Engagement Over Exposure: Designing Applied Research Projects for Students

By Hilary Hahn, Joy Marquez, Vivian Reznik, David Hoyt, and Sandra Daley

Abstract

The University of California, San Diego (UCSD), the San Diego Housing Commission (SDHC), and San Diego State University (SDSU) have worked together for more than five years to improve opportunities for residents of City Heights, a low-income neighborhood in San Diego, California. This paper describes how partners, working through the UCSD Community Outreach Partnership Center (COPC), engaged students in the design and implementation of an applied research project in the target community.

The University of California, San Diego (UCSD), an institution that emphasizes "interdisciplinary collaboration that links research and teaching excellence" (Dynes 2001), San Diego State University (SDSU), an institution "dedicated to learning and public service" (Weber 2001) and the San Diego Housing Commission (SDHC), whose mission is to "provide quality housing opportunities to improve the lives of those in need," have worked together for more than five years to improve health, education, and employment opportunities for residents of City Heights, a low-income neighborhood in San Diego, California. Universities can partner with one another and with communitybased agencies to achieve their goals and participate meaningfully in community redevelopment through a variety of strategies that include undergraduate and graduate student involvement. Through the use of applied research projects, universities and partner agencies can provide opportunities for students to engage in the design and implementation of community interventions, rather than simply exposing them to community agencies and activities. The University of California, San Diego and the San Diego Housing Commission have an established partnership in the Housing Commission's Moving to Work (MTW) Demonstration Program. The Educational Technology Program at SDSU joined the partnership, and graduate students from that program worked with residents of the MTW public housing complex to implement an applied research project. Agency partners used the data collected by graduate students to modify program design. This article describes the process of developing an applied research project and summarizes the challenges and benefits of university faculty and student involvement in community redevelopment from the perspective of the graduate student, the university system, and the community at large.

Description of the Community

City Heights was incorporated in 1913. It developed as a bedroom suburb during one of

San Diego's boom periods and endured as a quiet working class community through the 1950s. Housing is mostly made up of modest single-family homes on small lots. By 1990, City Heights had changed from a sleepy suburban community to an economically depressed area with one of the highest concentrations of subsidized housing units in San Diego. Currently less than 20 percent of the homes in City Heights are owner occupied; more than 80 percent of all residents are renters. Homeowners suffer depressed property values as a result of zoning inconsistencies and the prolonged construction of interstate highway 15, and more than half of all housing in the area is valued at less than \$100,000 (the median value in San Diego City is more than \$260,000).

The Department of Housing and Urban Development has designated the contiguous central city areas of City Heights/Mid City an Enterprise Community. The City Heights neighborhoods constitute the physical, commercial, and residential heart of Mid City. According to the 2000 Census of Populations and Housing, there are an estimated 168,125 residents in the Mid City area. San Diego closely follows New York City as a port of entry in terms of the numbers of new immigrants entering the United States. In San Diego, the largest numbers of new immigrants reside in City Heights because of the neighborhood's low-rent housing. The population is ethnically diverse—37.2 percent of residents are Hispanic; 31.9 percent are non-Hispanic White; 13.2 percent are Black/African American; 13.4 percent are Asian/Pacific Islander (including Vietnamese, Cambodian, Hmong, Thai, and Laotian); and 4.3 percent are from other ethnic/racial groups (including Ethiopian/Eritrean, Somali, and Sudanese) or mixed race groups. Thirty-nine primary languages are spoken in area schools.

A Crime and Economic Summit was conducted at Wilson Academy Middle School in City Heights April 22-24, 1994. More than 400 individuals participated in the Summit. Participants included community residents and business owners, for-profit and nonprofit organizations working in the community, high-level managers and staff from city and county government and city schools. Also present at the Summit were representatives from the state attorney's office, the city's parks and recreation and police departments, the arts and culture community, San Diego Community Colleges, San Diego State University, and the University of California, San Diego, as well as elected officials.

The Summit generated more than 140 recommendations covering a host of community needs which are summarized in the <u>City Heights Economic & Crime Summit Report</u> (City Heights Improvement Partnership 1994). The need for increased employment opportunities, increased educational opportunities, and better access to health care are three of the eight community needs identified in the report. The report also summarized the "assets, resources and opportunities" in the community. These included the community's proximity to, and ability to take advantage of, San Diego's universities and educational and research facilities.

Description of Partner Institutions

The UCSD and SDHC partnership began in 1991. Both agencies are members of the New Beginnings Collaborative, an innovative interagency partnership that was orga-

nized and housed in City Heights at that time (Daley 1999). The Collaborative is described below. City Heights has been a focus of city redevelopment efforts since 1994. In response to the City Heights Economic & Crime Summit Report, UCSD and the SDHC joined forces with San Diego State University to address some of the recommendations outlined in the report. At the same time, Price Charities increased its philanthropic support to the City Heights community, targeting specific recommendations made in the Summit report. Through Mid City For Youth, the partnership had easy access to an organized community group of residents and social service agencies that had clearly articulated their needs and were ready to participate in the development and implementation of interventions to address these needs. Mid City For Youth (MCFY), a neighborhood collaborative formed in 1989, supports youth and families, community members, businesses, schools and universities, religious and cultural organizations, and public and private agencies in their desire to promote a safe, attractive, and healthy community through collaborative efforts. Mid City For Youth provides a clearinghouse for ideas, communication, coordination, and networking in support of organizations serving the Mid City community.

