

SAN MARCOS HIGH SCHOOL
A PROPOSAL FOR SMALLER LEARNING COMMUNITIES

A. NEED FOR THE PROJECT

Data collected at San Marcos High School (SMHS) portrays a dismal portrait of widespread student disengagement, alienation and failure. Absenteeism is extraordinarily high. The dropout rate is double the state average. Academic performance gaps between the economically disadvantaged, Hispanic, and White students are disheartening. SMHS failure rates are unacceptable, i.e., 55% of ninth graders, 50% of tenth graders, 30% of eleventh graders and 16% of twelfth graders failed at least one course last year. In this setting, many teachers report they are overwhelmed. Contributing to the problem is a lack of long-term leadership at the high school. In the past five years there have been three principals. In addition, drug-use surveys at feeder schools show that incoming students are using alcohol and other drugs at levels higher than state averages (in some cases twice as high) for every substance investigated. Further, detentions in juvenile facilities in Hays County have tripled in the past decade.

While the description above and the data that follows paint a grim picture, there are strengths not demonstrated through these numbers. First, the local business community in San Marcos is eager to support improvement efforts at the high school. Second, Southwest Texas State University (SWT), a university of 22,000 students, is located in our community. SWT graduates more teachers than any other institution in the state, has faculty who are very interested in the small school concept, and have agreed to assist in its evaluation. In fact, two deans and faculty from eight different departments were involved in developing the plan presented in this proposal, and are eager to help implement the project. Third, there is a core group of experienced high school teachers at SMHS who have *not* given up, who have a strong vision of the proposed project, and who believe that virtually *all* SMHS students can succeed with the help that will be provided by this project. Fourth, outside consultants with extensive experience in implementing this type of program have agreed to help SMHS execute this proposal. The following data provide more detailed information about the need.

October '99 attendance data

In 1999-2000, SMHS had 1,884 students enrolled and an average daily attendance of 1,689. This means that on an average day, 10.3% of the students were absent. Equally distressing was the fact that 8% of the SMHS population were identified as “chronic absentees” that year.¹

Drop-out and attrition rates

The Texas Education Agency (TEA) reports the SMHS annual dropout rate to be almost double the state average (2.9% vs. 1.6%)². A new measure provided by T.E.A., the “actual longitudinal 6-year dropout rate” has been reported for the class of 1998; this measure was 18.4% for SMCISD, again with disparities between student subgroups (18.9% African American, 25.4% Hispanic, 5.7% White, and 26.8% Economically Disadvantaged). In SMCISD, the cohort Class of 2000, as eighth graders, numbered 501. In spite of the fact that San Marcos is growing rather rapidly, SMHS graduated only 343 students in 2000. This represents an attrition rate of 31.5%.

Incidence of violence

SMHS has not experienced gun violence, although there were numerous bomb threats made in the past year, some resulting in the evacuation of all buildings, and many hours of lost instructional time. Thirty-six students had “disruptive behavior” of sufficient concern to merit suspension for three days out of school, or placement in an alternative education setting. Four students were charged with felonies, three were found with weapons, four were charged with assault and one with retaliation against a teacher.

Drug and alcohol use

There were 57 documented incidents of tobacco, alcohol or drug possession at school. These included 25 tobacco, 25 marijuana, 6 alcohol, and 1 inhalant. Drug-use surveys at feeder schools have shown student drug use higher than state averages for every substance investigated.

Disciplinary actions

The most prevalent reason for disciplinary action was violation of student code of conduct (1,827 incidents), followed by disruptive behavior (283 incidents) and tobacco, alcohol and other drug use. In-school suspension (2,103 incidents) was by far the most frequently used disciplinary

¹ “Chronic absenteeism” is defined in the March 2000 report, *Career Academies: Impacts on Students' Engagement and Performance in High School*, as students who have an attendance rate of 85% or lower.

² T.E.A. AEIS Report, Baseline Attachment I, Appendix I.

action, followed by placement in an off-campus alternative education setting (114 incidents), and three-day out-of-school suspensions (110 incidents).

Percentages of students who pass graduation exams or local assessments

In Texas, an exit level Texas Assessment of Academic Skills (TAAS) is given in 10th grade. This is a minimum skills test. Students who do not pass are allowed to re-take the exam in subsequent years, but must pass in order to graduate. In the academic year 1999-2000, an established pattern of differences in performance between student subgroups continued. As shown in Table 1, the greatest difference was a 24-point disparity between math scores of White and economically

Table 1

SMHS % Passing Year 2000 Exit-Level TAAS			
Student Group	Reading	Math	Writing
Eco Disad	71	65	80
White	94	89	92
Hispanic	76	65	79
Afri. Am.	71	48	88

Table 2

% Passing All TAAS Exit-Level Tests Taken (math, reading, writing)			
Student Group	2000	1999	1998
Ec Disad	56 (n=110)	53 (n=119)	55 (n=108)
White	86 (n=150)	81 (n=147)	86 (n=130)
Hispanic	58 (n=246)	57 (n=232)	53 (n=130)
Af. Am.	48 (n=24)	60 (n=24)	53 (n=15)

Disadvantaged students and between White and Hispanic students. As Table 2 demonstrates, the percent of students passing and the performance gaps have changed little over the past three years. State mandated end-of course exams in Algebra I and Biology have been required since 1998, and English II and American History were added in 1999. The percent testing and passing are reported in Table 3. Not included in the table are the most recently released scores, for students taking the test at the end of the 1999-2000 academic year. Data received from the state reveal that only 14 of 320 students (5%) who took the end-of-course Algebra I Exam passed it this last year. Disaggregated data are not yet available. A possible explanation for this very low passing rate is that teachers are using the Algebra I course to help prepare students for the 10th grade, exit level TAAS math (which does not include algebra). There is great emphasis on TAAS passing rates, because schools are rated by the state according to passing rates. The fact that passing scores were much higher in courses with no TAAS component (75% for Biology, and 79% for History) would support this conjecture. At any rate, this low pass rate for Algebra is obviously cause for concern.

