confidence, psychosocial development, and reflective attitude and values changes.

Many students reported substantial positive changes in other areas of their development as a result of their CBR experience. They reported high levels of civic awareness and intentions for future civic engagement. They acquired knowledge in their discipline and developed capacities across key skill areas such as synthesizing public policy documents relating to their CBR project. They believed that their CBR efforts mattered and "made a difference" as they applied their knowledge to the needs of their community partners. Several students were clearly informed, empowered, and socially responsible citizens.

REFLECTIONS ON BETWEEN PROGRAM DIFFERENCES, WITHIN PROGRAM DIFFERENCES, AND BETWEEN STUDENT DIFFERENCES WITHIN PROGRAMS.

As I stated above, the interviews revealed a broad range of outcomes arising out of CBR experiences which differed in strength and type across settings. One reason for the diversity in the outcomes of the CBR programs was the differences in program characteristics (Waterman, 2003). *Between-program differences* included the nature of CBR experiences provided, the duration of the CBR class or internship, their intensity (i.e., time requirements in the community and in the classroom), the extent and nature of the supportive and reflective activities employed, and the extent and nature of the CBR project's integration with in-class curriculum.

In addition to between-program characteristics, *within program differences* were evident. This was because each participating student had a different set of experiences due to the fact that the CBR projects occurred in a wide range of community settings. In most classes or internships, students selected their CBR project from several options. Some community partners were more responsive, cooperative, and interesting to work with than others, and the tasks associated with the CBR projects varied considerably (e.g., interviews, archival analysis, etc.).

Furthermore, there were *student differences within programs*. Students participating in CBR programs differed in regard to gender; cultural background; cognitive capability; prior experience with volunteering and service-learning; academic readiness (i.e., prior

experience with research and/or academic major/minor); the extent and quality of peer relationships; and personality traits, motivations, values, and beliefs, for participation, among other factors.

One can assume that what a student brings to a CBR program will affect what that student derives from it. Furthermore, students in any educational program will be affected by it in different ways.

The differences within each program included content, time requirement, and quality across locations. Generally, however, courses were one semester but there were exceptions, including those of shorter duration (e.g., six/nine weeks).

- Individual Projects: A student was matched with a community partner.
- Team Projects: Teams of students were matched with community partners. The teams' products included presentations describing the project as well as an actual project for the community partner.
- Extended CBR internship: A student conducted a research project with and for their community partner

Students grappled with complex issues through readings, group discussions, extended reflection, and the CBR project. Most professors, but not all, covered prerequisite skills and information in class before being releasing the students to do their CBR project. Professors were generally available when students had questions about or challenges with their project.

REFLECTIONS ON INFLUENCES ON CBR'S EFFECTS

The students' descriptions of their CBR projects revealed the presence of the following four factors influenced the outcome of CBR projects on student learning.

- Exposure to the complexities and intricacies of the real world provided the key experiences of CBR.
- Reflection enabled students to make their own salient connections to the subject matter via the integration of the CBR project with course learning. This was typically accomplished by discussions, writing assignments, and journaling. Reflection took place by the student alone, with classmates, and with the community partners. Thus, the more integrated the CBR project and course learning, the more powerful the CBR effect.
- The quality of placement was an important component of the CBR experience. This was influenced by the extent to which students felt that community partners were involved in their CBR project, the level of cooperation they felt was offered by their partners, the degree to which they had voice and control over how the CBR project was implemented, and the extent to which they felt their project made an impact on the community partner.

- The more prepared students felt for their CBR experience, the more positive was CBR's effect. Some students weren't sure that they possessed the prerequisite skills. For example, one student said, "I have only had a year and a half of accounting and so who is to say that someone could come along and say that what I am doing is not in the best interest of the community partner?"

THEMATIC ANALYSIS OF STUDENT LEARNING OUTCOMES

Student learning outcomes relate to the following areas:
- Students' Intellectual Growth and Learning
- Students' Interpersonal Development
- Students' Expanded Visions for Future Involvement in Civic Matters

I. Students' Intellectual Growth and Learning

In classes involving CBR, students generally felt that they were more responsible for their own learning than traditional lecture-based classes. Furthermore, they constructed their own versions of reality through their CBR project rather than simply absorbing versions presented by their professors or textbooks. Also, they spent time discussing questions and solving problems, with much of the work in and out of class being done in groups. These features are present in this section as students spoke about the influence of CBR on several aspects of their intellectual growth and learning.