The University of California, San Diego (UCSD). Since its founding four decades ago, UCSD—one of the ten campuses in the world-renowned University of California system—has risen rapidly to its status as one of the top institutions in the nation for higher education and scientific exploration. UCSD emphasizes interdisciplinary collaboration that links research and teaching excellence (Chancellor's Website 2001). The University is home to approximately 20,212 undergraduate, graduate, and medical students. In the 1997 U.S. News and World Report ranking based on a nation-wide survey of 1,400 four-year schools, UCSD ranked seventh nationally in excellence for all state-supported colleges and universities. Recently, the Institute for Scientific Information ranked UCSD sixth among U.S. universities in terms of the quality and influence of its scientific work (Salisbury 2001). UCSD ranked third among U.S. universities according to federal obligations for research and development in fiscal years 1995 and 1996 (National Science Foundation 1996).

One of UCSD's major attractions is its institutional flexibility (UCSD: Who We Are Website 2001). Its "interdisciplinary ethos, combined with UCSD's tradition of innovation and risk-taking" underlies the campus' success in recruiting top scholars and students, as well as its prowess in research (UCSD: Who We Are website 2001). UCSD Chancellor Robert C. Dynes clearly articulated the UCSD urban mission in his 1996 inaugural address: "We must create more active collaborations among [University of California] research institutions and San Diego's business community. We must continue to build a strong sense of community at this young campus. I want to extend this sense of community to the entire San Diego region . . . I want [community members] to believe that UCSD is their University and to take much pride in UCSD's accomplishments."

The April 1997 Draft Report of the University of California Outreach Task Force,

prepared for the Board of Regents of the University of California, proposed a comprehensive plan for the overall outreach effort in the University of California system. This Report was strongly endorsed by the UCSD Academic Senate/Representative Assembly in May 1997. The plan aims to prepare students not just for university eligibility, but also for academic competition at the most exacting levels. It is multi-dimensional with a long-term component that addresses the root causes of under-achievement and links all major educational sectors in California with a common purpose. The plan proposes a three-point strategy:

School-centered partnerships—regional partnerships with school systems and local colleges and universities to address the full range of culture and practice in these partner schools.

Academic development—expansion of successful current academic development programs to increase the number of disadvantaged students who are eligible to attend the University.

Information outreach—identification and education of families, early and throughout the academic process, to involve them in their children's educational planning and preparation.

The UCSD School of Medicine (SOM) has a fifteen-year history of community-based work consistent with the University of California Outreach Task Force Report. Since 1990, the UCSD SOM has been a member of the New Beginnings Collaborative, a partnership with agencies and institutions in the county of San Diego. This partnership includes the SDHC, the Community College District, the County of San Diego Health and Human Services Agency, San Diego Probation, the San Diego Police Department, Neighborhood House/Head Start, Children's Hospital and Health Center, San Diego Unified School District, and a number of community-based non-profit agencies. The goals of the partnership are to provide some direct services and to examine the ways in which inter-agency collaboration can improve the way services are provided to children and families. The New Beginnings Council meets monthly and is comprised of middle managers of the partner agencies. Power is shared among the senior executives of the agencies in the partnership. These individuals meet on a quarterly basis as the Executive Committee. Both the Executive Committee and the New Beginnings Council are important to the partnership because it is at these meetings that information is disseminated, problems are identified and resolved, and agency networks are maintained. These meetings also allow partner agencies to gradually develop trust and a sense of each another's areas of expertise. In 1997 the Department of Housing and Urban Development Office of University Partnerships funded the UCSD SOM to continue collaborative work through the development of a Community Outreach Partnership Center in the City Heights community. Congress passed legislation in 1992 authorizing this funding by creating the Community Outreach Partnership Center (COPC) Program as a response to the needs of American cities and to the new philosophy of community collaboration advocated in the academic community (Boyer 1994).

UCSD, SDHC, and SDSU are three of the five major partners in the COPC. The COPC program is a demonstration to "determine the feasibility of facilitating partner-

ships between institutions of higher education and communities, to solve urban problems through research, outreach, and exchange of information." The COPC is an example of a successful partnership between higher education and community. The partnership is successful because it was designed to address needs identified by the community, is based upon long-standing relationships, and meets the stated goals of the university. COPC activities are consistent with the three-point strategy endorsed by the UCSD Academic Senate/Representative Assembly. They include school-centered partnerships that address academic enrichment in science, technology, and the arts, and health service delivery to children and families. COPC activities also address academic development not only in schools but also in housing units and community sites for children, youth, and adults. In addition, the COPC provides informational outreach through early academic outreach programs, parent education programs, and community college-university transfer programs. Mid City For Youth serves as the neighborhood advisory board for the COPC.

