

### **Information for Empowerment: recovery and sustainability in Puerto Rico.**

The Graduate School of Information Science and Technologies (GSIST) of the University of Puerto Rico-Rio Piedras Campus submits this Master's level proposal for a planning grant to explore the information needs of residents of distinctly diverse communities in Puerto Rico. We are requesting \$82,082.00. This project is designed and proposed in the context of the Institute of Museums and Library Services (IMLS) Community Catalyst project category. Puerto Rico is struggling to recover from a deep financial crisis and from the aftermath of two hurricanes that left the island severely affected. Citizens' participation in these recovery efforts are curtailed by their lack of understanding of complex, technical, scientific, environmental or financial information. Experts are seldom able to explain in understandable terms the consequences of government actions or inaction in regard to environmental issues such as coastal erosion, the effects of coal burning, deforestation and urban sprawl, global warming and others which are greatly affecting different areas of the island. To promote deliberative participation on the effects of these issues, information needs, which are also complex, will be unearthed to address them properly.

#### **Broad Need**

The project we propose is exploratory within the scope of the project category. We seek to identify the information needs of residents of communities across the island and the two island municipalities. We will also document opportunities of community-based public and academic librarians who will take part of the intervention and participate in the design of an internet-based information site. This site will host information resources on a number of issues that affect the living conditions and wellness of the communities.

Absences of reasonable and understandable explanations to events, and a lack of proposals and actions, contribute to the feelings of powerlessness and uncertainty that have been experienced by Puerto Rican citizens in recent years. Those feelings of uncertainty are fueled by a lack of accurate and accessible information that can help citizens understand the complex situations they face and curtail their contribution to propose solutions to address such pressing problems.

Puerto Rico does not have a strategy to develop an informed citizenry in critical areas. Initiatives have been developed from the civil society to educate fellow citizens on a number of different issues and through various strategies. Informal science activities have been led by scholars on environmental conservation activities. Non-governmental organizations are likewise striving to provide information and to promote a more open access information culture within Puerto Rican society. On the government side, K-12 education has greatly suffered for many years from myriad ailments that affect potential academic achievement. Efforts have been made to address the needed improvement of the teaching and learning of science, and other academic areas. Despite the fact that college students receive a broad general education formation, this formation is still lacking in some areas. With some variations, undergraduate students are required to take coursework in social and natural sciences, as well as the humanities. However, the understanding of basic science as it relates to everyday living is not at the level that it should be, and we cannot consider the average citizen to have sufficient "scientific literacy" as a result of their education. We find the same concerns at the social scientific level. The profound financial crisis which affects Puerto Rico is not understood by the majority of the citizens. In recent years, the government has implemented plans for infrastructure, energy, agriculture and other projects that supposedly have the purpose of bettering our living conditions. However, many citizens do not understand their impact nor have the basic knowledge to critically evaluate if the proposed projects are indeed beneficial, detrimental or even needed. Recently, problems such as coastal erosion; energy production and distribution; and health management have become the most debated issues. Clear, reliable and understandable information presented in various formats and easily accessed is needed to educate members of our communities of social, economic and scientific issues that affect their wellbeing. Ennis (1996) and Yacoubian, (2015, 2019), separately insist in the need to develop the scientific literacy of citizens so that critical thinking informs their "deliberative participation" and democratic decision making on important scientific and social issues. Amidst these challenges, the island does possess a broad telecommunications infrastructure in which internet penetration reaches 83% of the 3.05 million inhabitants, of which almost 2 million are active social media users.

Studies conducted in the past also demonstrate that 1.80 million are active mobile media users. This will be taken into account to determine which platform we will use to disseminate the information we will share.

### **Project Design**

Dr. José Sánchez-Lugo, Director of the GSIST, an educational technologist who has extensive experience in community development projects will lead this project. NGO's, government agencies and community residents will also participate as partners. We will firstly gather data on site in the serviced communities to identify, document and categorize information needs around issues that affect their living conditions or have the potential to change those conditions in the near future and that may not be fully understood by residents. Information needs assessment will combine a design thinking approach with proven methods in information science to identify other than obvious information needs that can provide an innovative look at these issues. As stated, we will identify the most appropriate media platform to provide creative information resources designed to address the gap of understanding on the issues identified. Faculty and students from our Master's in Information Science will participate in our efforts. Along with them, community librarians will conduct interviews, administer surveys and participate in town meetings within the local communities. Participating students will have the experience to undertake valuable practice in their chosen future profession within the community as they implement librarianship knowledge in conducting user information needs in an authentic environment. The students will also explore innovative ways in which to communicate complex information in understandable ways. The capability of sharing knowledge on complex scientific, financial and health issues and concepts with fellow citizens will contribute to a more literate society.

### **Diversity Plan**

The projects to be attended will be identified through meetings with diverse sectors of the civil society, as well as through government agencies. Organizations such as the Sierra Club, local NGO's that address coastal erosion and other environment problems, and community health groups will be contacted and invited to take part of our initiative. The communities serviced will include the San Juan metropolitan area, municipalities in the coast and interior of the island, and the island municipalities of Vieques and Culebra. At the end of the planning period, we will have identified and prioritized the information needs of these communities, as well as determining the appropriate strategies to address them. We will also have identified options for the dissemination of the information resources.

### **Broad Impact**

This planning grant will determine user needs and the most appropriate platform to provide reliable information. At the same time, we will strengthen librarianship practices and importance of libraries within our communities. The impact of this work will also benefit the Hispanic community in the mainland, since through our dissemination efforts they can access our information resources. The project will also include the Observatory of Issues Related to Information, the GSIST research center. An alliance will also be established with the Center for Puerto Rican Studies in Hunter College, NY, to assist in the dissemination of the information resources developed. It has been shown that the Puerto Rican community in the continental United States holds a strong connection with their counterpart communities on the island.

**The project schedule is as follows:** **Aug. -Dec.2020** Recruitment of graduate students, faculty, meetings with NGO's and government officials. Develop a criteria guide to inform decisions on participating communities, NGO's and government agencies. Develop and validate research instruments. Mapping of the community groups and agencies to be visited and interviewed. **Jan. –May 2021-** Participants' training. Begin visiting communities. Conduct surveys, interviews and town meetings at communities. **Summer 2012** (June -July) Write final report. Share with participating communities, NGO's and government agencies.

### **Budget**

**Project Director**-Dr. José Sánchez Lugo (In kind 25% of dedication \$22,704.) - **To be named Faculty** \$8172.  
- **Ad. Asst.** Awilda Torres 10 hrs /week for 30 weeks \$6,992 - **Graduate Students** Four (4) graduate students at \$10,530 each per year for a total of \$42,120 -**Web Developer** -Elian Ortiz 15 hrs/ week for 15 weeks \$5,483  
- **Staff Fringe Benefits** \$3,315. - **Equipment** - \$7,000.00. - **Software and materials** - \$3,000.00

**Travel (local and abroad) \$ 6,000.00. Total \$82,082.00**