Students came to see larger sociopolitical issues that contribute to their CBR project including the roots and conditions of a community issue or challenge, its implications and possible solutions
When doing CBR, students came face to face with how economic injustice, racism, sexism, violence, and poverty affect real people. In addition they saw hope as they encountered community advocates committed to ameliorating these problems and working for social justice.

Students engaged in critical thinking about the sources of problems and issues facing their community partner and long terms solutions for social justice. Thus, CBR broadened students' perspectives on the sociopolitical factors that affect both the individuals served and those performing the service. In addition, their projects sparked their interest in effective non-profits and corporate social responsibility. A student stated:
> Going out there and seeing people who are poor, you are actually seeing good ways of addressing poverty, bad ways of addressing poverty, and look more at getting to the root of the problem instead of just volunteering at a soup kitchen which is almost like a band aid. You get to go a little deeper. Non-profits are a viable solution but exactly what is the best way?

Students acquired writing skills to convey information to diverse audiences

CBR projects required students to cultivate a different set of writing skills from those typically used for traditional class assignments. As a political science major said, "Learning a different style of writing was a skill that I gained… I felt like I was giving the community partner something that they would want to read and invest their time in."

Students came to understand political and social structures to explore ways to be involved in shaping public policy
Several CBR projects addressed public policy areas such as housing, health care, homelessness, poverty and welfare, and agriculture. One political science student contrasted discussing welfare in class with talking with actual welfare recipients.

> These people would tell me what food stamps are good for and what they are not good for and when they could get welfare. So it put a face on a lot of broader policy areas that we were talking about in my political science course… So I have two different foci when I am looking at an issue. They are often very different but they give me a better take on things.

Another student recalled:

> We were talking about health care and how sometimes people will become homeless because they have someone in their family who becomes sick and they have to pay all these bills, then they don't have a house. This has happened to someone at the shelter. You see examples in real life, not just learning about it from books and stuff.

Students acquired an appreciation for the application of their major to a community issue
Students were able to make their own salient connections to the subject matter via their CBR projects and apply skills learned in their major to their CBR projects. For example, sociology, economics, and political science majors appreciated the connections between the impact of societal structures and public policy on socioeconomic issues arising out of their CBR projects. Accountancy and business administration majors were able to capitalize on their academic skills to write business plans and conduct and analyze surveys for their community partners. They contrasted their knowledge of management practices in businesses and corporations with those of non-profits who rely on donations and grants. For example, students who undertook a CBR project that involved developing a 5-year business plan for a free community-based health clinic, explained to their community partner how spending money on prevention of dental problems would likely produce returns later on.

However, students' exposure to the complexities and intricacies of issues facing their community partners resulted in the realization of "how much messier the real world is." For example, an accountancy major's recalled how her organizational skills were tested by her community partner's mismanagement of financial data: "They handed me a stack of financials that they didn't even know which year they came from and it was all they had."

The emergent nature of CBR projects contributed to students' perceptions that they often had less control over their work in CBR than they would in more traditional class assignments. As one student who undertook a historical study of a local building said, "There so many aspects that you had to consider, some loose ends and I had to come to terms that there was no clear cut answer. But I did get a little obsessed trying to tie up all the loose ends."

Students appreciated connections between theory and practice
Students formed both intellectual and personal connections between the CBR project and coursework. The following two comments illustrate the intellectual connections:
- "I have a better ability to talk about what I learned in that class and about what I did because I actually attempted to see [parent involvement] in the community and learn about it by actually watching people as opposed to just reading about it. I remember more facts because it is something that you actually witness."
- "[CBR] really does bring that material that you read in a book to life because you can read it as much as you like. But until you actually experience it, it won't stay with you as much as your professors hope. It really emphasizes what you are learning and it really does stick with you."

Students made personal connections between the CBR project and coursework through their responsibility to produce a product that had real value to their community partners. The following two comments illustrate these personal connections:
- As you are taking the class you are reading, [and] being out there, experiencing the same thing that you are reading. It is putting it into practice. I think it is important and kind of understanding in a real world sense. It is a little bit more than just writing a paper; you are actually experiencing it and if you mess it up, it messes it up for [the community] to. It puts more emphasis and importance into it.
- The CBR project took it to a personal level. Rather than just saying that this city has this many people with this characteristic and this socioeconomic status…. it helped the class become more personal and more realistic rather than just statistics.

