



Special School District

**Program Evaluation
for
Technical Education**

**Randy Dillon
September 27, 2005**

SPECIAL SCHOOL DISTRICT
Technical Education Program Evaluation

TABLE OF CONTENTS

Table of Contents.....	i
List of Appendices.....	iii
Executive Summary.....	iv
CHAPTER I	
INTRODUCTION.....	1
Background and Purpose.....	1
Focus for the Program Evaluation (Board of Education questions).....	1
Structure of the Report.....	1
Definition of Terms.....	2
CHAPTER II	
LITERATURE REVIEW.....	5
CHAPTER III	
METHODOLOGY.....	9
Process.....	9
Methods for Data Collection and Analysis.....	9
CHAPTER IV	
PROGRAM DESCRIPTION.....	11
CHAPTER V	
RESULTS (DISCUSSION OF FINDINGS).....	14
Question 1	14
Question 2	17
Resource Standards	17
Program of Studies 1.3	17
Class Size/Assigned Enrollments 2.1	18
Professional Support Staff 3.1 - 3.2	18
Administrative Staff 4.3	19
Certification/Planning 5.1 - 5.2	19

Process Standards	21
Instructional Design and Practices	
6.1 - 6.3	21
Differentiated Instruction and	
Supplemental Programs 7.3	25
School Services 8.1.2	26
Survey Results	28
MSIP Advanced Questionnaire	28
SSD Climate Surveys 2004	30
Program Performance Review Surveys	33
SSD Climate Surveys 2005	34
Component District Surveys	36
Question 3	38
CHAPTER VI	
RECOMMENDATIONS.....	40
CHAPTER VII	
COST ANALYSIS	41
REFERENCES.....	42
APPENDICES.....	

APPENDICES

Appendix 1	HSTW Report for North Tech
Appendix 2	HSTW Report for South Tech
Appendix 3	MSIP Teacher/Administrator Survey 2004
Appendix 4	MSIP Student Survey 2004
Appendix 5	MSIP Parent Survey 2004
Appendix 6	Administrator Climate Survey 2005
Appendix 7	Teacher Climate Report 2005
Appendix 8	Parent Climate Report 2005
Appendix 9	Component District Counselor Survey 2003
Appendix 10	Component District Principal Survey 2003
Appendix 11	Administrator Climate Survey 2004
Appendix 12	Teacher Climate Survey 2004
Appendix 13	Parent Climate Survey 2004
Appendix 14	Program Performance Review 2005

EXECUTIVE SUMMARY

Introduction

Public schools in the United States have historically served multiple purposes. At first, they served mostly to discriminately separate the upper 10% - 20% of the most able students who were capable of providing leadership in government, commerce and the professions. In time, they also began to provide a universal, basic education in literacy and civics that provided a safe and reliable population capable of working in both agriculture and industry. As a result of the industrial revolution, schools began to expand chronologically both into earlier years (i.e. kindergarten) and later years (i.e. 12 years of schooling rather than only 4-8 years). As a result of World War I and the technological changes it wrought, not only did public education expand chronologically, but it also began to expand programmatically.

Traditionally, public education prepared students with basic literacy and civic values. Reflecting the recent advances in higher education at the end of the 19th century and the first decades of the 20th century, public schools in the early 20th century added courses to the curriculum and began to expand the range of subjects that were taught. Included in this expansion were classes in practical and manual arts, including agriculture, home economics, business and industrial subjects. Later, marketing and health subjects were added. By the mid-20th century, when the world-wide economy was being transformed from the industrial age to the information age, these same vocational courses were modified only slightly, if at all, to reflect the profound changes taking place in the real world of work.

When the world entered the space age with Sputnik in 1959, the first public awareness dawned that public schools were, perhaps, not adequately preparing students for the modern world. While more students were in school, it was obvious that many were simply completing their "twelve year sentence" in public schools before beginning a real life in a wage earning job. Mirroring the national demand for qualified workers with technical skills, the federal government in 1963 passed the first fundamental change in public school law pertaining to vocational programming since the Smith-Hughes Act of 1917.

As a result of this 1963 law, states across the country began to enact legislation to provide for Area Vocational Technical School (AVTS) programs and to construct AVTS buildings. Special School District received permission from voters in St. Louis County to operate AVTS programs in 1965. In 1967-68 North County Technical High School and South County Technical High School were constructed and opened. Programs were open to students from all St. Louis County districts. In 1981, SSD also built West County Technical High School. In that same year, the district entered into a consent decree with the St. Louis Public School District and the State of Missouri under direction of the United States District Court to racially integrate the programs of the two districts.

After 24 years of desegregation, SSD is once again capable of operating programs, under its own jurisdiction, providing opportunities for high school students who have clear career goals which can be met in part through technical training. In the intervening years, however, the economy and world have changed. Career and Technical Education (CTE), as it is now titled, is expected to provide not only technical skills, but also academic skills required of students to enter and maintain growth in a global economy. The primary purpose of technical education continues to be preparation for competitive, entry-level employment. However, an increasingly important secondary purpose is to prepare for continued education and skill training in an occupational field of choice.

Literature Review

The literature review consists of highly selective documents which relate in a direct fashion to the questions at issue. The 2001 MSIP report prepared by the Department of Elementary and Secondary Education is the primary source for question one. The MSIP Standards and Indicators Manual for 3rd Cycle is the primary source for question two and three. Several documents from the National Dissemination Center for Career and Technical Education provide additional direction for question three as do the many surveys conducted by the district and division over the past two years. High Schools That Work has conducted two Technical Assistance visits and those reports have also been reviewed.

Methodology

This review uses three primary sources of data. First, it reviews the findings of the 2001 MSIP conducted by the Department of Elementary and Secondary Education to determine what concerns were noted in that visit. These findings are generally narrative in nature and relate directly to the standards of the Resource or Process standards of the MSIP. Second, data from the 2004-2005 school year are reviewed to determine how

closely data from the most previous year meet the expectations of the 3rd cycle MSIP and to give guidance to what actions need to take place during the 2005-2006 school year in preparation for the MSIP visit in May. Third, survey data from administrators, teachers, para-educators, parents, students, advisory committee members, component district counselors, and component district principals were analyzed to determine strengths and challenges for the program.

Program Description

The portion of the report describes the programs in technical education at the secondary level. It describes in brief the nature of the programs and the purposes of the technical education program in general. There is also a brief detailing of the various support services provided by the AVTS.

Results

This portion of the program review reports the findings from the data sources. There are several concerns from 2001 which have been, or are being addressed. There are several areas in the 3rd cycle which require some response. Finally, there are a few issues which remain yet unaddressed for the next MSIP. The three questions that will be addressed in this review derive from the last MSIP and anticipate the forthcoming MSIP in May, 2006.

Recommendations

This part of the program review addresses directly the findings reported above and makes several suggestions about how these findings might be resolved. The major recommendation resulting from the 2001 MSIP is the installation of vent hoods in the science rooms at North Tech and South Tech.