The San Diego Housing Commission (SDHC). The mission of the San Diego Housing Commission (SDHC) is "to provide quality housing opportunities to improve the lives of those in need" (San Diego Housing Commission Website 2001). SDHC is responsible for expanding affordable housing opportunities in the City of San Diego. Governed by an appointed board of seven members, the Housing Commission is ultimately responsible to the mayor and city council. The Department of Housing and Urban Development has consistently rated the SDHC a "high performer." Nationally, the SDHC is considered to be an innovative organization offering a breadth of housing related services.

The City Heights neighborhoods include a 22-unit public housing complex where the San Diego Housing Commission now conducts the Moving To Work Demonstration Program. Moving To Work (MTW) is a federal designation offered to a small group of housing authorities by the U.S. Department of Housing and Urban Development. The MTW designation represents an unprecedented opportunity for housing agencies to design and implement housing and self-sufficiency programs that meet local needs. MTW allows local housing authorities to combine federal funding into flexible housing assistance funds, as well as make changes to administrative procedures, occupancy rules, subsidy calculations, maintenance and modernization policies, and supportive services.

Agencies seek the MTW designation through a competitive process that demands locally designed innovative approaches that tailor program components to address local needs. In San Diego, the MTW designation allows the SDHC to waive many housing regulations, including mandated forms, lease documents, and grievance procedures, which go beyond state landlord-tenant statutes. The SDHC also obtained waivers for regulations on rent setting, duration of family residency, and commingling of federal funds. The MTW designation allows the SDHC to implement a unique welfare-to-work program that offers five-year time-limited housing assistance (Public Housing and Section 8 housing vouchers) to 72 families who are working, looking for work, or training for work. During the period of program participation, families have fixed, affordable rent (calculated as a percentage of earned income), and accrue \$50 per month in an escrow fund. Procedures streamlined under the MTW designation facilitate the offering of intensive support services designed to meet the needs of families transitioning from welfare to work. Families also have the opportunity to participate in personal and community development activities.

In the City of San Diego—which has one of the nation's least affordable housing markets—the SDHC is charged with bridging the gap between the high cost of housing and the high percentage of low wage earners, a gap that threatens the stability of the city's workforce. Established by the San Diego City Council in 1979, the SDHC helps more than 40,000 low income San Diegans each year, through a variety of housing assistance programs. These include owning and managing 1,850 public housing units, providing rental assistance for almost 9,000 families, offering financial assistance for qualifying first time home buyers, and rendering both financial and technical assistance to low income families whose older homes need rehabilitation.

The SDHC collaborates with businesses and investors to provide affordable housing in return for income tax credits and other incentives. As a founding member of the New Beginnings Collaborative, the SDHC also works closely with nonprofits, the County Health and Human Services Agency, universities, and public schools to maintain a network of relationships that allow SDHC case managers to provide information and referrals to residents in need of support services. A national leader in innovative job training and educational programs for residents, the SDHC not only helps to house families, but also provides learning opportunities and referrals to support services for families so that they can transition successfully to self-sufficiency.

San Diego State University. San Diego State University was founded in 1898 as a normal school dedicated to the preparation of elementary school teachers. The school was reorganized as a four-year state teacher's college in 1921. In 1960 the College became part of the newly created California State College system. Today SDSU is a "teaching university with strong research programs" and is classified by the Carnegie Foundation as a doctoral university that enrolls over 28,000 students (SDSU History website 2001). The President of SDSU, Stephen Weber, describes the university campus as a diverse energetic community dedicated to learning and public service (SDSU History website, 2001). President Weber also notes that the institution is dedicated to providing educational experiences in and outside of the classroom.

SDSU's involvement in City Heights is the foremost example of the institution's commitment to experiential learning. The City Heights Educational Pilot, begun in 1998, is a unique six-year partnership between SDSU, the San Diego Unified School District, the San Diego Education Association, and Price Charities. The primary goals of the pilot are to positively impact academic achievement in three City Heights' schools—Rosa Parks Elementary School, Monroe Clark Middle School, and Hoover High School—and to improve upon the way educational professionals are trained and supported.

A \$16 million dollar grant from Price Charities funds the involvement of SDSU faculty and staff in the pilot, and provides students, teachers, and families in the City Heights schools with educational resources that far surpass those otherwise available to the chosen schools. University students and faculty gain experience and expertise in managing urban community issues and concerns by taking theories out of the classroom and employing them in real time to address challenges in City Heights.

The purpose of the SDSU Department of Educational Technology is to produce graduates who apply a systems approach to problem solving using environments, tools, products, and strategies to evaluate and enhance human learning and performance. Educational technologists apply theories of learning, communication, organization, and behavioral sciences to program design, implementation, and evaluation. Students who achieve a Master of Arts degree in education with a specialization in educational technology typically are prepared to work as instructional designers, trainers, and as experts in educational computing. To these ends, the Department endeavors to: Prepare prospective educational practitioners, researchers, and leaders to use theories of learning, communication, behavior, and organization in concert with technologies to make tangible contributions that are valued by the campus, the community, and the field of education.

Collaborate with schools, corporations, agencies, and community-based organizations to design, develop, use, and evaluate learning and information systems. Appraise emerging technologies and experiment with promising innovations that might lead to significant improvements in teaching and learning.

