

Summit Smithville

Training Plan



April 2012

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2012 SECO Training Plan

Table of Contents

History and Background.....	3
A Culture of Sustainability Education in Smithville.....	4
The Education Component of the Comprehensive Plan.....	6
The Students	7
Junior High and High School Students	7
Unemployed/Underemployed Adults.....	8
Veterans	8
Partnerships.....	9
Committed Partners.....	9
Potential Future Partners.....	11
Other resources in Training and Certification.....	12
The Model for the Training Plan	12
Conclusion.....	13
Appendix 1: Deliverables Summary	14
Appendix 2: Education Elements in Smithville’s 2011 Comprehensive Plan.....	16
Appendix 4: Memo from April Daniels, spring 2012 semester intern	19
Appendix 5: Process Industry & Power Generation Training Curriculum.....	22



2012 SECO Training Plan

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History and Background

The City of Smithville is located in Central Texas, within two or three hours from some of the largest cities in the state: Austin, Houston, San Marcos, San Antonio, and Dallas. Many of our residents have retired to the “heart of the megalopolis” from major companies like Dell, IBM, MD Anderson and from the state university system. In addition, Smithville has grown and attracted an educated group of people of working age who appreciate the City’s tradition of service to the community and sense of caring about each other. Many of these individuals have stepped forward with some terrific ideas about what technology can do for a small, rural area (population about 4,000).

In June 2010 Smithville was awarded a small American Recovery and Reinvestment Act (ARRA) formula grant through the Texas State Energy Conservation Office (SECO), which paid for energy efficient lighting at several public buildings and a SkyStream Wind Turbine. It is located at the windiest place in Smithville on city property—at the Willow Creek Wastewater Treatment Plant located on the north side of Hwy 71 opposite the highway from the Seton Smithville Hospital.

With the successful implementation of this alternative energy solution, we applied and were approved for another SECO grant. In April 2011, the State Energy Conservation Office officially gave the green light to move forward with the City of Smithville’s grant contract (CS-1030), which provided the majority of the funds needed for a solar array on City Hall’s rooftop. That project required matching funds, most of which was met by paying city staff for in-kind work related to sustainability issues involving renewable energy and recycling, as well as developing a training program that promoted skills in these industries. The Grants Administrator and other staff and volunteers were required to spend time towards investigating and developing a “Sustainable Smithville Plan,” a Feasibility Study to show how the Plan might become a reality, a Training Plan, and a Case Study Manual that documented the entire process. This report is one of the four deliverables that were promised as a result of that grant award (see Appendix 1 for a summary of all four deliverables). It is presented as Deliverable #3 Training Plan:



2012 SECO Training Plan

The Training Plan:

1. Establishes partnerships in educational institutions and city facilities (such as the Library and the Recreation Center) needed to make training possible.
2. Identifies the groups in need of training, such as the unemployed and underemployed, as well as students first entering the workforce.
3. Develops initial ideas for training curricula, and seeks resources that may already contain outlined curricula in various fields.
4. Develops strategies to reach out to potential students.
5. Works to establish a training schedule to culminate at the end of the year or as soon as possible thereafter.

The City of Smithville has a long history of reaching for innovative solutions and working with a talented, educated volunteer base that makes everything possible here. We also have a strong tradition of public input and take the comprehensive planning process very seriously. Despite any potential costs associated with implementing these projects, we are confident that our small town can excel in this endeavor, primarily due to the many generous volunteers and donors in this area.

This training plan goes hand-in-hand with a strategy for economic development in the City of Smithville. We hope that these efforts to develop a workforce training program will attract green businesses to this area, which will in turn provide jobs for those workers. The vision of the "Sustainability Model for Economic Growth" is to attract businesses to Smithville that would fit a profile of industries that care to preserve and conserve our planet's resources. By doing so, the new economic model would help Smithville maintain its fiscal and environmental health. Not only would this model create jobs for which people would need training immediately, it would also foster partnerships with these industries to develop a program that would provide for ongoing opportunities for training, internships, and employment into the future.

A Culture of Sustainability Education in Smithville

Smithville is fortunate to have a school system and a public library that fosters an ethic of sustainability, conservation, and preservation. Some of the most relevant programs in the Smithville Independent School District include:

- First and second graders at Brown Primary participate in planting and harvesting "salad" or "pizza" vegetables through a program designed and implemented by the Smithville Community Gardens non-profit organization, which provides healthy, organic vegetables for all members of the community in seven formerly vacant lots.