The major recommendations resulting from the 3rd Cycle MSIP Resource and Process Standards are (1) development of school websites, (2) reallocation of Admission Representatives, (3) continued support for academies, and (4) increasing enrollments. The recommendations resulting from the survey data are that communication be improved with component districts and that professional development be improved with activities specifically oriented to the needs of technical education.

Cost Analysis

A cost analysis per student is provided.

CHAPTER I

INTRODUCTION

Background and Purpose

Special School District is committed to program improvement. An approved program evaluation framework has been used as a guide for this program evaluation. This report evaluates the services provided to students who are enrolled in the two technical high schools, North Tech and South Tech.

There are three phases of this program evaluation: context, implementation and process. Context evaluation looks at the discrepancy between what exists in a program and what is desired. Implementation evaluation looks at how the program is currently being implemented. Process evaluation looks at the strengths and weaknesses of the program.

Focus for the Program Evaluation

The focus of this program evaluation is to answer the following questions, which were generated by the steering committee and approved by the Board of Education.

1. What is the status of the concerns for the technical schools identified as a result of Special School District's 2nd cycle MSIP review?
2. To what degree are the schools meeting the 3rd cycle MSIP expectations?
3. What actions need to be taken during the 2005-2006 school year to meet the 3rd cycle MSIP expectations?

Structure of the Report

The structure of this report will consist of a review of current literature to determine quality indicators for providing services to students enrolled in technical education and a review of methodology used to evaluate the services. The results and findings will be assessed against the quality indicators found during the literature review. Recommendations will be made which derive from the findings.

Definition of Terms

For the purpose of this report it will be important to define commonly used terms.

Academic refers to the traditional subject disciplines of secondary education: (1) English/language arts/communications, (2) social studies, (3) mathematics, (4) science, (5) fine arts, (6) practical arts, and (7) physical education/health.

ASVAB is the *Armed Services Vocational Aptitude Battery*, a test designed to determine vocational interests, aptitudes and manipulative abilities.

AVTS stands for *Area Vocational-Technical School*. This term describes the model adopted by the state of Missouri for its vocational programming dating back to 1963. The AVTS provides centralized programs for many surrounding school districts which send students to the AVTS, usually on a half-day attendance. The programs are normally occupationally specific and equipment intensive, such that the cost of replicating the program in the comprehensive school would be cost prohibitive.

HSTW is the acronym for *High Schools That Work*, a project of the Southern Regional Education Board designed to provide a framework for school-wide reform. Both North Tech and South Tech are members of this national network of high schools. The project encourages participation by all staff and provides a vehicle for involvement by all constituents during the change process.

KeyTrain is a computerized, individualized remediation program designed to assist students in specific academic skills identified on the WorkKeys as needing improvement. (See also PASSKEYS).

MAP stands for *Missouri Assessment Plan*, the primary instrument for determining individual student progress at both the building and district level on a standardized test of academic skills.

MAX Learning is an instructional improvement program. MAX stands for Motivation, Acquisition and Extension. It provides several dozen methods for engaging students in textual material and the learning process. It provides techniques for both literacy and reading improvement.

NAEP stands for *National Assessment of Educational Progress*, a national test which measures basic academic skills. It is administered every other year as a part of the HSTW program to provide the schools with baseline data and to give a snapshot of how much progress is being made by the school.

PASSKEYS is a computerized, individualized remediation program designed to assist students in specific academic content areas. It is correlated with WorkKeys, ACT and the ASVAB. (See also KeyTrain).

PDC refers to *Professional Development Committee*, the committee which is responsible for identifying specific needs and providing professional development activities related to those needs. The Technical Education PDC is a subset of the larger district-wide PDC.

Perkins is a shorthand for Carl D. Perkins, former Congressional representative from Kentucky, and author of the original several associated laws which bear his name. The 1985, 1990, 1998 and 2005 laws are the federal funding entities which support vocational-technical programs.

Placement refers to the kinds of activities which students pursue *after* graduating from the technical school, unlike placement in special education which often refers to placement into a program at the *beginning* of services. These activities are categorized as employment, continued education or military, and they may be related or unrelated to the field of training in which the student participated.

PLAN is a precursor to the ACT which provides students with an objective picture of their current level of academic achievement and areas in which they need improvement in order to be more successful when taking the ACT. It is administered to sophomores.

PPR stands for *Program Performance Review*, an internal assessment of program effectiveness and efficiency. The review is based on three surveys of staff, students and advisory committee members, with a follow-up interview of the staff.

Program in the context of technical education refers specifically to one of seven disciplines within the field of technical training: (1) agriculture education, (2) business education, (3) family and consumer science (FACS), (4) health science, (5) marketing education, (6) trade and industrial education, and (7) cooperative education. SSD operates programs in all but marketing and cooperative education. This term is also often used in a generic sense to describe one or more specific activities within the larger school structure.

Ruby Payne "Frameworks of Poverty" is a program designed to promote an understanding of social and cultural differences which result from economic disparity and how those differences result in distinct behavioral responses in students.

TABE is the *Test of Adult Basic Education*, an instrument designed to measure the level of academic achievement of adult learners, often in preparation for remediation and/or the GED. It provides an early assessment of areas in which high schools students may be experiencing difficulty. While not specifically diagnostic, it can be used as a guide for general remediation.

Technical Education is a term which SSD employs to describe the technical training programs operated by the district under authority of the State Board of Education and the Department of Elementary and Secondary Education. Synonyms include *vocational education*, *applied technology services* and the most recent term *career and technical education*.

Vocational Student Organization (VSO) refers to several student groups organized within the larger program area. These include: (1) *Skills USA VICA* (Vocational Industrial Clubs of America) for Trade & Industrial and some FACS programs, (2) *FBLA* (Future Business Leaders of America) for business programs, (3) *FFA* (Future Farmers of America) for agriculture programs, and (4) *FCCLA* (Future Child Care Leaders of America) for FACS Child Care programs. These organizations encourage leadership, competitions, entrepreneurship, skill development and workplace readiness.

WorkKeys is a test of basic academic skills which are directly related to work performance requirements. It is supported by American College Testing (ACT) and designed to detect how closely a student's academic abilities relate to actual needs in a given occupation. The test is given to incoming juniors and then again, a year later, to those same students who are seniors.

CHAPTER II

LITERATURE REVIEW

The literature of vocational-technical education and career and technical education is vast. Any attempt to perform a comprehensive review of the literature would be overwhelmingly time consuming and not necessarily related to the questions at hand. Therefore, the literature review for this report has been limited to addressing the specific questions giving structure to the report and then a few selected documents which give some direction to future actions.

Specific to the first question of the program review, the necessary literature review involves an analysis of the 2001 final MSIP report submitted by DESE to the State Board of Education. This report contains the concerns which were noted by the visiting team and it provides a basis for determining what the status is of those concerns at this time.

The 2001 MSIP Report notes concerns in only a few areas in the Resource and Process Standards. The district was cited for not meeting Resource Standards in the Program of Studies because North Tech and South Tech did not offer foreign language and music. North Tech also did not offer health. In the Process Standards the Library Media Centers standard in the tech schools was cited as "not met" due to lack of a service/procedural plan and the lack of a Core Data report regarding professional materials from North Tech. There was also a lack of a curriculum or instruction in library skills. In the Facilities and Safety standard North Tech was cited for not having a fully compliant ADA restroom. There were also several various safety hazards identified.