The Educational Technology program emphasizes real-world experiences. Approximately two semesters are spent actually designing and developing tangible solutions to field-based problems. Students develop an extensive portfolio and evaluate the effectiveness of instructional strategies and products (Welcome to Educational Technology Website 2001). Upon completion of this training program the technologist is qualified to perform front-end analysis, program design, development, implementation, and evaluation of any education or training project, from software development to social program implementation.

Both the SDHC and the UCSD Division of Community Pediatrics (in which the COPC is administratively housed) were identified as internship sites for students enrolled in Evaluation Techniques, an upper-level evaluation design course required for completion of the master's program in Educational Technology. SDHC is also an internship site for students enrolled in the Internship course, an experiential learning course intended to provide students with opportunities to apply theory to practice.

Benefits and Challenges of Community/University Partnerships

UCSD, SDSU, and SDHC involvement in City Heights, through the COPC and its relationship with Mid City For Youth, is based on a long-term partnership with a shared philosophy and goals and a desire to involve students as participants rather than observers of community-based activity. The COPC fulfills the following three criteria for an engaged university as described by Barbara Holland (University of South Florida Strategic Plan, Office of the Provost and Executive Vice President, 2000):

- A fully engaged university is one that encourages and supports community involvement on the part of its faculty, staff, and students.
- A fully engaged university integrates the acquisition and application of knowledge.
- A fully engaged university builds on a pedagogy of engagement.

The universities are able to sustain this partnership with the community because of established relationships across disciplines within both universities including Educational Technology, Cognitive Sciences, Business, Urban Planning, Human Development, Public Health and Medicine.

The benefits and challenges of sustaining the activities of an engaged university are outlined below:

Benefits to the University

- The university retains its reputation as a premiere teaching and research institution by producing scholarship in the area of applied research.
- Research is more relevant because the university works on real challenges with direct input from the community.
- The undergraduate experience is enhanced because lessons learned in the classroom are applied to real-world situations.

Benefits to the Community

- The community, through the partnership, gains knowledge about the culture of the university and is afforded increased access to university resources including faculty, students, and staff.
- The community has real influence on research and gains the power to initiate new projects (Omenn 1999).
- The community expands services available to its members through new partnerships.

Challenges of Community-University Partnership

- Constant communication between staff members of partner agencies is required to maintain a partnership.
- Top-level commitment is required in order to facilitate sharing resources, addressing problems, and implementing solutions.
- Capturing the learning from front-line staff and student workers is difficult but necessary to inform future program design and action-based research.

The COPC Philosophy of Student Engagement

The COPC partners are deliberate about the process used to develop opportunities for students to engage in community-based activities because of a shared philosophy about the nature of these experiences. This shared philosophy values student engagement in community-based activities and interventions over simple exposure to community proceedings. Students are often exposed to community activities during their involvement in community service projects or internships, but they are there primarily as observers rather than participants. Engagement, on the other hand, implies a greater degree of intensity, which changes the process, meaning, and value of the experience for students, community participants, and partner institutions. Successful engagement programs reflect purpose, preparation, care, effort, and recognition. The objectives are as clear and precise as objectives in a business plan (Levison 1990).

COPC partners wanted to utilize the manpower that students could bring, as well as tap into the energy and enthusiasm of the student workforce. The partners chose to involve students with advanced skill sets that complemented those of the rest of the team, and also wanted to provide students with an opportunity to apply knowledge acquired in the classroom to a community setting. During their engagement as active participants, it was hoped that students would see they could begin to use service in the community as scholarship in the university. COPC worked with students and faculty to design an experience where students could recognize that their work had value, and where students had opportunities to present their work for scrutiny and validation by their peers and professionals in the field. The strength of having students participate in applied research projects enhances the scope of the work. One such evidence of the success of this approach is that the project's first graduate student intern is a co-author of this paper; her work is described later.

Designing an Applied Research Project for Students: The Moving To Work Project

During the course of planning the MTW program and the COPC, the SDHC and UCSD engaged in on-going discussions through partnership and inter-agency meetings. SDHC and UCSD agreed that COPC provided a unique opportunity to conduct an evaluation to document the directional changes in participants' progress towards self-sufficiency, and determine the impact of the MTW program on the level of self-sufficiency of families in the program. The MTW program manager at SDHC understood the protocol for service delivery and the COPC program manager understood research protocols. Together they were able to blend the requirements for service delivery and research between agencies and within their individual agencies to ensure that program design, implementation, and evaluation fulfilled both organization's missions. Also, in the course of weekly project management meetings, COPC partners decided that an applied research project would allow graduate and undergraduate students to participate in the evaluation of the MTW program, thereby providing an opportunity for intense student involvement.

