



A Practical Theory-Based Approach to Action-Research in Survivor Communities

Abstract

This article draws on field reports and education theory to: 1. Describe a dynamic in communities living with repercussions of historic events; 2. Describe the potential of action research to overcome this dynamic; and 3. Interpret data from a recent action research initiative. Findings suggest these communities may be defined by their capacity to imagine a better future, that this capacity may be enhanced by action research initiatives, and that this capacity is measurable. These findings offer Extension professionals a quantifiable construct that will allow them to document community need, evaluate results, and generate support for action research initiatives.

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Introduction

An article in the *Journal of Extension* presented results of research investigating "Extension Staff Response to Increased Programming for At-Risk Audiences" (Klemme, Hausafus, & Shirer, 2005). While that article made it clear that the complexities of at-risk programming require a cooperative approach that includes multiple agencies and community involvement, it also revealed some of the barriers to at-risk programming. That research implied three key needs:

1. The term "at-risk" is in need of clarification;
2. There is a need for dialogue about approaches to at-risk programming;
3. There is a need for assessment and evaluation methods for at-risk programming.

The case studies, fieldwork observations, and literature review presented below illuminate some of the challenges to programming in at-risk communities and illustrate an approach that recognizes these complexities.

AMD&ART: A Case Study

In 1997, a diverse group of professionals agreed to participate in a collaborative approach to revitalization in communities living with the repercussions of their coal mining histories. At that time, federally funded efforts were focused on improving water quality. Under the leadership of Dr. T. Allan Comp, the AMD&ART initiative aspired to generate multiple economic and social benefits from these limited funds (AMD&ART, 2006).

The initiative began in Vintondale, Pennsylvania. At that time the "coal flats" occupied the land between the main street and the defunct coal mine. This 35-acre site contained several hundred tons of mine spoils and was contaminated by Acid Mine Drainage (AMD). The median income was \$19,150, compared to a statewide median of \$29,069. The median value of housing was \$24,500, compared to statewide median of \$69,700 (Pennsylvania, 1990).

Between 1998 and 2000, the AMD&ART staff facilitated a series of workshops and "hands on" activities. The workshops included participatory design charrettes with engineers and landscape architects, and grant writing workshops, during which community members worked with staff to prepare proposals to fund various aspects of the initiative. The projects included a water quality monitoring program and a series of "clean up days" during which residents removed decades' worth of junk that had been dumped into the stream that runs along the coal flats. These activities were designed to raise awareness about community issues and generate support for the redevelopment initiative. In addition, and very important, the activities were designed to enhance organizational capacity within the community so residents might more effectively engage outside resources. As the initiative unfolded and specific needs were identified, AMD&ART staff worked with residents to establish partnerships with over 80 federal, state, and local agencies and organizations. This collaborative effort raised over \$800,000 and twice that in in-kind support (AMD&ART, 2006; Reece, 2006).

In the summer of 2005, control of the "Remediation Park" (formerly known as the coal flats) was handed over to the community. "Remediation" refers to the ponds and wetlands that filter the drainage (AMD) from the uphill side of the site and discharge potable water into the stream on the downhill side. This passive remediation system is embedded in a park that includes a concert pavilion, sports fields, and an environmental history center.

Thus, the AMD&ART staff orchestrated an initiative that brought experts from fields as diverse as hydrogeology, horticulture, fine arts, social work, and economic development together with community members to forward a broad array of shared and highly interrelated community goals. The program evaluation research, conducted in conjunction with the AMD&ART initiative, follows the overview of fieldwork and literature review below.

Insights from the Field

In fieldwork reports at the turn of the last century, Emile Durkheim used the term "anomie" to describe an attitude of people living with persistent constraints to attaining their needs. In addition to the constraints of limited resources, Durkheim described the constraints imposed by social group consciousness and the effects of those deeply embedded constraints over generations (1897). Paolo Freire used the term "fatalism" to describe a similar attitude in very different communities. Important for this study, Freire noted that the behaviors associated with this attitude, because they transcend generations, are sometimes interpreted by uninitiated outsiders as a cultural trait of docility or laziness (1970, p. 61).