Specific to the second and third questions of the program review, the necessary literature review involves the Standards and Indicators Manual for MSIP 3rd Cycle published by DESE. This document provides the basis for analyzing how closely the technical schools are adhering to the MSIP standards which will be reviewed in May 2006.

The Resource Standards concern regarding music is the only continuing area of concern from the 2001 report, however, music is not mandated and the offering of several art classes should suffice to meet the fine arts standard. Foreign language is now offered as is health at North Tech. There are always a few concerns regarding teacher certification which result from Core Data inconsistencies. These are usually the result of keying errors or course code matters which typically are resolved quickly. There are no major concerns expected in this standard.

As a corollary to the above documents, selected documents were reviewed from the National Dissemination Center for Career and Technical Education, a national clearinghouse for research in vocational-technical education. Specifically, five research reports dealing with pertinent issues now facing SSD were reviewed to determine how closely present efforts matched programming trends at the national level. Additionally, a very recent interview with Willard R. Daggett, President of the International Center for Leadership in Education and a former state education official in New York, provides some additional commentary worthy of note.

"Career and Technical Education: A New Look" provides a brief, but broad, analysis of new directions being pursued in successful technical education programs across the country. Of particular interest is the notion that Career and Technical Education (CTE) "...offers broader career pathways ...focused on meeting local labor market needs..." The article notes that a name change alone is insufficient to improve the image of CTE without corresponding changes in the content of the subject matter being taught. "The most successful career academies have not only made structural changes, invested resources in integration, and developed partnerships with employers and postsecondary institutions. They have also attempted to rethink the entire process of schooling." The article concludes that CTE should demonstrate its successful outcomes, emphasize the marketability of its graduates, cultivate the support of influential advocates, be responsive to the local labor market, and start successful marketing by beginning where students are now.

Because the now defunct MVTC placed so much emphasis on "career academies" during its last three years, and due to the enormous interest placed on this concept by local superintendents, the article "Career Academies" seemed an appropriate place to look at this concept. The article notes that the three components of "career academies" are a school-within-a-school clustering of students, partnerships with employers and integrated academic and occupational curricula. The conclusions from this report indicate that these three components are vital for success, and that academies must be responsive to local needs and circumstances, attract a diverse population, promote retention and graduation, improve the quality for teachers and effective a cohesive culture.

With the formation of a new advisory board for technical education, the article "Career and Technical Education: Getting School Counselors on Board" is a pertinent article to consider in view of the upcoming MSIP in May, 2006. There were many suggestions for improving relationships with sending school counselors that appeared relevant for SSD. Among the best are: (1) having counselors on advisory committees, (2) sharing success stories, (3) workshops at the AVTS for sending school counselors, and (4) providing programs at the sending schools.

The inclusion of business, industry and post-secondary representation on the new technical education advisory board expands the former MVTC board and demands that renewed attention be paid to these areas. The article "Business-Industry Relationships and CTE" indicates that "[b]ecause of the perceived disjuncture between what is being taught and assessed in schools and what is actually required in the workplace, the types of school-business relationships that worked in the past are inadequate; new infrastructures are needed." The recommendations indicate that these new structures should (1) develop partnerships on the basis of mutual needs, (2) work with multiple employers, (3) involve all stakeholders, and (4) be sensitive to business culture. These are particularly important criteria not only for secondary programming, but also for adult technical education, customized training and SSD's participation in industry partnerships.

Finally, with the emphasis placed on academics within the technical education curriculum, the article "CTE Contributions to Learning and Earning" offered some thought provoking statistics regarding the effect of CTE programs on earning power. The conclusions are cautionary at best, however, there is increasing evidence that technical skills, combined with strong academic achievement, augur well for increased earning power, particularly for those pursuing associate degrees. Among the findings cited is a 2000 National Center for Education Statistics (NCES) report that found "students with both a vocational concentration and a college preparatory curriculum not only outperformed vocational concentrators only but were statistically indistinguishable from those who completed college preparatory curriculum only." The article also cites the Southern Regional Education Board (SREB) which has "documented achievement gains by vocational students at its High Schools That Work sites, with their stress on concentration of courses in vocational studies, a challenging curriculum, increased graduation requirements and academic course-taking, integrated academic and career-technical education, high expectations, and demanding standards."

A recent interview with Willard R. Daggett, President of the International Center for Leadership in Education, conducted by John Gaal, Director of Training and Workforce Development for the Carpenter's District Council of Greater St. Louis, Missouri focuses on two themes: rigor and relevance. Dr. Daggett is an internationally respected voice for workforce development and technical education. He points out that "[I]n the past, the U.S. school system offered two tracks: college prep and voc-ed. In the 21st century this strategy no longer makes sense. Therefore, in today's world it can no longer be an either/or proposition. It must be a mixture of both." Daggett recommends that the new school promote an increased emphasis on mathematics and science as the pathway to a successful career; one that is both rigorous in its academic demands and, simultaneously, relevant in its content, that is, applicable to the real world, not theoretical and disassociated from real life.

While the MSIP documents indicate standards for measuring the appropriateness of present programs, other documents provide direction for future activities. Among these are the High Schools That Work reports which resulted from Technical Assistance visits conducted during the first year of participation. These reports generally substantiate the Advanced Questionnaires for MSIP and Climate Surveys conducted by the district.

The Technical Assistance Report for North Tech noted that the school "is providing a support system to help all students meet high expectations,...continually upgrading CT programs to meet national standards and industry certifications, ...involv[ing] teachers in staff development and school improvement decisions to enhance instructional practices, ... taking steps to build a quality guidance/advisement system, ... [and developing] a caring faculty and administration dedicated to helping students succeed." The challenges that were noted include: (1) requiring all students to complete the HSTW recommended academic core curriculum along with their career concentration, (2) raising expectations for all students by aligning curricula with state and national standards, (3) using varied instructional strategies to engage all students in the learning process, (4) revising the system of guidance/advisement to involve parents in developing their child's educational programs, and (5) developing and implementing a system to distribute and use data for school improvement.

The Technical Assistance Report for South Tech noted that "Career Technical Education classes are exemplary in breadth and scope,... [there are] several promising practices related to academic coursework, ...the adoption of high expectations offers a good starting point, ... examples of student engagement were noted, ... and the school is focused on targeting professional development activities that are centered on increasing student achievement, including the use of Mark Forger for MAX Teaching with Reading and Writing." The challenges that were observed include: (1) establishing high expectations for all students, (2) providing regular planning time to focus on teacher assignments and to assess the quality of student work, (3) increasing integration of academic and career technical studies, (4) ensuring that students are engaged in the learning process, and (5) establishing a system for extra help for all students

These documents provide a benchmark against which to measure (1) the degree to which technical education programs are consistent with MSIP standards and (2) the direction in which programming should move in the coming years.