The Educational Technology program at SDSU had already identified SDHC and UCSD as internship sites, and projects at both of these sites were listed on the Educational Technology database. When the decision had been made to involve students in the MTW project, COPC and SDHC MTW project managers developed and forwarded a description of the program research design and evaluation to the Educational Technology program. SDHC and COPC project managers also conducted a classroom presentation for the students enrolled in the Evaluation Techniques course in order to inform and answer questions about the expectations of both agencies regarding the internship. However, when Joy Marquez, a graduate student enrolled in the Internship course, contacted the COPC project manager to express interest in another internship project, COPC thought she might be uniquely suited to the MTW project. SDHC and COPC project managers ultimately selected Marquez to complete the needs assessment component of the MTW evaluation because she had demonstrated experience in working with the target population and in community building, as well as being bilingual and bicultural. Additionally, she is the product of an economically and educationally disadvantaged environment similar to that of many MTW residents. In fact, Marquez was a single parent for many years and continued to receive public housing assistance during the period that she conducted this assessment. Project managers realized that a student need not have the same personal experiences as the target audience, but they felt that it would be an advantage in this case.

The process used to engage students in community-based applied research projects is summarized below:

Community-based Applied Research and Student Engagement

- Community/university partners jointly develop applied research projects designed to involve students in forming hypotheses, conducting research, and analyzing results.
- Create a forum to share information about potential applied research projects with students and faculty.
- Provide student orientation, supervision, and continued guidance in the community settings to support student activities.
- Provide structured opportunities for debriefing student experiences:
 - Student shares firsthand information s/he has obtained.
 - Student frames his/her experiences.
 - Student knows his/her work has value.
- Provide a mechanism for partners to assess the information students provide and take action that may result in programmatic change.

Moving To Work Applied Research Project Methodology

The San Diego Housing Commission program staff used information gathered through focus groups with low-income residents in San Diego to inform MTW program design. SDHC convened these groups a full year before they selected actual MTW participants. The focus groups provided valuable information about barriers and enhancers to self-sufficiency. Individuals chosen for the MTW program had not participated in the focus groups. Therefore, SDHC and COPC program staff deemed it essential to collect and maintain current information about barriers and enhancers to self-sufficiency defined by MTW participants. SDHC and COPC staffs were cognizant of the fact that MTW is a time-limited program with a fair amount of risk involved for participants. It was important, therefore, to collect data about barriers and enhancers early and often so that they could make mid-course corrections to program design and serve program participants well. SDHC and UCSD COPC project managers decided to engage residents in the MTW Public Housing Complex in a process to identify their needs and gather information on potential solutions to identified barriers.

The project managers from the SDHC and the UCSD COPC worked with the student intern to design and implement an interview instrument to conduct the front-end analysis. As an Educational Technologist, the student intern ensured that an asset-based instrument would be designed. The student intern's responsibilities included: Design and implementation of a front-end analysis to determine the barriers faced by MTW program participants that might prevent them from achieving self-sufficiency within the designated time frame; and development of an interview instrument specifically for use with MTW participants for the purpose of conducting the front-end analysis.

The student intern sent a letter on SDHC stationery to all MTW public housing residents describing the project, the interview process, and how the information would be utilized. Subsequently, the intern telephoned each resident to schedule individual interviews. The intern used the initial telephone conversation to try to put the participants at ease about the process, listening for cues from the resident indicating uneasiness and working to immediately allay these concerns. Considering it essential that the interview be conducted at a convenient time for the family in order to limit additional strain on their already over-committed lives, the intern scheduled interviews in the evenings or on weekends.

Multiple telephone calls were required to contact most residents. However, once residents were reached, two-thirds kept their first appointment with no need to call back for rescheduling. The primary reasons given for cancellation of the interview were forgetting the scheduled appointment due to other more pressing concerns or a family emergency.

Perhaps because of her shared experience and deep understanding of the challenges faced by MTW participants, Ms. Marquez was able to build a positive rapport with interviewees. In her capable hands, the instrument was used to gather information about the programmatic needs of participating residents. In addition, Ms. Marquez was able to gather crucial information about how residents define their own success in the program. The interview instrument is included in the appendix.

Twenty-two MTW families reside at the MTW Public Housing Complex. MTW participants are composed of 80 individuals, 29 adults and 51 children. The adult population is 48 percent Latino, 28 percent African-American, 17 percent African, 3 percent Asian/pacific islander, and 3 percent Caucasian. Sixteen adults are foreign-born and most are in great need of English language proficiency. Six families have both parents in the home, while the other families are all single mothers with varying complex circumstances. Levels of self-sufficiency vary greatly among families. English language and education are the differentiating factors. All interviews were conducted in the homes of MTW participants. Female heads of household were generally interviewed first, followed by their partner and/or other adults living in the home. In some cases, with parental approval, children were interviewed as well. Interview time varied from 30 minutes to two hours or more. Longer interviews included other adults and children living in the household. In some instances, time was extended because Marquez perceived that the MTW participant needed to talk and Ms. Marquez was regarded as a trusted confidante.

The intern recorded notes during each interview and summarized these notes following her meetings with residents. Project Managers from SDHC and COPC met with the student intern at least twice a month to review the progress of the project. During initial meetings, partners conducted an orientation to the project, designed the instrument, and reviewed the methodology. Later meetings allowed for exchange of information, discussion of findings as they were generated (from each resident interview), and opportunities for reflection. The reflection meetings provided the student and the project managers with the opportunity to review the program and to design a work plan for the internship.