2012 SECO Training Plan

- Seven years ago, Smithville Elementary (SES) began a "Grounds Crew" program that helped build pride in the school and helped clean school grounds for which students needed to apply. It was extremely successful and is still running. From this program, the Tutoring, Recycling, Environmental Organization (TREO), for which students must be nominated into the position of responsibility and trust, began about six years ago. This current school year was the first full year of the "Watt Watchers" program, and is the inaugural year of the "Junior Harvesters." The Junior Harvesters built garden beds, planted, tended and are now harvesting strawberries, lettuce, and so on. They are using the foods in the cafeteria and have sponsored taste testing for the campus and their parents in an open house. The Grounds Crew and TREO programs especially have a great impact on keeping the school beautiful by taking care of trash and recycling. From January 2010 to December 2010, a CAPCOG grant provided additional resources for their recycling program, which has stepped it up even more. Students are nominated to or apply for the positions each semester, and last year in the 5th grade alone (the grade at which most of these programs become available for student participation), out of 135 students, only 20 did not get involved in one or more of these programs.
- The Elementary and Junior High Schools encourage students to participate in the "Cycling Tigers" program, which helps students stay fit while allowing parents to save on gas. It also shows students that they can get around town using an alternative mode of transportation—their feet.
- All schools have strong Earth Day programming every year.
- The Public Library supports the "Lucky Duck Club," "Walk to School Wednesdays," the "Reading to Ride" program, and the "Feet First" program, all of which are part of the Safe Routes to School program to encourage students to walk or bike to school, saving energy while building time to exercise into their every-day routines.

The impact these programs are having on the community is undeniable. Not only is there less trash on school grounds and a more beautiful school campus, students bring these values home to families that may not have recycled or gardened before, which impacts all of Smithville. At Brown Primary, the Nutrition Director has evidence our youngest students are eating more salads and making healthier choices for their meals, learning important values in sustainability at a very basic level.

These activities have also made a tremendous difference in the attitudes of Smithville's youths. Several parents have shared that their child, who had low self esteem, now gets up bright and early on the mornings that he/she are part of the Grounds Crew "going to work" and how proud they are to be part of it. Many students who actually were, or were at risk of, becoming disciplinary problems turn around as they understand that they are expected to be good students, good citizens, and good stewards of the earth through these programs. Students are becoming better prepared for the future—they are becoming better people and learning how to take care of things that are bigger than themselves. During the five years that Ana Murray has been principal at the Elementary School, the need for disciplinary actions has markedly dropped, due in large part to student involvement in programs and their sense of ownership and pride in their work. Fewer students are getting into trouble because they know the consequences to their actions include losing their access to these programs.



2012 SECO Training Plan

Through this profound commitment, instructors and administrators are using these programs to help provide teachable moments. For example, classes at SES have worked on the landscaping at the school and plant in other areas to help beautify their corner of the world as well as learn about how plants function and what they need to thrive. Brown Primary students who participate in planting and harvesting at the community gardens are learning where their food comes from and how to care for their health through better nutrition.

In addition, the volunteerism of many family members helps to strengthen the programs. For example, one grandparent has installed gutters and a water collection system to help students understand the value of wisely using water, especially during extended droughts. These moments teach invaluable lessons about resource conservation, and help students understand exactly how food gets to the table and how water cannot be taken for granted. In addition, several volunteer organizations, like Keep Smithville Beautiful, Keep Bastrop County Beautiful, the Smithville Community Gardens, and the Lost Pines Artisans Alliance have partnered with the school to help provide resources and expertise in recycling, gardening, and the arts. These programs not only help facilitate a clean and environmentally-friendly school but more importantly instill a level of responsibility in the students towards taking care of their community. Their involvement in recycling, picking up trash, gardening, etc. at school means they are more likely to do the same at their home. Kids are the best motivator for adults, and their guardians often pick up the drumbeat as well.

The Education Component of the Comprehensive Plan

The City has a strong partnership with the Smithville Independent School System (SISD), which is an important reason why education was considered to be an essential element in the 2011 Comprehensive Plan. In the long term, the Comprehensive Plan calls for projects that will foster economic opportunities and provide incentives for young people to remain in the community, slowing the “brain drain” from this rural area. Smithville wants to bring in educational and job opportunities that will provide decent wages, interesting work, and a solid future for students to stay in the area as they grow up and become residents. The recommendations from the Plan include:

- Provide Incentives for Local Business to Offer Internship Opportunities
- Expand Vocational Training Opportunities
- Promote Higher Education Opportunities
- Promote Community and Parental Engagement in Education

Appendix 2 provides these recommendations in their entirety. Each of them is important to developing a community-based educational system that is more broadly applicable to the job market. For the purposes of this document, training that includes internship opportunities and vocational training are of primary interest as they are more directly related to the types of businesses Smithville will likely attract as a result of the Sustainable Smithville Plan, but the other aspects do play into the program as well. For



example, by increasing local opportunities, we also provide an applied approach to our students' education process such that they will see the direct, real-world application of the theories of math and science that they learn in their classes.

The Students

The program is designed to target three very different kinds of students: teens just beginning their career paths, unemployed/underemployed adults who need additional training in new fields to succeed in today's increasingly technical economy, and veterans trying to transition back into life at home.

Junior High and High School Students

Students in Junior High and High School are at a point in their lives where making a career decision begins to become extremely important. Whether they are college-bound or more likely to be better served through vocational training, students at this age need information about where a future career might take them so that they can explore those possibilities.