Table 3

End-of-Course Exams	State		SMHS		African American		Hispanic		White		Econom. Disadvan	
	'98	'99	'98	'99	'98	'99	'98	'99	'98	'99	'98	'99
End of Course Alg I												
% Taking	17.4	18.0	23.8	16.8	28.9	16.8	29.8	20.3	13.8	11.5	24.5	22.0
% Passing	35.9	43.4	5.4	18.9	0.0	5.9	4.4	17.4	9.3	26.8	6.0	8.5
End of Course Biology												
% Taking	23.9	24.2	37.2	25.5	45.6	27.7	39.3	25.4	30.3	25.0	36.5	26.9
% Passing	76.4	76.4	67.3	66.1	63.4	64.3	58.9	54.8	84.6	84.5	58.5	43.1
End of Course Eng II												
% Taking		21.4		21.5		23.8		19.2		23.5		18.5
% Passing		72.7		64.0		58.3		54.6		76.7		52.5
End of Course US Hist												
% Taking		18.9		18.6		15.8		17.7		20.3		17.7
% Passing		69.8		81.7		75.0		72.4		95.2		70.5

Enrollment in advanced level courses

At SMHS, 18.8% of students are enrolled in advanced level courses (12.2% of the African American population, 11.5% Hispanic, and 31.1% White). Classes for dual (college and high school) credit were taken by 150 students (1 astronomy, 97 integrated physics and chemistry, 42 English IV, and 10 special education).

Percentage of students taking college entrance exams:

In 1998-1999, 168 students, or about half the number of graduates took the SAT exam. Verbal SAT scores: Hispanic verbal 441 vs. White 504. Math SAT scores: Hispanic Math 450 vs. White 511. According to the Department of Education, the national 1999 averages on SAT for Hispanics were: verbal 457; math 458.

Percentage of LEP and/or migrant

Last year there were 85 students (4.8%) attending SMHS with limited English proficiency. This percentage belies the impoverished language environments from which many of these students come. Parents often deny speaking Spanish in the home, although that is their primary language. In years past, students were not only discouraged, they were *punished* for speaking Spanish at SMCISD. Many of those students are now parents and grandparents, who after surviving those abuses themselves, believe it would be a detriment to their children to admit speaking Spanish at home. According to TEA, the mobility rate for students at SMHS is 21.3%

Low-income or otherwise disadvantaged

Only 30% of the SMHS students identify themselves as qualifying for free and reduced price lunch, but it is clear that many who would qualify for this program fail to apply to avoid the stigma attached to such designation. SMHS is the only high school in the community, and the percentage of economically disadvantaged students range from 49%-67% in grades K-8. Thus, economic factors lead many SMHS students to look for work to help support their families. As the unemployment rate is very low and our area is growing, teenagers who want to work have little trouble finding a job. Those who work typically try to handle the demands of a job and school as well. But, many eventually give up school for the immediate paycheck. Another problem faced by SMHS is teen pregnancy. Last year alone over 80 SMHS students became mothers, and almost as many became fathers. In addition, evidence provided by Hays County Literacy Action indicates that 45% of our *adult* population functions at levels that imply they failed to completed high school or obtain their GED. Thus, many parents are themselves in need of educational services, and not prepared to assist their children with high school level homework.

Other local need factors

In the 1996-97 school year, a school improvement review noted that the ninth grade class was swollen by student retentions. That is, there were 663 students in ninth grade that year, compared to 501 who had been in the eighth grade the year before. A school-community cadre initiated by the superintendent developed a plan for a Ninth Grade Center (NGC) that would house all *first-year* freshmen in a separate building, with it's own principal, staff, and counselors. This change resulted in marked reduction in failure rates for the first two years. Unfortunately, this success was short-lived. In the third year of operation (1999-2000), failure rates were higher than their original levels. This has been attributed to a lack of teacher training in the smaller learning communities concept, the numerous leadership changes that occurred at the high school and to high staff turnover at the NGC. In short, the culture at the NGC became a smaller version of "big" school culture with each teacher operating independently. A search is underway for new leadership for the NGC.

Applicant's fiscal capacity to fund programs described here without Federal assistance

The proposal for implementation of an Academy for Math, Science and Technology and an Academy for Visual and Performing Arts was approved by the Board of Trustees in Fall 1999, but not funded, due to a low fund balance. A failed bond proposal in 1999 has put further stress on the budget, and we face a roll-back election in late August of this year. Because the Academies Plan has such strong Board support, even in this time of fiscal constraint, funds have been allocated for an Academy Director (one position only) and for equipping a CAD (Computer-aided Drafting) lab. However, recent discouraging outcomes at the NGC make it clear that professional development, technical assistance, and structured time for staff to re-create their community, will be essential to ensure the future success of the NGC as well as the proposed Academies and the Teacher Advisory Program.

