**REVISED PROJECT NARRATIVE:**  *SubstanceAbusePrevention.org: A Virtual Community*

**Project Purpose**

**Purpose and Mission:** The purpose of this project is to demonstrate how community problem prevention strategies and principles can be moved from a physical community to a virtual community (VC). The mission is to help Dallas technical professionals, citizens, and youth translate scientifically proven individual/peer, family, school, and community strategies to a VC that prevents substance abuse in youth ages 12-17.

**Problem/need.** The US has many social problem, among the most severe being youth substance abuse. In 1997, Substance Abuse and Mental Health Services Administration (SAMHSA) surveyed 7,844 youth age 12 to 17 who represent the national population of 22 million in that age group (SAMHSA, 1977). Some relevant findings are:

- **35%** had been offered marijuana, free or for a price
- The odds of youths using marijuana were **39** times higher among those who had at least a few close friends who tried or used marijuana
- A larger percentage of black youths reported that it was easy to obtain cocaine, crack, and heroin relative to the percentage of white/Hispanic youths
- **81%** said that their parents would be "very" upset if they tried marijuana
- The risk and protective factors studied explained a significant amount of the total variation in individual substance use. For example, together with demographic factors, they explained **61%** of the variation in past year marijuana use.
- Because research has shown a causal relationship between youth substance use and community, family, individual/peer and school risk and protective factors. Changing these factors could reduce youth substance use.

The 1998 Texas Secondary School Survey, the largest of its kind in the nation, and the Drug Abuse Warning Network (DAWN) emergency room found:

- **Inhalant use** is increasing among youth
- The proportion of youth admitted to publicly-funded treatment reporting marijuana as the primary drug problem continues to increase
- **Depressants** are a growing problem because of their importation from Mexico
- **Heroin overdose deaths** have increased annually, but the average age of the decedents continues to increase, even though a number of young persons in the Dallas-Ft. Worth area have died from heroin (http://www.tcada.state.tx.us/research/trends/dec98/).

**Solution.** Over the last 15 years, SAMHSA and the National Institute on Drug Abuse (NIDA) have research youth substance abuse extensively and developed “scientifically proven prevention strategies and principles” (Brounstein, Zweig, & Gardner, 1998) (Appendix A). Strategies that target youth have a high chance for success, for example, 12 year olds who do not smoke pot are 79% less likely to become chronic drug abusers (www.marijuananews.com/exchange_between_mike_gray_and_t.htm). These strategies are also cost effective. For every dollar spent on drug use prevention, communities can save $4 to 5 in costs for drug abuse treatment and counseling (www.nida.nih.gov/Prevention/Prevopen.html). The Texas Commission on Alcohol and Drug Abuse 2000 School Survey found a 9% decline from 1998 in illicit drug use in grades 7-12. State leaders concluded that “the results are proof that the state’s prevention efforts are working.” And “we need to remain dedicated to looking for
new and better ways to insure that parents and educators have all the tools they need to prevent substance abuse” (http://www.tcada.state.tx.us/research/schoolsurveys.html).

While we know what works in drug prevention, few communities have the resources to implement these strategies. We must find less expensive and effective ways to get what we know about substance abuse prevention to today’s youth. Technology, which has helped make many sectors of society more efficient, can possibly help reduce the cost of substance abuse prevention. Virtual communities of all sorts exist on the Internet (http://www.rheingold.com/vc/book/). Clearly research is needed to test converting what is know about community substance abuse prevention into a VC that is available to youth around the world.

This project will develop a VC that reduces risk factors and fosters protective factors among youth ages 12-17 who are at risk for substance abuse or other adolescent problems

A selection of the individual/peer, family, school, and community strategies used in the VC are illustrated by the sample screens in Appendix B. VC strategies, outputs/outcomes, and success measures are in Appendix C.