Smithville is currently working with Technology for All, a not-for-profit organization based in Houston with an office in Smithville, which provides free technology-oriented and digital literacy courses at the Smithville Recreation Center and in 36 other rural communities through a Department of Commerce American Recovery and Reinvestment Act (ARRA) grant through Broadband Technology Opportunities Program (BTOP). Their letter of support is included in Appendix 3. Technology for All is working to develop a curriculum that would train youths in computer and other job skills, including:

- Intermediate and Advanced Computer Skills
- Workplace Expectations and Professional Behavior
- Resumes/Job Searching
- Geographical Information Systems design and development

Providing these kinds of computer skills is a necessary first step towards providing the fundamental education for students 18 and under before they move into more robust training for any given industry. In conjunction with the Technology for All computer training program, they will help establish a speakers' bureau of local professionals who will be available to the schools to schedule job talks with students to explain what different kinds of industries are like and what they would expect if they are interested in potentially seeking a job in a green industry. In addition, participants in the 2009 Comprehensive Plan Update identified the potential for digital art education and training, particularly game programming, which could be a very lucrative field for our youth.

Once this foundation has been developed, partnerships with other businesses and organizations will provide the more specific training needed. It is our plan to develop an internship program with the nearest community college and local businesses that can teach students 18 and under the skills they need to succeed in green industries—and potentially help hire them after their internships. It is critical



2012 SECO Training Plan

to provide skills and training that increases the vocational choices of our students and workforce, especially those students who may be less focused on a college-prep curriculum.

In addition to training these students, the Smithville Independent School District will seek to find training opportunities for their teachers to find innovative ways to incorporate these concepts and potential for training into appropriate curricula. This approach will result in a faculty with a more current knowledge of these fields and the science they employ, which may translate into a more enthusiastic and knowledgeable atmosphere throughout the community about these issues.

Unemployed/Underemployed Adults

The job market has been sorely unbalanced in recent years as the available workforce does not have the skills needed to fill available local jobs across the country. Adult learners need particular attention to teaching methods, and may need to be re-trained for industries that may not have existed at the time that they went to school or earned certificate and degrees.

Working with Technology for All, a curriculum is in development to include skills useful for any job in today's market such as:

- Basic computer skills, Internet, and e-mail
- Searching for and applying for jobs
- Resume writing
- Business communications
- Business skills, as determined by community needs

In addition to the Technology for All computer training, the training program is working to partner with local industries to provide internship opportunities and on-the-job training programs for adults.

Veterans

Smithville has a strong sense of patriotism and pride in her sons and daughters who have dedicated time in their lives to serve this country. When they return home, however, too many veterans are not able to find work; the unemployment rate among veterans is higher than the average rate nationally.

Smithville's commitment to the individuals who served in the military runs deep; citizens have given a lot of time and resources to the Smithville Texas Veterans Memorial Park (www.texasmemorialpark.org), but they know all too well that it is the living people that need them the most. It is imperative for this town to help military personnel return to a bright future here at home. Internships and training programs will be coordinated through the Office of Veterans Affairs whenever possible, and additional funding through organizations like the Veterans' Workforce Investment Program will be sought whenever possible to help these men and women return to a productive life after their service.



Partnerships

As of this writing, nine organizations have pledged to support the project. The memo from April Daniels in Appendix 4 provides additional information about some of these organizations, as well as about some of the organizations that may become committed partners in the future.

Committed Partners

The following organizations have been contacted and are potentially interested in developing a relationship with Smithville to hold training in technical fields:

- Smithville Independent School District (<http://www.smithvilleisd.org/>): The SISD is a strong partner with the City of Smithville through programs like Safe Routes to School, various Library literacy programs, and a wide variety of other community programs geared towards teaching our youth not only skills that will help them find gainful employment in the future, but also allowing them to gain experience and character through opportunities to volunteer. The SISD has expressed their interest in developing an internship program that would help provide training opportunities in the community for their students both for volunteer organizations as well as for new green industries. Two existing student programs are working to help students become ready for future careers. The high school DECA program is a club for marketing and business students where they develop business plans for competition. In addition, the SISD Cooperative effort works with local business to place students as interns in companies where they learn important skills and develop business sense. Performance at the high school level in the past year has met the state standards at 100%, an unusual success rate, which can be attributed to classroom instruction, intervention plans, and attention and commitment to individual students. Students within the school district also have an opportunity to follow five different career pathways including human services; agriculture, food and natural resources; arts, AV technology and communications; business management and administration; information technology; and marketing, sales and services.
- The City of Smithville Public Library (<http://www.ci.smithville.tx.us/Public-Library.aspx>): Smithville's Public Library already holds many classes of technical nature as well as classes on getting a job. In October 2011, they were awarded Broadband Technology Opportunities Program (BTOP) funding with the Texas State Library System through the Technology, Expertise, Access and Learning for All Texans, or TEAL, Grant. This grant provides upgraded public access computers, free ESL classes, and also allowed them to partner with Technology for All to build a program that offered free computer classes at the Library and the Recreation Center. Topics currently include: Computer Operating System; Applying for a Job Online; and Internet Safety.
- The City of Smithville Recreation Center (<http://www.ci.smithville.tx.us/PARD.aspx>): The computer training room at the Recreation Center is important in our capacity to provide



2012 SECO Training Plan

training. The Recreation Center is also administratively capable of scheduling training courses as might be required by Austin Community College or any other institution.