"Moving To Work" Applied Research Project Results

In her final report, *Needs Assessment: Moving to Work Juniper Families* (2001), Marquez included some interesting observations about the process of conducting the front-end analysis. She notes that she received a warm welcome in about two-thirds of the MTW participant households; in these households all family members present at the time of her visit were interviewed. Marquez states that she believes her willingness to share her own experiences helped to gain the residents' trust. She attributes her ability to quickly establish trust with the participants to her capacity as a thoughtful listener, with compassion and empathy for the hardships of living below the poverty line. She notes that heads of households born outside the United States seemed far more willing to share their experiences and answer questions. Less time was spent with heads of households born in the U.S. In these homes, the atmosphere seemed more strained and therefore only the most important questions were asked.

In addition to her reflections on the process of conducting the front-end analysis, Marquez provided a narrative summary of the data collected and then offered specific recommendations for programmatic change. The following is a list of some of the recommendations as examples of the depth and breadth of the front-end analysis conducted by the student intern.

Children and Youth in the MTW Program. Outreach should be carefully planned to engage youth in the MTW program and generate interest in the Learning Opportunity Center (LOC) among youth. Youth engagement is a key factor in parents' ability to attain self-sufficiency and it is recommended that youth activities be a top priority of the MTW program. Safe, reliable, affordable, convenient childcare and/or general supervision is also paramount to the success of MTW participants.

No single solution can be devised for everyone. For this reason the report includes the following recommendations: (1) Add a Youth Director position to the LOC staff; (2) include homework tutorial as an integral part of youth activities at the LOC, with tutors available during flexible hours to meet the needs of students who may choose to visit the Center at any time between 3:00 and 8:00 p.m. on weekdays; (3) because the greatest numbers of children in the MTW Complex are under five years of age, include preschool children, ages two to five in LOC programming. Storytelling was recommended as an appropriate activity in which to engage younger children. This was felt to

be particularly important because busy parents often forego reading to their children despite an understanding of the important role that reading can play in the literacy development of children.

Staffing and Educational Programming for the Learning Opportunity Center The following positions are recommended to staff the MTW LOC:

Educational Technology Consultant to design and develop an educational component for the MTW model incorporating all the services available and recommending improvements to the system in an effort to focus learning more directly on participant needs; work closely with other LOC staff to create a positive, inclusive learning environment for all ages. Event Coordinator and Youth Director to partner with the educational technology consultant. The primary responsibility of this staff member would be to plan and promote activities offered to youth. Network Administrator to maintain the web server, computers, and printers; troubleshoot problems; and maintain current functionality of hardware and software. Technology Coaches to facilitate participants' use of hardware and software. Lab Assistants should come from the resident population and can be useful in a number of ways, including opening the LOC when the coaches are not on duty.

Together, these staff members would be responsible for educational programming that would include:

Distance education

- Focus on "Learning How To Learn"
- Online learning via WWW, Email
- Certificate Programs
- Degree Programs
- Satellite Telecasts
- Video Conferencing
- Workshops and Seminars
- Personal Growth Information

Personal development skills

- Writing
- Language (effective communication skills)
- Sociopolitical, historical, and cultural interactions
- Market interpersonal and technological skills specific to chosen field
- Business etiquette and interpersonal skills
- Interview and presentation skills

Equipment. The report included extensive and detailed recommendations on hardware, software, and supplies needed to ensure the LOC's greatest usefulness to the MTW participants; however, these are not outlined in this paper.

Institutional Response to Applied Research Project Results

Educational technologists are trained to identify gaps that may exist between actual and optimal states, and to design solutions that will allow programs to reach optimal states. Toward this end, the results of the analysis conducted at MTW were compiled into a needs assessment report and recommendations were generated that would meet the needs of the residents as well as the other stakeholders involved in the project. The interviews allowed program administrators to gain a better understanding of how program participants defined success for themselves. This was important because gaps between programmatic definitions and participant definitions must be made explicit and be addressed. This must happen early in the program or participants may become disillusioned and/or frustrated with the program.

The program managers encouraged the student intern to make recommendations that reflected the optimal support systems needed by MTW participants. Program staff recognized the value of the student intern's recommendations in this area, but also recognized that it would be difficult to implement these recommendations. MTW is a HUD designation, but is not a funded program. There is a total lack of funding for the Learning Opportunity Center and family educational support services, and limited funding for support services provided by SDHC and COPC. To implement these recommendations, partner agencies are attempting to identify new funding and are creating partnerships with community-based agencies. To date, the program managers have developed the following programmatic responses to the student intern's recommendations.

Children and Youth in the MTW Program. UCSD and SDHC recruited the UCSD Early Academic Outreach Program (EAOP) as a partner to provide homework assistance and tutoring under the supervision of a certified classroom teacher. A certified classroom teacher was hired to assume some of the responsibilities of a Youth Director. The teacher plans and promotes educational activities offered to youth and supervises EAOP student tutors. YMCA TeenLink Program was recruited as a partner to provide group mentoring activities for older children and youth in the complex.

