

The TIDES Experience – Texas and Beyond

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The TIDES (teaching, images and digital experiences) Program offers a digital gateway to rich historical, cultural and scientific resources held in Texas and Mexican libraries, museums, archives, historical societies, private collections, parks and wildlife preserves. These resources (photographs, scanned documents and artifacts, video and more) are accompanied by custom-made, standards-based curriculum material and are freely available to teachers, students, and researchers worldwide.

Overview

Stephen F. Austin State University (SFASU) located in Nacogdoches, Texas is a state university with a diverse curriculum of more than eighty undergraduate majors and one hundred and twenty areas of study. Drawing on personalized attention to students, outdoor labs, hands-on real-world experiences and award-winning research projects in the rural setting of the university the Ralph W. Steen Library developed the TIDES program to make humanities and science collections of East Texas available digitally.

The combined expertise of cultural heritage professionals, university faculty, parks staff, and K-12 teachers guided the development of user specific web sites designed to provide meaningful access to a wealth of TIDES digital collections. Phase one goals for the TIDES program centered on middle school teachers' need for point of view information regarding Spanish and Mexican occupation of Texas, the development of virtual expeditions, an increase in available lesson plans, the addition of partner and community collections to the TIDES digital repository, and expanded teacher enrichment opportunities.

In September 2005, the Ralph W. Steen Library at SFASU was awarded a three-year Institute of Museum and Library Services (IMLS) grant in the National Leadership (NLG)/ Advancing Learning Communities category to fund the Texas Tides Digital Learning Consortium. This IMLS grant allowed the Texas Tides initiative to grow and encompass the expanding needs of target audiences. In 2007 the Texas Tides project was renamed TIDES (Teaching, Information, & Digital Experiences) to better reflect

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its evolving mission. A primary focus of the initiative was construction of a **collaboration model** for the TIDES digital learning consortium. The TIDES model serves as a framework for building learning communities of K-12 teachers, university faculty, memory institution professionals, parks staff, and communities. TIDES learning communities design resources based on a nuanced understanding of partner needs. In many ways, the TIDES program's success is a true blend of utilizing the unique talents and connections of all project team members and partners and being open to serendipitous meetings and the opportunities that they afford.

TIDES programs increase access for educators, students and other researchers to primary resources with an emphasis on history, science and multicultural information. Teacher workshops provide free training on the integration of TIDES learning resources into mandated curriculum, the development of web research strategies, the evaluation of web resources, and the benefits of becoming an active member in the TIDES digital learning consortium. A result of a partnership with Texas A&M University's Department of Hispanic Studies' is the availability of mission-era Spanish documents translated into English that help meet Texas' secondary education teachers need for point of view information related to state history. The book "Espinosa's Exemplary Life of the Venerable Father Friar Antonio Margil De Jesus" is one example of translated mission-era material now available through the TIDES digital repository. Dr. Victor Arizpe, Head, Department of Hispanic Studies and Dr. Brian Imhoff were also instrumental in facilitating the Program's first trip to Mexico City in 2006. This first trip combined with the contacts made on Ms. Rachel Galan's (TIDES Project Director) 2006 Fulbright-Hays Summer Seminar trip to Mexico provided valuable connections to Mexican schools, teachers and cultural heritage professionals. As a result of early networking opportunities, four teachers from Mexico joined the project's curriculum development teams for K-12 teachers, seven TIDES teacher expeditions to Mexico were completed, and a wealth of Mexican cultural content was added to the TIDES digital repository.

Program growth results, in part, from the inclusion of the TIDES Program in other university and community grant proposals. The TIDES Program is a partner in several grants including a Preserve Ameri-

ca Grant (Brian Bray Historic Sites Manager for the City of Nacogdoches – lead applicant) and a National Parks Service grant "Capulin Volcano: Examining the Forces that Shape Our World Through Exhibit Design" (Theresa G. Coble Assistant Professor Arthur Temple College of Forestry –lead applicant). Of primary interest to these other projects is the opportunity to integrate TIDES' collaboration models, relationships with the K-12 community, virtual field trip creation, and the availability of TIDES digital repository collections into their project proposals. With these growing partnerships come infinite opportunities for adding digital collections and other content to the TIDES digital collections. These partnerships have placed the library's TIDES program in the strategic position of being integral to a variety of departments' current and prospective funding initiatives –from biology to heritage tourism.

The TIDES Program joined other cultural heritage institutions in Texas to form the Texas Digital Heritage Initiative (THDI) in 2005. The THDI is a cooperative project to identify, describe, digitize, preserve, and make broadly accessible special collections of history and culture held by libraries, archives, museums, historical societies, and other institutions in Texas. In this initiative, the TIDES program serves as both a regional center for the imaging of East Texas humanities collections and as a model for testing and implementing concepts to help make digital collections useful to K-12 teachers and students.

Technology

The various technology related decisions, issues, concerns and challenges of a digitization effort involving tens of thousands of objects, a multitude of partners and their varying needs were evaluated at every step of the project. Some challenges faced by most technology based ventures certainly were addressed: decisions between a wide choice of products; evolving hardware and software; storage and space concerns; training; and evolving digital preservation standards. In 2006 a decision was made to convert the ten thousand item VTLS Virtua database to OCLC's CONTENTdm digital collection management software. This migration resulted, in part, from the search needs expressed by TIDES digital learning consortium members: K-16 teachers, cultural heritage professionals, and other stakeholders. The many formats (documents, PDFs, images, video and audio files) represented by TIDES

digital repository collections necessitated the migration to a flexible system. A lack of internal programmers also contributed to the choice of purchasing the CONTENTdm system since there was not a high level of technical support staff needed to implement the product. In January 2007, the new database was brought online with the original converted ten thousand items. As of October 2008 more than eleven thousand additional items have been added for a total of over 22,000 items. When the CONTENTdm database began production in January there were 98,371,457 items accessed. Each month has seen an increase of uses and in October 2008, 4,957,831 items were viewed. Aggressive marketing and providing Open Archives Initiative (OAI) compliant data to web harvesters are two keys to the significant growth in the use of TIDES digital repository collections. CONTENTdm has met the TIDES program's needs in regards to a content management system. Currently, the library is purchasing unlimited CONTENTdm through a grant to SFASU's Center for Rural Heritage Research –another TIDES partner.