B. FOUNDATION FOR IMPLEMENTATION

Substantive stakeholder involvement

A school/community commission was convened to address issues of concern at SMHS in 1997. This commission, which became known as the "Academies Cadre," spent two years doing research, sharing their findings in public meetings, discussing options, visiting other career academies, and finally writing, and revising a plan³ for presentation to the Board of Trustees. The proposal for an *Academy for Math, Science and Technology* and an *Academy for Visual and Performing Arts*, which was approved by the Board of Trustees in Fall 1999, was the result of painstaking work of 55 volunteers (22 teachers, 3 administrators and central office staff, 4 SWT faculty, and 26 local employers, parents and students). Invitations to reconvene separate cadres for 2000-2001 have been issued; these three cadres will become a part of the management plan for the two career academies and the NGC. The SMHS Campus Improvement Team (which also includes teachers, administrators, parents and other community representatives) will assist in the implementation of the teacher advisory program.

Research-based findings and outside technical assistance

In March 2000, Manpower Demonstration Research Corporation (MDRC) issued a report on

³ See List of Cadre members, and Academy Proposal to Board in Appendix III.

Career Academies describing interim outcomes of research that began in 1993. The MDRC findings are very validating to the plans developed by the local Academies Cadres! In particular, MDRC investigations found the following.

- 1) *Career Academies substantially improved outcomes among students at high risk of dropping out. That is, Academies reduced drop-out rates, improved attendance, increased academic course-taking, and increased the likelihood of earning enough credits to graduate on time.* These are all issues of great importance to SMCISD, and will be addressed by this project. The effects of the proposed project on these outcomes at SMHS will be evaluated by SWT. (Also see “Needs” in Section A and “Goals” in Section C)
- 2) *When Academies produced particularly dramatic enhancements in the interpersonal support that students received from teachers and peers, they reduced dropout rates and improved school engagement for both high- and medium-risk students.* This proposal includes four elements that should enhance interpersonal support that students receive from their peers and teachers. First, the reduced class size alone should improve interpersonal relationships among students and teachers. Second, the common interests that teachers and students will share should improve bonding among teachers and students. Third, “Master Leaders” who have been trained at the DANA Center at the University of Texas, will provide professional development for math and science teachers involved in this project. The DANA Center focuses on helping teachers improve interpersonal relationships with their students, and stresses the importance of establishing a culture of peer cooperation and mutual support. Fourth, this proposal includes provisions for a “Teacher Advisory Program.” Class schedules have already been modified to allow for thirty-five minute periods each day. Teachers will be assigned 15 to 16 students each. This system will ensure that all students attending SMHS will have a portfolio-style individual education plan, and have at least one caring adult who will be responsible for monitoring their social and academic progress and helping them obtain the support they need throughout their high school careers. Funds are requested to provide training for the teachers in how to develop portfolio-style individualized educational plans, and in how to teach students organizational and study skills. Staff from Newman Smith High School in

Carrollton, Texas, which has been recognized for its exemplary “Career Advisory Program,” is providing technical assistance for this aspect of the project.

- 3) *MDRC’s policy recommendations include that Career Academies should serve a heterogeneous population, with a suggestion that “the pervasive positive impacts for students at high risk of dropping out may derive, in part, from exposure to a highly engaged peer group.”* Students in SMHS academies will represent a heterogeneous population ethnically, economically, and educationally, as no measure of merit will be used for placement in the academy, and substantial before and after-school academic support will be provided for students who need help to achieve high academic standards.
- 4) *MDRC’s findings indicated that if Career Academies do not complement their programs with strong interpersonal and academic supports, they risk reducing school engagement for some students.* The proposed project includes professional development for teachers and strategies to provide students with needed support. Extended-duty pay will allow teachers to work before and after school to provide additional academic support to those students who need it. Graduate students from SWT will also be paid to provide the same kind of support. Hispanic college students will be hired whenever possible to serve as role models for the many Hispanic SMHS students and encourage them to consider post-secondary education.
- 5) *Finally, MDRC data suggests that if academies are to improve academic achievement as measured by most standardized tests currently in use, promising approaches may involve aligning curricula with high standards and providing teachers with the incentives and capacity to deliver on such standards.* This proposal will give teachers the freedom to develop interdisciplinary curricula, aligned with high standards, and relevant to their specific emphases. Teachers in each of the three SMHS smaller learning communities will be given time and structured opportunities each year to reflect on their professional practices, analyze the strategies and results of the previous year’s work, and set goals for the coming year. Teachers will be paid stipends to provide the additional support that will be necessary for many of their students to achieve high academic standards, and will be given control over how to use their SMCISD professional development budget to their best advantage.

C. FEASIBILITY AND SOUNDNESS OF THE PLAN

The vision statement developed by the Academies Cadre (composed of teachers, students, administrators, employers, and parents) states:

“San Marcos High School will provide, through the development of the academy concept, a richer learning environment which is responsive to the needs and interests of students as individual learners. Students will have a clear understanding of how various disciplines relate to each other, and perhaps more importantly, how high school studies are relevant to their futures. This will increase the significance of their daily studies. In addition, they will have more opportunities to intensify their experience – and increase both academic and career skills – in activities relevant to their passion (area of specialization). Under these conditions, students will become increasingly dedicated students. Teachers creating this environment will experience increased gratification from student successes, leading to a cycle of optimism and achievement for both students and staff.”

The goals and objectives of this proposal attempt to honor this community developed vision while creating tangible measures to monitor progress in this endeavor.

