

Kowalewski, B. M. 2004.

S-L → CBR

ME

New Perspectives in Service-Learning

Research to Advance the Field

Edited by

Marshall Welch

*Lowell Bennion Community Service Center
University of Utah*

Shelley H. Billig

RMC Research Corporation



Library of Congress Cataloging-in-Publication Data

New perspectives in service-learning : research to advance the field /
[edited by] Shelley H. Billig, Marshall Welch.

p. cm. – (Advances in service-learning research)

Includes bibliographical references and index.

ISBN 1-59311-157-6 (paperback) – ISBN 1-59311-158-4 (hardcover)

1. Student service–Congresses. 2. Student
service–Research–Congresses. I. Billig, Shelley. II. Welch, Marshall.
III. Advances in service-learning.

LC220.5.N49 2004

361.3'7–dc22

2004020286

Copyright © 2004 Information Age Publishing Inc.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the publisher.

Printed in the United States of America

CHAPTER 7

SERVICE-LEARNING TAKEN TO A NEW LEVEL THROUGH COMMUNITY-BASED RESEARCH

A Win–Win for Campus and Community

Brenda Marsteller Kowalewski

ABSTRACT

A community-based research (CBR) project employed as service-learning pedagogy in a research methods course is first described and then evaluated against a well-defined theoretical model. CBR is a form of action research wherein course content is taught and practiced through conducting research for and with a community partner. The perspectives of faculty, students, and community partners are considered in this evaluation. The impact of this service-learning pedagogy on student learning is also assessed using feedback from course evaluations and project evaluations administered to both students and community partners. Findings suggest that the CBR project described in this chapter is a very powerful learning experience for students

New Perspectives in Service-Learning: Research to Advance the Field, pages 127–147

Copyright © 2004 by Information Age Publishing

All rights of reproduction in any form reserved.

and produces important outcomes for community partners. This lends support for the assertion that CBR is the penultimate form of service-learning.

Service-learning is a pedagogy that enables students to accomplish course objectives through both classroom and service experiences. Real-world experiences addressing pertinent community issues are at the heart of service-learning. Mintz and Hesser (1996) viewed the fundamental principles of service-learning through what they called lenses of collaboration, reciprocity, and diversity. Through the collaboration lens, Mintz and Hesser suggested that service-learning engages people in responsible and challenging actions for the common good with clearly articulated service and learning goals and opportunities for critical reflection. Through the reciprocity lens, service-learning empowers those with needs to define those needs first and recognizes the needs as dynamic rather than static, thus fostering a genuine, active, and sustained organizational commitment (Mintz & Hesser, 1996). Finally, service-learning through the diversity lens involves participation by and with diverse populations wherein the differences in backgrounds and orientations are viewed as assets (Mintz & Hesser, 1996).

These principles of service-learning are in essence the fundamental principles of community-based research (CBR), a teaching strategy that some have called the “highest stage of service-learning” (Porpora, 1999, p. 121). CBR lends itself to service-learning as it is research that is done *for* and *with* the community, not *on* the community. Students actively engage in providing a service by conducting needed research the community has identified. Simultaneously, students learn and utilize research methodologies and concepts. The many opportunities for collaboration and direct application of course content experienced in CBR have led some to argue that it is the penultimate service-learning pedagogy. Strand, Marullo, Cutforth, Stoecker, and Donohue (2003a, 2003b) proposed three key elements to CBR, which directly mirror the lenses of service-learning described by Mintz and Hesser (1996). The fundamental elements of CBR involve: (1) collaboration; (2) validation of multiple sources of knowledge; and (3) social justice for less empowered populations. These elements are discussed in more detail below. It is important to establish that CBR can be a form of service-learning pedagogy. Consequently, CBR interfaces nicely with service-learning in an introductory research methods course. This approach allows students to learn and apply research methodologies and concepts while providing indirect service in the community.

This chapter describes a CBR project, employed as a pedagogical tool in an upper division research methods course in sociology. This chapter also (a) evaluates the use of CBR in the research methods course against a clearly delineated CBR model proposed by Strand and colleagues (2003a, 2003b); and (b) explores the impact of this CBR project on student learning.

A brief review of CBR and its impact on student learning is discussed. Then the central components of the CBR model are outlined (Strand et al., 2003a). A description of the CBR project employed in the research methods course follows. The methods and results of the evaluation of the CBR project and its impact on student learning are presented. Finally, conclusions about CBR and its relationship to service-learning are drawn.