- Technology for All (<http://txc2.org/>): Technology for All and the Smithville Public Library have partnered with the City to develop a plan to bring training opportunities to Smithville residents. The plan includes creating a way for high school youth to find internships with companies that work in the latest technologies including alternative energy, manufacturing in related industries, and other computer-related fields. In addition, it seeks ways to train adults who may be unemployed or under-employed for jobs in these fields. Appendix 5 provides a working draft for the curriculum we hope to implement in the near future.
- Austin Community College (<http://www.austincc.edu>): Ed Ardizoni, Director of the Continuing Education Dept., Renewable Energy, has committed to partnering with organizations in Smithville to help promote ACC classes as well as to provide training in Smithville when at least seven individuals sign up for their courses. Additionally, they are already working with the school to provide dual college/high school credit in some of the basic engineering and electronics courses that are required for their certification in a number of related fields, including their courses on solar and wind energy. They currently have a “100% eligibility” understanding with SISD, through which 100% of SISD students are eligible to attend ACC at whichever level applies to each student (certification, Associates Degrees, undergraduate training to go on to a four-year college, and so on). They also provide assistance to seniors to ensure that their entrance exam scores are as high as possible and in other entrance materials, which may be used at other institutions of higher education.
- Keep Bastrop County Beautiful (<http://keepbastropcountybeautiful.org/> and <http://heartoftexasgreenexpo.org/>): KBCB is hosting a Green Expo in June 2012 for which Friday speakers will additionally provide CEU credits for professionals. Their commitment to sustainability and training in sustainable, green industries is a driving force in the County.
- Revolt WindPower (<http://www.revoltwindpower.com/>): Rob Webb, co-founder of Revolt WindPower, has lead several seminars on what it takes to prepare to work in the wind energy field and is willing to speak to classes as a precursor to any more technical training that might be required by any given manufacturer, as well as to help junior high and high school students make career decisions about going into the field of windpower.
- Association of Citizens for Education: ACE is a nonprofit that was established to help the SISD during the fiscal crisis of 2011. They are available to help on a number of levels, including mentoring students to help prepare them for post-secondary schooling, certifications and vocational training, and are organized to provide fundraising assistance to give teachers what they need in their classrooms to make the learning process better.



2012 SECO Training Plan

- Northern Oklahoma College Tonkawa Campus (www.processtroubleshootingskills.com): The National Science Foundation/Advanced Technological Education (ATE) Troubleshooting grant will provide access to no-cost, shared learning materials that cover technology-oriented troubleshooting including methodologies, tools, case studies, scenarios, etc. to build learners' abilities to identify and correct abnormal conditions in various types of systems. These skills are applicable to power generation, as well as petrochemical, manufacturing (including semiconductors, a major industry segment in Austin), and many other fields. John Dees, the training and outreach manager for Technology for All's Rural Texas and San Antonio office in Smithville is part of the grant project team and is working to finalize a partnership with the City.

Potential Future Partners

As of this writing, these organizations and individuals have been initially contacted and have a basic understanding of what we would ask of them, but we need to develop the relationship in more detail or get further along in programming before they feel comfortable committing to the program.

- North American Process Technology Alliance (NAPTA, www.naptaonline.org): This not-for-profit organization, consisting of process technology education providers, business/industry, and community advisors, provides a wide range of curriculum materials addressing topics such as petrochemical/power generation, safety/health/environment, quality, equipment, instrumentation, systems, operations, and maintenance. These materials are available at low cost, and can be taught on-line, using instructors in a classroom environment or in a blended environment with on-line courses taught by a facilitator in a classroom setting.
- Industrial Country Market (http://www.icm71.com/Industrial_Country_Market/index.html): A for-profit organization dedicated to sustainable energy, water collection and science, they currently hold classes for individuals interested in learning how to get off the grid with solar power and how to create a water conservation system for homes and businesses. We are hoping to work with them to bring them out to Smithville periodically to invigorate science classes in the high school and to facilitate a connection with the Bastrop Workforce Commission for various topics that they already provide.
- Pines and Prairie Land Trust (<http://www.pplt.org/>): This organization proposed a possible curriculum in sustainable agriculture for the new Austin Community College (ACC) campus located in Elgin, TX, but that concept has not yet become a reality. The Board may be interested in future planning for a curriculum in connection with the Smithville Sustainability Training Program and ACC.
- Two local manufacturers—Spiradrill and Centex—are potentially interested in gaining free interns through this program, but are not certain that the skills they teach are related to sustainability. They would be able to provide manufacturing experience, which would easily tie in with the SISD's larger goal of providing work experiences for students, but they might not fit the profile of this program exactly. We need to discuss their processes in more detail, because



2012 SECO Training Plan

as long as the skills they teach could be transferrable to alternative energy manufacturing, they would be a good first step for this program.