Project Goals

- I. To improve practices and policies at the Ninth Grade Center so that all ninth grade students (700 in yr 1) have a solid foundation in core academics, study skills, and the development of individual academic goals for success during high school.
- II. To ensure through the development of a teacher advisory system that all students attending SMHS have at least one caring adult responsible for monitoring their social and academic progress throughout their high school career, developing a portfolio-style individual education plan and making referrals for additional support when appropriate.
- III. To improve student academic success and engagement in the learning process through the development of two career academies: The Academy for Visual and Performing Arts, and the Academy for Math, Science and Technology.

Project Objectives (Outcomes) and Methods

Objective IA. Reduce the failure rate of the 545 *incoming* freshmen class from 55% to 38.5% (a 30% reduction) at the end of the first year, to 30.8% (an additional 20% reduction) by the end of year 2, and to 24.6% (an additional 20% reduction) by the end of year three. Methods: 1) Provide before and after school and weekend academic support by teachers and graduate students. 2) Focus on creating study groups for peer support. 3) Monitor student performance on learning benchmarks at three-week intervals; prescribe interventions as appropriate.

Objective IB. Improve the end-of-course-exam passing rate for Algebra I students by 200% by the end of the first year (5% passing to 20% passing) and by an additional 100% in year 2 and by 75% in year 3 (40% passing in year 2 and 72% passing in year 3). Methods: 1) Provide professional development through consultants trained by the Charles A. Dana Center, University of Texas at Austin, “TEXTEAMS” (Texas Teachers Empowered for Achievement in Mathematics and Science). 2) Create a sense of urgency for Algebra education in the community, making clear that resources are available for additional academic support for struggling students, and publicizing the link of success in Algebra to future academic success.

Objective IC. Reduce the number of disciplinary actions by 20% year one, 30% by year two, and by 40% year three. Methods: 1) Provide extensive professional development for teachers in how to design and implement integrated, interdisciplinary, thematic teaching units for mastery learning, so that school is more relevant, motivating, and engaging to students. This will be provided through training by Dr. Roger Taylor, and from online resources available by becoming registered to use units from “Curriculum Design for Excellence Online.” 2) Provide teacher training in how to develop a culture of peer support through peer study groups. This training is a component of the Math Institutes provided by Dana Center, University of Texas at Austin. 3) Schedule classes so that teachers teach 5 of 7 classes, with one period scheduled as common planning time, so teachers across disciplines can meet, discuss and address student concerns, including emerging

discipline issues, on no less than a weekly basis.

Objective IIA. Improve school bonding, as demonstrated in the attendance rate of all 1,890 high school students, specifically by decreasing absenteeism from 10% in 2000 to 8% in 2001, 7% in 2002 and 2003. *Methods:* 1) Each student will meet for 35 minutes each day in an advisory period; advisors will immediately follow up on absences by contacting parents to check on wellbeing and attendance status of student. 2) Provide training for all teachers on the effective use of the teacher advisory period. Outside technical assistance will be contracted to provide the training. Newman Smith High School in Carrollton, Texas has a recognized advisory program which we would like to replicate with possible modifications for our population and needs.⁴ 3) Provide all students with planners (Preimer Agendas, a Franklin Covey publication) and training in time management, study skills, and goal setting, for use during the advisory time.

Objective IIIA. Recruit a minimum of 600 students grades 10-12 (300 in each academy) by the beginning of year 3, with targets of 200 for each academy in year 2 and 150 in each, mid-year of year 1. *Methods:* 1) Ensure recruitment messages emphasize that academies can better prepare students for higher education (four or two year colleges, conservatories) and for movement into careers (such as through CISCO or CAD training, or in the performing arts). Students and parents must be aware that additional academic assistance is available for those who need it to. 2) The director of the academies will visit civic and service organizations, and other public meetings to inform the community about the goals of the academies. 3) Presentations will be made to all ninth grade students about the benefits of attending the academies, and the additional academic support available for those who may need it to meet higher standards.

Objective IIIB. Academic success will improve as demonstrated through: Exit level TAAS passing rate improving by 10% each successive year of the project; by improvement in student GPA's; by SAT scores improving by 10% each successive year of the project; and by increasing

⁴ Because of ongoing summer construction (and no telephones) at Newman Smith High School, we have not secured their commitment to provide this consulting service. If they decline, we would contract with another successful program to assist in development of the advisory component of this plan.

numbers of students taking and passing advanced level courses. *Methods:* Methods will focus on three areas, improving teaching, providing additional academic support for students who need it, and providing multiple career awareness activities to help inspire and motivate students, and help them see the relevance of their studies. Professional development will focus heavily on the weakest area, which is math, and on the development of an integrated curriculum. Activities involved in use of these methods will include: 1) Math teachers will attend Math Institutes provided by Dana Center, University of Texas at Austin. These will include 5 days each on Algebra I, Algebra II/Pre-calculus, and Geometry. In attending these institutes, teachers will extend their own mathematical knowledge and understanding as well as learning new content and new ways of conceptualizing the content they already know. 2) Provide extensive professional development for teachers in how to design and implement integrated, interdisciplinary, thematic teaching units for mastery learning, so that school is more relevant and motivating to students. This will be provided through training by Dr. Roger Taylor, and by becoming registered to use units from “Curriculum Design for Excellence Online.” 3) In year one, which will begin mid term, or January 2001, schedule classes so that teachers teach 5 of 7 classes, with one period scheduled as common planning time, so teachers across disciplines can meet, discuss and address student concerns, including emerging discipline issues, on a regular basis. In years two and three, the academies will go to block scheduling, but still ensure teachers’ common planning time.