Case study analysis of reports from practitioners working in situations as diverse as multi-cultural immigrant communities in Appalachia, African American communities in the south, and Native American communities in the Midwest, support Freire's observations. Follow-up interviews with these practitioners contributed additional insights. While the causes of the adverse conditions vary

widely, the terms the practitioners use to characterize these communities are similar. These include "despair," "defeatist attitude," "jaded," "disheartened," "futility," and "cynicism." (Carlson, 2004; Comp, 2001; Konechne, 2004; Reece, 2006; Unpublished interviews with colleagues working in at-risk communities, 2006).

While not explicit in the reports mentioned above, this case study analysis found a common factor that offers insights about how and why these communities exist through generations of adverse conditions: If real estate in these communities ever had market value, that value dropped at the time of their respective economic devastation. Thus, these communities are characterized by extended families who are economically bound to their houses and/or land, and important, to each other. A corollary to this is often factionalism between extended families.

It is very important to note that I am not suggesting blanket characterization for any ethnic group or region; to the contrary, I am describing a dynamic that transcends these distinctions. This suggests it would be helpful to approach programming in these types of at-risk communities in terms that acknowledge the social dynamic they have in common, rather than terms that differentiate them based on ecological, geographic, cultural, and/or ethnic heritage.

Survivor Communities

I suggest "Survivor Communities" may be a useful term and a useful heuristic for research that will inform programming in communities that display these characteristics. The term will be useful in dialogue with potential partners because it acknowledges community scale trauma; it is not pejorative; it does not focus on deficits; and important, it transcends the differences between communities without discounting the unique heritage at the core of each community's identity. The connections between these insights from the field and education theory are reviewed below.

Connecting Theory and Practice

Experiential Learning

John Dewey's writings have been required reading in education theory since the early 20th century (Menand, 2002). Dewey's challenge to educators is to design activities during which meaningful work is engaged, but higher order learning is the outcome. Dewey's thesis about "experiential education" is exemplified in his statement that there is nothing in an elementary study of botany that cannot be introduced in a "vital way," connecting learning to nature, life, and human relationships, in a vegetable garden (Dewey, 1916, p. 196-200). This is a succinct description of traditional Extension programming. More recent writings by Jurgen Habermas, Paolo Freire, and Jack Mezirow explicate aspects of experiential learning. These ideas, and their implications for at-risk programming are briefly reviewed below.

Communicative Learning & Transformative Learning

Klemme, Hausafus, and Shirer suggest at-risk programming requires a participatory approach that enhances communication between diverse participants. When writing about the significance of "communicative learning," both Habermas and Freire assert that to teach effectively we must participate as co-learners (Freire, 1970, p. 96; Habermas, 1971, p. 192). Because communicative learning theory recognizes that linguistic codes, social norms, and expectations differ across cultures, including disciplinary cultures, it is a useful philosophical approach to developing participatory programming initiatives.

Habermas and Mezirow suggest "transformative," or "emancipatory," learning is characterized by "critical self-reflection" on the assumptions that are fundamental to our understanding of the world. The "emancipation" in transformative learning is emancipation from misperceptions about constraints that limit our control over our lives. Most important, this includes emancipation from misperceptions about our limitations to overcoming these constraints (Habermas, 1971, p. 310; Mezirow, 1991, p. 87; 1996).

It is important to note that in communities that fit the description of Survivor Communities, this is not merely about limited resources; it is about recognizing and overcoming the self-reinforcing fatalism--the Survivor Community Dynamic--described above. Implications for programming are offered below.

Programming with Survivor Communities

Freire's philosophy of education is grounded in his fieldwork with communities that fit our description of Survivor Communities. However, Freire suggests that it is not the pervasive constraints to meeting basic needs that sustain the fatalistic dynamic. Freire's research suggests that once these constraints are perceived as "fetters" rather than insurmountable barriers, people act to "emancipate" themselves from those fetters. Important, Freire refers to this phenomenon as the capacity to act on "untested feasibility." Thus, Freire's philosophy, after Dewey, is founded on the principle that education in these communities must pose a concrete issue as a problem that requires action (Freire, 1970, p. 99-102). It is important to reiterate that Freire's work was focused on communities that fit the description of Survivor Communities and that by concrete issues he means issues that are fundamental to the basic needs of the community.

Further analysis of the case studies mentioned above and my own observations in the field confirm Freire's idea about "fetters." In each case study the "fetters" included limitations imposed by social forces both internal and external to the community, specifically, the internal cultural and political forces that are sustained by the Survivor Community Dynamic, and the external forces of politics, economics, and bureaucracy. In each case it was external forces at the core of the devastation. In each case, those who remain have neither the individual capacity to leave nor the community capacity to overcome the repercussions. And, very important, the successes of these initiatives were due to partnerships initiated by external organizations that recognized these complexities and worked collaboratively with the community and other outside agencies to identify and overcome the barriers to meeting community needs.