CHAPTER 3

METHODOLOGY

This chapter includes information on methodology including the process and the method for collecting data.

Process

The process for gathering data was fairly straightforward for the issues involving the questions. The 2001 MSIP Report from DESE and the Standards and Indicators Manual for 3rd Cycle MSIP are objective and fairly clear in their meaning. The personnel and student data from 2004-2005 is quantitative in nature and addresses the MSIP issues. The survey data provide subjective judgments about the programs and must be interpreted to some extent. Two public forums were also held to solicit input from parents and interested community members.

Methods for Data Collection and Analysis

Several methods were used for data collection. Existing information was gathered from Core Data and other quantitative sources. Aside from the MSIP documents, surveys from staff, students, parents, advisory committee members, and component district counselors and principals were reviewed for strengths and weaknesses. Two public forums were conducted to solicit anecdotal and subjective judgments about the program. The public forums did not prove particularly useful since they were attended by only two parents at each event. More valuable for parent input are the parent surveys. The High Schools That Work Technical Assistance visit reports provide evidence for several MSIP 3rd Cycle standards and indicators. Surveys were administered using the MSIP Advanced Questionnaire for administrators, teachers, parents and students. The SSD Climate Survey was administered to administrators, teachers, paraeducators, and parents. Students and advisory committee members were surveyed using the MSIP Student Survey and Program Performance Review instrument. Component district counselors and principals were surveyed using a satisfaction survey specifically designed for their judgments about the technical schools. It was administered in the fall of 2003.

Table 1: Evaluation Focus Questions and Data Collection Methods

Technical Education Questions	Data Collection Methods							
	Literature Review	Staff / Admin Survey	Parent / Student Survey	2001 MSIP Report from DESE	MSIP 3rd Cycle Standards & Indicators	Public Forum	HSTW Reports	Cost Analysis
1. What is the status of the concerns for the technical schools identified as a result of the Special School District's 2nd Cycle MSIP review?	X			X			X	
2. To what degree are the schools meeting the 3rd Cycle MSIP expectations?	X	X	X		X	X	X	X
3. What actions need to be taken during the 2005-2006 school year to meet the 3rd Cycle MSIP expectations?	X	X	X		X	X	X	X

CHAPTER IV

PROGRAM DESCRIPTION

The Special School District is the AVTS provider for St. Louis County inclusive of 23 component school districts. The Technical Education division operates two technical high schools, North Tech, located at 1700 Derhake Road in Florissant, Missouri and South Tech, located at 12721 West Watson Road, Sunset Hills, Missouri.

SSD provides training for juniors and seniors in 35 technical program fields, in addition to a career exploration program for sophomores. Academic courses are provided in all core academic subjects (English, social studies, science and math) as well as fine arts and physical education. Students may attend either half-day or full-day. Many student organizations are available including VICA Skills USA, FBLA, FFA, FCCLA, TREND, Renaissance, publications, and athletics. As a new era begins for technical education in SSD, a new advisory board is also in place replacing the several court committees that have held authority over the program for over two decades. This new, voluntary, advisory committee holds the promise of providing for technical education, in a reduced manner, what the Governing Council has provided for the district as a whole.

These schools provide programming opportunities in 35 technical occupation fields including:

- Automotive Collision Repair Technology
- Automotive Technology
- Broadcast Captioning
- Business Technology
- Carpentry
- Commercial Art
- Computer Information Systems
- Cosmetology
- Culinary Arts
- Dental Assistant
- Design Technology
- Diesel Technology
- Early Childhood Careers

Electrical Trades
Electronics Technology
Emergency Medical Technician
Environmental Technology
Financial Services
Firefighting
Floral Design/Greenhouse Operations
General Construction Trades
Health Sciences
Heating, Ventilation and Air Conditioning
Laboratory Technologies
Landscape Maintenance/Equipment Operations
Law Enforcement
Machining Technology
Masonry
Motorcycle/Outdoor Power Equipment Technology
Network Administration
Plumbing
Printing Technology
Travel and Tourism
Veterinary Assistant
Welding

There is also a sophomore Technical Education Exploration (TEE) program. An off-campus extension program in Health Sciences is operated at Riverview Gardens High School. An off-campus honors satellite program in Health Science, called Prodigy, is operated at the BJC complex in the city of St. Louis.

A full complement of academic courses support students who attend full-day including courses in communication arts, social studies, mathematics, science, fine arts and physical education. Each school has an advisory period for full-day students. Each building also provides the following support programs and personnel:

Guidance Counselor
College and Career Placement Counselor
Instructional Facilitator
Assessment Facilitator
Learning Center Facilitator
Social Worker
Nurse
Admissions Representative
Instructional Technology Specialist

Instructional Technology Facilitator

District-wide personnel provide services in the following areas:

Curriculum and Instruction
Student Support Services
Certification and Accountability
Admissions
Data, Research and Evaluation Services
Marketing
Business and Industry Representative

Enrollment Trends

<u>Fall Core Data</u>	2001	2002	2003	2004	2005*
North Tech	806	991	1057	1060	1064
(Change in membership)		+185	+66	+3	+4
(Percentage change)		+23%	+7%	+3%	+4%
South Tech	805	945	1028	1021	904
(Change in membership)		+140	+83	-7	-117
(Percentage change)		+17%	+9%	-.7%	-12%
West Tech	194	-	-	-	-
Total Core Data	1805	1936	2085	2081	1968

*estimate

CHAPTER V

RESULTS (DISCUSSION OF FINDINGS)

Question 1: What is the status of the concerns for the technical schools identified as a result of Special School District's 2nd cycle MSIP review?

The 2001 MSIP Report submitted by DESE noted concerns in the following areas:

- (1) No Core Data report regarding professional materials for the North Tech Library Media Center was submitted. (Process 10.1C)

Corrected.

- (2) Restrooms at North County Tech were not fully compliant with ADA. (Process 14.1A)

Corrected. Two ADA compliant restrooms are located in center B-Wing upstairs.

- (3) North Tech did not provide foreign language, music or health. (Resource 1.3)

There is a two course sequence in Spanish . Health is offered as a part of the Physical Education curriculum. While there is no music course, there are three fine art courses in Art.

- (4) South Tech did not provide foreign language or music. (Resource 1.3)

There is a two course sequence in Spanish. Music has been offered as an elective, however in 2004-2005 it will not be offered. There are two fine art courses in Art.

- (5) A limited number of students were enrolled in the district's technical schools compared to the number of students enrolled in the component districts. (Process 8.3A)

Enrollment increased in 2002-2003 and 2003-2004. It remained stable in 2004-2005 and has decreased slightly for 2005-2006 with the withdrawal of the St. Louis Public Schools from the student exchange agreement.

- (6) The district did not have the appropriate career and technical student organization for the Childcare Assistant program. (Process 8.3C)

The district has adopted and implemented the FCCLA (Future Child Care Leaders of America) vocational student organization for the Early Childhood Careers program.

