A Pedagogy of Blending Theory with Community-Based Research

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Blending activity theory and community-based research educational applications describes the praxis achieved through the initial design, development, implementation, and assessment of one research methods course as a pedagogy to enhance and improve the outcomes of civic and community engagement for the university, its students, and the community. The results from this approach were validated by using the DEAL model of reflection. The findings indicate significant heightened awareness in students’ attitudes, knowledge, and engagement in their community through the use of this combination of activity theory and CBR. Through this pedagogical approach, undergraduate researchers were able to access and apply tested qualitative theory, conduct activities, and use reflective assessment tools.

In their monograph, *The Role of Service Learning in Educational Reform*, Bhaerman, Cordell, and Gomez (1998) cited Perrone (1993), who wrote, “Society faces an assortment of problems: a youth culture that has few connections to ‘civic life,’ feeling among youth of having no vital place in society, deteriorating communities, and an increased pessimism about the future” (p.8). In the 17 years since Perrone's observation, communities and faculty are seeing a marked increase in interest among university administrators to engage within their communities. Fritz and Roberts (2006) observed "service learning enjoys increased popularity in institutions of higher education due to concerns related to decreased civic participation."

In fact, civic life has become part and parcel of the missions of an increasing number of American colleges and universities (Strand, Marullo, Cutforth, Stoecker, Donohue, 2003). In an article written by four undergraduates – Wills, Peresie, Waldref, and Stockman (2003) – and published in the *Michigan Journal of Community Service Learning*, the authors observe that over the last decade, universities across the country have increasingly recognized that ideologically- and financially-committed institutional support for community engagement pedagogy is necessary to improve the synergy between a university and its community (p.36). Moreover, a critically important element and pedagogical tool of this movement toward civic engagement in higher education is community-based research.

Community Partner - Blueroof Technologies

Blueroof Technologies is a 501(c)3 charitable corporation developing a comprehensive program for the McKeesport, Pennsylvania, area to become a leader in the use of Senior Smart Technology for senior citizens, facilitating their use of this technology to help in their daily living. Senior Smart Technology focuses on information technology such as computer systems to educate, monitor, and optimize the lives of senior citizens. Each senior citizen participating in the Blueroof Technologies program was identified as a Blueroof Research Associate (BRA).

**Purpose**

In order to develop a more effective civic and community engagement program, a research methods course was enhanced and modified to incorporate activity theory blended with CBR to develop a praxis for implementing this pedagogical approach. The purpose of this instructional research narrative is to examine and discuss the impact of this pedagogical qualitative methodology and the application of the praxis for blending activity theory and community-based research (CBR) within one undergraduate research classroom in order to determine the effect on the outcome of civic and community engagement projects. Both cultural-historical activity theory and community-based research allow individuals to test ideas drawn from a particular praxis structure brought into the public domain. When individuals understand praxis as “narrative-informed action,” they engage knowingly in a complex construct of informational, historical, and material conditions (Arnett, 2001).

**Objectives**

Within the general purposes outlined above, the primary objectives of this instructional narrative are:

1. To demonstrate the use of this pedagogical approach to bring together academic research through a collaborative effort with community residents to produce knowledge;
2. To engage all involved in a co-learning process; and,
3. To provide feedback and observations about the perspectives of the students, the faculty member, and the community partner.

Couto's article “Review Essay - Community-based Research: Celebration and Concern” provides methods and review of further evidence for the three objectives stated above to be considered as "canons" for best practices (p. 69).

**Community-based Research Principles**

For the purpose of this instructional essay, community-based research is defined as the pedagogy of applying course-based "qualitative" research through a proactive collaboration among students and members of the community (Strand, Marullo, Cutforth, Stoecker, Donohue, 2003). And, additionally, Couto (2003) makes reference to the Handbook of Action Research (Reason & Bradbury, 2001), and cites Stringer's (1999) point “that if we cannot as yet agree on a single name...whatever the nuances among terms, there is coherence.” Stringer criteria for community-based research:

- Brings academic researchers into collaborative residents and leaders to produce knowledge;
-Engages all involved in co-learning process;
-Takes a systemic perspective;
-Builds community groups’ capacity to conduct needed changes; challenges the existing canons of disciplinary research and pedagogical practice; and
- Balances research and action (p.5)

Therefore the definition for community-based research in this instructional essay is based on the criteria provided by Strand, Marullo, Cutforth, Stoecker, Donohue, and Stringer, which is a combination of activity-collaborative inquiry, critical analysis, and social action.

