



COMMUNITY-RELATED ISSUES

The Del Rio Project: A Case for Community–Campus Partnership

BRUCE GOODROW, EdD, MPH, CHES¹ &
PATRICIA L. MEYERS, BAM²

¹*Professor, College of Public & Allied Health, East Tennessee State University, Rogersville, TN, USA; and* ²*Program Coordinator, Hawkins County Community Partnership Program, East Tennessee State University, Rogersville, TN, USA*

ABSTRACT **Context:** *Interdisciplinary teams of graduate health professions students and faculty were provided with experiential learning opportunities while assisting a small rural community address critical health-related issues.*

Project objectives: *To establish an effective partnership with community leaders and area residents to assist in determining the feasibility of a new primary care clinic and to remediate a water borne disease threat. To create interdisciplinary clinical learning experiences and to develop future longitudinal learning opportunities, emphasizing primary prevention. To create a community–campus partnership with control originating in and sustained by the community.*

Partnership development: *An interdisciplinary team of health professions students and faculty worked with community leaders and residents to develop leadership skills, enhance infrastructure and coordinate efforts to address health concerns. A health marketing analysis and a series of year-long environmental assessments of surface and ground water were completed. The community was assisted with reaching consensus for future actions, emphasizing local control, enhanced county-based ownership, and sustainability of intervention efforts.*

Outcomes and implications: *The Del Rio and East Tennessee State University partnership was instrumental in accomplishing its short-term objectives with the remediation of two major health issues. The more important long-term objectives of enhancing citizen leadership skills and developing a more action-oriented community infrastructure were also met. Using an experiential learning model, students practiced community organization skills, conflict resolution and problem-solving strategies. The campus–community partnership illustrated the advantages of experiential, multidisciplinary education and accentuated the positive aspects of collaborative planning and action. The partnership*

Author for correspondence: Dr. Bruce Goodrow, Hawkins County Teaching Center, East Tennessee State University, PO Box 609, Rogersville, TN 37857, USA. Tel: (423) 272-4808. Fax: (423) 272-4959. E-mail: bgoodrow@planet.com

continues to provide expanded learning opportunities for students and contributes to the empowerment and self-sufficiency of the community. The ripple effects of the model have become evident, with dramatic increases in university-wide efforts to increase partnership opportunities and enhanced support for service learning throughout the region.

Introduction

Opportunities often arrive in the guise of problems. So it was when the Del Rio Project was initiated. Del Rio is a small, isolated rural community in East Tennessee, USA, consisting of 943 households distributed over a large geographical area. The region is characterized by mountainous terrain, with residences and small subsistence farms scattered along a series of ridges and hollows connected by poorly maintained, winding roads, often made impassable during inclement weather. The community had reached a crisis point over two major issues related to health care.

The first concern for area residents was their difficulty accessing primary care providers who were located at a considerable distance, at either end of a long valley. Barriers to health care access were widespread, including a large elderly population with restricted mobility, over 36% of households earning incomes at or below the poverty level, and many families without reliable transportation.

The second major community concern revolved around the issue of water borne disease potential in surface and subsurface water supplies. In early 1997 the community experienced a small outbreak of hepatitis A, resulting in several area streams being condemned, with all human use or contact prohibited. This condemnation prohibited human consumption and recreational uses, such as swimming and fishing. Ultimately, an epidemiological investigation revealed that the outbreak of hepatitis was linked to an index case transmitted by occupational exposure in a day care center operated in a large city 40 miles away. The additional cases were spread by person-to-person contact among family members and neighbors. No evidence of water borne transmission was ever documented. Still, the adverse publicity and resulting monitoring by regulatory agencies resulted in the identification of coliform indicator organisms and stream condemnation. Coliform organisms are often a result of poor septic systems, domestic animal contamination and, in some cases, surface water usage by wild animals. Initial data from the Del Rio community had not isolated the cause of the high bacterial presence. The unifying community issues were the concern with water borne disease potential and the negative effect the stream condemnation had on tourism and local property values.

Development of the Partnership

East Tennessee State University (ETSU) has had a history of developing community partnerships with local counties and townships. A grant from the

W.K. Kellogg Foundation had created the initial efforts in 1991 (Richards *et al.*, 1991). The university had already developed a substantial community presence in the county. Three area primary care providers had been serving as preceptors for graduate nurse practitioner students and medical residents for several years. In 1996 ETSU received a new grant for the Kellogg Foundation to develop the Graduate Health Professions Education (GHPE) program designed to create more opportunities for interdisciplinary clinical experience in community settings (Meservey & Richards, 1996).

A grassroots community group had been formed in Del Rio to address the issues of health concern. Residents wanted to examine the feasibility of obtaining a new primary care clinic to be located in Del Rio and to see what could be done to remediate the water borne disease potential. The community contacted ETSU for assistance in their efforts through the Community Partnerships Initiative.