REVIEW OF COMMUNITY-BASED RESEARCH

Community-based research (CBR) is a form of action-oriented research that can be used as a pedagogical tool. In many regards, CBR is just one of many labels for action-oriented research used today. Historically, Lewin (1948) coined the term *action research* to describe an approach to research that combined theory and practice. In more recent years, a number of different models have been proposed for doing action oriented research (Green et al., 1997; Murphy, Scammell, & Sclove, 1997; Nyden & Wiewel, 1992; Porpora, 1999; Small, 1995; Stoecker, 1999, 2003; Strand, 2000; Strand et al., 2003a; Stringer, 1999). Although each model has its own unique qualities, Stringer (1999) noted the similarities in these models. These include:

- Collaboration with community members;
- Engaging a co-learning process;
- Taking a systemic perspective;
- Capacity building for community groups;
- Challenging existing canons of disciplinary research and pedagogical practice; and
- Striking a balance between research and action (p. 5).

Couto (2003) suggested action research has reached an important developmental point as a field. Many researchers and practitioners have written about action research models and how to employ them (Murphy et al., 1997; Nyden et al., 1997; Porpora, 1999; Stoecker, 1999, 2003; Strand, 2000; Strand, et al., 2003a; Stringer, 1999). However, few researchers have assessed their use of CBR with any specific criteria of these models.

It is important for researchers and practitioners to understand and test the theoretical underpinnings of the action research models (Stoecker, 2003) and assess the challenges employing such models (Ferman & Shlay, 1997; Hite, 1997; McNicoll, 1999). However, it is also important to evaluate the application of the models from the perspectives of all partners involved in the research.

Many action researchers have published their personal reflections on their specific action-oriented research project (Chapdelaine & Chapman,

1999; Gedicks, 1996; Willis, Peresie, Waldref, & Stockmann, 2003). Some have reflected on the challenges employing this pedagogy as well as on the outcomes for students (Chapdelaine & Chapman, 1999; Willis et al., 2003). Much of this research does not focus on the student or community partner experience. However, two studies include the students' perspectives. Chapdelaine and Chapman (1999) used student evaluations with faculty reflections to evaluate a CBR project employed in their class. Willis and colleagues (2003) presented insights from four undergraduates with extensive experience in CBR.

IMPACT OF CBR ON STUDENTS

Reports of the impact of the CBR on students is limited. Ferrari and Jason (1996) investigated the impact of CBR projects on students' attitudes after engaging in projects that were independent research projects. Students reported the CBR project resulted in personal growth, enriched their education, and influenced their career goals. Ferman and Shlay (1997) reported the quality of their students' writing was bolstered by a CBR project. Hite (1997), looking more specifically at student learning, provided limited qualitative evidence from student journals that the CBR employed in her course contributed to accomplishing course objectives. Chapdelaine and Chapman (1999) found evidence that a CBR project positively impacted students learning specific course content and meeting particular course objectives. Willis and colleagues (2003) reported that CBR:

- Enriched traditional academic coursework;
- Provided a sense of empowerment;
- Provided greater understanding of social problems; and
- Integrated academics and service.

Although these studies investigated the impact of CBR on students, they were written mostly from a faculty perspective without considering very much data from the students themselves.

Strand and colleagues (2003b) argued that CBR fundamentally involves critical pedagogy that helps students think critically, become effective agents of change, and realize that their skills and knowledge can be used to help others. Eyler and Giles (1999) provided some evidence that service-learning experiences involving intense reflection and deliberate connections to course content result in more critical thinking among students. If CBR is employed according to the theoretical model, then one would expect similar outcomes to those described by Eyler and Giles; however, this has yet to be explored.

THEORETICAL MODEL OF CBR

Strand and colleagues (2003a) defined CBR as “a partnership of student, faculty, and community members who collaboratively engage in research with the purpose of solving a pressing community problem or effecting social change” (p. 3). Given this definition, Strand and colleagues created a model based on three general principles that differentiates CBR from other traditional academic research.

1. CBR is a collaborative enterprise between researchers (professors and/or students) and community members.
2. CBR validates multiple sources of knowledge and promotes the use of multiple methods of discovery and dissemination of the knowledge produced.
3. CBR has as its goal social action and social change for the purpose of achieving social justice (p. 8).

Collaboration is the element of the CBR model that underscores the fact that CBR is research *with* and *for* the community. Ideally, Strand and colleagues (2003a) suggested that community partners should be working with students and professors at every stage in the research process. The second element of the CBR model has been referred to as democratization of knowledge (Strand et al., 2003b) or new approaches to knowledge (Strand et al., 2003a). Strand and colleagues (2003a) listed four key components to the democratization of knowledge:

1. Knowledge brought to the project by all partners involved is equally valued.
2. Multiple research methods are used.
3. User-friendly approaches to the dissemination of knowledge are provided.
4. Conventional assumptions about knowledge itself are challenged (pp. 11–13).

The last principle of CBR, social action and social change, points to the central purpose for engaging in CBR: to produce information that can be used to bring about needed change. The findings of the research or the process itself might contribute to social change (Strand et al., 2003a).