- The University of Texas at Austin’s Center for Sustainable Development (<http://soa.utexas.edu/csd/about/>): The Office of Sustainability currently offers additional training for students pursuing more traditional degrees at the University, and also provides lectures and educational programming that could be integrated into the K-12 programming at SISD. Coordination of this effort is required, but at least initially people have been receptive to the potential of this program.
- Texas State University offers continuing on-line educational courses and a certificate program (http://www.gatlineducation.com/sustainability_professional.html). Part of the charge of the Smithville Training Plan must include helping students become aware of what opportunities exist. The other issue is funding. Helping students find scholarships to be able to take the courses will be a challenge that must be met for this program to work.
- The Texas Railroad Commission’s Energy Education Program (<http://www.energyeducation.tx.gov/>) needs to go through SISD to become instituted in this program. This should be possible as we further develop the training curriculum.
- Rural Capital Development Board (<http://www.workforcesolutionsrca.com/>): We need to have more of a program in place before we approach this organization again.

Other resources in Training and Certification

- Solid Waste Association of North America (SWANA, www.swana.org): SWANA offers several managing composting programs training courses each year. In partnership with the US Composting Council's Professional Credentials Committee, it also offers the first national certification for Composting Program Managers.
- U.S. Composting Council (www.compostingcouncil.org/index.cfm) provides workshops and training courses at its Annual National Composting Conference and Exposition, which are primarily for individuals who are already knowledgeable about composting including compost managers, operators, regulators, researchers, government officials, engineers and consultants. Sessions cover composting and compost marketing practices, new technologies and compost applications, policies, public outreach, program financing, and regulations.

The Model for the Training Plan

Solar, wind, geothermal, recycling, and other “jobs of the future” all require specific training. Ideally, Smithville hopes to attract several leaders and innovators in renewable energy and recycling that are willing to institute an internship program through the school system and in partnership with Technology for All and the Bastrop County Workforce Commission to allow students of a broader program in



2012 SECO Training Plan

sustainable industries to gain on-the-job experience. Each of these industries have varying degrees of required education ranging from required training through manufacturers to be able to install wind turbines through engineering and specific certifications required to install solar units. Where instructors in Smithville will be asked to create a training program, the model they will be asked to use follows the industry standard instructional design model to create and select courseware, learning programs, and related resources (see Appendix 6 for more information about the Analysis, Design, Development, Implementation, and Evaluation—ADDIE—model).

Conclusion

The City of Smithville knows that our future depends on a skilled workforce in emerging technologies that provide energy and products at a lower cost to the well-being of the environment. This Training Plan is a first step in systematically attempting to entice green industry and establish partnerships with local institutions to formally provide a training program for our youth and the adults in the community in need of gainful, meaningful employment.

Our next steps in implementing this Training Plan include the following:

1. Further develop the relationships with the current and future partners. Determine what each can offer, how much it would cost, what courses are currently available, and what needs to be developed.
2. Create a listing of what courses are currently available, where it is available, and how much it costs. Provide that list to SISD to distribute to appropriate grade levels.
3. Establish a speakers' bureau of local professionals who would be interested in speaking to students about alternative energy and sustainable "green" jobs.
4. Work with SISD to further develop the internship and mentoring programs to integrate the ideas presented in this document.
5. Research sources of funding both from the programmatic side that would fund courses to be provided for free to students as well as from the students' side that would fund tuition fees for individual students. Provide the list to SISD.
6. Work with Technology for All and other groups to develop curricula and implement classes.

Many people are committed to making this program work. Smithville is a place where all things are possible, and we are especially dedicated to improving the quality of life for all here. Helping Smithville students and the under-employed adults will go a long way towards doing just that.



2012 SECO Training Plan

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Appendix 1: Deliverables Summary

The Sustainable Smithville Plan will:

1. Establish the commitment of city leaders and community members to a Sustainable Smithville in various aspects of renewable energy, reduction in energy needs, and other issues in sustainability.
2. Discuss the potential for bringing in solar, biomass thermal, and other renewable energy sources into the city.
3. Outline the future of energy production in Smithville.
4. Examine training and economic development opportunities (such as eco-tourism to show others how Smithville was able to become the “most sustainable little town in Texas”).

The Feasibility Study will help show how this Plan can become a reality. It will:

1. Identify at least five renewable energy and sustainability projects.
2. Provide details on implementation and budget for these projects.
3. Identify potential funding sources and partnerships, and other resources needed to bring the projects to fruition.

The Training Plan will:

1. Establish partnerships in educational institutions and city facilities (such as the Library and the Recreation Center) needed to make training possible.
2. Identify the groups in need of training, such as the unemployed and underemployed, as well as students first entering the workforce.
3. Develop initial ideas for training curricula, and seek resources that may already have outlined curricula in various fields.
4. Develop strategies to reach out to potential students.
5. Work to establish a training schedule to begin at the culmination of the year.

The Case Study Manual will:

1. Collect papers and procedures, as well as public input related to the process and any procedures that go into the success of the above documents.
2. Organize these into a case study manual of how Smithville was able to accomplish its goals.
3. This case study would be available on the internet, and will provide a useful tool for other communities and neighborhoods wishing to use Smithville as a model in sustainability.

