

Oracle bones: Divination of collaboration behavior?

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Abstract

The present study tested a five-stage collaboration continuum model that is frequently used to identify the level of community linkage needed to best address an identified problem. Data were collected through a national study of 3,404 Cooperative Extension professionals who work with children, youth, and families using the Organizational Change Survey. Questions on collaboration focused on the style of working relationship with community, state, and federal agencies and organizations outside the Cooperative Extension System. Results support the

collaboration continuum model. Implications of these results for future research, training, and program development are discussed.

Keywords: collaboration, Cooperative Extension, networking

Introduction

About 20 years ago, funders, administrators, and service providers began to predict that collaboration would save precious resources, reduce duplication of service, and result in better program results. These predictions were little more than latter-day “divinations,” such as those recorded on oracle bones. Oracle bones are pieces of bone or turtle shell bearing written inscriptions used in royal divination in ancient China (Jianying 2006). They were unearthed in 19th century China and sold as dragon bones for use in traditional Chinese medicine. It was not until 1899 that they were recognized as bearing ancient writing. Research determined that the bones were used to divine topics during ceremonies by sawing, splitting, and drilling pits partway through the bone. A heated rod was inserted into several of the pits until the bone cracked at those points. The cracks were then “read” as ancient Chinese characters and the answers to questions were interpreted. Ancient writing was added to record the questions, the divined answers, and frequently, if the predicted answer came true or if not, and if not, what really happened. Sometimes the bones were used over and over again for a number of years to ask the same questions and record the answers, such as to predict whether it would be a good year for crops. As such, oracle bones became written records of empirical data and early evaluations.

In Cooperative Extension work with children, youth, and families, collaboration with other agencies has been “divined” to be useful, valuable, and sometimes even required by funders. Several models of community collaboration have been presented in the literature (e.g., Gray 1989, Tjosvold 1986, Vaughn 1994). The importance of collaborative work has been recognized in practice by those working in communities to develop, implement, evaluate, and fund a variety of prevention and intervention programs. However, unlike oracle bones, there are few records of what happened (empirical supports) for the various conceptual models of community collaboration.

Fortunately, Extension program leaders working with land-grant University personnel, much like those ancient Chinese kings, recognized the need to record what actually happened when collaboration took place and figure out what it looks like. In 1993, the United States Department of Agriculture Cooperative State Research, Education, and Extension Service (CSREES) created the National Network for Collaboration (NNC) to support collaboration among universities and community-based programs. One of the network’s projects was to develop a Collaboration Framework that could help develop new or strengthen existing collaborations. The purpose of

this study is to test, or observe, and record the results of implementing the National Network for Collaboration's five-stage model of a collaboration continuum (Bergstrom et al. 1995) through a national study. As part of the Collaboration Framework, this model has been widely disseminated and is supposed to be used by community groups throughout the United States to identify the level of community linkage needed to best address an identified problem. This is the "divination," but we have no evidence that it is indeed operational.

The NNC's model provides an explanation of the degree of commitment needed at each of the levels. Using descriptions from Vaughn (1994) and Bergstrom et al. (1995), each level is discussed below:

1. *Communication or Networking* – the most informal of all the levels, can best be described by the independent interaction between each of the individuals.
2. *Cooperation* – requires the individuals to represent their organizations and to begin networking with others who have similar vision, mission, and goals. Although contact may be irregular, relationships begin to build.
3. *Coordination* – organizations at this level still function independently, however, they begin to work jointly to develop complementary activities on pre-determined issues. A strategic communication pattern is determined to increase and enhance the communication between organizations.
4. *Coalition* – offers an organization the opportunity to jointly plan and take action on an identified issue; there is a sense of interdependence, sharing goals, strategies, directions, programs, and policies.
5. *Collaboration* – the most formal of all the levels, requires each organization to have a sustained commitment to the collaborative effort and a willingness to see this as a new entity.

The present study

The purpose of the present study is to test the National Network for Collaboration's five-stage model (Bergstrom et al. 1995) of a collaboration continuum through a national study. If there is empirical support for this model, results will show variability in intensity of work across the five stages from communication/networking to collaboration. It is also anticipated that as collaborating partners are removed by geography, level of responsibility, client base, and/or power base, working relationships at the lower levels of intensity will be more common. Therefore, additional support for the model will be demonstrated by differential patterns of

collaboration with partners at different proximity to the respondents, with a greater degree of collaboration with proximal partners and a lesser degree of collaboration with more distal partners.