IMPACT OF CBR AS CRITICAL PEDAGOGY

Using the three principles described earlier, Strand and colleagues (2003b), argued that CBR fundamentally employs critical pedagogy. They suggested critical pedagogy has three goals:

1. A focus on collective or collaborative learning that deemphasizes hierarchy.
2. A demystification of conventional knowledge.
3. Teaching for social change (p. 11).

Accordingly, CBR will help students develop "the capacity to think critically and analytically about existing structures of oppression and injustice, skills that prepare them to operate as effective change agents in the public sphere, a commitment to values of social justice and human dignity, and a belief in their own and others' ability to apply their knowledge and skills to bring about improvement in people's lives" (p. 12).

FAMILY SELF-SUFFICIENCY PROJECT DESIGN AND IMPLEMENTATION

Thirty students enrolled in an upper division Social Research Methods course were involved in a CBR project for two local housing authorities in neighboring cities. Two program administrators in each agency were identified as community partners in the project.

Selection and Design of Project

The partnership between the university and the two housing authority agencies began approximately 3 months before the start of the semester. The coordinator for the city Neighborhood Development project suggested to a group of faculty engaging in service-learning activities that many community agencies, including the city housing authority, were in need of evaluation research. In a follow-up conversation the coordinator offered to act as a "matchmaker" between the faculty member and the administrators of the local housing authority. A meeting was scheduled and the match was made.

The first step taken was the identification of the agency's needs. Three possible projects were outlined and discussed. One project, the evaluation of the Family Self-Sufficiency (FSS) program, was determined to be the most important to the agency and the best project for facilitating the course objectives in an upper division sociology course on research methods. The

FSS program is a federally funded program through the Department of Housing and Urban Development designed to move participants from dependence on welfare assistance to self-sufficiency. Clients have five years to meet their program goals. The FSS program targets lower socioeconomic families who are eligible for public housing assistance. The majority of the FSS clients are single, female heads of households with three or fewer children; have a high school diploma, a GED, or less education; and have an annual household income of less than \$20,000 a year. The majority of the clients are Caucasian; however, the Hispanic or Latino(a) populations are disproportionately overrepresented in both cities' programs.

At the outset, a partnership with only one housing authority was being pursued to evaluate the FSS program run within their agency. However, another FSS program operated by a housing authority in a neighboring city was added at the request of the original housing authority partner.

In early discussions, the community partners and faculty member determined that a longitudinal 5-year study involving newly enrolled participants was most appropriate. A cross-sectional study of current FSS participants would also be conducted to produce more immediate results for the agency. All decisions regarding the project and research questions were determined by the community partners and faculty member prior to the start of the semester.

Role of Students

Thirty upper division undergraduate students worked in four groups on the evaluation of the FSS program in both cities. A basic outline of the research design had already been determined by the faculty member and community partners prior to the semester. Students carried out the design and made suggestions for improving it as the project unfolded. All data collection instruments were developed by students with frequent feedback from the instructor. Students then administered those data collection instruments. Compilation and analysis of the data were also completed by students. The instructor created the code books for surveys and students entered the data in a statistical software package commonly used in the social sciences. The qualitative data collected through interviews were transcribed and analyzed by students with some guidance from the instructor to ensure that all community-driven questions were answered. Students and faculty initially interpreted the results of the study. Students then prepared and presented a PowerPoint report for the staff and administrators of the FSS programs in class. It was at this point that the community partners participated in the interpretations of the findings. Each of the four groups of students wrote a summary of their individual

portion of the project, which were then compiled into two reports by an undergraduate teaching assistant and the faculty member.

Use of Class Time

Approximately 65% of the class time was devoted to the project. The class met twice a week for 75 minutes. Most weeks would involve one day of lecture to understand course material explained in the text and the other day was spent on the project. The lectures were structured in such a way that the "project day" following the "lecture day" was a direct application of the material discussed in lecture. Students spent much of the last 8 weeks of the course directly applying the course material in the CBR project. Every day was devoted to the project when the data were being compiled and analyzed and during the 2-week period of constructing the data collection instruments. The last 2 weeks of the semester were spent preparing the oral presentations to the community partners for the last day of class.

Data Collection and Analysis

The FSS project required students to employ at least one research method addressed in the course. Most groups of student researchers employed only one research method in depth. The overall project involved four different methods:

1. Content analysis;
2. Nonparticipant observation;
3. Face-to-face interviews; and
4. Survey research.

Given the nature of the research questions the housing authorities wanted addressed, the research developed into two distinct studies: employing a longitudinal study and a cross-sectional study.