Strategies to enable all students to reach challenging State content and performance standards, ensuring the successful completion of high school and preparation for college or a career

All the strategies included in this proposal are intended to enable all students achieve these goals so that they can do well on college entrance exams, and/or embark on a challenging, well-paying career. These strategies are briefly reviewed on the following pages.

- **The Teacher Advisory System** will benefit all SMHS students (Academy and Non-Academy) by helping them articulate their goals, teaching them time management, organizational skills,

and giving them other necessary skills to reach their goals. Teachers will be responsible for contacting parents or guardians of their 15 student-advisees any time they are absent, and will serve as an advocate for them when they referrals to tutoring, counseling or community resources, peer mediation or conflict resolution, or in-school support groups.

- **The Ninth Grade Center (NGC)** teachers will be given professional development in the teaming approach, so that they can effectively use their common planning time to address emerging student concerns, both academic and social. They will be given time to participate in setting goals and methods for improvement in the performance of their students, thus giving them more “ownership” of the outcomes. The resulting outcomes in improved attendance, reduced failure rates, and greater academic success at the ninth grade level will create a foundation of success for students in the next three years of their high school experience.
- **Professional Development in Weakest Performance Area.** Math is clearly a problem for many SMHS students. When only 14 of 320 students pass an end of course exam in Algebra I, the fault cannot be placed on the students. Professional development will be provided to all math teachers in this project by expert staff from the Dana Center. The DANA Center recommends not only changing instructional techniques and stressing the development of peer study groups,⁵ they also emphasize the need to convince teachers and students alike of the importance of math and the need to improve math literacy.
- **Professional Development in Integrated Instruction** will be provided through conferences offered by Dr. T. Roger Taylor. In five days, the training will cover how the curriculum can be integrated to tap into the multiple intelligence strengths of all learners, the use of databases to develop integrated, interdisciplinary units aligned with state standards, and developing anticipatory sets that grab students’ attention to produce highly diverse project/problem

⁵ Uri Treisman, the Director of the Dana Center, University of Texas at Austin, is a visionary and a winner of the Mac Author “genius” award for his work with minorities. He is especially noted for his success in teaching calculus to minority students at the university level. While the DANA institutes do focus on improving teacher understanding of mathematical concepts, the development of peer study groups are a hallmark of Uri’s techniques and are also included in his professional development trainings.

learning products. His training utilizes a collaborative learning model based on brain research that facilitates project/problem learning and illustrates the use of timetables of history and science to enhance and connect disciplines.

- **Changes in Scheduling, for Academies** during the first year, will have to stay with a seven period day because students who begin a two semester course in August will be best served by completing it with the same teacher in the second semester. Academy teachers will teach five out of seven periods to allow them adequate, common planning periods. However, in year two, consideration will be given to changing to block scheduling for the academies.
- **Before and After School Assistance for Students** will be provided by Academy teachers and SWT graduate students. This academic support is necessary if all students are to have truly equitable access to the Academies. The graduate students (to be recommended by their respective SWT departments) will provide help not only in subject areas, they will serve as role models. When possible, these positions will be given to minority students.
- **Career Focused Classes** will be offered to students in the academies. Students excelling in Computer Aided Drafting or CISCO networking classes will be able to move directly into jobs paying over \$30,000 per year. Those in the Visual and Performing Arts will be better prepared for auditions, and will have had opportunities at conferences to make important contacts.
- **Extensive Career Awareness Activities for Academy Students** will be an important component to maintain student interest and involvement, and to help students create a long-term vision (and plan) for their future. Because San Marcos is small, and much of our economy evolves around services for the tourist industry (i.e., food and retail), we will take advantage of the local university to provide a breadth of awareness opportunities that would otherwise be unavailable to us. In addition, student field trips will travel to sites in Austin, Texas, (30 miles away) where a burgeoning economy is fueled first by technology, and second, by the entertainment industry.

Ensuring that curriculum and instructional practices within each smaller learning community are aligned with its goals and to its theme or emphases, where they exist.

Curriculum-writing training, five-day extended contracts for the Academy's teachers to do curriculum writing (having time to use the skills acquired), and modified scheduling for teachers to have common planning time, will all contribute to ensuring that curriculum and instructional practices are aligned with each Academy's goals, themes, and emphases. It may be noted that field-specific professional development is provided for math, but not for visual and performing arts. This is because the SMCISD arts department is already an award-winning department in their field, yet *all* students must succeed in math if they are to meet graduation requirements.

- **Outside Technical Assistance in Math, Science and Technology Academy Program Development.** Technical assistance in program development and management will be provided by Margaret Greff⁶, who has successfully initiated and maintained a successful science and technology academy in San Antonio. Since the Fall of 1999, when the Academies were approved, the art faculty at SMHS have done considerable planning in anticipation of funding. Math and science departments, however, have not had the same degree of leadership and vision, and will benefit from the additional technical assistance and hands-on experience of this exceptional teacher, administrator and consultant.
- **University-based career awareness activities:**
 1. ***Two-month-long summer apprenticeships for students in the sciences:*** Students who are capable yet undecided about attending post-secondary education will be targeted for a summer apprenticeship at the college of science at SWT. The SMHS students will work for two months on a science-project together with undergraduate students, high-school teachers, and SWT-faculty. The outcome will be presented at a Science Fair or regional conference. This project will enable SMHS-students to get a better idea of the

⁶ See vita, Appendix II.