Leadership partners include city and county officials, school officials, LCRA, Keep Smithville Beautiful, the Smithville Chamber of Commerce, and a variety of community groups like the Bastrop Workforce Development program, Smithville Community Network, Smithville Community Fund, Noon Lion’s Club, and many others. In addition, many community members are interested and excited about the possibility of renewable energy in this small town, and many will want to take part in this program. Several commercial business owners on the historic Main Street are interested in the possibility of solar energy on their rooftops, and a pilot project on a city-owned building will help promote the possibility and inform each owner of its reality.

Appendix 2: Education Elements in Smithville's 2011 Comprehensive Plan

NOTE: This is from the March 2011 Draft, which was not adopted at the time of this writing.

Education and Training

Introduction

There are few issues more important than education. Potential residents will locate in a community simply because it has an excellent school system. Business owners will look for workforce training opportunities and a skilled potential workforce in deciding where to locate their business. It is critical that education be a priority for Smithville to position itself for future growth and success. The City should maintain a strong relationship with the School District moving forward to ensure coordination of efforts and cooperation on projects that can benefit both entities.

Short Term Recommendations

The City and Smithville ISD have a strong relationship that should be continued. Both entities benefit from cooperating. The recommendations here are an effort to strengthen that relationship and ensure both organizations are benefitting from new opportunities. City and ISD leaders should hold regular workshops to identify opportunities to work together. These partnerships will result in a stronger relationship and save taxpayer dollars by reducing duplication of efforts. Partnerships should also be publicized so citizens know their leaders are coordinating and working to save taxpayer money. Successes must be celebrated. As leaders see the benefits of cooperation, and are rewarded by citizens through greater support, the relationship will continue to grow, allowing for closer coordination and greater success for both organizations.

Long Term Recommendations

The projects identified here will foster economic opportunities for Smithville, as well as attractions for young people to stay in the community. These include expanding opportunities for job training and higher education so there is reason to remain. Rather than leaving for the big city, young people will have access to education and high paying jobs that will keep them in Smithville. These recommendations include:

- Provide Incentives for Local Business to Offer Internship Opportunities
- Expand Vocational Training Opportunities
- Promote Higher Education Opportunities
- Promote Community and Parental Engagement in Education

Provide Incentives for Local Business to Offer Internship Opportunities

Local businesses can benefit tremendously from offering internships to students. They receive very inexpensive labor and the opportunity to train potential future employees. Students clearly benefit from exposure to the workplace and real world training not available in school. It may also provide them with direction on what to do post high school, either through higher education, technical training, or a foot in the door at a job straight from school.



2012 SECO Training Plan

The City and School District should establish a task force that includes business owners to identify and address challenges to creating an internship program. It may be that some level of incentives be offered to jump start the program. This may be as minimal as offering advertising at school sporting events (banners in the ball fields) or Yearbook (if advertising is sold in this), and other areas. This opportunity is tremendous and every effort made to foster a successful program.

Expand Vocational Training Opportunities

Like the internship program, vocational training can benefit the businesses as well as the students. Having a trained, available workforce will also make Smithville much more attractive to prospective businesses as it will reduce their costs. The same task force set up to foster the internship program should also be tasked with identifying vocational training needs for local businesses. The ISD can then begin to identify what they require to offer that training. Businesses may be willing to purchase equipment, or help fund a position if they will benefit from training offered in the school.

The Task Force should study successful programs in the State and elsewhere to determine what really works. There may also be an opportunity to partner with ACC or other Community or Technical College to offer training. The ISD may be able to make facilities available for higher education to offer technical training for students and potentially adults.

Promote Higher Education Opportunities

The Comprehensive Plan has a discussion about expanding higher education opportunities in Smithville. Elgin will soon have an Austin Community College campus, making physical access to classes easier. The ISD should explore every opportunity to expand access to college level classes and advanced training to their students.


Promote Community and Parental Engagement in Education

One of the key factors in education success is having committed and engaged parents. This is also one of the biggest challenges facing school districts. With both parents working, single parent households, and other issues, it is very hard to get some parents actively engaged with their child's education. There are many creative ways to address this that many ISD's have undertaken. These include offering parenting classes, having extended hours for tutoring and counseling, offering adult education, having computer labs open in the evenings for families to utilize, and more. Smithville ISD leaders should explore every opportunity to engage parents. The community as a whole should support this effort and work together to ensure every child has the opportunity to get the most out of their education.

Conclusion

Education is the most fundamental opportunity to prepare Smithville for the future. Providing quality education that meets the needs of students and the community as a whole will ensure Smithville remains a successful community. The ideas outlined in this section will lead to continued success and the enhancement of the community's reputation. Smithville will become a very desirable destination for residents and prospective businesses by offering quality education and a well prepared workforce.

Appendix 3: Letter of Support from Technology for All



January 2, 2012

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Dr. Jill Strube
City of Smithville
317 Main Street
Smithville, TX 78957

RE: Summit Smithville Training Program

Dear Dr. Strube,

We are pleased to begin this training project in partnership with the City of Smithville. We are happy to provide pro-bono services in support of the following goals:


The Training Plan will:

1. Establish partnerships in educational institutions and city facilities (such as the Library and the Recreation Center) needed to make training possible.
2. Identify the groups in need of training, such as the unemployed and underemployed, as well as students first entering the workforce.
3. Develop initial ideas for training curricula, and seek resources that may already have outlined curricula in various fields.
4. Develop strategies to reach out to potential students.
5. Work to establish a training schedule to begin at the culmination of the year.