**Activity Theory Principles**

The volume of work assembled and presented by Daniels & Gutierrez (2009) and devoted to learning and expanding research of activity theory, includes a number of articles, opening with the definition, by Sannino, Daniels, and Gutierrez, of “activity theory... as a practice-based theory that is grounded in practice both theoretically and concretely.” For scholars, activity theory offers an analysis of development within practical social activities. “Activities organize our lives. In activities, humans develop their skills, personalities, and consciousness. Through activities, we also transform our social conditions, resolve contradictions, generate new cultural artifacts, and create new forms of life and the self” (p.1). Activity theory today attracts more interest globally than ever before (Daniels & Gutierrez, 2009, citing Sannino, Daniels, and Gutierrez).

Daniels and Gutierrez’ (2009) collection on activity theory mentioned earlier, includes Engestrom’s article, “The Future of Activity Theory: A Rough Draft,” which points to objects that are concerns; they are generators and foci of attention, motivation, effort, and meaning. "Through their activities, people constantly change and create new objects. The new objects are often not intentional products of a single activity but unintended consequences of multiple activities” (p.303). Furthermore, activity theory is a practice-based and is historical and future –oriented. Sannino, Daniels, and Gutierrez (Daniels & Gutierrez, 2009) argue that there are methodological issues that distinguish an activity theory approach from traditional approaches to research:

Activity theory involves the researcher throughout the course of the development, stagnation, or regression of the activities under scrutiny, as well as in the activities of the research subjects. The deep involvement in everyday human life is a crucial resource of activity theory (p.3).

The actual nature of the activity is the core of activity theory (See Figure1). The two activity systems – (1) the classroom and (2) Blueroof Technology – explore the "shared object" in this narrative: the Blueroof Research Associate. The Tools represent the view of communication and shared developmental space with workplaces; Outcomes are learning/methods to analyze the Blueroof Technology BRA interests in technology and students' degrees; the Division of labor includes Blueroof Technology, BRA, students, faculty, and administrators; Community partners include people in the workplace; and finally Rules include a curriculum mastery of needs analysis and methods.

According to Adler and Heckscher (2006), as cited in Daniels, Edwards, Engestrom, Gallagher, & Ludvigsen’s work Activity Theory in Practice (2010), students explore the community as based on a "shared object" and value, the participants' ability to contribute to that value, their mutual trust in each other's capability to contribute, and the emergent non-zero outcomes of the collaboration (p.23). The essential elements of such collaboration is a new activity structure, in which the object of the teacher’s activity is not student learning but on the evolving student relationship with the object of the activity on which the training and accepting technology is focused. The collaborative development of BRA training and accepting technology into their daily lives was seen as the "shared object" and value to which Blueroof Technology, the faculty member, and the students could contribute in collaboration that would potentially lead to a positive outcome that none of the research collaborators could estimate.
In the subject curriculum design, per the premise of this narrative, the activity theory for the communication research methods course required students to identify a population within their community in which they could effect change through a communication instrument/object. The general goals for the communication research methods course were to link activity theory with community-based research and increase students skills through activity theory by introducing them to the scientific discovery process, to infuse problem solving and deductive reasoning, to give them the opportunity to uncover knowledge they already have, and to have them discover more about the community around them (Yuretich, Khan, Leckie, Clement, 2001). To enhance the introduction to these activity theory goals to the students, a number of in-class exercises were developed and incorporated as a regular feature of classroom activities. These exercises were designed to help students think like researchers. Over 10 of these activities have been developed and span many topics related to qualitative inquiry. Demonstrative examples to underscore the importance of the subjects covered by these exercises were posted on the course-related web site designed by the faculty member and reference librarian, "Conducting & Writing Formal Research" located on the Web at http://www.libraries.psu.edu/mckeesport/formal.htm. The ultimate objectives for conducting active research according to scholars Hocking, Stacks, and McDermott (2003), is to provide:

- An introduction to social scientific thinking as it applies to human communication;
- Awareness of ethical issues associated with conducting research with human participants;
- Exposure to the major empirical research methods, particularly surveys, field studies, and experiments;
- The opportunity to learn and apply some of the statistical techniques which are important to interpret fully accurately the results of communication research;
- Exposure to writing a final research report; and most importantly,
- An emphasis on information processing and independent critical thinking as the ultimate goal (p.xviii).

Brown points out that to be successful in communicating these objectives teachers need to identify – and encourage their students to develop – good research habits (2005). This concise format and enumeration of these concepts are well supported by Communication Research (Hocking, Stacks and McDermott, 2003), the publication which has been chosen as the textbook for the course since it supports some of these points in the construction of the proposal,
while others are applied with activity theory during the performance of the community-based research.

Course Meetings

This research methods class is scheduled as a fifteen week course that meets once a week at the client’s facility: Blueroof Technologies. Initially, during these three hour class sessions, one session introduces the course requirements and procedures. Next, two classes focused on personal dimension and civic dimension through articulated learning. Students were required to keep a journal weekly based on the “DEAL Model” of reflection (Ash, Clayton, & Moses, 2004). (See Figure 2)

The following five classes were used for face-to-face lectures that describe the theory that must be applied in order to do formal research. The remaining class sessions were used by students to engage in activity theory and community-based research. Students were expected also to spend additional hours beyond class sessions to meet with community partners Blueroof Technologies and Blueroof Research Associates.

The students undertook the essential research approach to working with their community partners Blueroof Technologies and Blueroof Research Associates and first determined an identified need. Several conferences with the faculty member, students, and program director of Blueroof Technologies revealed a critical need for formal research to develop information and to help identify Blueroof Research Associates who would accept technology into their lives and teach others through peer-to-peer learning to use this technology. As a requirement for the research methods class, this information had to be developed through a qualitative research process in order to provide a reliable basis for determining which of their Blueroof Research Associates would be likely to have sustainability in their use of technology.

Students employed the praxis of blending activity theory and CBR to complete their research project. First the students were required to write an annotated bibliography and literature review, and they researched the appropriate qualitative research method to apply to the process of designing a solution for filling the need of their client. The qualitative research methodology chosen and employed by the students included a participant survey (N=50 BRA) based on the Technology Acceptance Model (TAM), Prekumar, and Bhattacherjee, (2006), which was followed up with interviews and 3 taped focus groups using a web page evaluation checklist designed by the University of California, Berkeley (Barker, 2004). In addition, the focus group interviews were used to gather descriptive data in the subjects’ own words so that the students could develop insights on how subjects interpret some piece of the world (Bogdan and Biklen, 1998, p.115). The students provided feedback and observations from the survey tool (TAM) and focus groups of Blueroof Research Associates. The students worked with Blueroof Associates in developing their report for purposes of clarity, access to BRA, and directions for formatting a formal report. However, students were also required to write a 15-25 page research paper due at the end of the semester. Their papers showed the impact of their understanding of research and the importance of community outreach, and they will discussed below.