SDHC hired a Resident Manager to oversee the MTW Public Housing Complex and a neighboring public housing complex. The Resident Manager organizes and supervises recreational activities for children and youth. The SDHC occasionally provides van transportation for children and youth to engage in activities at parks and community recreational facilities. The Learning Opportunity Center's hours of operation were based on resident preference.

Staffing and Educational Programming for the Learning Opportunity Center Event Coordinator and Youth Director—SDHC and UCSD EAOP hired a certified classroom teacher to provide educational programming. Technology Coaches—SDHC developed a partnership/contract with Occupational Training Services to provide computer coaches to facilitate use of hardware and software by residents. Distance Education—COPC opened a dialogue with the community college district about providing distance learning opportunities and teleconferencing to the LOC. This dialogue continues. Online Learning—Residents have free email accounts and access to the World Wide Web. Education about computer use and online learning opportunities is part of the orientation to the LOC, as well as a component of ongoing services. Personal Development Skills—SDHC recruited Occupational Training Services as a partner to provide credit-counseling workshops. Personal Growth Information and Language—Coordinated a Ken Blanchard/Rosie Greer workshop for youth and adults on motivation and personal achievement (Blanchard 1982). FSAs provide information and referrals for English as a Second Language and self-esteem, wellness, and medical services. Business Etiquette, Interview, and Presentation Skills—SDHC provides referrals to their I CAN program, which offers job readiness coaching.

Equipment. X/O Communications (formerly NextLink) was recruited as a partner to provide more than fifteen Pentium computers and high-speed Internet access for the Center.

Armed with data collected through the front-end analysis and the recommendations in *Needs Assessment: Moving to Work Juniper Families*, the project managers advised senior managers within the SDHC and faculty within the UCSD COPC of the recommendations. Project managers also described the interventions already in place in response to these recommendations. Senior managers and faculty working closely with the project managers identified additional resources and partner agencies. Senior managers and faculty also engaged in ongoing conversations with project managers regarding the appropriateness and feasibility of implementing some of the recommendations and continue to be engaged in discussions regarding new information provided in Marquez's report.

In addition to programmatic recommendations, the student intern's report identified challenges and made recommendations to which the project managers could not respond because issues raised were beyond their sphere of influence. These problems were related to institutional procedures directed by the partner agencies; it was the impact of partner agencies' policies, not the program itself that was problematic. For example, the student intern recommended that programming be developed for younger children at the Learning Opportunities Center. This recommendation was based on the needs assessment data indicating that the lack of childcare was a major challenge and would impede parents from using the center. However, past experience in the SDHC Resident Services Division had led the Division to develop a policy stating no children under school age are permitted in the Center, as this was found to be a deterrent to adult learning activities. Additionally, agency leaders believed that the presence of children with them rather than try to arrange for childcare.

Student Engagement Through Applied Research: Benefits and Challenges

One difficulty experienced by the first project intern, Joy Marquez, was bringing closure to the relationships developed with the residents after her portion of the work was completed. This was likely due to her own previous, long-term, low-income, single-parent status. Marquez felt a kinship with many of the program participants and, in fact, still remains in contact with a few of them. The development of these close relationships allowed the intern to learn personal details about the lives of participants and their families in a way that likely could not have been achieved through other means. MTW residents trusted this intern because of her background.

Another challenge experienced by Marquez was accepting the realization that even though a student intern may be qualified to generate recommendations that are valid and feasible, the intern is not a member of any decision-making body and, therefore, does not have the power to negotiate change. This is an important realization because it brings out the need for clearly defining the boundaries of what interns are expected to contribute and how their work will be used.

Benefits to Students

- Students have the opportunity to make meaningful contributions to communitybased applied research.
- Students get hands-on experience working on real world problems.
- Students learn about themselves—they learn about their skills and the boundaries of their current knowledge as well as work to expand them.
- Career opportunities are expanded through new connections within the university and the community.
- Students learn that work in the community can be part of scholarship.

The partnership between the SDHC, COPC, and the Educational Technology intern was not always smooth. The intern, program mangers, and faculty from UCSD engaged in lengthy and spirited discussions that reflected differences in values, beliefs, and personal and professional experiences. The group did not resolve all differences, but was able to remain focused on the work plan and maintaining an environment that ensured optimal student learning.

Challenges of Student Involvement

- Pairing the "right" student with the right project recognizing that individual students come to the project with their own frame of reference resulting from prior personal and professional experiences.
- Helping students interact appropriately in a community setting.
- Providing orientation and ongoing reflection sessions for students (Levison 1990).

Sessions should:

• Include descriptions of the role of the university, the role of community agencies, and the student's role in the community-based activity.

- Allow students to articulate successes, challenges, fears, and constraints and voice their findings and recommendations.
- Allow faculty and staff to provide constructive feedback.
- Establish a dynamic relationship with the student where student learns that some recommendations are valid and feasible and can be used to inform programmatic changes, while other recommendations cannot.
- Provide students with follow-up on agency and university response to student input.
- Helping students to contextualize their experiences and understand the role of community-based work in their own personal and professional development.
- Helping students to transition when the project is finished.