- (7) The district's plan for evaluating the effectiveness of its vocational programs did not include all required components. (Process 8.3E)

The district's five-year rolling plan was cited as inadequate for assessing the effectiveness of vocational programming. The Program Performance Review (PPR) was apparently not cited in the review. The revised assessment plan will address this issue as will the High Schools That Work evaluation.

- (8) Team observations indicated an instructional climate that was not conducive to learning at North Tech. (9.1A)

Specific observations included "students not engaged in the learning process, the lack of a supportive environment created by the stark appearance of the building, teachers in offices rather than engaged with students, and the lack of a full range of school activities to promote the involvement of students in learning." With the change of administrative staff and faculty over the past five years, this will be corrected in the coming report. Staff surveys support an improved atmosphere.

- (9) Service/procedural plans for the library media centers have not been revised. (Process 10.1A)

Service/procedural plans are being revised as a result of the spring 2005 Program Review report.

- (10) A library curriculum is not available and/or library skill instruction is not being implemented. (Process 10.1D)

Library skill instruction is a part of the curriculum of many academic classes particularly as it related to research and the use of the internet. These are especially relevant for the communication arts and social studies curriculums and the Technical Education Exploration program.

- (11) Safety hazards in various places were noted, including (1) safety zones not marked, (2) safety rules not posted, (3) safety goggles not used consistently, (4) safety guards missing, (5) exiting plans not posted, and (6) hooded ventilation for science laboratories.

Following the report, safety zones were marked in shops and safety guards were replaced. A recent walk-through at South Tech indicated that exit plans are posted in all rooms, safety zones are marked in most shops with the exception of those recently moved or renovated, safety goggles are available, and safety guards are in place.

However, safety rules are not consistently placed in shops/labs, goggles should be assigned to each student or sterilized between users and ventilation hoods for science rooms are not in place. Additionally, it has been noted that open shelves and storage cabinets must be attached to the wall, items must be removed from the top of cabinets, and in a few instances fire blankets should be acquired or placed appropriately. Some fire extinguishers were out of compliance. Some tools were not secured. These issues are being addressed through the school safety committees and with the assistance of the facilities department.

Question 2: To what degree are the schools meeting the 3rd cycle MSIP expectations?

The 3rd Cycle MSIP Standards and Indicator Manual has been consulted. The following Resource and Process indicators have been addressed. Other pertinent indicators have been addressed in other program reviews.

RESOURCE STANDARDS

PROGRAM OF STUDIES

- 1.3 High School - Each high school has a current minimum offering of at least 40.5 units of credit, with sufficient sections in each course to meet the needs of all students in grades 9-12 and the state high school graduation requirements. These courses are distributed as follows:**

Discipline	Minimum Standard	Desirable Standard	Actual Units 2004-05
Language Arts	6.0	10.0	7.5
Foreign Language	2.0	4.0	2.0
Social Studies	5.0	6.0	7.0
Mathematics	4.0	6.0	8.5
Science	4.0	6.0	9.5
Fine Arts	2.0	6.0	2.5
Vocational Education	12.0	20.0	105.00
Physical Education	1.0	2.0	1.0
Health	.05	1.0	1.0
Practical Arts	4.0	8.0	17.0
Total:	40.5	69.0	161.0

CLASS SIZE/ASSIGNED ENROLLMENTS

2.1 Class size and Assigned Enrolments - Enrollments will be consistent with both class-size standards and total enrollment requirements.

1. Student enrollment in individual classes will be consistent with the following guidelines:

Grades	Minimum Standard	Desirable Standard	Actual Average 2004-2005
7-12	33	28	13.5 Vocational/TEE 15.9 Academic

PROFESSIONAL SUPPORT STAFF

3.1 Library Media Staff - Certificated librarians and/or library media specialists are assigned consistent with the following ratios, based on the student enrollment at each building:

Students FTE	Minimum Standard	Desirable Standard	Actual Staff 2004-2005
North Tech: 1057 Enrolled	1.2	1.6	1.0
772.5 FTE	.8	1.2	1.0
South Tech: 1006 Enrolled	1.2	1.4	1.0
741 FTE	.8	1.2	1.0

3.2 Guidance and Counseling Staff - Certificated counselors are assigned consistent with the following ratios, based on the student enrollment at each building:

Students FTE	Minimum Standard	Desirable Standard	Actual Staff 2004-2005
North Tech:			
1057 Enrolled	2.2	3.0	4.0
772.5 FTE	1.6	2.2	4.0
South Tech:			
1006 Enrolled	2.2	2.8	4.0
741 FTE	1.6	2.0	4.0

ADMINISTRATIVE STAFF

4.3 Principals/Building Administrators - Certificated principals, vocational directors, and assistant administrators are employed and assigned consistent with the MSIP staff ratios:

Students FTE	Minimum Standard	Desirable Standard	Actual Staff* 2004-2005
2065 Enrolled	2.25	7.0	9.0
1531.5 FTE	3.25	5.25	9.0

* Includes 1 Director, 2 Administrators, 2 Principals, 4 Assistant Principals

CERTIFICATION/PLANNING TIME

5.1 Teacher Certification - All administrators and teachers must be appropriately certificated for their assignments in accordance with the guidelines contained within the Core Data Manual.

Each year there are several certification exceptions reported from Core Data for Technical Education programs. These are usually fairly routine and result from inconsistencies between course codes and certification reported by the district.

Occasionally, the exception will result from a temporarily elapsed certification which has not been renewed in a timely manner or because there is a time lag between the time DESE receives a renewal and when the report is issued. All of these are annually resolved.

5.2 Planning Time - Each full-time classroom teacher, including kindergarten teachers, shall have a minimum of 250 minutes of scheduled planning time each school week. It is desirable to have 50 minutes of planning time each day. Planning time is calculated between the official start and close of the school day and does not include travel time, lunch time or time before or after school. (Planning time is not required for administrators, counselors or librarians.)

Core Data reports the provision of planning time for technical education staff. There are no reports of exceptions on this issue.

PROCESS STANDARDS

INSTRUCTIONAL DESIGN AND PRACTICES

- 6.1 The district implements written curriculum for all its instructional programs.**
- 1. Each written curriculum guide must include: (1) a rationale which relates the general goals of each subject area and course to the district's mission and philosophy, (2) a general description of the content, (3) general goals for graduates in each subject area, (4) specific, measurable learner objectives for each course, (5) alignment of the measurable learner objectives for each course to the knowledge, skills, and competencies that students need to meet the district's goals and the Show-Me Standards, (6) instructional strategies and specific assessments for a majority of the learner objectives, (7) evidence that individual learner objectives have been articulated by grade level/course sequence, (8) date of board review and approval for each curriculum guide.**
 1. Written curriculum guides are available for all academic courses and vocational programs in the Technical Schools. The guides contain all of the components required by MSIP and were Board of Education approved on December 9, 2003.
 - 2. Teachers receive training on the curriculum review and revision process, curriculum alignment, and classroom assessment strategies.**
 2. Teachers were involved in the development/revision of all curricula and have been in-serviced in curriculum development, review, revision, alignment and assessment. Academic staff meet in department meetings twice each year and vocational staff meet with advisory committees twice each year. Additional training has been provided through the High Schools That Work (HSTW) grant with particular emphasis on MAX Learning.