The scope of the health issues and the initial community concern matched ideally with the goals and objectives of the newly founded GHPE program. University faculty members and community leaders joined to create a community-campus project that would assist the community in helping themselves. The institution's long-term objectives of the campus-community partnership were to develop future longitudinal learning opportunities for public health prevention programs and to provide clinical experiences in primary care for medical and nursing students. The project would allow experiential learning opportunities for teams of interdisciplinary students and would assist community members seeking viable solutions to their health problems. A series of preliminary planning meetings resulted in identifying the best possible courses of action. Faculty members were sensitive to the need for allowing students and community members to assume leadership roles in the project. Faculty members were involved in advising and at times redirecting team dialogs, but did not assume direct leadership.

Several key issues became apparent during the preliminary planning meetings. Of major concern was the attitude of local residents who felt they could not effect change, and they were suspicious that outside organizations and agencies had self-serving agendas. The area had a history of short-lived social service programs, which only served to heighten skepticism that local families could become effective change agents.

Through the GHPE program, university faculty and community leaders created a new partnership whereby control originated in and was sustained within the Del Rio community. Networking with area provider groups identified a local primary care organization that was willing to consider opening a new clinic operation, providing that adequate community need and support could be documented. Local businesses, including the electric company, the utility board and the news media, began to work together to explore alternative actions and to examine all available resources. The university selected and supported an interdisciplinary student and five-member faculty team to assist with the com-

munity organization process. Faculty members represented the disciplines of environmental health, public health, medicine and nursing.

Mobilization to Action

A team of health professions education students was recruited and assigned to work with program faculty and citizen groups. Initially a team of four environmental health graduate students, three public health education students and one health care administration student was organized to complete a community assessment over a one-year period. Students and local residents were provided with faculty-supported assistance in a series of eight 3-hour evening sessions which covered sampling design, questionnaire development, interview techniques, communication skills and community organization strategies. The objectives were to design and complete both a health marketing study and an environmental assessment of surface and ground water quality. Students were also directly involved in developing the community infrastructure and in promoting leadership skills for local residents and special interest groups. A series of five town meetings was held to inform local residents of the objectives and progress of the project.

Project students and faculty traveled to the community for one day per week for 12 months. They also attended other community events on evenings and weekends. The depth and duration of student presence was a key element in the success of the project.

Historically, the Del Rio community had two equally vocal factions. One group opposed any changes and was interested in maintaining a lifestyle of independent living with minimal contact with any out-of-county interests or organizations. The other group was interested in promoting change and openly encouraged a more rapid evolution toward social and economic interdependence. The issues were further complicated by the fact that the county was being transformed by the influx of new residents who were drawn to the area for retirement from other regions of the United States. Many of the older, multigenerational families were resistant to change and resented the newcomers. The tension between *Old Del Rio* and *New Del Rio* was a barrier to consensus and community action.

An essential element of the Del Rio Project was establishing open lines of communication, creating a forum where opposing viewpoints could be publicly debated, and encouraging trust among all elements of the partnership. Leadership development was a high priority as the community had limited population resources and could ill afford to have potential leaders not become active due to a reluctance to enter a public forum. We felt that existing community activists could benefit from leadership development to enhance their skills in conflict resolution, public relations and small group dynamics.

With university assistance, faculty leadership and interdisciplinary student

teams, we initiated leadership development and community infrastructure support. During a 12-month period we offered the community partners training in basic communication skills, conduct of meetings, conflict avoidance and compromise development. Thirty-two community members participated in the process. Eight teams, each comprised of four community members and one student took responsibility for specific components of the project. The leadership of each group rotated among members as individual expertise or experience was needed. Faculty members served as facilitators to assist with conflict resolution within groups. Problem-solving and task responsibilities were resolved within individual teams. At the end of the first year, the community had created the Del Rio Community Development Council, a nonprofit organization complete with bylaws, an operating budget and elected officers. The newly formed organization, which was supported by a majority of area citizens, had representatives from all existing special interest groups and provided a much more effective voice for promoting community action.

As some residents were most concerned about water, while others were focused on their primary health care needs, the leadership roles changed with the focus of each intervention. Students and faculty shared opinions and data with their community partners. They worked to develop symbiotic relationships with a myriad of other special interest groups, branches of local and state government, and community organizations.

Project Outcomes

One year after initiating the project a remarkable story emerged. The community-campus partnership resulted in a completed health marketing survey, which gathered data from 261 randomly selected, geographically stratified households (a 28% sample). Data were obtained using a neighbor-to-neighbor personal interview with 78 items addressed. The interview success rate for the selected households was 96%. This could only have been accomplished through the community-supported neighbor-to-neighbor approach. A series of town hall meetings was subsequently held to inform local residents and to provide additional opportunity for input.

The marketing analysis documented both the need for additional primary care services and the commitment to support the proposed clinic. Resulting survey data identified the scope and type of health care services needed and resulted in a pledge to open a new clinic by an existing local health care organization. The message was clear: build it, staff it and the community will support it. The local health care group indicated that they could provide staff but felt that the community should be responsible for building the actual clinic.