Specifically, Technology For All will help provide curricula and training materials as it relates to teaching high school and adult learners the basics in computer literacy, job readiness, and computer programming. We will also support their quest for employment in the green jobs of today and the future.

We appreciate this opportunity to partner with the City of Smithville.

Sincerely,



William S. Reed, D.Min.
President & Chief Executive Officer

2220 Broadway • Houston TX 77012 • Main: 713.454.6400 • Fax: 713.454.6454 • www.techforall.org



Appendix 4: Memo from April Daniels, spring 2012 semester intern

MEMO

TO: Jill Strube
FROM: April Daniels
RE: SECO Deliverables Education Partnership Opportunities
Date: April 10, 2012

Following is educational opportunity information re: SECO Grant Deliverables:

Austin Community College

Continuing Education Dept., Renewable Energy
Ed Ardizoni, Director
Phone: (512) 223-7525
E-mail: eardizon@austincc.edu

Austin Community College offers certificate programs and training in renewable energy such as the installation of solar panels and systems designed to support new renewable energy technologies. ACC is currently developing a wide range of programs and courses that focus on the renewable energy field, with a strong emphasis on solar power technologies. Ed Ardizoni, Director of the Renewable Energies Program (Continuing Education), can speak to issues such as class size, cost, location, instructor availability and junior college district/municipality partnerships.

ACC Courses: <http://continue.austincc.edu/choices/energy/>

More Detailed Curriculum Description: <http://www.austincc.edu/ce/renewable/industry/>

Texas Railroad Commission: Energy Education Program

(Information taken from <http://www.energyeducation.tx.gov/>)

Energy Education is an interactive curriculum supplement on CD for secondary-school science students, funded by the U. S. Department of Energy and the Texas State Energy Conservation Office (SECO). The educational program built around this material strives to lay the foundation for environmental stewardship in teachers and students through critical thinking and problem-solving.

The supplement begins by introducing scientific principles of energy and fuels, and then proceeds to investigate specific topics: the nature and extent of renewable and nonrenewable energy resources, the economics and environmental effects of energy use, and energy technology.



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Energy Education has 34 activities/investigations, including two web-based lessons and one interactive Flash-based investigation. The approach balances technology and hands-on activities. Multiple electronic resources are used to help teachers meet the Texas Education Agency's Long-Range Plan for Technology and advanced students' learning needs, clarify and extend concepts, establish partnerships with local businesses and community organizations, and help integrate TEKS into computer-based classroom activities.

More than half of the lessons include hands-on scientific investigations. This is the preferred approach in Texas schools. Texas law requires high-school science students to spend at least 40 percent of their instructional time conducting field and laboratory investigations. The Texas Education Agency also recommends this approach for middle-school science courses.

In addition, Energy Education includes six integrated lessons in art/language arts, health, mathematics and social studies. These materials are provided for schools that take a school-wide approach to the teaching of science or that organize units of study thematically.

University of Texas at Austin

Center for Sustainable Development
Barbara Brown Wilson, PhD, Director
bbwilson@austin.utexas.edu
Phone: 512-471-2709
Website: <http://soa.utexas.edu/csd/about/>

The University of Texas at Austin offers portfolio programs through their office of sustainability (graduate level classes). These are not degrees but rather additional training received while pursuing more traditional graduate degree programs in fields such as engineering and architecture. Dr. Barbara Wilson is the Director of the U.T. Center for Sustainable Development. There are various lecture and education programs offered through this department which could provide awareness education to K-12 students such as: UT Environmental Science Institute's - HOT SCIENCE COOL TALKS Lecture Series: Leading researchers communicate their research to the public, and in particular to the K-12 community. The talks are interactive educational experiences, lively discussion, and a live webcast. These are free public events held on campus and could possibly be imported to SISD campuses. The lecture begins with a pre-lecture fair and teacher's professional development workshop, followed by the formal lecture at 7 p.m. Appear to be geared toward educators but may be appropriate for high school age students.

Note that there are some courses offered for architecture and engineering students but these courses are designed to be part of a degree plan and are not stand along classes.

Texas State University

Continuing Education
Online Courses



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Texas State University offers continuing education courses in an online setting these courses include “green” or renewable energy education.

This course is specifically targeted to students interested in entering the field “green building” as home inspectors.

Certificate Program:

Senior Certified Sustainability Professional (cost \$2495.00)

http://www.gatlineducation.com/sustainability_professional.html

This program is offered through Texas State as an online course in partnership with Gatlin Education.

Course Description:

“The Senior Certified Sustainability Professional Online Training Program will prepare you for an exciting career as a leader in the green-collar economy. As a certified sustainability professional, you’ll be responsible for setting the course and coordinating an enterprise’s sustainability strategy. Millions of new jobs in this rapidly growing sector will be available to people who set themselves apart from the crowd by earning the professional credentials and skills they need to lead sustainable business practices.”