Students appreciated the value added to their educational experience by CBR
Students recognized that they acquire skills and knowledge from their CBR projects that may set them apart from their peers. As one student said,
> Student consulting has provided me with a different outlook than my peers especially with this community and the way things work. It is interesting to see which experiences come out in student consulting or CBR internships. It is above the academics: it has set me apart from someone who has not had the opportunity to do real applications…. You learn from the professors who tell about their experiences and you read about experiences in texts. But to drive those ideas

home it helps to have an experience of your own to take the information to the next level.

Students acquired place-based knowledge where the CBR project was conducted such as knowledge of local context, history, economy, and politics.
Students described college as an "insulted community" and like living in a "bubble." CBR projects have the potential to cast the college or university in a new light in the eyes of community members. The following comments are typical:

- [CBR] helps the students put roots in the community so that the people see the university as an ally rather than a group of 18-22 year-olds who have rowdy parties. They see that they can come to us for help in certain areas.
- CBR gave me a better sense of the community. We get so zoned into what is going on on campus and you kind of forget that you are in a larger city and there is life outside of W&L. I think that really got things into perspective.
- When you do CBR you are in the community and you connect with people more and you feel more a part of Lynchburg as a city, not just as a college student. I see myself as more of a resident and I recognize the problems that are going on here.

Students learned about, experienced, and valued diversity, including understanding and awareness of power, class, race, gender, and other factors in social identity
CBR projects often put students in contact with individuals who are different from themselves and facing great adversity. Typical is this comment from a sociology major:

> You don't think about the problems in the community unless you are really involved. I had never been around people who had done drugs and it is a whole different world. But there are people out there who do drugs who aren't as educated as I am and I need to get inside that box in order to be able to relate to them better.

In addition, during some CBR projects students were exposed to dire circumstances facing individuals and communities. One student described it this way.

> One of the hardest things was the sheer emotion of the things that I experienced. Seeing people in situations different from my own: the kids who are hungry or sick or have never been to the dentist. The emotional aspect was the hardest thing for me; putting that aside and focusing on the task at hand.

Several students described how they learned to look at themselves critically, especially as they were challenged to examine long-held beliefs and behavior. For example, a student whose CBR project involved interviewing pregnant 16-year-olds with a history of drug involvement said,

> My project definitely opened my eyes to a lot of things. Sometimes you are a little close minded and you put stereotypes on other people. But when I sat down and listened to their stories I put myself in their shoes and realized that living in the city is completely different from where I grew up. You try not to stereotype

someone who is 16 and pregnant. You try not to judge at all and listen and try and learn from what their experience was.

Students acquired research and evaluation skills
Students' familiarity and efficacy with research was evident as they described:
- learning about ethics
- obtaining human subjects approval and informed consent. Students spoke about some participants who couldn't read the consent form, who were nervous about how their information might be used, and/or who were worried that their behaviors and lives would be judged by the students.
- contacting individuals and scheduling interviews
- developing operational definitions of the issues they were studying
- constructing surveys and interview protocols
- obtaining samples
- conducting effective interviews
- writing up findings using language appropriate for their intended audiences.

As one student put it, "In retrospect, we have gone through all of the steps." A sociology major spoke about her the confidence that CBR had provided her in writing research papers: "I know how to write an opening, a background section, a methodology, an analysis and my conclusion."

Several CBR projects involved students interviewing community residents. Students' communication skills were enhanced as they interviewed different kinds of people, many of whom they would not typically interact with. A student described what she learned about interviewing:

> You have to phrase the questions in the right way. When you having that conversation you have to be able to realize when someone is hesitant. You don't want to go too deep into that subject because there is some animosity, bad feeling, tension, or something. Reading people and reading what they say to know when to stop, when to pull back, and when to move on.

Her classmate said this about interviewing: "You have to be able to conduct yourself and go through it without being scared…. Being more open to approach people that you might not of before."

For some students the research skills learned in CBR projects may continue into thesis work. A student said,

> I revised my survey for my community partner about 15 times so that has gotten me way ahead of working on my thesis survey… I know what works, what doesn't, what people are hesitant to answer, how to phrase things.