Targeted Underserved Community. Dallas and the South Dallas Community are ideal locations to carry out this project. Dallas is a typical large, rapid growing, US city of 1,188,580 people with with 50.8% white, 25.9% African American, and 35.6% of all races of Hispanic origin (2000 Census). Dallas is the principle city in Dallas County, which has a 2000 population of 1,852,810. About one-third of Dallas’ population resides south of Interstate Highway 30. Anglos comprise 74% of the population in the North Dallas while African Americans comprise 64% of the population in South Dallas. According to an October 2000 United Way needs assessment, household income is 23% less in South Dallas than in North Dallas. Three fourths of all Dallas County residents who live in poverty live in South Dallas. The 1997 Dallas poverty rate is 16.4%, with the 1998 child poverty rate being 15.2%. In 1994, 90% of South Dallas youth lived in poverty compared to 27% for Dallas County. South Dallas is typical of urban cities where youth have a high risk of substance abuse. According to the City of Dallas and the Council of Governments data, the South Dallas 1996 dropout rate was 19.4% compared to 16.8% for Dallas County. More than 40% of public school students in Dallas County are at-risk of educational failure. While several small prevention efforts exist (see the advisory board in Appendix D) funding and coverage is inadequate. For example, Texas has the highest rate of uninsured patients in the US with 25% of the population of the population going without insurance. Twenty four percent of the children in Texas did not have health insurance in 1997 compared to a national average of 14.8% (Health and Human Services Commission, 1997). See Appendix E for a more detailed profile of South Dallas.

While South Dallas and Dallas as a whole have many deficits, they also have many assets. Dallas is surrounded by suburbs with many high tech organizations and resources, e.g., Texas Instruments, Yahoo, and Broadcast.com. In light of the problems facing South Dallas’s youth, several South Dallas substance abuse service providers exist that pool resources to protect youth and rebuild and revitalize their community (see community involvement section).

The lead agency in this collaboration, HSF, has operated a 12 bed TX licensed residential and outpatient substance abuse treatment program in the Fair Park area of South Dallas. Holmes St.
addresses the needs of low income, high-risk chemically dependent, multi-dysfunctional adolescent males using a relapse prevention model of treatment. This model consists of education, confrontation, and support combined with individual/peer, group, and family counseling combined with community reintegration. The residential program has graduated 386 youth since its opening in 1991 and the outpatient program has served 309 households since its opening in 1998.

The School of Social Work at the University of Texas at Arlington has a South Dallas field unit of interns who have collaborated with community organizations such as the “Weed & Seed” project. This field unit, supported by the Community Empowerment Foundation and housed at various South Dallas social service agencies is a valuable resource for educating UTA students while applying scientific knowledge and principles to the community.

The above concentration of resources, capacities, and efforts makes South Dallas an ideal laboratory for translating scientifically proven prevention principles into a VC.

Types of People Involved. The VC developed through this project will involve the following eleven types of people. The bolded titles will be used throughout the remainder of the application. First year estimates include those testing the VC.
1. Developers will be youths who have completed or are close to completing the program at HSF. A group of 7-12 youth will develop the initial VC content. We anticipate involving 36 Developers during this 3-year funding period.
2. Reactors will be youth who are receiving substance abuse treatment services at HSF and other Dallas agencies. They will serve as focus groups that critique the VC content of the Developers. We anticipate involving 225 Reactors during this 3-year funding period.
3. Visitors will be youth who find the VC while surfing the Internet. Visitors will be able to access many of the VC’s features, but will chose not to participate in the actual life of the community, i.e., enter chat rooms, talk with a mentor, etc. We anticipate 2,500 Visitors the first year and 5,000 Visitors per year for project years two and three.
4. Participants will be Visitors who decide to join the community and participate in one or more of its activities. We anticipate 150 Participants during the first year and 500 Participants per year for project years two and three.
5. Students will be youth who visit the VC with their teacher as part of a school classroom activity. They will have Visitor access and be solicited to join the VC as Participants. We anticipate 10 Teacher and 150 Students during the first year and 30 teachers and 600 Students per year for project years two and three. (Appendix F).
6. Families will be related groups of individuals who enter the VC as a unit. We expect 25 families the first year and 75 families in years 2 and 3.
7. Consultants will be Dallas technology professionals who have agreed to donate their time and talents in helping youth construct the VC (Appendix G-H). We anticipate using 100 consultants during the project.
8. Mentors will be members of the community who agree to guide youth in various VC activities, for example, via email, in chat rooms, etc. We anticipate 75 mentors will be involved during the 3 years of the project (see support letters in Appendix I & J).
9. Volunteers will be community residents and others who will support the project through face-to-face volunteering and virtual volunteering, e.g., helping with consultant training of youth. We anticipate 75 volunteers during the three year project, (see Appendix I & J).
10. **Interns** will be UTA School of Social Work bachelors and masters level interns who are placed in the South Dallas field unit. We anticipate two or three students each semester will be involved in this project as per the stipend in the budget.