The newly formed Del Rio Community Development Council made the new clinic their first project. Land was donated and timber was given to start the process. A county-based builder of log cabins volunteered to erect the structure

and also sawed the timber into lumber. Local residents and businesses donated time, materials and labor to provide construction, plumbing, electrical and paving services.

The health marketing survey had documented a need for maternal and pediatric primary care services and additional services for adolescent health and geriatrics. Residents widely supported programs that would focus on prevention and would result in interventions lowering mortality and morbidity. They were concerned that any program should be community-value sensitive and sustainable without excessive external support. Residents were adamant in wanting control to remain community-centered, and in wanting the community-campus partnership to continue.

The issue of adolescent health services provided the first real test of the partnership and the efficacy of the infrastructure development efforts. One segment of the community wanted to avoid any connection with sexual issues, including sex education, birth control or sexually transmitted diseases. These residents endorsed parental responsibility and interventions through religious education and counseling. An equally vocal portion of the community believed strongly that these services were needed and should be freely available at the new clinic. The issue became more complicated when the local health care group told the community that they were required by law to offer a full range of adolescent health services.

Five community meetings were held to allow input and to hear different opinions. The partnership was able to weather the storm and a series of compromises ensured that adolescent health services would be provided. The opportunity to address the adolescent sexuality issue openly resulted in a local parent group serving to develop support for an adolescent pregnancy prevention grant. The county had a long history of high adolescent pregnancy rates. An adolescent pregnancy prevention grant proposal, focusing on abstinence, was completed and submitted to the funding agency with the endorsement of local religious, educational and parental groups.

Environmental and public health students created a staff development presentation based on the water quality data. This information was shared with local health care providers and with the nursing and medical students involved in the GHPE program at the university. The presentation focused on the epidemiology of water borne disease, the types of pathogenic agents in local water supplies, the relative risk of illness and the types of symptoms that may be presented when area residents seek medical care. The issue of acquired partial immunity suggested the need for more specificity in diagnostic tests. The community agreed to an additional study for determining the potential of endemic water borne illness in the area. This study is being completed during the 1999/2000 academic year.

The community contacts developed during the initial phase of the project were instrumental in creating a series of ongoing clinical experiences for university medical and nursing students. Five primary care clinical sites were able to offer

interdisciplinary experiences for future students. Current new projects within these sites include adolescent pregnancy prevention, diabetes education and migrant health education.

Data from the environmental assessment have been shared with residents and community leaders. The assessment indicated that the local surface and ground waters have no more danger of water borne disease potential than do any of the other streams in the region which have not been condemned. Local community leaders are currently in the process of contacting the appropriate regulatory state agencies to address these issues. All data provided in the environmental analysis became the property of the community. The community interests combined with empirical data have been instrumental in decisions for policy change and to guide remediation efforts.

Academically, four theses have been completed in the area of environmental health and two have been done in the public health domain. Two additional grant proposals have been completed and are currently under review. The initial student team members have now graduated and all have successfully gained employment. Students reported that the community-based project was instrumental in assisting them in securing their current positions. They highly valued the interdisciplinary nature of the project and the community-based problem-solving experience.

Projection for the Future

Trust and success in community-campus partnerships develop over time and must be earned. The communities of Del Rio and East Tennessee State University have achieved those goals. Suspicion, feelings of frustration and powerlessness have given way to an empowered community that has the commitment, resources and ability to help themselves. Efforts in community organization and leadership development have resulted in a new awareness of the potential of focused community action and the positive gains that can be achieved.

The students working with the Del Rio Project obtained experiences and were provided with learning opportunities that could never be duplicated in a classroom. Interdisciplinary learning and team building were not abstract concepts but were a constant reality during the entire project. The amount and intensity of community interaction created a learning environment that benefited each student as they entered their respective professional careers.

Community-campus partnerships continue to create opportunities. The health marketing survey had indicated a need for women's health services. In the fall of 1998 interdisciplinary teams of medical, nursing and public health students conducted the first Del Rio Women's Health Fair. The event was attended by 150 rural residents who took advantage of free mammograms, pap smears, bone density tests, cholesterol and diabetes screening, and health education services.

Analysis of preliminary data revealed that 42 (28%) women had not seen a medical care provider during the previous five years. Appropriate referrals were made and the community has already planned to make the health fair an annual event.

The Del Rio Project has not been concluded. It has only just begun. The community–campus partnership continues to explore other issues, such as grant proposal development for programs addressing community needs for domestic abuse and school violence prevention, and economic development. A migrant health education project has just been completed which provides services needed for migrant workers and community-based learning for additional interdisciplinary student teams from the university. The campus–community partnership model initiated within the Division of Health Sciences has now been replicated university-wide. It has stimulated a more viable service learning component within the university and has the potential to impact many additional communities and future cohorts of university students. Circumstances that appeared initially as crises have evolved into a series of opportunities for the mutual benefit of the community and the university.

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