The CBR experience challenged long-held biases about research as "something very related to the science building" or "as going and reading books individually." One student described CBR as "self-propelled research as opposed to professor-instilled research." Another said,

> You still have to get your sources. They might be someone you meet on the street who knows everything about the city of Lynchburg and that is better than finding a book that has been written about your topic. It is just as difficult as [traditional research]. You are not on the computer googling how to find things or in the library trying to find books, although they help of course. It is also a matter of networking and figuring out who is who and who knows the most about this and who else can I talk to, and that sort of thing.

For some students, CBR was their first research experience; while others had undertaken more traditional research in laboratory settings. Several students learned valuable lessons from the experience, including the need for efficient recording equipment and detailed fieldnotes. Three comments are illustrative of this. One student stated, "Once we had the patterns and themes and fitted them together, I found that [research] was something that I did enjoy. It made my mind happy." A second said, "Research is something that could interest me in a way that I had not thought of [because] of my narrow definition of research." While a third said, "Going out there and getting my own data is a neat feeling."

Once students collected the data, they needed to come up with suggestions for addressing the findings. A sociology major described this process, "There is nothing set in stone so you have to come up with a solution on your own." Generally students spoke positively about the impact of their projects on their community partners. One of the rewards of CBR for these students was actually seeing their project benefit their community partners. For example, another sociology major undertook a study that addressed the needs of young mothers who are drug dependent. She said

> I really like that me and the other girls were able to come up with some solutions for what could better the program. We found out that the director is actually going to use what we suggested. She was really happy with the things that we came up with. The project was big learning but that she liked what we came up with made it even more worthwhile.

The deliverable to the community required by CBR projects increased students' levels of motivation and engagement with the class
Several students felt that the CBR project added an important dimension to their class which heightened their engagement and motivation with the material. As one student said, "[CBR] is more interesting than a normal class. You stay more engaged and are not bored and you care beyond just getting a grade. There is something to care about beyond my GPA." Her view was shared by a fellow student: "I wanted results [so] that I would have something to offer those community members."

But students also felt that CBR was demanding in ways that were different to traditional coursework. They spoke of being more responsible for their own learning and being an advocate for change for those with fewer resources than oneself. Typical comments included:

- "You have to go way over and beyond anything that you have to do in the classroom."
- "The college experience is less what goes on in the classroom and more of what you can take out and apply in the field; what differences you can make rather than what grades you are making."
- "The hands on experience outside the classroom is where you really have an impact on people in the community."
- "It challenges you in a way that nothing else on campus can: not volunteering, not research papers. This forces you out of your comfort zone and seeing that you can live up to the challenges."
- "This is the first time in school that I have done something that seems more professional. Finishing the project and giving a presentation to people – it is not like we are just getting a grade. This is for them and they are going t use it. So making sure that it not just good but that it is finished and completed in a polished sort of way."
- "CBR is life changing because you learn so many life skills like communication, networking. It is a shame that some people won't get to experience it. I know that it is not for everybody and a lot of people would rather sit and read books, but for me I got a lot out of it."

A political science major said,

I feel like you are doing research for a purpose. You are not just doing it for the sake of a grade or test; you are doing it because someone can actually use what you are doing. So it pushes you further to want to do the research.

She added:

A CBR research project is almost like finding a diary like the diary of Anne Frank as opposed to reading a history of the holocaust. That sort of twist on things.

II. Students' Interpersonal Development

As they described their CBR experience students spoke about developing a set of technical, personal, and interpersonal competencies including independence, communication, personal responsibility, and individual efficacy within the context of positive relationships with fellow students, community partners, and professors. Students felt that building and sustaining relationships in the community and with their peers was integral to successful CBR. They were faced with the challenge of building relationships with their community partner as they identified a project focus and developed a project management plan for data collection, timeline, and deliverables. They needed to know

how to best communicate (i.e., via email, phone, or in person) with community partners who were often stretched to the limit in their daily work. They needed to use initiative to contact individuals and organizations in the community to obtain the necessary information and data. As they worked on the project and gathered data, they needed to build trust and rapport with research participants. These ideas are present in this section.

CBR projects required students to set clear expectations with their community partners
When planning their CBR projects with community partners, students were faced with the challenge of only committing to research tasks that they could realistically complete during the duration of the course or internship. Often this required committing to one activity rather than additional ones that were needed by the community partner. As one journalism student said, "Originally we had wanted to do a fundraising video, a PSA, and a website. But we realized that we could not do it all."