The database was only one of the technology hurdles faced by the TIDES program. Web development also posed many challenges to meaningful access of TIDES digital resources. Program websites were developed with consideration to the specific needs of user audiences. User feedback was collected through a series of interviews, focus groups, and surveys. TIDES websites are dynamic and strive to meet the changing needs of TIDES audiences. The TIDES for Teachers website was introduced in 2007 and includes lesson plans, virtual expeditions, college readiness resources, a learning community and information for professional development. Experimentation with K-12 teachers' ability to access TIDES digital resources from their classrooms uncovered the need for developing simple "bare bones" websites. School districts employ a variety of filtering and security software that severely limits teachers' access to online resources. In addition, teachers face issues of limited band width and slow connectivity. By using a combination of web products and techniques, such as CSS, JavaScript and html, the current site was developed to include few "bells and whistles" requiring plug-ins and long page load times. An alternative TIDES for Teacher site is planned for the future to include FLASH and other higher end features for those users that can access them effectively.

Part of the success, which the program team measures by growth in material and use of digital collections, can be contributed to the fact that there is no "one size fits all" approach to the way program staff form collections or make metadata decisions. Dublin Core fields are used to gather basic metadata information for TIDES digital repository collections. Metadata librarians in the Digital Projects and Cataloging and Metadata Services departments consult with partners and then provide the final structure for collection metadata.

Personnel

The TIDES Program is managed by the Digital Projects department in the R.W. Steen Library; a department formed to sustain the project begun under the 2005 IMLS grant. The TIDES program gained a permanent staff of two librarians, an educator, one technical specialist, one administrative assistant and 13 student workers. The Digital Projects Department is proud of its collaborative legacy and looks forward to expanding the scope of the TIDES Program and TIDES partner organizations in the future. The department provides many services and has an extensive collection of tools at its disposal, including but not limited to: the ability to film locally, globally, in the classroom, in the field, and at every level, from university to elementary; film with multiple cameras and produce a variety of quality video formats, including DVDs, online streaming, and flash content; digitize the collections of different organizations and host them online through the CONTENTdm server; host and help produce lesson plans; work with faculty members, allowing them access to the department's equipment and providing them with the multimedia resources they need; send teachers and staff on expeditions to various locations, most recently to Mexico. The department documents these trips in order to provide virtual experiences that are integrated into K-12 lessons and curriculum.

Expanding TIDES Initiatives

Focus groups and workshops illuminated Texas teachers' need for culturally-sensitive, regionally based teaching tools. Teachers highlighted the need for resources to instill a sense of cultural awareness and appreciation in their students', regardless of background, as a means of encouraging their social and civic growth. East Texas teachers had specific con-

cerns about relating to their large Mexican student population. New partnerships with schools in Mexico City, Cuernavaca, Merida, Monterey, and Oaxaca allowed project staff to include teachers from Mexico with East Texas teachers on the TIDES curriculum development teams. The teachers from Mexico served as cultural mentors to the Texas teachers and illuminated the need for more bi-national discussion opportunities for K-12 educators. Participant teachers unanimously expressed the need for more enrichment opportunities that involve relevant round table discussions and stated that, that type of opportunity is rarely if ever made available to them.

Twenty-two elementary, middle and high school teachers from both Texas and Mexico attended TIDES Curriculum Development Team workshop in July 2006 and 2007. These teachers learned about the TIDES program, met project partners and gave feedback on future development. The TIDES curriculum development team teachers continue discussions in the TIDES virtual learning community wiki and help the TIDES program turn textbook curriculum into neighborhood curriculum.

Teacher expedition programs were piloted for elementary, middle and high school teachers. These expeditions included the cultural heritage institutions of TIDES' East Texas partners and various locations throughout Mexico. Six teachers accompanied TIDES staff on five trips to Mexico to explore new partnerships and gather video and photographs of Mexican cultural events and natural history. Participant teachers collected material and helped create TIDES virtual expeditions, cultural content and trip-based lesson plans. Teachers involved with these trips reported a renewed sense of excitement about their jobs and the subject matter that they teach. Interestingly, their students' enthusiasm matched or exceeded their own, indicating a twofold benefit to such experiences.

Community outreach is an integral part of the TIDES program. Program marketing efforts have helped increase awareness of TIDES initiatives. There is a constant influx of available teaching, filming and project opportunities that ensure the dynamic future of the TIDES program. Continued program assessment will provide needed information to direct the growth and change of program resources in direct response to audience needs.

Five new TIDES web sites are currently in development: TIDES for College Faculty and Students;

TIDES for Elementary, Middle, and High School students, and TIDES for Community. Funding for the TIDES for Community website is provided through funding for the City of Nacogdoches' Preserve America National Parks Service grant.

Conclusion

Despite a variety of hurdles, the TIDES program has flourished and grown from a regional collaboration to one with national and international partners. Perhaps one of TIDES' greatest successes is achieving true program sustainability. Now, the TIDES program serves as a solid model for collaboration, stretches the definition of library service, and provides a valuable platform for project partners to utilize their unique skills and abilities to impact their communities in meaningful ways.