It is very important to reiterate this point: this research suggests that those who remain in the community after the devastating event have neither the individual capacity to leave nor the community capacity to overcome the repercussions. Thus, partnership with external organizations is necessary to overcoming the repercussions, including the Survivor Community Dynamic. This was clearly illustrated in the AMD&ART case study.

Thus, the challenge to Extension professionals working with Survivor Communities is to develop an approach to programming that is based on sound education theory, is grounded in practice, and builds within the community the capacity to identify and overcome internal and external barriers. The section below offers a working definition for "Trans-Disciplinary Action-Research" and a rationale for this approach to at-risk programming.

Trans-Disciplinary Action-Research

Because this approach engages participants in collaborative processes that not only identify the barriers to addressing community needs, but also iteratively develop, implement, and evaluate the effectiveness of strategies to overcome these barriers, the term "action-research" is helpful (Kerry, Marullo, Cutforth, Stoeker & Donohue, 1998; Stringer, 1999). Because this approach transcends not only disciplinary boundaries, but civilian boundaries as well, to include multiple agencies and community members, all of whom are "working to achieve a broad array of shared and highly interrelated community goals," the term "trans-disciplinary action-research" is helpful (Stokols, 2006; CDE, 2006). The AMD&ART initiative reviewed above exemplifies this trans-disciplinary action-research approach.

The section below reviews the program evaluation research conducted in conjunction with the AMD&ART initiative.

Program Evaluation with AMD&ART

For the purposes of generating baseline data from which to document the benefits of the AMD&ART initiative, a random sample survey was administered in the summer of 1998, shortly after the first public workshop. That survey was replicated in the summer of 2000, just after construction on the coal flats commenced. In both cases, the surveys were sent to 100 randomly selected households. The population of Vintondale was 546. In 1998, 33% of the surveys were returned completed; in 2001, 41% were returned completed. The 1998 survey included 15 questions (Button, Stough, Comp, Arena, & Casper, 1998). The 2000 survey included several additional experimental questions (Thering, 2001). The experimental questions were informed by insights generated through interviews with residents and staff, and a body of literature on "social capital" and "community capacity" (Brady, Verba, & Schlozman, 1995; Goodman et al., 1999). This multi-method program evaluation research was founded on a hypothesis that the community's capacity to organize themselves and access outside resources would be increased through AMD&ART's trans-disciplinary action-research approach and that this increase would be measurable.

While that research will likely be of interest to many Extension professionals, it is not the focus of this article. (That research found evidence of the community capacity building benefits of the AMD&ART initiative. [Thering, 2001; Thering & Comp, 2000; Unpublished interviews with AMD&ART staff and community members conducted in conjunction with the AMD&ART History Symposium, 2005]). However, that investigation generated a considerable amount of data that, at the time, seemed ambiguous, and thus was set aside. In the 5-year interim, I have worked with other at-risk communities and conducted the case study research and literature search reviewed above. With the insights gleaned from that investigation, I revisited the data from the AMD&ART initiative. The results are reviewed below.

Measuring the Capacity to Imagine a Better Future

One set of the ambiguous response data was generated from a question that asked about the "possible benefits of cleaning up acid mine drainage and redeveloping contaminated lands" (Button et al., 1998). Nine "possible benefits" were listed. Respondents were asked to rate the importance of each "possible benefit" on a scale from 1 to 5, with 1 being "Very Unimportant" and 5 being "Very Important."

Response data from the baseline survey showed that, of the nine possible benefits listed, four were considered less than important (mean < 4.00). The follow-up survey showed none of the nine were considered less than important. The change was statistically significant in three of the nine (Table 1). Initial analysis interpreted this change as an increase in community consensus about redevelopment issues. Since consensus about issues is a characteristic of community capacity (Goodman et al., 1998), this interpretation was consistent with our interpretation of the other data.