CBR required students to hone their communication skills
Many students referred to the importance of authentic communication with the people affected by a given issue and with the professionals and volunteers associated with addressing these challenges. One student said,

> Communication is a big deal. Learning how to interact with people who have much more experience than you have and who know more than you do and they are looking to you to provide them with all this information like you really know a lot.

The ability to express oneself through effective communication was mentioned as an important skill arising from CBR projects. As one student said, "You can't be shy. You have to be able to deal with people." Students described several communication skills which were necessary to build common ground and relationships with their community partner. These included listening to their community partner's vision for their organization, reflecting on what they heard, and expressing their opinion on how a CBR project could help them achieve it; using critical thinking skills to refine their partners' often poorly articulated research ideas; and public speaking. As one student described it, "To be on the spot and be able to think quickly and come up with ideas and have a conversation has been something that I am getting better at every time I do it."

Several students clearly valued and developed concern for their community partner; they appreciated the importance of place and context. As one student said, "Don't come in like you know the answer and you're so smart and you are this college kid who is going to them everything because you are not. You are there to listen and to learn."

Through their engagement with the community, students gained confidence in their ability to communicate with people from different races, backgrounds, and economic situations. Several CBR projects required students to interact with individuals from different walks of life and they learned a great deal in the process. Doing research in a

soup kitchen for example, required a student to talk with individuals who possessed valuable experiential knowledge. Describing a key informant, the student said,

> He would talk about different aspects of the homeless plight in Lynchburg and about shelters and other housing options available. It was interesting to gain that knowledge from him; the street smarts of actually living that experience.

CBR projects required students to hone their organizational and time management skills
CBR projects require a myriad of task and logistics including setting up and planning for meetings with community partners, coordinating travel arrangements, scheduling interviews, and, on occasions, obtaining human subjects approval. All students balanced their CBR projects with classes and other obligations. As one business student said, "You learn very quickly to prioritize. I may have a test tomorrow and our project team wants cash flow the next day."

Students used initiative in CBR projects
Unlike traditional course assignments, CBR required students to take initiative to ensure the progress of a project. As one student put it,

> In class the professor will hold your hand a little or you can Google something. But [CBR] cannot be found on the Internet or in any textbook. You have to pick up a phone or you have to drive to that organization, you have to keep pursuing it until something becomes of it, because if you don't do it no one will do it.

Students also had to take initiative with their community partners to ensure that CBR projects maintained momentum. For example, a student recalled having to wait for her community partner's input into a draft of a survey: "Sometimes you have to push the community partners more than they are pushing you. Even though it is their project, you need to stay on them, especially when you have deadlines to meet."

However, several students spoke of their confidence in their ability to produce a valuable CBR product for their community partner. For example, one student described it this way:

> I had the capability of doing something that could have an impact on the community. We had to go out and do all the research and come up with findings and put it all together and basically come up with a way to solve the issue. It was pretty empowering seeing that I actually have the skills to go out into the real world and do something like this.

CBR requires students to hone their public speaking skills
Several students spoke about gaining confidence in their public speaking ability both in meetings with their community partner or when sharing results to a wider audience such as city meetings. A philosophy major said that public speaking "helped me not to be so nervous, to speak slower and to speak to different kinds of audiences." An accountancy

student felt more confident expressing her opinion as a result of her experience doing CBR:

> I feel more comfortable in a group speaking up and sharing ideas. When it comes to brainstorming in class I might not speak up and say what I am thinking. But when you work in a team and you are trying to make a business plan for an organization, you need to throw those ideas out on the table of else they won't get heard. I am more comfortable making suggestions than I was in the past.

CBR required students to learn how to work effectively in teams
Participating in teams provided students with several challenges and benefits. They learned to listen to each other's ideas and compromise, to manage team members' strengths and weaknesses, to know when to lead and when to delegate responsibilities, and when to undertake unappealing tasks for the good of the team.

Team leaders experienced the challenge of communicating both with fellow students and community partners. One student recognized the challenge of leading her peers:

> There is a huge difference when you are writing an email and you are trying to phrase it to make people like you. [But] you want them to do the work and actually tell them that they have an obligation to do it. So it is hard to find the middle ground.

Indeed working with peers as part of student team often involved challenges of leadership and group cohesion, especially when not all team members shared a strong work ethic. One sociology major recalled one of her team members:

> She was kind of a "laze". She was into her senior thesis and older than me and this was last on her agenda. I was saying, "Let's go, come on, we have to put the project together." It was just getting her to do things and I was pushing her a little harder.