Longitudinal study. The longitudinal study utilized a quasi-experimental design using an experimental and control group for program evaluation of the FSS program in one housing authority over a 5-year period of time. The experimental group consisted of the new clients in the FSS program while the control group consisted of Section 8 Housing Choice Voucher clients who did not participate in the FSS program. These groups were asked to complete a survey at three separate points in time: at the time they were accepted into the FSS program; during the third year in the FSS program; and again at the end of the 5-year program. Student researchers

collected and analyzed data from the initial phase. Survey instruments were administered to all new FSS participants at their one-on-one introductory meeting with their FSS caseworker.

Cross-sectional study. The cross-sectional study involved four different modes of data collection:

1. Content analysis;
2. Observation of staff-client interaction;
3. Interviews; and
4. Survey research.

Three student groups were responsible for the cross-sectional study. One group was responsible for a content analysis of all printed documents used by both housing authorities as well as nonparticipant observations of FSS administrators interacting with FSS participants in one agency on 10 separate occasions. Another group conducted face-to-face interviews with FSS staff members in each housing authority. A total of six interviews with all FSS staff members, three interviews in each housing authority, were audiotaped and then transcribed from tape for analysis. The last group of student researchers was responsible for the cross-sectional survey administered in each city to current FSS clients and a control group consisting of a random sample of Section 8 Housing Choice Voucher participants.

PROJECT REPORTS AND DISSEMINATION OF RESEARCH RESULTS

Each group of student researchers was required to write a report describing the FSS project. Various sections of the report were turned in throughout the course of the semester for feedback and revisions before turning in the final draft at the end of the semester. Each of these reports were components to the larger overall evaluation of the FSS programs. The faculty member and a teaching assistant collaboratively synthesized the four reports into two reports. One described the longitudinal study and one described the cross-sectional study. These reports were given to both housing authorities.

Findings of the research were also orally presented on two separate occasions. First, each group of student researchers presented their research findings at an annual department research conference held on campus. Second, FSS staff and administrators from both housing authorities were invited to campus for an oral presentation of the research findings. Each student group presented their particular piece of the overall project.

PROJECT FINDINGS

Students conducting this study assessed four areas in each FSS program:

1. The structure of the FSS program;
2. How well the programs promoted self-sufficiency to its clients;
3. The self-sufficiency of program clients compared to a control group of Section 8 housing clients; and
4. The clients' perceptions of the program's effectiveness.

In terms of the structure of the FSS programs in both cities, the student researchers observed that each program functioned under a different structure. In one city, the staff members were responsible for administering more than just the FSS program to clients. In the other city, the staff members were responsible for administering the FSS program only. Although both structures seemed to work, there was a higher level of staff satisfaction among those responsible for administering the FSS program only.

Students also conducted a content analysis of all documents produced to promote the FSS program to clients. The analysis revealed that three out of five dimensions of self-sufficiency were inadequately addressed in both cities. The home ownership, health, and transportation dimensions were neither adequately described nor promoted in program description pamphlets. This finding prompted each program to consider developing new documents that describe and promote their programs.

Another group of student researchers examined the differences between FSS clients and a control group of Section 8 housing clients on five dimensions of self-sufficiency:

1. Financial;
2. Personal development;
3. Home ownership;
4. Health; and
5. Transportation

As expected, the first phase of data collection for the longitudinal study showed that new FSS clients did not differ from the control group on these dimensions of self-sufficiency. It is only with participation in the program that the levels of self-sufficiency are expected to increase. The cross-sectional study, comparing current FSS clients in both cities with the control groups in both cities, revealed that the FSS programs in both cities seem to be positively affecting their clients and helping them to become more self-sufficient. FSS clients in both cities are more likely than Section 8 housing clients to:

- Be employed full time;
- Have an income of at least \$10,000 a year;
- Have a higher credit rating;
- Have higher self-esteem;
- Be saving money to purchase a home; and
- Access more forms of assistance.

Generally, the findings suggest the FSS programs in both cities are most effective in the financial, personal development, and home ownership dimensions of self-sufficiency. Both programs were least effective in the transportation dimension. Improving the clients' access to transportation may increase the effectiveness of the program even more.

Lastly, the FSS clients' perceptions of the FSS programs in both cities were explored. Overall, the clients in both programs were very satisfied with the program and the role it played in their progress toward self-sufficiency. Both housing authorities have used these findings to help them secure funding to sustain and improve their programs.

ASSESSING THE IMPACT OF CBR AS A TEACHING TOOL

The project was assessed by applying theoretical principles proposed by Strand and colleagues (2003a). Data were collected from 30 participating students and 4 community partners to evaluate the FSS project. Reflections from the faculty member served as a qualitative evaluation measure.

Data Collection

Data collection from students occurred at two different time periods using two different instruments: a course evaluation and a project evaluation. The course evaluation was administered with the final exam. All 30 students completed the form. The project evaluation was administered via mail 2 months after the course was completed. Of the 30 evaluations mailed, 13 were returned representing a 43.3% response rate.