3. The written curriculum incorporates content and processes related to equity, technology, research, and workplace-readiness skills.

3. The four components of equity, technology, research and workplace-readiness are woven throughout the various curricula. Specific examples will be provided.

4. Systematic procedures are used to review and revise the written curriculum.

4. A Curriculum Development Process and Curriculum Review Timeline have been developed.

6.2 The district administers state-required tests and other tests and uses disaggregated and longitudinal assessment data to adjust its curricula and instruction.

1. The district has a written assessment plan which includes: (1) what tests are used and the purpose for each test, (2) guidelines are including students with disabilities in district testing programs, (3) specific strategies for assessing the Show-Me Standards which are not assessed through the Missouri Assessment Program (MAP), (4) a description of how assessment results will be used and disseminated, (5) provision for staff development activities directly related to the assessment program, (6) provisions for teaching test-taking skills to students, (7) a test security policy.

1. SSD Assessment Plan is in the process of revision.

2. The district has implemented strategies to motivate students to take required tests seriously and to recognize those who perform well on the Missouri Assessment Program examinations.

2. Assessment Facilitators are assigned to each building. One aspect of their duties is to assist teachers in motivating students to take seriously all tests, but particularly the MAP, NAEP and WorkKeys. Selected teaching staff have participated in MAP skills training which have also presented techniques for enhancing student motivation to perform well on the tests.

3. **The board annually reviews performance data disaggregated based on race/ethnicity, gender, identified disability, migrant, and/or LEP students in order to effectively monitor student academic achievement and dropout/persistence-to-graduation rates. (Other areas in which the district might consider disaggregated data helpful are placement rates in special programs, attendance rates, retention rates, and suspension/expulsion rates.)**
3. The Board of Education reviewed performance data in the spring of 2005, including MAP scores, drop-out rates, placement rates, attendance rates, and discipline data.
4. **If there is a significant difference in the disaggregated achievement and/or dropout rates among various student subpopulations, the district uses this information to adjust instruction for these populations and has criteria for evaluating the effectiveness of these adjustments.**
4. Significant differences in achievement, among various sub-groups of students, are shared with staff. HSTW committees are using these data to address instructional modifications which might assist students who are under-achieving. The Learning Center also provides access to PassKeys and Worktrain, two remediation software programs which assist students to build academic skills.
5. **The district uses a variety of assessment data (longitudinal, demographic, disaggregated, diagnostic, surveys) to support district-wide decisions about curriculum and instruction.**
5. Data is derived from many sources including MAP, WorkKeys, NAEP, PLAN, Accu-placer, TABE, annual Program Performance Reviews (PPR), and surveys of administrators, staff, parents and students. All of these data are included in building strategies directed toward achieving the goals of the district as set forth in the Rolling Plan (Strategic Plan).

6.3 The district has implemented effective instructional programs designed to meet the assessed needs of its students, as well as the practices and procedures needed to support these programs.

1. The district provides a professional development program that focuses on and supports its curriculum and instructional practices.

1. The PDC in Technical Education supports efforts to improve the instructional program with particular emphasis on (1) Ruby Payne, Poverty and Learning, (2) Mark Forget, MAX Learning, (3) e-MINTS technology, and (4) PDC training for professional development committee members.

2. Classroom strategies that accommodates students' individual learning needs are implemented.

2. The Ruby Payne and Mark Forget training sessions are proving to be very beneficial for meeting individual student needs. Additional support is provided by the Instructional Facilitator (IF) who is assigned to each building. Their role is to provide individual modifications for students who require assistance due to unique learning needs. A Learning Center is also available in each building to address specific reading and mathematical difficulties. Dual credit college credit classes are provided in English and Biology through the 1818 program articulation with St. Louis University. Advisory periods provide additional time for small group assistance on homework and developing study habits. A Distance Learning Center is available at each site and has been used for full-semester classes and short-term instruction.

3. A balanced, research-based reading program is in place for grades K-3.

3. NA

4. Teachers use current assessment information to plan instruction and have received specific training on this process.

4. Academic staff use assessment data to indicate areas in which instruction needs to be improved. Technical staff use assessment data and the PPR as a gauge for improving both the related and hands-on portion of their instruction. Vocational advisory committees are made aware of assessment data and their suggestions for improvement are solicited.

5. The district consistently provides access to extended learning time and alternative instructional delivery systems for all students.

5. Extended learning is not provided due to the nature of the technical school, however alternative instructional delivery of instruction is provided in Advisory Periods and through the Learning Center.

6. The district identifies and provides targeted instruction or other needed services/interventions for educationally-disadvantaged, ESOL, migrant, and homeless students, as well as students who may, for other reasons, be at risk of leaving school without completing high school.

6. Special Needs students are provided services as needed or as required by an IEP. Disadvantaged, ESOL, Migrant, and Homeless students are provided with services from the Instructional Facilitator in the form of modified curricula and the monitoring of supplemental services. The Learning Center provides direct instruction and remediation. The Social Worker provides supplemental social services necessary to maintain attendance and to meet basic needs. The Assessment Facilitator provides testing and assessment services to assure that students are receiving appropriate instruction. Students who are at-risk of becoming a drop-out are identified as early as possible. Intervention services are provided on an individual basis befitting the individual need of the student, but may include personal counseling, family counseling, referral to service agencies, remedial assistance with academic studies in the Learning Center, assistance from the Social Worker, assistance during the Advisory period or assignment to an alternative program.

DIFFERENTIATED INSTRUCTION AND SUPPLEMENTAL PROGRAMS

7.3 Vocational education is an integral component of the educational program.

1. Competency-based curriculum has been implemented to meet the diversified needs of all students and prepare them for entry into the workplace and/or continued education.

1. All technical curricula are competency-based and are reviewed annually by advisory committees comprised of representatives

from businesses and industries. The curricula prepare students for both competitive entry-level employment and continued education at the successful completion of the program.

2. Career and technical student organizations for each approved vocational program are in place as intra-curricular instructional methods.

2. Career and technical student organizations are available for all students. These include SkillsUSA sponsored by the Vocational Industrial Clubs of America (VICA), Future Business Leaders of America (FBLA), Future Farmers of America (FFA) Future Child Care Leaders of America (FCCLA)

3. Vocational education programs provide students with assistance in the transition to the workplace and/or continued education.

3. A College and Career Placement Counselor is assigned to each building with the specific responsibility of assisting students in successfully transitioning from high school into work or continued education.

4. The district implements an accountability system to assess student progress and program effectiveness.

4. Since 1987 the district has used the Vocational Instructional Management System (VAMS) as the software program to track student progress through the vocational curriculum. For over 10 years, the district has used the Program Performance Review to determine program effectiveness.

SCHOOL SERVICES

8.1 At least biennially, the district reviews the goals and objectives of each program and service; received reports of the effectiveness of each program and service; and, takes action to ensure that these programs efficiently achieve their goals.