11. **Staff** will be UTA staff and agency personnel who will implement the project.

**Internet Technologies Involved.** This project will allow youth to experiment and use the following Internet technologies to design their VC.

- **Streaming video** will allow Developers, with the help of Consultants and Volunteers, to create and disseminate prevention content in the format most familiar to youth, i.e., video. The videos will include images from youth’s homes, families, schools, and community.

- **Streaming audio** will also be used as a low bandwidth option.

- **Narrated picture books** will allow youth to illustrate their stories using pictures narrated by text or streaming audio.

- **Chat rooms, Internet support groups, and virtual meeting spaces** will allow youth to “hang out” and get support from other teens. Chat rooms will be supervised by adult volunteers who can also provide guidance on a broad range of subjects from substance abuse prevention, schooling, and job and career development.

- **Online single user and multi-user games** will allow youth to engage their friends in learning using computer game formats. We acknowledge that sophisticated games are beyond the resources of this project. However, simple game formats will be tried.

- **Email, listservs and bulletin boards** will be used to foster communication in the VC. They will also be used by Staff, Volunteers, Mentors, and Developers to manage the project.

- **Online Mentoring** will be used because it has been a successful strategy in other projects. All online mentoring activities will be strictly monitored and supervised using guidelines established by the Virtual Volunteering Project based at the University of Texas at Austin (www.serviceleader.org). Some guidelines include: background screening all volunteer mentors, utilizing password protected sites, protecting identities of participants, recording and reviewing online chat discussions for inappropriate activities, and other measures.

**Program Goal:** To determine what proven components of substance abuse prevention in ‘real’ communities can be effectively transferred into “virtual” communities. The project **outcome and process objectives are in Appendix K.**

**Outcomes and Impacts.** This project will have **impacts** beyond the **outcomes in the objectives** (Appendix K). The increased technological skills of Developers will result in improved skills in communication, leadership development, utilization of conflict resolution techniques, increased reading and writing abilities, increased awareness/access to community resources, and increased opportunities for employment in technical fields. The impacts on Consultants, Volunteers and Mentors will be increased pride in their community, increased feeling of accomplishment, and increased sense of “giving back” to the community. The community will also be impacted with lowered youth substance abuse and higher preventative factors in youth, families, leaders and citizen volunteers. The human services will have a model of how to translate community strategies into VCs and an example with specific successes (see also Appendix C and evaluation section). **Project Timeline** can be found in Appendix L.

**Innovation**

This project is innovative in several regards.
Use of a VC to Prevent a Human Service Problem. A search of Google for “VC” netted 1,320,000 hits. However, a Google search for "substance abuse prevention VC" and similar wording netted no hits. Some aspects of a VC, e.g., Internet support groups have been successfully used. However, the applicants are unaware of any attempt to prevent social problems using a robust VC modeled after a real community.

Kids Who “Have Been There” Communicating Proven Content to Peers. One unique feature of this proposal is that the prevention contents of the VC will be designed by the youth “who have been there” using media favored by youth, e.g., computers, the Internet, video, and audio. This technique of having youth translate proven prevention strategies to their peers has been successfully used by the Principal Investigator in a Levi Strauss funded project that developed two CD-ROMS to teach youth, ages 6-9 and 9-12, about HIV and AIDS (Wilder & Schoech, forthcoming). Both CD-ROMS involved text, graphics, audio, and video. Youth 6-9 selected a jungle virtual setting for their training while youth 9-12 selected a pirates’ virtual setting. The CDs were well received by teachers and parents and successfully achieved most of their educational goals (www2.uta.edu/cussn/kidshiv/kidsaids.html).

The Blending of Urban Community and VC. HSF substance abuse treatment program is located in a true urban community. In contrast to many suburbs today, the surrounding streets are alive with people almost all the time. The kids who will translate substance abuse scientific content and principles into the VC will understand communities and their roles in peoples’ lives because they live in a community that has a powerful role in their lives.

Diffusion Potential

Common Problem. Substance abuse is an excellent area for demonstrating how to translate social problem prevention strategies and principles to a VC because (see problem section for references):

- Substance abuse is a common problem among today’s youth (SAMHSA Survey)
- Scientifically proven strategies and principles exist to prevent substance abuse
- Youth who “have been there” are available to translate this scientific content into a VC for their peers
- Technical experts are available and eager to share their expertise for worthwhile causes such as youth substance abuse prevention.
- Community groups and individuals have supported youth substance abuse prevention efforts and are willing to help and support youth in a VC.