Appendix 5: Process Industry & Power Generation Training Curriculum

Overview

- About process industries, power generation, and alternative energy
- Process operations and maintenance

Process operators/technicians

- Duties, Responsibilities, Expectations
- Safety/Health/Environmental and security
 - Hazards, Government regulations, Controls (engineering, administrative, Personal Protective Equipment)
 - Quality Initiatives; Total Quality Management, ISO, Statistical Process Control, Six Sigma
- The workplace and teams

Core skills

- Applied math; Applied physics; Computers
- Business communications
- Process drawings and documentation

Tools & Equipment

- Piping and valves (note: all remaining equipment types will also cover the topics listed below)
 - Purpose/uses; Components; Theory of operation; Normal conditions; Abnormal conditions; Maintenance
 - Vessels, Pumps, Compressors
- Power transmission and lubrication; Engines; Turbines; Electrical distribution, motors, and generators
 - Alternative energy equipment
 - Heating and cooling; Furnaces and boilers
 - Process utilities and auxiliaries

Instrumentation & Systems

- Operations; Maintenance; Troubleshooting

Appendix 6: Training Design Model

The training industry standard instructional design model ADDIE will be used when creating and selecting courseware, learning programs, and related resources. ADDIE is: Analysis, Design, Development, Implementation, and Evaluation.

Analysis

During the Analysis phase, the instructional design team identifies the particular learning subject based on learner needs. The team surveys the community to determine which topics/courses are needed most. A training needs assessment is performed. An audience profile is created or modified, including experience, knowledge/skills, training needs, strengths, attitudes, concerns, etc. The team develops a set of goals and objectives for the course during the Analysis phase, and creates an audience needs document.

Information from audience needs, existing knowledge/skills, and current surveys/feedback is studied to create a gap analysis (explaining what the learners know and what they need to learn). The potential opportunities and challenges to the learning project are also analyzed and documented.

A timeline/milestones and resources document is generated. At the end of the Analysis phase, the team has created an instructional design document that will form the basis of the design phase work.

Design

During the Design phase, the team uses the ABCD approach to create the goals/objectives for the course. ABCD is Audience, Behavior, Condition, and Degree. Goals and objectives must be clear, concise, and measurable. The team creates Terminal and Enabling Objectives (terminal objectives identify the learner's expected level of performance by the end of the course, while enabling objectives support the terminal objectives).

Along with goals and objectives, an approach is determined for delivering the learning materials. For example, will web-based courses be used, or a blended approach that combines web-based courses used in an instructor-led setting.

The team determines what learning materials and additional resources need to be developed or located/selected. The team also designs any evaluation instruments (testing requirements/specifications, case studies, etc.) as required. A design document is created at the end of the process and circulated for review/feedback.

Courses are designed or selected with the learner in mind at all times. Course materials must be straightforward, easy to understand, and engaging. A course should be "chunked," or divided into short, easy-to-digest lessons.



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Learning objectives and goals must be stated at the start of each lesson, and each supporting topic should be identified clearly and associated with an objective. A summary should be provided to reinforce the course objectives. Language is simple and direct, allowing users of various educational levels to understand the content. The content developers use active voice when writing and editing.

A wide range of learning materials must be provided to learners, to address different learning styles and help them understand and digest the content. Case studies and problem-solving exercises are incorporated when appropriate, to allow learners to demonstrate a higher understanding of the content.

Learning resources are a key element to these courses. Relevant links and documents/files are made available to learners. This includes facts sheets (objectives, terms, key points), exercises/activities, task aids, and other similar materials.

Development

Following the Design phase, in typical ADDIE-oriented projects the instructional team starts the Development phase. The team seeks out existing learning materials during this phase, to incorporate with existing training program materials. When suitable materials that meet the criteria from the Analysis/Design phase are located, the team contacts the owner/developer and obtains permission to use the materials.

If suitable materials are not secured for use, then the team goes through a Development phase to create (e.g. text, graphics) along with any activities/exercises that are required. Also, all evaluation instruments (questions, case studies, exercises) are developed. Train-the-Trainer materials are developed during this phase as well. Any supporting web site pages/content is developed also. Training materials will be posted on a web site for distribution for use by other organizations and interested parties.

All materials, either those from a third-party or developed internally, go through a review/feedback process during the Development phase.

Implementation

In the Implementation phase, course materials are approved and distributed through the web site, CDs/DVDs, webinars, and other means. A final exam can be incorporated into the course. Certificates of completion will be issued to learners.

Evaluation

Customer satisfaction and feedback is a crucial element to this training plan. At the end of a course, learners are requested to complete a satisfaction and feedback survey on the course, including recommendations for how it can be improved. Formative evaluations are conducted during the entire instructional design process, and changes are incorporated as needed.



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The team reviews the survey feedback and decided what changes should be made to the course. This feedback is evaluated regularly and the team discusses ways to improve the courses, customer service, etc. based on this information.

The instructional team creates a project wrap-up document (what went right, what can be improved, best practices, etc.). A designated team member also periodically reviews the course content to see if any updates to the course are required.

At various intervals, learners will be given follow-up surveys asking them to rate the impact and effectiveness of the training they received.