2. The district conducts thorough follow-up studies of its graduates (during one of the first two years and the fifth year following graduation) and conducts surveys of employers and

colleges on how well the district has prepared students for work or post-secondary education.

2. The required 180 day follow-up for all vocational completers is conducted annually. A survey of employers and colleges to determine satisfaction with student placement is a part of the Program Performance Review (PPR) conducted annually.

Survey Results

I. MSIP Advanced Questionnaire (Fall, 2004)

(1) Administrator and Teacher Surveys

The MSIP Advanced Questionnaire administered to technical education teachers and administrators indicated strengths on the following indicators, as evidenced by the noted percentage who either agree or strongly agree:

- item #7, availability of curriculum guides (87%)
- item #19, parents provided with information about programs (91%)
- item #20, regular communication with parents (95%)
- item #24, parents provided with class expectations (82%)
- item #32, students are treated fairly (82%)
- item #38, all children can learn (95%)
- item #39, teachers here are good teachers (87%)
- item #41, teachers communicate about what is to be learned (91%)
- item #44, parents want their children in this school (95%)
- item #45, this school is a good place to learn (91%)
- item #46, teachers make learning interesting (86%)
- item #47, teachers will listen (92%)
- item #48, teachers in this school really care (89%)
- item #49, teachers treat students with respect (85%)
- item #50, expectation for all students to achieve at a high level (85%)
- item #52, expected to participate in professional development (96%)
- item #53, professional development is an integral part of job (94%)
- item #59, good communication between teachers and students (88%)
- item #63, students are regularly provided information about performance (91%)
- item #73, students are safe (88%)
- item #74, I feel safe (85%)
- item #83, I look forward to each working day as a teacher (85%)
- item #92, vocational education is an essential part of the district (87%)

The MSIP Advanced Questionnaire revealed challenges on the following indicators, as evidenced by the noted percentage who either disagree or strongly disagree:

- item #67, rules of conduct for students are consistently enforced (34%)
- item #91, discipline is handled fairly (25%)

(2) Student Surveys

The MSIP Advanced Questionnaire administered to technical education students indicated strengths on the following indicators, as evidenced by the noted percentage who either agree or strongly agree:

item #22, all students are given a chance to succeed (73%)

item #38, my teachers think I can learn (73%)

item #49, my family believe that I can do well in school (79%)

The MSIP Advanced Questionnaire revealed challenges on the following indicators, as evidenced by the noted percentage who either disagree or strongly disagree:

item #34, in our community people tend to trust each other (34%)

item #35, our classes are often interrupted (33%)

item #51, I would attend a different school if I could (43%)

(3) Parent Surveys

The MSIP Advanced Questionnaire administered to technical education parents indicated strengths on the following indicators, as evidenced by the noted percentage who either agree or strongly agree:

item #27, my child is given a fair change to succeed at school (89%)

item #29, my child likes attending this school (88%)

item #30, I can talk with child's teachers or principal (89%)

item #31, my child's school is a good place to learn (89%)

item #35, I am welcome to discuss my child's needs (90%)

item #43, access to computers at school is important (91%)

item #46, vocational education is an essential part of the district (85%)

item #51, my child knows what he is supposed to be learning (89%)

item #52, my child's teacher expects very good work from my child (87%)

item #65, I believe my child can do well in school (96%)

item #69, my child's teachers think my child can learn (86%)

The MSIP Advanced Questionnaire revealed no major challenges.

A comparison of student and parent survey results in the highest and lowest rated indicators indicate that parents and teachers view issues more similarly than do students. However, there is concurrence that students can learn, that they are given a chance to success and that their families believe that they can succeed.

II. SSD Climate Surveys (Spring 2004)

(1) Administrator Survey Results

Administrators in Technical Education indicate high ratings in the construct areas of work relationships, (mean 4.4); respect, (mean 4.4); belonging, (mean 4.2); and supervision, (mean 4.2). Specifically, high ratings are noted in:

Belonging:

item #2, being a part of the department (4.6);
item #6, being recognized for good work (4.4); and
item #8, being a full member of the department (4.4).

Respect:

item #10, being treated with respect (4.4) and
item #11, being listened to about ideas to do things differently (4.4).

Supervision:

item #12, being treated with respect (4.4),
item #17, being provided opportunities to develop skills (4.4), and
item #15, brings members of the administration into one team (4.3)

Work Relationships:

item #21, seeing the results of work (4.4)
item #23, working effectively with staff in small groups (4.5)
item #20, working with SSD team in my department (4.4) and
item #22, working with families (4.3).

Administrators in Technical Education indicate lower ratings in the construct areas of professional development, (mean 3.2) and reorganization, (mean 3.3). Specifically, low ratings were noted in the following areas of each category:

Professional Development:

item #66, coaching to develop instructional skills (2.0)
item #78, access to centralized SSD facilitators (2.0) and
item #79, access to SSD regional facilitators (2.0)

Reorganization:

item #83, special education services and staff closer to students (3.2)
item #82, understanding the goals of reorganization (3.4) and
item #84, advancing the concept of One Child One Team (3.4)

Administrator Summary:

Reorganization would be expected to be a relatively low rating due to the fact that it did not as significantly impact technical education as it did special education. Other low rated items (#61, #62, #81, #77) in professional development dealt with special education issues which again might be expected to indicate low rating. High ratings in professional development included issues dealing with the PDC (#80, 4.3), making decisions based on data (#70, 4.3) and using data with staff (#71, 4.3). Among other high rated items are #47, a clear vision for technical education (4.5), #85 job satisfaction (4.4), #87 work relationships (4.4) and #35, student achievement increasing through higher standards and expectations (4.4).

(2) Teacher Survey Results

Teachers in Technical Education indicate high ratings in the construct areas of work relationships (mean 4.4); and student achievement (mean 3.9). Specifically, high ratings were noted in the followings items of each category:

Work Relationship:

item #21, seeing the results of work with students (4.7)
item #23, working effectively with students (4.5) and
item #22, working effectively with families (4.3)

Student Achievement:

item #34, emphasis on building positive relationships (4.2)

Teachers in Technical Education indicate lower ratings in the construct areas of reorganization (mean 3.2) and professional development (mean 3.3). Specifically, lower ratings were noted in the following items of each category:

Reorganization:

item #82, understanding of goals of reorganization (3.3)
item #83, bringing special education services and staff closer to students (3.3) and
item #84, advancing the concept of One Child One Team (3.3)

Professional Development:

item #73, discussion of balanced literacy (2.8)
item #74, discussion of functional assessment/behavior intervention (2.8) and
item #76, universal classroom support (2.8)

Teacher Summary:

Similar to the administrators, teachers in technical education have lower ratings in those areas which are more specifically special education and/or in which the terminology of the question is more special education in nature. Teachers have a high ratings on item #8, working effectively with students (4.5). Most other ratings are in the mid-range or neutral.

(3) Para-educator Survey Results

Para-educators comprise a very small portion of the Technical Education staff. Survey results indicate no construct areas with truly high ratings. However, low ratings are evident in (1) professional development (mean 3.0), specifically on the item #3, opportunity to attend in-service training (2.9). There was also a low rating on item #18, discipline in the school is done fairly (2.7).