Advantages over Established Approaches. The advantage of the project over established approaches is that is will reach many more people for substantially lower costs. Other advantages are often touted to exist in the virtual world, e.g., people reveal more personal and confidential information about themselves in a virtual world. Chat room participants often experience a hyper bonding phenomenon (Schoech, 2000). However, we simply do not know enough about virtual communities to specify what impacts these advantages will have. Thus, this project is important in exploring and learning how virtual worlds can prevent social problems.
Ease of Replication and Adaptation. Communities and human service agencies throughout the world will be able to use our website to discover how to translate the learning from this project into their unique problem and needs.

Plans and Budget Resources Dedicated to Dissemination. The budget contains resources ($2000) for the project staff to attend traditional conferences. However, the web will be the most important communication and dissemination resource. Part of the project website will be devoted to presenting what has been tried and our successes and failures. The project contains a 50% time PhD level research assistant who will be responsible for project coordination and research and evaluation. As knowledge is discovered, it will be posted on the web for all to see.

Project Feasibility
Technical Approach. This project is technically feasible as shown by the many uses of the proposed technology. Some limited VCs exist. Cyber Sisters Club (Lichtman, 1998), even serves inner city youth. HSF has the expertise and ability for substance abuse prevention program design. Local businesses have agreed to provide technical consultation and mentoring. The streaming video, audio, and pictures will be developed utilizing current digital video camera technology. Video and audio editing and Web design can be done on the computers purchased through this project.

Applicant Qualifications. This project will be bringing together the diverse talents of a highly skilled group of individuals (see organizational chart, Appendix D). HSF will serve as the lead agency. This agency, under the leadership of Godwin Bettis (Appendix M) has a demonstrated success rate of over 60% for the 368 multi-problem youth who have graduated from the residential program. Holmes St. was awarded the 1997 TX Youth Commission’s Outstanding Program of the Year Award. Charles Barton, the Project Director, is a Master’s level LCDC with extensive computer experience, who has been working with HSF for 5 years.

Another group of partnering organizations consists of the Excellence in Education Program of the Dallas Black Chamber of Commerce, and the National Alternative Education Athletic Assn (NAEAA). NAEAA is an association of African American sports groups who mentor kids. These groups have a demonstrated commitment to the health and safety of the youths in the affected community and have a strong history of providing financial support, time, and expertise for substance abuse prevention.

The third group of partnering organizations is Texas Instruments and Imaginity Interactive (Appendix G & H). These businesses like this project, because it provides them an opportunity to use their professional talents to help others and benefit their community. They also have tremendous capacity to provide the quality consultation, Real Network server and web server capacity that is demanded in the business world. We do not see scalability and increased use being a problem given the quality of the Internet server space being donated. Professionals from organizations such as CBS Channel 11, Verio, 100 Black Men, and Dallas Black Data Processing Professionals were interested in providing consultation, but were unable to commit with letters at this time.

A fourth partnering organization is the School of Social Work (SSW), U. of Texas at Arlington (UTA), which has a student interns unit in the South Dallas community and has placed students in many South Dallas agencies for years. UTA is the second largest of 15 institutions in the University of Texas System with a 392-acre campus of approximately 20,000 students situated in...
the center of the Dallas/Ft. Worth Metroplex. The SSW has a fulltime faculty of 34, almost 900 students in its BSW, MSW, and PhD programs, and over 5,000 alumni. UTA is a Research 1 level university with Internet2 access.

The Project will be headed by Professor Dick Schoech, who has worked and taught in community practice since 1971 and has specialized in human service technology since 1978 (Appendix N). He is the ½ time Technology Director for the School of Social Work. He has (1) developed several information systems and web sites, (2) developed 2 CD-ROM training modules on HIV/AIDS for kids, (3) taught 4 classes online, (4) maintains 16 listservs, (5) is the founding editor (1985) of the Haworth Press Journal of Technology in Human Services, and (6) chair of the HUSITA6 (HUman Services Information Technology Applications) Conference in Charleston in October 2001 (www2.uta.edu/cussn/husita6).