The four key individuals at the participating agencies received a short evaluation form at the same time students received theirs. Three of the four key partners completed and returned the evaluation forms. Evaluation forms were sent to agencies after the final written report had been submitted to both agencies.

Faculty reflections on the CBR project were used for the evaluation of the project. Most of these insights evaluate the overall project with respect to the ideal type CBR model discussed in the theory section of this chapter.

Given the collaborative nature of CBR, the faculty member is as much of an integral player in the partnership as students and community agencies. Hence, the inclusion of these data is relevant for the study.

RESULTS

The results of this assessment are organized around the two research objectives. First, the FSS project was evaluated using the criterion of the theoretical CBR model described by Strand and colleagues (2003a). Relevant data from faculty, student, and community partner evaluations were used in this analysis. Second, the impact of the FSS project on student learning as it relates to course objectives and critical thinking was assessed.

Theoretical CBR Model Evaluation Criteria

The theoretical CBR model proposed by Strand and colleagues (2003a) includes:

- Collaboration between faculty, students, and community partners;
- The democratization of knowledge; and
- Social change as the basic elements in any CBR model.

The presence of each of these criterion in the FSS project is evaluated from the perspectives of all partners involved.

Collaboration

Faculty perspective. The research design of the FSS project was deliberately constructed to be collaborative in nature. Strand and colleagues (2003a) suggested that collaboration should take place in every stage of the research process. Table 7.1 shows which partners were involved in which stages of the research process. The only stage in which all three partners were collectively involved was during the interpretation of the results.

The problem and research questions were identified solely by the community partner. The community partner also played a central role again in the later part of the process wherein initiatives are implemented. Consequently, the FSS project was moderately collaborative in nature.

Student perspective. Students were asked to rate the degree of collaboration with peers, faculty, and community partners on a 5-point scale. Students' responses suggest the FSS project facilitated collaboration with all three groups (see Table 7.2). The mean scores for each collaboration measure is above the average score of 3 on the 5-point scale, and the percentage of students agreeing or strongly agreeing with the

Table 7.1. Partners' Involvement Throughout the Research Process

<i>Research Process</i>	<i>Faculty</i>	<i>Students</i>	<i>Community Partners</i>
Identifying the issue or problem			✓
Constructing research questions	✓		✓
Developing research instruments	✓	✓	
Collecting and analyzing data	✓	✓	
Interpreting results	✓	✓	✓
Writing final report	✓	✓	
Issuing recommendations	✓	✓	
Implementing initiatives			✓

Table 7.2. Mean Scores and Percentages of Students Responding to Collaboration Measures (n = 13)

<i>Collaboration Measure</i>	<i>Mean Score</i>	<i>SD*</i>	<i>Percent Responding Agree or Strongly Agree</i>
The FSS project afforded me the opportunity to:			
a. Work collaboratively with peers.	4.25	0.97	83.3%
b. Work collaboratively with faculty.	4.38	0.77	84.6%
c. Work directly with community workers.	3.92	1.04	61.6%

* Standard deviation

statements is above average. However, a higher percentage of students agreed and strongly agreed that the peer and faculty collaboration opportunities were more readily available than collaboration with community partners. This finding may be explained by the research design. In fact, not all groups of student researchers had as much direct contact with community partners as did others. The students involved in face-to-face interviews and nonparticipant observations constituted approximately half the class (14 out of 30 students) and these students had the most opportunity for collaboration.

Community partner perspective. The community partners were to evaluate collaboration and communication between their agency and faculty and students as well as their overall satisfaction of the role their agency played

in the project. Overall, the evaluation of collaboration was very positive. All community partners responded that they were satisfied or very satisfied with all areas of collaboration measured.

Interestingly, faculty and students rated the collaboration with community partners as lower than collaboration with each other. These ratings represent a minimal level of collaboration as defined by the theoretical model expecting collaboration at each stage of the research process (Strand et al., 2003a). However, community partners were satisfied or very satisfied with this level of collaboration. The community partners' responses call into question the theoretical level of acceptance. Perhaps in practice, collaboration in every step of the research process may not be attainable or desirable on the part of community partners. Participating in a CBR project, although beneficial to the agency, is time consuming and a potential drain on already scarce resources.

Democratization of Knowledge

Theoretically, CBR involves the democratization of knowledge that includes four key components:

1. Knowledge brought to the project by all partners involved is equally valued.
2. Multiple research methods are recognized and incorporated into the project.
3. User-friendly approaches to the dissemination of knowledge.
4. Conventional assumptions about knowledge itself are challenged.