Summary of Students’ Findings

The survey tool TAM used in the students’ study was selected for both its validity and for its reliability when measuring technology acceptance. With respect to technology enhancing their lives, 81% of the BRA respondents indicated that it would enhance life; 74% of the participants reported that it was time to learn to use the technology; but there was an interesting finding: only 16% (8) of those who responded revealed that they would adapt to change and continue to use technology if given the opportunity. The students revealed their findings to Blueroof Technologies with a formal presentation. The Penn State University - Greater Allegheny students’ information helped to identify eight (8) Blueroof Research Associates who would accept technology into their lives, and, through a peer-to-peer learning model, would teach others. The result was the establishment of the “Follow Me Home” project. Combined with the students’ qualitative research and quantitative research from University of Pittsburgh and Carnegie Mellon University Blueroof Technologies has provided a personal laptop computer to 10 Blueroof Research Associates and are “following them home” to see how they engage with the technology. The students also presented their research at the International Society for Exploring Teaching and Learning (ISETL) conference in October 2008 at Las Vegas, Nevada.

Research Method

The methodology for this instructional article is qualitative in nature since it reports the experiences and impressions of students in a university research methods course. Bogdan and Bicklen (1992), in Qualitative Research of Education, noted that “dependence on qualitative methods for studying various educational issues is growing” (p. ix). The “DEAL Model” for critical reflection is used to identify the qualitatively different ways in which
**Figure 2**
Schematic Overview of the “DEAL Model”
Adapted from Ash and Clayton (2004)

1. **Describe**
   experience objectively:
   - What?
   - Where?
   - Who?
   - When?
   - Why?

2. **Examine**
   experience per reflection
   prompts by category of learning
   - goal

   - **Personal Growth Category**
     Sample prompts
     - Your strengths/weaknesses/skills/asumptions, etc., that emerged?
     - Effect on service/on others?
     - Need to change? How?

   - **Social Responsibility Category**
     Sample prompts
     - Trying to accomplish what?
     - Approaches taken why?
     - Need to change to more systemic approach? How?

   - **Academic Enhancement Category**
     Sample prompts
     - Academic concepts that applies?
     - Sample/different from experience? Why?
     - Need to rethink concept? How?

3. **Articulate Learning**
   - What did I learn?
   - How did I learn it? Why is it important? What will I do because of it?
students experienced such aspects of civic and community engagement and to assess the quality of their learning and whether they were meeting the learning objectives for the research course (Adapted from Ash and Clayton, 2004) (See figure 2). Ash and Clayton point out that when structuring reflection mechanisms they must include these three general phases:

- Description (objectively) of an Experience.
- Analysis in accordance with relevant categories of learning.
- Articulation of Learning outcomes.

When engaged in academic analysis, students examine their experiences in light of specific course concepts, exploring similarities and differences between theory and practice (p.140). Because educators very so widely in their approaches to the teaching-learning process, a qualitative method is especially appropriate since it allows a researcher to consider such variations from an appropriate scholarly perspective. All studies were approved by the University Office of the Use of Human Subjects. Figure 2, “Deal Model”, was adapted from Ash and Clayton from “The Articulated Learning: An Approach to Guided Reflection and Assessment”.

Results

Today, community-based research is a "promising activity," one that is collaborative, change-oriented, and engaging to faculty members, students, and community members in projects that address a community-identified need. Researchers agree that nothing is truer about our universities than the fact that collaborative environments – which foster mutual respect among administrators, teachers and students – are essential to quality education (Brown, 2003, p.28).

Undergraduate students must have guidelines to connect their experience to the active learning. By connecting one’s experiences to course material and challenging beliefs, the better one understands one’s own narrative and the more reflective one’s actions can be. Moreover, Fritz and Roberts report service learning has roots in John Dewey’s educational philosophy, but has typically grown inductively, from experience and implementation of best practices (2006, p.1). The field of communication's natural connection to service learning has resulted in a number of applications and offers potential for philosophical grounding and theory development through an understanding of praxis: theory-informed action and reflection. The following are six excerpts from several different students journals using the DEAL approach. They are student reflections: description, analysis, articulation, and learning outcomes which indicate significant heightened awareness in students’ attitudes, knowledge, and engagement in their community through the blended learning format: the combination of activity theory community-based research and reflection:

The only thing necessary for the triumph of evil is for good men to do nothing.” This world is full of good men and women. Sometimes all it takes is a push in the right direction. Other times inspiration can be found in the strangest of places. I found it at Blueroof Technologies and through our community-based research course. But, where ever you may find inspiration remember this; civility costs nothing and gives everything. All it takes to better this world are small acts of kindness. We don’t require people devote their entire lives for a cause. What we need more importantly is for everyone to simply give a little. Everyone doing something is far better than only a couple doing a lot. It’s time we stop putting off what we can do tomorrow and get it done today. Sometimes all it takes is one university course to point this out- give a helping hand.