However, several students felt confident about their leadership skills particularly in regards to allocating tasks among team members. The following comments illustrate what students learned from being on a team

- "One person may be the group leader, but that person cannot do it all."
- "I learned that you can rely on other people to get things done."
- "It makes you really focus on the fact that you have to work as a group to accomplish the goal. I would never have been able to come up with the survey we created without the help of all the group members. It is very challenging and it all comes together nicely so it is really a value to work together as a team and achieve your goal."

In addition to their team responsibilities, students had to collaborate with their community partner. One student said:

It is very difficult to communicate with someone who is in the community, older than you, and been in business longer than you. In this type of project they are asking for a service from you and you are still a student, so it is kind of hard to manage it.

Often in their CBR collaborations, students possessed valuable knowledge and authority in the eyes of their community partners, based on their academic knowledge and training. However, the students' knowledge meshed with their partners' valuable knowledge of the situation at hand that was outside the realm of students' understanding.

Through their engagement with the community students developed a sense of professional identity as they learned and deepened their research skills to meet their community partners' needs.

Several students felt that their community partners had high expectations for their CBR project. As one student said, "They treat us like professionals and expect a lot from us." Another student said,

I feel like I almost staking my reputation on the outcome of this project. It is the first time that I am really putting myself out there and saying this is the work that I have done and I hope that it is up to the standard that they are looking for. It puts a big responsibility on you. You have to put a lot of work to make sure that the work is good. That is definitely a challenge.

III. Students' Expanded Visions for Future Involvement in Civic Matters

Students felt that their participation in CBR projects resulted in the acquisition of academic skills and knowledge, as well as significant changes in their personal development. Together, as this section shows, these outcomes influenced their thinking about their futures, including their careers and their potential roles as agents of social change.

CBR influenced students' knowledge and professional skills

Several students felt that the skills acquired in their CBR projects would transfer directly to their future career. A sociology student put it this way:

CBR helped me so much. If I have to come up with a new program or if I was the director I would know how to go about getting information. I have learned how to be able to conduct these studies, so that is really going to help.

CBR influenced students' overall career competitiveness

Despite the challenges of CBR, students felt that their experience would benefit them in the job market and make them more effective once they were employed. For example, a journalism major who interviewed middle school students for her CBR project felt that the experience had provided her with valuable knowledge of their lives that would benefit her if she "ever needed to cover kids that age." Two sociology majors said,

- Having those skills to talk to someone in the community is definitely an advantage. Experience outside of the classroom is what people look for: what is your experience, not necessarily what did you study. Because they know that you know how to apply it.
- Working outside of the classroom and applying it, is such an awesome experience. It is great to have that experience on your back for later. When someone is looking at you for a job you can say, "Yes, I did that" and it might put you a step ahead.

Students also saw the value of their enhanced communication skills in their future careers. For example, one student said, "CBR is learning how to work with people more efficiently, communicate better, which is definitely an important life skill and makes me a good candidate in the work field."

The CBR experience helped students weigh up their suitability for future career paths
CBR projects that require students to be immersed in a community-based organization provided them with the experience of the daily work involved. As a result, several students now considered starting their own non-profit or working in that sector. A sociology major whose CBR project involved interviewing pregnant teens spoke about the career questions that her project had prompted her to ask:

> Do I want to be in the field, hands on doing something; or do I want to be in the background doing research and that sort of thing? … You watch what you can and cannot stomach on a day-to-day basis too. It helps you figure out, "I can work with people who have children doing drugs or I don't think I could do that every day." It is feeling out what is right for you, what you can deal with and what you can't.

Some students spoke about how their career paths had been altered as a result of CBR. For these students CBR reinforced their interest in pursuing a career that involved working with people and social action even though they recognized that their choice would not necessarily result in high earnings. A student who changed his major from chemistry to sociology put it this way:

> CBR shaped my thought from, "Let's work in a lab and make lots of money" to "Money is not the most important thing so maybe your career can be important in a different way." Being involved in the community helped me realize that I want to do something that helps other people, something rewarding, not necessarily money-wise but morals-wise.

CBR projects sparked an interest in participating in research projects in the future.
Several students' enjoyment of their CBR experience led to a desire to repeat it in future coursework or in their career. The following comments are typical:
- CBR made me have more interest in survey research which I don't think I would have thought about beforehand.