Faculty reflections were used to measure the first three elements of this principle. Student data were used to evaluate the last element regarding conventional assumptions being challenged. Community partner data were used to evaluate the approaches to disseminating research findings.

Faculty perspective. Overall the democratization of knowledge appears to be present in the FSS project. All partners involved in the FSS project contributed new knowledge. Community partners defined the problem and brought knowledge about housing in general and about the program specifically to the project. Students also contributed knowledge regarding the program and some of its outcomes after conducting a brief review of the literature on self-sufficiency. The faculty member provided knowledge regarding the research process and research methods.

Multiple research methods, such as content analysis, nonparticipant observation, face-to-face interviews, and survey research, were used. Additionally, the oral presentations given by students were very user-friendly, straightforward, easy to understand, and logically organized. The two final reports, however, were written in a standard academic structure

describing objectives, literature review, concepts, methods, results, and conclusions. This format was less familiar to interpretation by community representatives and therefore less user friendly than the oral presentations.

Community partner perspective. Community partners were asked to evaluate the approaches to disseminating data. All of the community partners responded that they were very satisfied with the oral presentations of the research findings. One partner even wrote, "Student presentations were very well done. It was obvious [that] the students were learning through the process of gathering information on an actual program."

Student perspective. Only the aspect of challenging conventional assumptions about knowledge itself was assessed by students. The conventional knowledge of students, before taking the class, was that research is scientific and therefore objective. The way our society uses research results to "prove" positions on issues has led to the construction of this conventional knowledge. Theoretically, CBR should help challenge that conventional wisdom. Students were asked to agree or disagree on a 5-point scale if the FSS project afforded them the opportunity to realize that doing social research is not always objective. An overwhelming majority of students (92.3%, $n = 13$) agreed or strongly agreed with this statement. It appears the students perceived the CBR project as successful in helping them to view the research process as an art as much as a science.

All partners rated the application of the democratization of knowledge criteria very favorably. These criteria of the CBR model seem both theoretically and practically important and desirable from the perspective of all partners involved.

Social Change and Social Justice

Social change is a salient feature of CBR. Faculty and students' reflections of the project, and information about how the community partners are using the findings of the research, have been used to determine to what extent the social change principle of the CBR model was realized.

Faculty perspective. One of the main goals of the project from the outset was the production of an outcome that was useful to the community partner. In this way, bringing about social change through CBR was really left in the hands of the community agency. This is evident in the previous discussion of collaboration wherein community partners were left to implement recommended changes without further input from academic partners.

Student perspective. Students also recognized the application of social change. For example, when asked what they liked best about the FSS project, one student articulated how social change was apparent to them: "There was a positive outcome. It wasn't just a mock assignment. We actually produced research that is going to help people (hopefully) in the future." Although

students recognized the social change element in the FSS project, most saw their contribution no further than to the end of the semester.

Community partner perspective. Community partners were asked how the findings of the research were going to be used. They responded with general comments about how the findings have helped them determine what is working for current FSS clients and what is not. The findings are helping them to reinforce the positive aspects of the program and improve what is not working. One community partner wrote: "The information that came out of the survey backed up many conclusions that support the thoughts of staff. We were able to use this information to back up our requests for more grant funding!"

While these are small steps for social change, the FSS project did indeed produce a product that is being used to create social change minimally. Of the three key principles of CBR, the FSS project seems to satisfy the social change principle the least. All partners involved recognized the importance of social change in the project. Although not satisfied completely in the FSS project, the social change criteria seems theoretically important to all partners, even if not practically implemented.

IMPACT OF CBR ON STUDENT LEARNING

Student feedback on the FSS project was analyzed to evaluate the impact of the project on meeting course objectives and promoting critical thinking.

Course Objectives

The FSS community-based research project, the text, and course lectures were used to provide students with knowledge and application of research methods, the fundamental course objectives. Course evaluation data suggest these objectives were accomplished. Of the 30 students enrolled in the course, 86.7% reported that classroom activities were supportive of the course objective—a rating of 4 or 5 on a 5-point scale.

Course evaluation data also suggest that 73.3% of the 30 students enrolled in the course rated the outside-of-class assignment as above average (a 4 or 5 on a 5-point scale with 5 being the highest) in terms of its contribution to their understanding of research methods. An analysis of responses on the FSS evaluation form lend additional support for the positive impact of the CBR project on student learning. Students were asked to rate the effectiveness of the FSS project in the four knowledge/skill areas listed in Table 7.3. Students rated the FSS project well above average in its effectiveness on each indicator. An overwhelming majority of

Table 7.3. Mean Scores and Percentages of Students Responding to CBR Effectiveness Measures