Human Research Review & Privacy Considerations. Steps will be taken to assure the privacy of project participants. Selected chat rooms will be password protected and Mentors will provide monitoring and supervision. Informed consent will be obtained from all whose words, images, or likeness will be used in the VC. The PI has experience in this area given the HIV/AIDS CD-ROM with kids video and images previously developed. Human Research Review forms have been submitted and UTA’s IRB approval provided prior to the award.

Sustainability. Since the VC will be part of HSF’s normal substance abuse programming, sustainability will be less difficult than with many other projects. Also, the bulk of the cost of the project is in developing the VC content and evaluating what is successful. However, sustainability endeavors will begin the first year of the project. Additional community resources will be explored and we will seek sponsors for successful VC content from health and behavioral health maintenance organizations. We expect Imaginuity to continue to donate Streaming Video server space and web hosting after the project ends because they are committed to Dallas youth and the project will involve their work.

Budget Overview. The budget is best understood by viewing the budget spreadsheet in the budget section along with the budget narrative.

Community Involvement
This project has extensive community involvement as can be seen in the support letters in the Appendices. This involvement ranges from professionals in large corporations such as Texas Instruments and Imaginuity to local support such as the Black Dallas Chamber of Commerce. An Advisory Committee of local service providers has agreed to help with the project. Advisory Committee members already committed include: Dallas Challenge, Dallas Youth Services Corporation, Concord Baptist Church, Weed & Seed Project, and the Foundation for Community Empowerment. Local schools support is indicated in Appendix F. These organizations have been working together over the past several years to provide services to our most at-risk youth. These projects include educational remediation, after-school programming, substance abuse treatment and housing development.

Evaluation
Dr. Schoech will be responsible for the evaluation and overall evaluation design. A half time Ph.D. student will be employed as a documenter, evaluator and total quality manager. The evaluation will make use of standardized instruments (Appendix C) such as:
1. The "Substance Use and Abuse" questionnaire (Poulin & Kauffman, 1995) designed to assess perceptions of (a) the seriousness of community problems and substance usage, and (b) the effectiveness of prevention and treatment efforts.

2. The "Interagency Coalition Evaluation" (Vicary, Doebler, Bridger, Gurgevich, & Deike, 1996) interview schedule designed to assess respondents' communication and collaboration with other members, their awareness of available resources, and their impressions of the project's impact on the community.

Other standardized instruments will be sought and adapted, for example, mentor/mentee instruments from Mentium and www.mentornet.net/.

A sampling of the research questions to be evaluated include:

1. What are the characteristics of youth who benefit most from each VC features?
2. Which features of SubstanceAbusePrevention.org are the most cost-effective in reducing which risk factors and increasing which preventative factors?
3. What features of SubstanceAbusePrevention.org VC attract different types of users, e.g., Visitors and Participants?
4. What makes a Visitor to SubstanceAbusePrevention.org become a Participant?
5. What attracts community residents to become Consultants, Volunteers and virtual Mentors and what benefits do they receive for their efforts?
6. What constitutes a “model” prevention VC and what resources and processes are required to replicate various parts of the model?
7. What impact does a substance abuse prevention VC have on a geographic area and on others who visit the community?

The evaluator will do the following.

1. Help research and post accepted data collection instrument for online completion
2. Collect and analyze demographic information on Developers, Reactors, Visitors, Participants, Students, Volunteers, and Mentors.
3. Insure VC content is consistent with SAMSHA strategies and NIDA principles.
4. Staff the youth focus groups and insure feedback is incorporated into VC content.
5. Administer the data collection instruments in Appendix C.
6. Insure that the VC collects data that can be automatically collected from Web site users and evaluate this data, e.g., evaluate chat using AskSam qualitative analysis software.
7. Implement and monitor Total Quality Management (TQM) principles and infrastructure.
   For example, the evaluator will help the Project Advisory Committee identify project customers, establish performance measures, collect performance data, develop feedback loops, and take corrective actions.
8. Document and post the VC “model” and facilitate its replication into other geographic areas.
9. Insure protection of confidentiality, privacy, and intellectual property of the youth, volunteers, mentors, and others involved.

Conclusion
The Internet has matured to become a tool that communities can use to solve their problems. However, few Internet sites exist for preventing health and social problems. This project will develop and document one possible way. The results will not only be a replicable model, but a substance abuse prevention VC that will impact all its developers and visitors.