sciences and the value of postsecondary education. According to our agreement with SWT, the academy student will receive a summer stipend of \$440 a month. This is important, as we have many economically disadvantaged students who are expected to contribute financially to their families during summer months, and they would be unable to participate without some remuneration. An amount of \$1200 per student intern will be used for research supplies, tools, and travel to regional conferences. The Academy director will be responsible for the selection of the students and will visit the interns and their coaches at SWT during the summer. Placement of the students within the school of Science will be done in cooperation with Dr. Wilhelmus Geerts (department of Physics). One summer apprenticeship will also be available with the MD Anderson Cancer Research Institute in Smithville, Texas, paid for by their outreach program.⁷

2. ***Archeology Field School*** Math, Science and Technology Academy students and selected teachers will participate in an archaeological excavation for two Saturdays, each year, learning about the work of archeologists. Students will be introduced to Texas Prehistoric and Historic archaeology, and learn basic field methods employed by archaeologists through active participation on the excavation of an archaeological site in San Marcos. Because of our location at natural springs that create the headwaters of the San Marcos river, our area is one of the oldest continually inhabited sites in North America, and is rich with archaeological treasures. This hands-on workshop will provide students with an opportunity to hypothesize, explore, collect, catalog and discuss their findings over two days of fieldwork and lectures.
3. ***Geography*** Students of the Math, Science and Technology Academy will be taken to SWT on three consecutive Saturdays each year to learn what modern-day geography is about, particularly GIS, remote sensing, GPS technology, cartographic visualization, water

⁷ This has verbal confirmation, but there is no written commitment accompanying this proposal.

resources, and other important topics in environmental geography, and use SWT's computer laboratories. At the same time, students will learn more about SWT, its programs, and its campus. A total of 120 students will attend over the three years.

4. ***IC-technology fabrication lab demonstrations*** Students will be offered the opportunity to participate in a one-day course, "Integrated Circuit Technology," offered by the Departments of Physics and Technology at SWT. It will consist of an interactive lecture that covers the steps involved in making an electronic circuit, and a laboratory experience in which the students will make their own chip in the new microfabrication facility. The purpose of this activity is three-fold. First, by exposing our students to the interdisciplinary IC-fabrication process, they will get a better understanding of how chemistry, physics, and mathematics work together and form the building blocks of modern technology. Second, this one-day activity will provide examples and illustrate important principles studied in the core courses of our curriculum. Third, it will introduce our students to an important new career option for the area. The growth of the high-tech industry in the Austin – San Antonio corridor, e.g. companies like VLSI, Sony, AMD, Motorola, IBM, Dell, Samsung, Texas Instrument and Applied Materials, is limited by the lack of qualified workforce. By exposing SMHS students to the fabrication process and to the fact there are many high paying jobs available in the area, we hope to convince many to stay in school, go to college and choose a career in the sciences.
5. ***Academy for Visual and Performing Arts*** will bring in as yet undetermined guest lecturers or "master teachers" who are experienced in specific areas such as set design, screenplay, digital design, drama, or dance. These visiting masters will provide professional development for staff as well as career awareness for the students. Collaboration with SWT College of Fine Arts, and contracting with artists who are scheduled to visit that campus will allow us savings in travel costs for these consultants.

Professional development activities offered to teachers, non-instructional school staff, and others are aligned with smaller learning community goals.

Team Building/Culture Building retreats will be facilitated each year for each of the three learning communities. Teachers will be afforded an opportunity to reflect on their growth as individual professionals, as well growth as a team. At the retreats, the project evaluator will provide process and outcome findings, which the team will use to inform their creation of goals for the coming year.

Teaming ensures that teachers with a common group of students meet regularly to assess those students' progress, and address any emerging academic or behavioral, social concerns. All teachers in the project will be trained in teaming, and schedules will be developed to assure teachers common planning time with their teams.

Interdisciplinary teaching is not currently used at SMHS, where most departments and teachers operate in isolation from others. Training in development of integrated curricula, and online resources will be provided through this grant, as well as five days of extended contract for teachers to work together in developing their curricula.

Rationale for grade levels and ages to be served by the smaller learning communities; and the methods and timetable for placing students in the smaller learning community:

All ninth grade students will be placed in the NGC, and all 10-12th grade students will be invited to attend the academies. If selection by student choice does not afford the academies a population that reflects the general SMHS population, recruitment efforts will focus on encouraging enrollment from the student group needed to achieve that. Students will not be placed according to ability, performance, or any other measure of merit.

The NGC is included in this proposal because this transition time from middle school to high school is so important to the future success of students. Our district has recognized this and made initial investments three years ago to implement a smaller learning environment. Those investments went into a schedule that supported teaming, but professional development and team building was neglected. A lack of leadership compounded the problem, and teachers fell into a

pattern duplicating that of the rest of the high school, with teachers working in isolation, with little sense of community. Correcting this is of high priority, particularly in light of disturbing 9th grade failure rates this year. The NGC will also “market” the academies to students.

The tenth through twelfth grades were chosen for career academies, because students will require the full three years following their ninth grade years to meet requirements for graduation.

The themes chosen for the academies will allow us to take advantage of our strengths (visual and performing arts) and to focus on improving our weakest area (math). Further, the economy in our area, particularly in Austin, Texas, supports development of careers in these two areas. High tech, as well as music and film-making are fueling the growth of the Austin economy.

