

DEFINING PROJECT NEED

NEED ASSESSMENT APPROACHES

Here are the three most commonly used approaches for assessing and documenting the project needs.

1. Key Informant: Provide a quote from an external expert

See example A

2. Statistical Analysis: Use data from public records or internal sources

See examples B and C

3. Studies and Journals: Conduct a literature search of published documents on the subject.

See example D

Your research will provide information needed to form a compelling need statement and show your understanding of current knowledge in your field.

Your need statement should also document the urgency of addressing the problem and answer the question: "So what?"

HOW DO I ANSWER THE "SO WHAT" QUESTION?

A strong proposal uses both quantitative (numbers) and qualitative (quotes from external experts-see example below) data to support why the project is necessary.

Review the data your research revealed and ask yourself:

What is the urgency in solving this problem now?

What happens if the need is not addressed?

WHAT PROBLEM DOES YOUR PROJECT ADDRESS?

With the completion of your research, you have the base to make a strong need statement:

What are the problems (or gaps) that exists that require solutions?

WHAT ABOUT COMPETITORS?

Smart preparation means spending time determining if others have done this project elsewhere, and what service delivery approaches were used. This “market analysis” will strengthen your project plan. If you are unaware of who your competition is, start searching for comparable projects (both internally and externally) through:

Web searches

Peer contacts

Then answer the following questions:

Is the market for this project steady, increasing, or decreasing?

What did past projects learn?

What makes *your* project unique?

GAP ANALYSIS OF MY PROJECT

A strong proposal presents a clear gap analysis (what exists now compared to what ought to or could be). A table, such as the one below, might be a good one to include in your final proposal.

GAP ANALYSIS	
As-Is	To-Be

Example A
Key Informant: Quote from an External Expert

The following is an example of an external “expert” report used in an Excelencia award proposal to document the need for the project:

Deborah Santiago, Vice President for Policy and Research at *Excelencia in Education*, was recently quoted as saying that there are three main hurdles blocking otherwise qualified students from going to college: completing the application, taking assessment tests, and filling-out financial aid forms. *College Connection*, with its one-on-one support services, assists every student through every step of the college admissions process – from start to finish! Services provided include:

- Access to college and help getting started
- Student life information
- Admissions application
- Austin Community College Video Teleconference – Campus Tour
- Financial aid application completion
- ASSET assessment (college placement exam)
- Tour of Austin Community College campus(es)
- Academic Advising
- Acceptance letter to Austin Community College at high school graduation
- Registration for Austin Community College classes

All of these services are brought to the students’ high schools and are provided FREE OF CHARGE to both the districts and to the students!

Source: Austin Community College District Grants Development Office proposal for Excelencia Award, 2006.

Example B
STATISTICAL ANALYSIS: USE OF DATA FROM PUBLIC RECORDS
OR INTERNAL SOURCES

Del Valle Independent School District

Located on the Colorado River southeast of Austin in southeastern Travis County, Texas, Del Valle is a community with no mayor, city council or chamber of commerce. The only governmental agency located in the Del Valle area is the Del Valle Independent School District spanning a 174 square mile area of Travis County, Texas. The District serves the Travis County communities of Montopolis, Frontier Valley, Sundridge Park and Pleasant Valley and the rural communities of Garfield, Creedmore, Mustang Ridge, Elroy, Pilot Knob, Webberville and Hornsby Bend.

The Del Valle Independent School District currently serves a total of 8,180 students in grades Early Childhood through 12th grade. The District has one high school (grades 9 – 12), two junior high schools (grades 7 – 8) and six elementary schools (grades pre-k – 6), and one alternative high school (grades 9-12). A seventh elementary school will be opened in the fall of 2006-2007 school year. The Talent Search Target Schools from Del Valle will include both junior high schools (Del Valle and Ojeda) and the District’s regular high school. Demographic breakdown of students in the Target Schools is found in Table 1.

Table 1: Ethnicity of the Target School Populations

Target Schools	African American		Hispanic		White	
	#	%	#	%	#	%
Bastrop Middle	85	13%	170	27%	375	59%
Cedar Creek Middle	35	6.3%	266	48%	253	45%
Bastrop High School	219	10%	618	29%	1,266	60%
District Total	339	10%	1,054	31.8%	1,908	57.7%
Del Valle Junior High	100	17%	389	65%	101	17%
Ojeda Junior High	68	12%	433	74%	80	14%
Del Valle High School	333	18%	1,162	64%	297	16%
District Total:	501	16.7%	1,984	66%	478	15.8%