Table 1.
Descriptive Statistics: 1998 and 2000, and t-test Comparison

Q: On a scale of 1 to 5, with 1 being VERY UNIMPORTANT and 5 being VERY IMPORTANT, please rate the following possible benefits of cleaning up Acid Mine Drainage and redeveloping contaminated land:	Mean 1998	Std. Dev. 1998	Mean 2000	Std. Dev. 2000	t-test sig .05
1: Restoration of stream health and clean water	4.81	0.47	4.80	.88	.76
2: Reintroduction of fish to the area	4.69	0.59	4.73	.78	.87
3: Increased tourism	3.90	1.24	4.33	1.16	.22
4: New recreational facilities are included in AMD cleanup and land redevelopment	4.11	1.20	4.38	1.04	.54
5: Resident participation in AMD cleanup and land redevelopment decisions	3.67	1.49	4.61	.79	.05
6: More visitors spending money in the area	3.52	1.40	4.38	.93	.01
7: Educational activities, illustrations, and field trips for students	4.04	1.23	4.55	.88	.29
8: Increased community cooperation as part of planning cleanup and redevelopment	3.83	1.28	4.58	.93	.03
9: Restoration of scenic beauty	4.50	0.84	4.60	.98	.90

However, this interpretation implied the respondents thought issues like community cooperation and increased tourism less than important in 1998 and then thought these issues important in 2000. In addition, changes in standard deviations suggested there was a lack of consensus about the importance of educational and recreation opportunities in 1998 and more consensus about these issues in 2000 (a standard deviation <1.00 was interpreted as consensus).

These interpretations were not consistent with what we knew of the community through our interactions during workshops and interviews conducted between 1998 and 2000. That qualitative material showed that the community consistently demonstrated concerns for all these issues. Thus that set of survey data was set aside as ambiguous. However, revisiting that data after 5 years of additional fieldwork and research offered new insights. The Survivor Communities heuristic suggested a relationship between the literature on community capacity, which defines and describes community capacity, and the literature on education theory, which portends to explain where community capacity comes from.

This new perspective revealed a heretofore unrecognized ambiguity in the wording of the question about "possible benefits": the question was cast in terms of "possible," while the response options were cast in terms of "important." Informed by Freire's description of the "untested feasibility," we considered the possibility that the results of that question did not document a change in what residents thought "important," but rather a change in what they thought "possible." Follow-up interviews with community members and AMD&ART staff supported this interpretation. This quote from a recent article about the AMD&ART initiative exemplifies the response from community participants: "the idea that this thirty-five acre blight could be a place that attracted tourists and brought pride to the town sounded, if not 'the dumbest idea in the world' certainly like a remote possibility" (Reece, 2006).

While the idea that a coal flats might become a tourist attraction would be hard to believe in the most optimistic of communities, that the possibility of increased community cooperation was equally hard to believe (again, see Table 1), illustrates the self-reinforcing fatalism of the Survivor Community dynamic. Another quote from a follow-up interview exemplifies this: "It's true; I never would have thought I'd see those people working together!" (Thering, 2005). Thus, this research suggests Freire was describing an aspect of community capacity that was overlooked by the literature: the capacity to imagine a better future. Important, this research suggests this capacity is affected by trans-disciplinary action-research efforts informed by the Survivor Communities heuristic and that this capacity is measurable. The implications for Extension professionals working with Survivor Communities are explored below.

Conclusions

From needs assessment, to program development, to evaluation, Extension professionals are increasingly challenged to document need, justify expenditures, and substantiate results with "hard data." The results of this research suggest the "capacity to imagine a better future" is a measurable construct that will help meet these challenges in at-risk programming.

Needs assessment processes, if designed to include questions formatted like the example from the AMD&ART survey, will generate baseline measures (AKA "indicators") of community capacity, including the community's capacity to imagine a better future. Whether that data is collected by formal random sample surveys, by surveys conducted during workshops, and/or a "show of hands"

documented in the classroom or a public meeting, the results can offer valuable insights and generate support for program development. When these measures are replicated at various points throughout the initiative, the results can offer "hard data" for evaluation.

It is important to stress that while this approach is grounded in rigorous research methods, the validity of the process is more dependent on the researcher's familiarity with the complexity of issues facing the community in question than on knowledge of statistics. Thus, it is essential that Extension professionals who use these methods keep notes of meeting minutes, copies of newspaper articles, and other qualitative documentation to explain the selection of questions and to support interpretation of the research results.

Finally, but most important, the results of this investigation suggest a trans-disciplinary action-research approach, as exemplified by the AMD&ART initiative, can create the conditions under which a Survivor Community can imagine a better future, identify the internal and external barriers to attaining that future, and take action to overcome these barriers.

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