Management plan

Project Director Beatriz Flores, Assistant Superintendent for Curriculum and Instruction, will serve as Project Director for this grant. Improvement in student success is an issue of primary concern to her over the next several years, as all other schools in SMCISD have been successful in achieving “recognized” or “exemplary” status, yet SMHS was rated “low performing” three years ago, and has barely retained the ranking of “acceptable” since that time. Therefore, she will commit a minimum of 10% of her time to management of this project, as part of her focus on improvement of learning at SMHS. Bea has over 27 years of service in education, and has served as teacher, assistant principal, and principal, before being named assistant superintendent. She has managed many state and federal grants successfully. She and her staff currently manage six million dollars in state and federal grants (including Title grants). She will be responsible for coordinating the start-up tasks such as negotiating a consultation contracts, convening interview teams and expediting the selection of the Academy Director, coordinating with the technology department to order CAD equipment authorized by the board, and assigning a team to address scheduling issues that must be resolved by mid term. Once the Academy Director is hired, the Project Director will meet with him or her monthly, and provide administrative support, advocating for Academy budgetary and other needs in Management Team (comprised of the

Superintendent and Assistant Superintendents). She will stay apprised of the progress in meeting goals. Primary responsibility for day-to-day operations of the Academies will lie with the Academy Director. The Project Director will assume the same process for communication and monitoring the success of the NGC by meeting regularly with the Ninth Grade Principal, accessing evaluation reports, and advocating for their needs.

Director of Academies The director of the academies (to be hired with district funds) will report, directly to the Assistant Superintendent for Curriculum and Instruction. The director will provide leadership and vision for the academies. He or she will do the following: 1) vigorously support the vision statement of the academy; 2) serve on a “campus council” which meets monthly; 3) meet with separate advisory committees for each academy quarterly; 4) work with the district grant writer to identify additional funding needs, or potential sources of support to hire a second director; 5) be responsible for developing partnerships with businesses for work-based learning and career awareness opportunities; 6) schedule outside speakers/teachers in career awareness efforts; 7) promote the academies to the public; and 8) be the primary contact with the project evaluator. Qualifications include a Master’s Degree or comparable professional experience, a background either in the arts or in math, science, or technology, management experience, classroom experience, a consensus style of leadership, and demonstrated dedication to the academy concept or vision statement. As the district creates a new bond issue for public vote (which will include building a new high school) the director will educate community planning groups about the importance of school size, and how architectural design can enhance and support the implementation of smaller learning communities.

Ninth Grade Center Principal (existing position). This position is currently open. The person who fills this position will serve in the same capacity as the Academy Director , but for the NGC. A search team is looking for a positive, visionary leader who has been successful in creating collaborative environments in other settings. He or she will coordinate with the Academy Director in planning training times for common

Teacher Advisory Coordinator Angela Forrest, assistant principal at SMHS will coordinate the implementation of the Teacher Advisor Program. She will be the primary contact for the evaluator for this component of the project. Angela has a background in math and science teaching, and has served as an assistant principal for five years. The Campus Improvement Team will monitor progress of the Teacher Advisory Program.

Outside Consultants Consultants will be important to the success of this project and include Margaret Greff, who is currently director of John Jay Science Academy in San Antonio. She has a Master of Science in geophysics, and taught from 1975 until 1997, when she became director of the John Jay Science Academy. She will advise on program development and management issues. SWT College of Education will provide evaluation services, and will facilitate annual retreats for teachers each of the three smaller learning communities. SWT's involvement will not only bring expertise to the project, it may create greater awareness of the advantages of smaller learning communities to graduating teachers.

Campus Council This group will consist of the SMHS principal, the academy director, the NGC principal, and teacher representatives from each group. They will meet monthly to resolve any issues arising in regard to shared space (gyms, band hall, auditorium, CAD lab, etc.) or programs (athletics, other UIL competitions), campus safety concerns, and other issues affecting all groups.

Student Review A common planning time will be designated weekly as the student review meeting, during which time teachers can bring up concerns about any student for discussion and problem solving. If the problem is academic, tutoring or testing may be recommended. If the concern is behavioral, actions could vary from talking to the parents, referral to a counselor, a community agency, an in-school support groups, or peer mediation.

Learning Community Meetings Each academy and the NGC will have faculty meetings at least monthly. This time will be spent in self-observation and reflection regarding the development of instructional programs, individual professional growth, and in dealing with the discomfort that arises with the process of change. This process will be documented by SWT. The data obtained will be used to describe the formative process in annual reports.

Advisory Councils School/community groups will serve as advisory boards for each of the academies and the NGC. Letters have been delivered to former Academies Cadre members requesting their participation in this capacity. They will be reconvened monthly August 2000 through January 2001, when the academies open. Thereafter they will meet quarterly.

Timeline	Milestone
August 2000	5 th : school starts, with teacher advisor periods scheduled 31 st : Smaller Learning Communities award announced Ninth Grade Center Principal hired/announced. Academies Cadres meet monthly through January, then quarterly.
September 2000	Project Director initiates search for Academy Director Equipment for CAD lab is ordered, to be installed before 2 nd semester Contracts for Teacher Advisory training and evaluation completed Graduate students to serve as tutors for Ninth Grade Center selected/hired. Ninth Grade Center has first team building retreat.
October 2000	Academy Director hired. Training for Teacher Advisory System begins. Teacher selection for academies begins. Student recruitment for academies begins. Public relations for academies begins. Evaluator develops and distributes process and action forms. Graduate students to serve as tutors for academies selected/hired. First Campus Council Meeting Ninth Grade Center has first Learning Community meeting.
November 2000	Teacher selection for academies completed Director establishes additional Professional Development in integrated curriculum writing. Math teachers attend Math Institutes
December 2000	Each academy has first retreat Students are scheduled into academy classes
January 2001	Academies begin operation Student recruitment continues if targets not met. First Learning Community Meeting for academies (monthly thereafter) Initial student focus groups.
Jan-June 2001	Student career awareness activities at SWT at work-based learning sites. Visiting master artists/teachers provide enrichment Campus Council and Learning Community Meetings Monthly. Reports to evaluator monthly.