At a time where people are looking out for only themselves we should be focused on looking out for each other. For me as a student about to graduate the meaning of civic and community engagement is not just an opportunity rising at our campus, it’s an idea and principal that should be challenged and embraced by all. Through active research I learned that civility is not a state of mind but rather words put into action. The idea is right there for everyone to see. Community Engagement means to engage in your community by offering your support and time.

Kant postulated, ‘What are the aims which at the same time are duties? They are perfecting of ourselves, and the happiness of others.’ While this concept may seem dated by contemporary standards, it embodies a philosophy to which I attempt to adhere. And I believe civic and community engagement, with its inherent vitality, tolerance, and effectiveness, could be an appropriate vehicle to achieve this goal for every individual.

I feel this research course and community-based research experience, was just a tiny step in comparison to the many efforts devoted by tens of other citizens who truly incorporate civic and community engagement into their daily life. However, I learned a great deal about American society. And what I learned from it refreshed my view of the relationship between our individual self
and the Blueroof Research Associates we involved. The real civic and community engagement, thinking carefully, should be spontaneous, automatic, and free of any self-interest. I feel each and every one of us has an obligation and commitment to work on behalf of those people who through ignorance, poverty, or circumstances beyond their control, are unable to communicate - speak out because they lack communication reach. We should use our joint efforts to make their voices heard.

We live in an interconnected, global society. We are all connected to each other and to the world around us through many factors—environmental, social, and economic, just to name a few. It is important for all of us as citizens of the world to be, at the very least, aware and informed about what is going on in the world around us. As members of an academic community here at Penn State Greater Allegheny, we were given the opportunity to go beyond basic awareness of issues through active involvement in the community and scholarly discussion, research, and reflection.

The general goals for the communication research methods course were met: the faculty member was successful in integrating research skills with activity theory by introducing them to the scientific discovery process, infuse problem solving and deductive reasoning, give them the opportunity to uncover knowledge they already have, and have them discover more about the community around them. The full effect and application of activity theory and CBR have on student learning outcomes can be found throughout the students reflection paragraphs. Additionally, the students' reflections showed that activity theory is not just a rich learning approach for community engagement purposes but a powerful framework for understanding how learners are cultural and historical agents embedded within, and constituted by, socially-structured relationships and tool-mediated activity. It is this cultural and historical understanding that makes this activity theory and community-based research stand out from other learning frameworks.

The most consistent and desirable outcomes for institutions wishing to strengthen and enhance civic and community engagement programs can be realized by supporting the implementation of curricula which blends activity theory and CBR, thus evolving its campus culture through civic and community outreach. Course design within programs specifically focused on outcomes involving civic and community engagement projects and employing interactive learning for students should include these considerations:

- A strong strategic plan which blends the use of activity theory and CBR for teaching methods.
- A central focus on curriculum design to augment consistency and clarity.
- The “DEAL Model for Critical Reflection” which describes a reflection framework that pushes students toward personal growth, civic engagement, critical thinking, and interpretations of complex issues.
- Staff support, such as a coordinator who can meet face-to-face with faculty from any department incorporating courses for the program.
- Administrative support for faculty members, e.g. training, assessment tools, project funding, course release time, equipment, and software.
- Additional financial support for faculty and students, e.g., travel, conference fees, professional organizational fees.