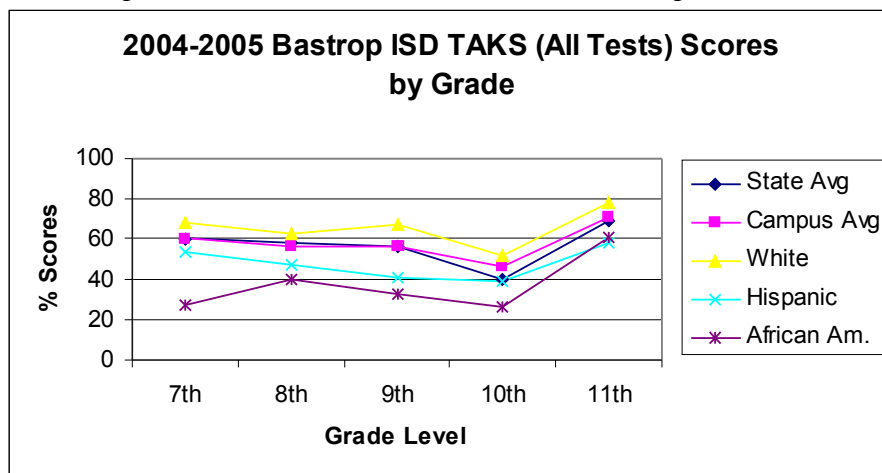
Source of Data: State of Texas PEIMS AEIS Report FY 05

Source: Austin Community College District Grants Development Office proposal to the Department of Education, STEPS: Supporting The Expectation of Postsecondary Success: A Federal TRIO Talent Search Application.

Example C
Statistical Analysis: Use of data from public records or internal sources

In contrast, the **high school** dropout percentages shown in Table 4 demonstrate that the campus dropout rates are just at or slightly above the national averages. However, the dropout data, when broken down by ethnicity, provide a much more meaningful picture. The data demonstrate that **minorities dropout at significantly higher rates** than their white peers. The characteristic most used to identify at risk-students is low achievement, which is typically measured in terms of poor performance by below average/failing grades and/or poor performance on standardized tests scores . The Texas Assessment of Knowledge and Skills (TAKS) is a primary and secondary education standardized test used in Texas to assess student attainment of math, English, science, reading, and social science skills required under Texas education standards. It replaced the TAAS in 1999.

Table 5: Relationship Between Academic Achievement and Dropout Rate - Bastrop ISD



Source: Texas Education Agency PEIMS AEIS Report FY 05

Example D

STUDIES AND JOURNALS: LITERATURE SEARCH OF PUBLISHED DOCUMENTS ON SUBJECT

Why Texas for an ATE Regional Center?

The Texas Applied Nanotechnology Education Center (“TANEC”) will serve the entire state of Texas – a region as large as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New York, Pennsylvania, Ohio, and North Carolina combined (Texas Almanac, 2006). According to the 2005 report “Benchmarking US States for Economic Development from Nanotechnology” Texas is one of the nation’s best-poised states to capitalize on nanotechnology (Lux Research, 2005). Five of the twenty-one Texas universities involved with nanotechnology-related programs have already developed nanotechnology-specific research centers (Masterson, 2003; NNIN, 2006). And, Rice University was ranked number one by *Small Times* magazine in the commercialization (both for number of patents and overall strength of patent portfolio) and number two in the US for its nanotechnology facilities (Small Times, 2005). In addition, Texas boasts more than fifty early-stage commercial entities developing products and services from nanotechnology research and dozens of existing companies, from a variety of industries, involved in nanotechnology (Nanotech-Now, 2006; Nanovip, 2006).

In 2002 Governor Perry established the Texas Technology Initiative (TTI) to provide statewide coordination and support for economic development based on innovations in semiconductor, nanotechnology, biotechnology, software technology/wireless, micro-electro-mechanical systems (MEMS), photonics, and manufactured energy. TTI efforts led to the (1) establishment of the nationally recognized Texas Enterprise Fund used to recruit or expand several high-wage businesses and (2) development of the State Strategy on Advanced Technology, a plan to position the state as a leader in the emerging technology market. To further these efforts, in 2004 Governor Perry’s office called for the creation of the Texas Emerging Technology Fund, a \$300 million state fund that is used as a catalyst for job creation over the long term in Texas. The Fund supports collaborations between the state, academia, and the private sector on programs to develop and commercialize products in emerging technologies (TCC, 2005).

A specific example of how the state is responding to industry needs is evidenced in its recent (2005) \$4 million grant to Austin CCDD and Sematech/ATDF, a consortium for the research and development for accelerating the commercialization of technology innovations. This grant initiative, focusing on nanoelectronics, provides intensive NanoScholar internships, professional development for educators and industry professionals, nanoelectronic modules, and statewide outreach to education, industry, and community leaders.

Texas also adopted an industry cluster model as part of the governor’s long-term economic development strategy. This initiative identified six industry clusters in which Texas has existing strengths: (1) advanced technologies and manufacturing that includes a sub-cluster for nanotechnology and materials, (2) aerospace and defense, (3) biotechnology and life sciences, (4) information and computer technology, (5) petroleum refining and chemical products, and (6) energy (Perry, 2004). By focusing nanotechnology curricula into these broad areas in which nanotechnology is already having an impact, TANEC will develop courses, prepare technicians to work in a variety of industries, advance nanotechnology education throughout the region.

Source: Austin Community College District Grants Development Office proposal to the National Science Foundation, 2006.