Course Outcome Measure Knowledge/Skill Areas	FSS Project			Textbook		Difference of Means	
	FSS Mean Score	SD ¹	Percent Responding 4 or 5 (n = 13)	Text Mean Score	SD		Percent Responding 4 or 5 (n = 13)
1. Providing you with knowledge of a research method.	4.62	0.65	92.3%	3.54	0.97	53.9%	1.08**
2. Providing you an opportunity to practice research methods.	4.69	0.63	92.3%	2.92	1.12	30.8%	1.77**
3. Helping you retain your knowledge of research methods.	4.15	0.90	84.7%	3.08	1.04	46.2%	1.08**
4. Teaching you the process of doing research.	4.46	0.66	92.3%	3.46	0.88	61.5%	1.00*
Overall FSS project effectiveness rating on these four indicators	4.48	0.53	84.7%	3.25	0.85	23.1%	1.23*

¹ Standard deviation; * level of significance = .05; ** level of significance = .01

students (92.3%) rated the project as especially effective in providing them with knowledge regarding research methods, giving them an opportunity to practice their research skills, and teaching them the process of doing research. The overall mean (4.48) suggests a very positive reaction on the part of the students to the FSS project and how it contributed to their knowledge of research methods overall.

The effectiveness of the FSS project was compared with the effectiveness of the textbook in contributing to students learning course outcomes. The percentage of students rating the effectiveness of the project on any one of the course outcomes is much higher than the percent of students rating the text as especially effective on any outcome. A test of means was calculated to determine if the students' rating of the FSS project was significantly more effective than the text book in producing the course outcomes. The last column in Table 7.3 indicates the difference in means on each of the four course outcomes. On each course outcome, students rated the FSS project as significantly more effective than the textbook.

Students were also asked to respond to open-ended questions regarding the most important thing they learned from the FSS project. Many of these comments made reference to the application of skills and knowledge related to the course material. One student responded: "I learned how to conduct research through different techniques (surveys, interviews, etc.), and more importantly, I learned how to interpret and analyze the research I gathered." Most students reported they learned that research is more time consuming than they thought. Others pointed out the importance of working together in a research process to get the work done. Students also made comparisons between what they learned from the project versus what they learned from the text. The majority of responses indicated a preference for the CBR project rather than the text for learning research methods: "...there are many considerations that come to light when actually doing field research. While the text may highlight and explain research, it does not do so as effectively as actual field application."

Although the CBR project was the favored teaching tool, students recognized the text as an important reference. Many students noted the importance of learning about different research methods presented in the text, even if they were not employing them in the CBR project. Others wrote how the text was useful for helping them to outline the research project from beginning to end: "It was useful to refer to [the text] when writing the survey. It helped us know what categories to put questions in to and how to arrange the actual survey."

Overall, the qualitative responses to open-ended questions regarding the most important material learned from the CBR project and text supports the quantitative findings reported above. The CBR project appears to have had a profound impact on students learning the course

material, even more so than just reading the textbook, as done in traditional research methods courses.

Critical Thinking from Critical Pedagogy

Critical thinking is embedded in CBR, almost by default. Strand and colleagues (2003b) proposed that students involved in CBR develop the capacity to think critically, become effective change agents, and come to believe in their skills to help others. The only element of critical thinking measured in this study was students' recognition of their abilities and the belief in those skills to help others.

Students reported they liked "the feeling of doing something for the community" and that they enjoyed the project because "it was real and in our own community." Very often students appeared to be empowered by their ability to use their skills to influence social change or to help someone. For example, one student wrote: "I learned that it is not just useless knowledge that is never used in life. We used what we learned. There was a sense of satisfaction at the end of the semester." Another wrote: "I liked how involved the class was. The instructor allowed us to take over certain areas and it allowed us to dig deep and use the skills we have learned." These student responses provide fairly strong evidence in the ability of CBR, and this project in particular, to produce students who believe in their abilities to impact someone's life for the better.

DISCUSSION AND CONCLUSIONS

Outcomes of this course evaluation suggest that the FSS community-based research project employed in a sociology research methods course generally meets the criteria for the CBR model described by Strand and colleagues (2003a). All partners involved in the project agreed that the three main principles of collaboration, democratization of knowledge, and social change were met on some level by the FSS project. Although collaboration was rated the lowest from the perspective of faculty and students, community partners were satisfied with the level of collaboration in the project. This discrepancy may call into question the theoretical expectation for complete collaboration throughout the research process. Second, student feedback suggested that using service-learning to conduct CBR was a very good pedagogical tool that appears to have positively impacted students' learning and, to some degree, critical thinking. These findings demonstrate the potential of service-learning coupled with CBR as a pedagogical

tool. The FSS project met all three criteria for CBR, from a minimal to moderate degree.