May 2001	Follow-up student focus group. Request Board approval of second Academy Director position.
June 2001	End of first instructional year; teachers have five days for curriculum writing. First student apprenticeships at SWT and MD Anderson Cancer Research Institute begin Student placements at other work-based learning sites continue.
July 2001	First annual evaluations prepared; Second retreat for academies and Ninth Grade Center
August 2001	First performance report to Department of Education First <i>full year of academy operation</i> begins. Second year of Teacher Advisory system begins.
June 2002	Second year of project ends. Teachers have 5 days of curriculum writing Number of student summer apprenticeships increases
July 2002	Annual evaluation completed. Third retreat for academies and Ninth Grade Center, goals set for 3 rd year.
August 2002	Third year (second <i>full year</i> for academies) of project begins.
June 2003	Third instructional year ends Teachers have five days of curriculum writing Students participate in summer internships.
August 2003	Project ends, on basis of excellent outcomes, the Board of Trustees continues investment in professional development, extended duty time for teachers to provide academic support to students. ☺

D. QUALITY OF THE PROJECT EVALUATION

Faculty from the SWT College of Education will conduct both a formative and a summative evaluation of this project. Data on all the above-mentioned items, with the exception of extracurricular activities, are routinely input by the campus clerks into a real time database that is maintained by district technology and evaluation staff. They routinely keep the data current, and ready for required submissions to the Texas Education Agency, three times a year. Custom reports are easily obtained by request to district technology staff. Data will be made available to the outside evaluator without student-identifying information. The evaluator will then use this information to determine progress toward set goals on a quarterly basis, and give the information to the Academy Director, who will share it with teachers as they review progress toward goals. Forms outlining the extracurricular data will be developed to meet the requirements of the grant, and provided to campus sponsors of extracurricular activities. The project director will ensure that

these forms are distributed, that data is gathered and entered into an extracurricular database with student numbers so that extracurricular activities of academy students can be differentiated from extracurricular activities of the general population, and accessed by the evaluators. Evaluators will attend faculty meetings and the annual retreats of the three smaller learning communities to collect data, present their findings and participate in goal setting.

Method for describing, on an annual basis, the smaller learning communities and related program changes undertaken to make the smaller learning communities safe and successful.

The faculty of each academy and the NGC will meet to review and reflect on their progress monthly. The evaluator will develop a “process observation” form and an “action item” form. Each form will be completed by a designated teacher during their monthly meetings. The “process observation” will gauge the contributions of staff toward problem solving, and the “action item” will record any changes that are made to staffing, scheduling, procedures or instructional techniques. These will be forwarded to the evaluator monthly, and analyzed along with performance data for an annual report. The evaluator will include findings of focus groups with students in the annual report to the district.

E. ADEQUACY OF RESOURCES

This proposal includes a commitment of \$330,444 from SMCISD, a commitment of \$30,201 from SWT, and a request for federal support in the amount of \$486,017 in direct costs, and \$13,983 in indirect costs. A high tech media lab has been provided through a corporate foundation grant for Visual and Performing Arts Academy, and district E-rate funds are being used to equip the Academy for Math, Science and Technology Academy with a CAD (Computer-aided Drafting) lab. The local contributions noted in this proposal do not include in-kind support from local businesses who have volunteered to assist in career awareness activities. The district has committed to fund one position for a Director of both academies. Private funds will be sought to fund a second position.

SMCISD has asked for no funds to purchase equipment, and has planned the use of funds to maximize the delivery of services to students and professional development for teachers. That is, we have asked for \$254,500 to provide additional academic support and career awareness activities for students, and approximately \$126,000 for professional development and extended planning time for teachers. These funds will be sufficient (but necessary) for this project to succeed. The Superintendent has agreed support a request for additional district funding to continue this project beyond the funding period. In closing, with the resources made available through this grant, SMCISD staff are confident they can and successfully implement this project and achieve the goals identified.

Section 427 of GEPA Statement

The parents of economically disadvantaged students may not encourage their children to participate in activities or take advanced coursework leading to post-secondary education, fearing that they would not be able to afford it. Therefore, we ensure that information regarding the availability of financial assistance for college, and the type of coursework needed to attend, is communicated to parents beginning in sixth grade. Also, a counselor is specifically assigned to help students find scholarships and other kinds of financial aid while in high school.

Past cultural abuses of Hispanic students may make the families feel unwelcome in the school setting. Therefore, programs will incorporate activities which honor the Hispanic culture. Specifically, Visual and Performing Arts will include screenplays by Hispanic authors, include Hispanic visiting artists, and include Ballet Folklorico in the dance program. Math, Science and Technology will incorporate projects such as the documentation of contributions of Hispanic community members in the history of San Marcos in a web-based media.

The narrative includes details of extensive efforts to provide additional academic support to students who need it to meet high standards, and to achieve a population in the programs funded which reflects the general population by gender, race, economic linguistic advantage.