- I had never done anything like it and I loved it. I could see myself doing it in the future.
- CBR gives me an idea of the different things that I could do with my major, doing program evaluations, or research for people under a grant.
- CBR is something that I would like to continue after I graduate. If it is not part of my job in the future I would like to continue doing pro bono sorts of things when I have the time.

Update
20 April 2009

1. The CBR Outcomes Assessment Survey (COAS) is designed to be a succinct survey that assesses the cumulative impact of a student's undergraduate CBR experiences on five dimensions of learning.

2. The pilot survey is currently administered online via Survey Monkey (go to https://www.surveymonkey.com/s.aspx?sm=IjYJYv3ul6Ax7bUepXY9oA_3d_3d).

3. The pilot version takes approximately 15 minutes to complete—we're shooting for 10 in the final version.

4. The survey assess CBR impact on five dimensions of student's undergraduate learning, based on Nick Cutforth's extensive qualitative study (included above). The dimensions are: academic skills, civic engagement, educational experience, professional skills, and professional growth. Below we list a sample of items that comprise each dimension (some items have been slightly modified).

ACADEMIC SKILLS:

a.	Improved my academic writing skills
b.	Improved my research skills
c.	Provided real-world connections to academic content
d.	Enhanced my understanding of academic content

CIVIC ENGAGEMENT

e.	Enhanced my understanding of community issues
f.	Enhanced my understanding of social issues
g.	Deepened my understanding of others who are not like me
h.	Helped me develop empathy with those who from different ethnic, racial, economic, backgrounds.
i.	Helped me promote empathy with those who share a different religious faith and/or sexual orientation than I do.

j.	Enhanced the likelihood that I will vote.
k.	Will likely enhance my future civic engagement.

EDUCATIONAL EXPERIENCE

Increased my course-related interactions with faculty
Increased my out-of-course interactions with faculty
Increased my interest in my major.
Improved my interest in college.
Clarified my career path.

PROFESSIONAL SKILLS

q.	Improved my public speaking *skills*.
r.	Improved my *confidence* to speak publically.
s.	Helped me learn to set clear expectations
t.	Improved my ability to work as part of a team
u.	Improved my ability to work independently
v.	Improved my skills with conflict resolution
w.	Improved my ability to run meetings
x.	Improved my ability to delegate
y.	Improved my ability to listen to others
z.	Improved my ability to compromise

PERSONAL GROWTH

Helped clarify my values
Helped improve my personal qualities
Improved my ability to consider others' perspectives
Deepened my understanding of myself

5. The survey will be able to distinguish students who had overall CBR experiences that were positive, negative, or mixed, and outcomes will be explored by this grouping. The survey will also be able to analyze learning outcomes based on various demographic characteristics, such as ethnicity, family income level (as proxied by parents' level of education and self-report), and GPA, to name a few.

6. The survey asks students to list the structure of their CBR experiences (CBR course with practicum, CBR theory only, a regular course that included a CBR component, independent study, internship only). Items also ask student to describe various CBR activities in which they have participated (e.g., Defining a problem/issue, researching a problem/issue, collecting data, analyzing data, interviewing/interacting with community members, attending meetings with community partners, implementing project(s) with community partners, reporting data, presenting CBR experiences or findings in class, to name a few). These items will, over time, provide information about CBR delivery nationwide.

7. There are two open-ended items on the pilot version. One asks students to discuss any other thoughts they have about how their CBR experiences have impacted them. Another asks students about suggestions for improving the survey itself.

8. As of 6 April, 62 respondents had completed the survey from 5 institutions. However, among institutions where only one survey was completed, we're assuming the respondent was a CBR staff or faculty member. Of the 62 current responses, 40 respondents completed all or nearly all items. About 10 listed responses to only the first few items, and another 10 answered none of the items. Some of these might be CBR staff and faculty perusing the survey. In our analyses, we will only include in our analyses respondents who completed most of the survey. Currently all respondents are Caucasian.

9. The pilot survey will be online until June 7 2009. At that time, the pilot survey will be closed. On June 12 2009, our subscription to Survey Monkey ends, so unless we extend the subscription or move the survey to another site, it will be unavailable until the revised version (based on pilot analyses) is completed.

10. A completed report should be submitted by July, 2009. Overall results will be reported to all consortium members. Trisha will determine the extent to which institution-specific results can be provided to individual institutions, based on available funds.