The proper approach to outreach is one that helps to create a positive environment for faculty, and one that uses a combination of resources which will result in a culture that is fully engaged in civic and community engagement, and one that enhances teaching and learning outcomes. Combining activity theory and CBR is a transformative approach to uniting the three traditional academic missions of teaching, research, and service. This practical illustration for students of problems and the relationship to theoretical problem solving and the incorporation of qualitative research in the curriculum of the degree programs at Penn State University creates a vital link between the students’ ability to understand the necessary techniques and protocols in the conduct of the successful practice in their disciplines, as well as their ability to apply those techniques and protocols with skill and precision.

Responsibility for Learning and Conclusion

This instructional research narrative reflects on, and contributes to, the discussions of activity theory and CBR as a powerful praxis within a research curriculum. Praxis is the practical application of theory, or, according to Arnett and Arneson (1999), theory-informed action. Fritz and Roberts (2006) agree: research methods education is a powerful tool when it is focused on engagement of praxis grounded in theory. The metaphor for praxis is that one engages the world in which one lives (Arnett, 2001). Praxis – in, of, and about activity theory, community-based research, and civic and community engagement service learning – is of increasing interest to scholars.
Mortimer Adler (1942) asserts that the function of theory is to describe and explain facts, and the function of practice is to decide what to do about them. When one engages in theory-informed action, one engages the world in which one lives through the theories learned in the classroom. As activity theory drives application, students engage the richness of the community-based research through their field of study, research methods. In addition Daniels and Gutierrez (2009) agree that activity theory relies on establishing a “praxis” bridge between theory and practice. In the research methods classroom, civic and community engagement, as well as public scholarship, offer new defining moments for applied research methods pedagogy.

Magolda (1999) further explained in her article “Powerful Partnership: A Shared Responsibility for Learning”:

Rich learning experiences and environments require and enable students to make connections…through opportunities to relate their own experience and knowledge to materials being learned;…and through pedagogies emphasizing critical analysis of conflicting views and demanding that students make defensible judgments about and demonstrate linkages among bodies of knowledge. (p.3)

Magolda emphasizes that the narrative of self-authorship is impossible unless students are able to connect learning with their lived experiences; self-authorship requires making meaning of one’s own experience. Fritz and Roberts (2006) note that the field of communications has been increasingly involved in service learning over the last decade (Oster-Aaland, Sellnow, Nelson, & Pearson, 2004), and it has momentum as having a "natural connection or partnership” (Applegate & Morreale, 1999, p.xii) to this engaged educational endeavor. Fritz and Roberts cite O’Hara (2001), who acknowledges the discipline of communications:

[T]hose in our discipline are in an excellent position to lead the academy in embracing the responsibility both to help students develop a strong ethical commitment to sustaining a democratic society and to show students how they can use education to support their commitment [by] teaching students the ethical use of communities to promote positive social change is at the heart of our discipline (p.264).

When faculty integrate community engagement into their courses, they are advancing O’Hara’s premise. Keyton (2001), in her article describing integrating service learning in curriculum accomplishes two objectives for students. First, they have the opportunity to learn the theoretical knowledge they are taught in the classroom, and second, they have the opportunity to learn about needs of their community and how their individual and collective action can satisfy those needs (p.201). Furthermore, the integration of these two objectives distinguishes service learning from other instructional approaches. As activity theory drives application, students engage the richness of the community-based research through their field of study - research methods. Those faculty members who are interested in how to use activity theory blended with community-based research as a course delivery approach can consider the ideas presented throughout this essay as a guide to helping them to begin to integrate these two theories into their existing or future courses, most specifically, research methods courses. Community-based research is a process of hard work on both sides of the table, yet an effective way to engage faculty, community partners and students in and out of the classroom. Creating a course based on the goals and objectives of activity theory and community-based research, as well as synthesizing and applying these theories to new situations, has the potential to enhance learning.

Moreover, an effective curriculum for educating students with a focus on teaching activity theory blended with community-based research does all of this. In the course of their involvement with Blueroof Technology and weekly classroom exercises the students developed a stronger capacity to think on their feet, they extended multigenerational communication reach, and they provided the capacity to think critically and analytically. More importantly, they gained the knowledge and skills to be prepared for taking on the challenges of active citizenship in a participatory democracy.

References


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