The University and its community partners have chosen engagement over exposure as a strategy for involving students. Exposure is what most students experience during their involvement in community service because they are there primarily as observers rather than participants. Engagement implies intensity. COPC partners have a deliberate intent of involving students. The university and its partner agencies first develop programs and identify research projects, then recruit students to participate in the design and implementation of these community-based activities. Faculty and staff remain involved with the students, and students are aware that they have a contribution to make to the work. Universities can provide opportunities for students to translate service in the community to scholarship in the university through applied research.

References

Blanchard, K., The One Minute Manager (New York: Morrow, 1982).

Boyer, E. L., "Creating a New American College," *The Chronicle of Higher Education*, 9 March 1994: A48.

City Heights Improvement Partnership, "City Heights Crime & Economic Summit Report," (Unpublished report, June 24, 1994).

Dynes, R., "State of the Campus Address," (speech to the University of California San Diego Campus, March 21, 2001).

Levison, L. M., "Choosing Engagement Over Exposure," as cited in J. Kendall et al, eds., *Combining Service and Learning: A Resource Book for Community and Public Service* (Raleigh: National Society for Internships and Experiential Education, 1990): 68-74.

Marquez, J., "Needs Assessment: Moving to Work Juniper Families," retrieved from http://et.sdsu.edu/JMarquez/needsassess.htm on August 14, 2001.

National Science Foundation, Division of Science Resources Studies, *Federal Science* and Engineering Support to Universities, Colleges, and Nonprofit Institutions: Fiscal Year 1996, NSF 98-331, Project Officer, Richard Bennof (Arlington, VA: GPO, 1998). Retrieved from http://www.nsf.gov/sbe/srs/nsf98331/htmstart.htm, August 14, 2001. Omenn, G. S., "Caring for the Community: The Role of Partnerships," *Academic Medicine* 74 (7, 1999): 782-789.

Salisbury, D. F., "Stanford Ranked Second in Research Quality According to Study," retrieved from http://www.stanford.edu/dept/news/report/news/october21/ isirank1021.html, August 14, 2001.

San Diego Housing Commission Web Site retrieved from http://www.sdhc.net/Vision percent 20Mission percent 20Page.htm, August 14, 2001.

San Diego State University "Campus Information" retrieved from www.sdsu.edu/ campusinfo/history, August 14, 2001.

University of California, San Diego, "Chancellor's Web Page" retrieved from http://www-chancellor.ucsd.edu/, August 2001.

University of California, San Diego "Who We Are," retrieved from http://www-er.ucsd.edu/who/index.htm, August 3, 2001.

University of South Florida Strategic Plan Community And Urban Initiatives Task Force (Chapter of the 2000 Strategic Plan Report to the Office of the Provost and Executive Vice President, 2000).

Weber, S., "Welcome From the President of San Diego State University," retrieved from http://www.sdsu.edu/welcome.html, August 14, 2001.

"Welcome to Ed Tech," retrieved from http://edweb.sdsu.edu/EDTEC/ EDTEC_Home.html, August 14, 2001.

Author Information

Hilary Hahn has been the Project Manager for the UCSD Community Outreach Partnership Center since 1997. She has a Master's in Educational Administration, Planning, and Social Policy from Harvard University and is currently a Violence Prevention Fellow of the California Wellness Foundation Violence Prevention Initiative.

Hilary Hahn, Ed.M. University of California San Diego 9500 Gilman Drive 0927 La Jolla, CA 92003-0927 Email: hrhahn@ucsd.edu Telephone: 619-681-0659 Fax: 619-681-0666

Joy Marquez has a Master's in Educational Technology from San Diego State University. She recently accepted a position with San Diego State University Foundation's Educational Pilot as coordinator of the City Heights Community Technology Center. Joy Marquez, M.A. City Heights Community Technology Center 4283 El Cajon Boulevard San Diego, CA 92105 Email: jsmcommunity@home.com Telephone: 619-594-7179 Fax: 619-594-8810

Vivian Reznik is a Professor of Pediatrics in the UCSD SOM. She has been involved in creating community-based programs in San Diego for medical students and resident training. She worked with city and county governmental agencies to create access to health care and enhanced educational opportunities for children and families.

Vivian Reznik, M.D., MPH University of California San Diego 9500 Gilman Drive 0831 La Jolla, CA 92003-0831 Email: vreznik@ucsd.edu Telephone: 619-543-5340 Fax: 619-543-5642

David Hoyt is the Monroe E. Trout Professor of Surgery and Chief of the Division of Trauma at UCSD.

David Hoyt, M.D. FACS University of California San Diego 9500 Gilman Drive 8896 La Jolla, CA 92003-8896 E-mail: dhoyt@ucsd.edu

Sandra Daley is an Associate Professor of Pediatrics and Assistant Dean of Student Development and Community Programs, UCSD School of Medicine. She has been a pediatrician in San Diego's low-income neighborhoods, a physician consultant for the San Diego Unified School District, and has worked in interdisciplinary collaborative efforts in education, health and social services for more than twenty years.

Sandra Daley, M.D. University of California San Diego 9500 Gilman Drive La Jolla, CA 92003 E-mail: sdaley@ucsd.edu Telephone: 858-534-0764