The evaluative data used are based on course and project evaluations. These instruments were designed for course and project assessment and feedback rather than as part of a research design involving a carefully controlled experimental study. As such, future research employing a comparison group is needed. Even so, the findings reported here support the notion that CBR coupled with service-learning has potential as a teaching and learning tool. Service-learning is enhanced through CBR in that it offers opportunities for collaboration, direct application of course content, and potential for social change. Additionally, CBR changes the focus and process of research. CBR moves research away from the traditional research model (Strand et al., 2003a), which distinctly changes the nature and quality of research. The quality of the research being conducted in an academic setting is fundamentally changed by CBR because the purpose of that research is not just for the sake of adding to our knowledge of a particular subject. CBR is a pedagogical tool that fundamentally changes the nature and quality of service-learning and research in universities and communities.

REFERENCES

- Chapdelaine, A., & Chapman, B. L. (1999). Using community-based research projects to teach research methods. *Teaching Psychology, 26*, 101-105.
- Couto, R. A. (2003). Community-based research: Celebration and concern. *Michigan Journal of Community Service Learning, 9*, 69-74.
- Eyler, J., & Giles, D. E. (1999). *Where's the learning in service-learning?* San Francisco: Jossey Bass.
- Ferman, B., & Shlay, A. B. (1997). The Academy hits the streets: teaching community-based research. In P. Nyden, A. Figert, M. Shibley, & D. Burrows (Eds.), *Building community: Social science in action* (pp.129-133). Thousand Oaks, CA: Pine Forge.
- Ferrari, J. R., & Jason, L. A. (1996). Integrating research and community service: Incorporating research skills into service-learning experiences. *College Student Journal, 30*, 444-451.
- Gedicks, A. (1996). Activist sociology: personal reflections. *Sociological Imagination, 33* [Special Issue: Sociology and Social Action, Part I], 55-72.
- Green, L. W., George, M. A., Daniel, M., Frankish, C. J., Herbert, C. P., Bowie, W. R., & O'Neil, M. (1997). Background on participatory research. In D. Murphy, M. Scammell, & R. Sclove (Eds.), *Doing community-based research: A reader* (pp. 53-66). Amherst, MA: Loka Institute.
- Hite, L. M. (1997). An action learning project on diversity: Pitfalls and possibilities. *Journal on Excellence in College Teaching, 8*, 49-67.
- Lewin, K. (1948). *Resolving social conflicts*. New York: HarperCollins.

- McNicoll, P. (1999). Issues in teaching participatory action research. *Journal of Social Work Education, 35*, 51–63.
- Mintz, S., & Hesser, G. (1996). Principles of good practice in service-learning. In B. Jacoby (Ed.), *Service-learning in higher education* (pp. 26–52). San Francisco: Jossey-Bass.
- Murphy, D., Scammell, M., & Sclove, R. (Eds.). (1997). *Doing community-based research: A reader*. Amherst, MA: Loka Institute.
- Nyden, P., Figert, A., Shibley, M., & Burrows, D. (1997). University-community collaborative research: Adding chairs at the research table. In P. Nyden, A. Figert, M. Shibley, & D. Burrows (Eds.), *Building community: Social science in action* (pp. 3–13). Thousand Oaks, CA: Pine Forge.
- Nyden, P., & Wiewel, W. (1992). Collaborative research: Harnessing the tensions between research and practitioner. *American Sociologist, 23*, 43–55.
- Porpora, D. (1999). Action research: The highest stage of service-learning? In J. Ostrow, G. Hesser, & S. Enos (Eds.), *Cultivating the sociological imagination: Concepts and models for service-learning* (pp. 121–133). Washington DC: American Association for Higher Education.
- Small, S. (1995). Action-oriented research: Models and methods. *Journal of Marriage and the Family, 57*, 941–956.
- Stoecker, R. (1999). Making connections: Community organizing, empowerment planning, and participatory research in participatory evaluation. *Sociological Practice, 1*, 209–232.
- Stoecker, R. (2003). Community-based research: From practice to theory and back again. *Michigan Journal of Community Service Learning, 9*, 35–46.
- Strand, K. J. (2000). Community-based research as pedagogy. *Michigan Journal of Community Service Learning, 7*, 89–96.
- Strand, K., Marullo, S., Cutforth, N., Stoecker, R., & Donohue, P. (2003a). *Community-based research and higher education: Principles and practices*. San Francisco: Jossey-Bass.
- Strand, K., Marullo, S., Cutforth, N., Stoecker, R., & Donohue, P. (2003b). Principles of best practice for community-based research. *Michigan Journal of Community Service Learning, 9*, 5–15.
- Stringer, E. T. (1999). *Action research* (2nd ed.). Thousand Oaks, CA: Sage.
- Willis, J., Peresie, J., Waldref, V., & Stockmann, D. (2003). The undergraduate perspective on community-based research. *Michigan Journal of Community Service Learning, 9*, 36–43.