Method

Cooperative Extension systems in all 50 states were invited to participate in a study designed to assess the state of Extension with regard to its organizational ability to support programming for children, youth, and families at risk. The Organizational Change Survey assessed collaboration within and outside of Cooperative Extension and other organizational components including the implementation of a common vision and strategic planning, staff support and recognition, and diversity of Cooperative Extension programs and staff. Twenty-four states participated.

A packet containing a camera-ready copy of the Organizational Change Survey, implementation procedures, and disk copies of supporting documents was sent to each state Cooperative Extension director. Dillman's (1978) Total Design Method was used as a framework for implementation. Eligible respondents (identified by code number only) included all paid Cooperative Extension professionals in the community, county, region, area, and university who work directly or indirectly with children, youth, and families. Each state was responsible for selecting participants and implementing the survey; data files were sent to our team for aggregation and national-level reporting. The survey and method were reviewed and approved by our university's Human Subjects Committee. Data were collected between August 2000 and May 2001.

Overall, 3,404 individuals out of approximately 4,366 returned a completed Organizational Change Survey, resulting in a 78 percent response rate. Typical of Extension professionals, 32 percent of respondents were male and 68 percent were female. Two-thirds (67 percent) reported that they were between the ages of 36 and 55, 21 percent were 35 years old or under, and the remaining 13 percent were over the age of 55. The majority (90 percent) of respondents reported their ethnic group as White/Caucasian, 6 percent as African American/Black, 2 percent as Hispanic/Latino, 1 percent each as Asian/Pacific Islander, Native American/Eskimo/Aleut, and Other. Approximately two-thirds (66 percent) reported that they had received a graduate or professional degree, 27 percent had obtained a college degree, 5 percent had some college, and 3 percent had completed high school. While 4 percent of participants reported that their primary responsibility for working with children, youth, and families was at the community level, 63 percent reported their primary responsibility at the county level, 18 percent at the multi-county level, and 15 percent at the state level.

Collaboration outside of Cooperative Extension was measured with three questions. Each question started with the stem: "In your work with at-risk children, youth, and families, mark the

type of relationship you currently have with” and ended with one of three levels of agencies and organizations: community, state, or federal. Response categories based on the National Network for Collaboration’s (Bergstrom et al. 1995) continuum included 1=“none,” 2=“networking,” 3=“cooperation,” 4=“coordination,” 5=“coalition,” and 6=“collaboration.” Each category was defined for the respondents as follows: (1) “none” refers to no relationship; (2) “networking” refers to establishing dialogue and common understanding; (3) “cooperation” refers to matching needs and coordinating efforts to avoid duplicating services; (4) “coordination” refers to sharing or merging resources to address common issues or to create something new; (5) “coalition” refers to sharing ideas, leadership, and resources over several years; and (6) “collaboration” refers to building an interdependent system to accomplish shared vision and outcomes.

Results and discussion

Frequency distributions were computed to determine the style of working relationship respondents reported with various types of agencies outside Cooperative Extension. Table 1 illustrates the percentage of Extension professionals reporting each style of working relationship with community, state, and federal agencies and organizations outside of Extension.

Table 1. Percentage of Cooperative Extension professionals reporting various styles of working relationships with community, state, and federal organizations and agencies (N=3,404).

Working relationship	Level of Relationship		
	Community	State	Federal
Networking	20	32	28
Cooperation	19	20	15
Coordination	18	13	9
Coalition	18	10	8
Collaboration	18	8	9
None	7	17	32

[Table 1 Summary: Table shows the percentage of Cooperative Extension professionals reporting networking, cooperation, coordination, coalition, collaboration, or no working relationships with community, state, and federal organizations and agencies.]

When working with community agencies and organizations, Extension professionals are relatively equally distributed across the various styles of relationships. Less than 10 percent

report no working relationship with community agencies and organizations. The most common style of working relationship with state agencies and organizations is networking. A steep descent is then evident in the percentage of professionals working more intensely with state agencies and organizations. When working with federal agencies and organizations, “none” is the most common style of working relationship. While the percentage of professionals reporting “networking” with federal agencies and organizations is only slightly less than those reporting “none,” a similar descent and then leveling off is seen.

These results present empirical evidence for the use of the National Network for Collaboration’s model of a continuum of community collaboration. The data presented in Table 1 demonstrate this in two ways. First, respondents clearly were able to use the definitions of the levels of intensity of working together from none to collaboration to describe their work with a great deal of variability across the levels. Second, the intensity of reported working relationships decreased as the partner agencies became more distal. There are several implications of these results for future research, training, and program development.

At the community level, 93 percent of the respondents were fairly evenly distributed in intensity of working with local partners outside of Extension. From 18 percent to 20 percent each reported work at the networking, cooperation, coordination, coalition, and collaboration levels. Further research is needed to see what factors determine which level and under what circumstances a practitioner would choose to work. Is it that any one practitioner always chooses to work at a particular level – cooperation, for example? Is this a factor of individual preference, experience, or training? Or is it a matter of the degree of commitment and available resources within one’s agency or organization?

Scholars have suggested some key factors that may influence the process that determines the intensity level of working together (Borden 1999, Farmakopoulou 2002, Gray 1989, Bergstrom et al. 1995, Mizrahi and Rosenthal 2001, O’Looney 1994, Osher 2002, Otterbourg and Timpane 1996, Tjosvold 1986). Such factors include internal and external communication, membership, organizational structure, training, goal setting, political climate, leadership, sustainability, resources, and perceived professional, altruistic, or personal benefits. It would be useful to add questions to future studies that ask not only about the level of working relationships, but also about the factors that may influence that choice.

There is no optimal level for a working relationship, but the level must be based upon the goals, vision, and mission of the group, and the time and other resources available to any member individual or agency. It is reasonable then to expect that at the community level, one would find the diversity in working relationships reported by this sample. Training in skills and knowledge related to the factors that influence this process may help practitioners better determine the appropriate level of relationship intensity. Leadership training in the model itself will help those

who initiate or chair community groups to help groups progress through the levels to the optimum level for their purposes. Such training will also aid individuals and agencies to allocate proper time, funding, and other resources to community groups to which they belong or have commitments.

When one moves from working with local partners outside of Extension to working with state and national partners outside of Extension, it is also reasonable to expect that as the partners become more distal to the respondents, the intensity of working relationships would diminish. This is exactly what was found with this sample. It is interesting to note that with state-level partners, about one-third of the respondents reported working at the networking level, with a steady decline to only 8 percent who reported collaboration. With federal partners, about one-third reported no working relationship, slightly fewer reported networking, and then a sharp and steady decline to collaboration. When partners are removed by geography, level of responsibility, client base, and, frequently, power base, it is easier to work at the first level. This level involves communication and casual, often irregular, contact between individuals to share information and make contacts. Indeed, examination of the data shows that 60 percent of the respondents have either no relationship or networking relationships with partners at the federal level, 49 percent with partners at the state level, and 27 percent at the community level.

While it is easier not to work at all with more distal partners or, if required, to work at the networking level, it is sometimes desirable or even mandated that practitioners work more intensely with state and federal partners. Future research could provide useful data to influence policy decisions to identify the types of projects, funding, guidelines, and other factors that influence the level of intensity of working relationships with state and federal partners. Such research, and then training, to apply the lessons learned could identify how and when to move these working relationships to more intense levels.

As we engage in more and more collaborative work, questions arise about evaluating collaboratives. Evaluation questions usually focus on feasibility, process, and outcomes at the level of the individuals and the organizations they represent and at the level of the collaborative as a whole (Taylor-Powell, Rossing, and Geran 1998). Such evaluation can facilitate learning and communication among collaborative members and stakeholders, improve efforts as they develop and progress, demonstrate accountability, and show the benefits and impacts of working relationships over time. However, to ensure appropriate evaluation, it is key that clear distinctions be made among different levels of working relationships. The present study provides support for using the National Network for Collaboration's model as a way to define various relationships. Further, if program evaluation focused on the process and levels of collaboration with links to program outcomes, much could be learned.

Finally, if we were adding notes to our oracle bone regarding collaboration, we would say there is support for using the National Network for Collaboration's model to determine the appropriate level of working relationships. We might start new bones with some of the questions presented above, and note what happened as we collect additional information. In times of few resources and high expectations for accountability, application of this model can inform practitioners and help them allocate time, personnel, and expertise in a manner consistent with the group's goals and expected outcomes.

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Cite this article

Peterson, Donna J., Betts, Sherry C. , Roebuck, James C. and Lynne M. Borden. 2008. Oracle bones: Divination of collaboration behavior? *The Forum for Family and Consumer Issues*, 13 (1).