(4) Parents Survey Results

Parents with students in Technical Education indicated the highest ratings on item #10, I respect the school's teachers (4.6), followed by high ratings on item #9, being welcome to discuss the student's needs (4.4), item #16, supporting the child's learning at home (4.4), item #17, feeling welcome at the school (4.4), item #22, believing that the technical school expects quality work from the student (4.4) and item #26, overall satisfaction with the technical education school (4.4). The lowest items were #15, the teacher helping the child to learn at home (3.4) and #4, students showing respect for other students (3.6).

III. Program Performance Review (2005)

(1) Student Survey Results

There were no specific climate surveys from students in Technical Education, however, the annual **Program Performance Review** does measure two indicators from students to determine program performance. The item concerning *program quality* reveals ratings consistently in the high 80% to low 90% scale, with only a few programs rating less than 70%. The item concerning *operations* is generally in the high 70% to mid 80% range with several programs at the 90% level.

(2) Advisory Committee Member Results

Advisory Committee members are also surveyed on **the Program Performance Review** instrument. Like students, their scores for *program quality* range in the high 80% to low 90% range. Their ratings on *operations* are also similar to that of students, however, they have fewer ratings in the 90% range.

IV. SSD Climate Surveys (Spring 2005)

(1) Administrator Survey Results

Administrators in Technical Education indicate high ratings in the construct areas of work relationships, (mean 4.4); respect, (mean 4.4); belonging, (mean 4.2); and supervision, (mean 4.2). Specifically, high ratings are noted in:

Belonging:

item #2, being a part of the department (4.75);
item #8, being a full member of the department (4.4).and
item #9, I work effectively with my staff (4.88)

Respect:

item #10, being treated with respect, (4.88) and
item #11, being listened to about ideas to do things differently (4.50).

Supervision:

item #12, being treated with respect (5.00);
item #13, my SSD supervisor provides effective leadership (4.62);
item #15, my SSD supervisor brings members into one team (4.88);
item #16, my SSD supervisor supports shared decision making (4.75) and
item #17, being provided opportunities to develop skills (4.75)

Work Relationships:

item #20, I enjoy working with the SSD team in my department (4.71)
item #21, seeing the results of work (4.88),
item #22, working with families. (4.57) and
item #23, working effectively with staff in small groups (4.62)

Administrators in Technical Education indicate lower ratings in the construct areas of professional development, and those relating to specific special education issues. This reflects similar results with the 2004 survey.

(2) Teacher Survey Results (2005)

Teachers in Technical Education indicate high ratings in the construct area of work relationships (mean 4.4).

Work Relationship:

Item #8, I work effectively with my students (4.57)

item #21, seeing the results of work with students (4.75) and

item #23, working effectively with students (4.56)

Teachers in Technical Education indicate lower ratings in the construct areas of specific special education issues.

Teacher Summary:

Similar to the administrators, teachers in technical education have lower ratings in those areas which are more specifically special education and/or in which the terminology of the question is more special education in nature. This is similar to the 2004 survey.

V. Local District Surveys

(1) Partner District Counselor Survey Results

Counselors in partner districts were surveyed in November 2003.

The highest ratings were in the following areas:

- (1) Overall satisfaction of programming at North Tech (94%)
- (2) Overall satisfaction of programming at South Tech (99%)
- (3) Satisfaction with the admissions representatives (96%)
- (4) Information about tech is easy to obtain for counselors (95%)
- (5) Communication about programs (94%)
- (6) Information about tech is easily obtained by students (93%)

The lowest ratings were in the following areas:

- (1) Information being obtained for parents (84%)
- (2) Accessibility of programs for a wide range of students (86%)
- (3) Communication between North Tech and their school (87%)
- (4) Communication between South Tech and their school (87%)
- (5) Clear and equitable application process (88%)
- (6) Appropriately equipped and maintained buildings (89%)

Overall, counselor ratings were high and indicated a fairly substantial knowledge of technical education. Counselors are usually the key staff in the partner districts who interact with the technical schools.

(82) Partner District Principal Survey Results

Principals in partner districts were surveyed in November 2003.

The highest ratings were in the following areas:

- (1) Information about tech is easy to obtain for students (92%)
- (2) Information about tech is easy to obtain for counselors (83%)
- (3) Satisfaction with the programming at South Tech (82%)

The lowest ratings were in the following areas:

- (1) Communication between North Tech and their school (43%)
- (2) Communication between South Tech and their school (50%)
- (3) Communication about programs (50%)
- (4) Accessibility of programs for a wide range of students (50%)

- (5) Clear and equitable application process (58%)
- (6) Overall satisfaction with programming at South Tech (63%)
- (7) Information being obtained for parents (64%)
- (8) Satisfaction with the admissions representatives (67%)
- (9) Appropriately equipped and maintained buildings (75%)

Overall, principal ratings were considerably less than those of counselors. This might be expected since principals know less about technical education than counselors and since they have considerably less contact with the tech schools. One common element between the two groups seems to be the general area of communication between the tech school and partner district school. This presents an area of challenge for the future.

Question 3: What actions need to be taken during the 2005-2006 school year to meet the 3rd Cycle MSIP expectations?

Based on the results from Question 1 and Question 2, the following actions remain to be taken in order to meet 3rd Cycle MSIP expectations for Resource and Process Standards:

I. Resource Standards:

These actions address Resource Standards 5.1 and 5.2.

- (1) Assure that Core Data accurately reflects appropriate certification of staff.
- (2) Assure that teaching staff are assigned appropriate planning time.

II. Instructional Design and Practices:

These actions address Process Standards 6, 7, and 8 of the MSIP.

- (1) Assure that new or revised curricula contain all components of 6.1.1.
- (2) Assure that equity, technology, research and workplace readiness are woven throughout the curriculum.
- (3) Update the Curriculum Development Process and Curriculum Review Timeline.
- (4) Update the Assessment Plan.
- (5) Improve the dissemination of professional development materials, perhaps through the development of a school website incorporating staff development.
- (6) Share assessment data with staff to improve instruction in areas of challenge.
- (7) Develop opportunities for extended learning through the new school website.

III. Safety Processes:

These actions address Process Standard 14 of the MSIP.

- (1) Install ventilated hoods in all science laboratories.
- (2) Mark safety zones in all shops which have been moved or renovated.
- (3) Post consistent safety rules in all shops/labs.
- (4) Secure all open shelves and storage cabinets to the wall.
- (5) Remove all items from the top of cabinets.
- (6) Safety goggles assigned to each student or sterilized between each user.
- (7) Check fire extinguishers for compliance; replace on regular cycle.
- (8) Check working condition of eyewash stations.
- (9) Check guards on all power machinery.
- (10) Check security of all tools.
- (11) Assure that all safety drills have been conducted.
- (12) Place fire blankets where appropriate.
- (13) Assure that all TV/monitors are tied down on carts.
- (14) Assure that all flammable materials are stored properly.

IV. General Processes from Survey Results:

These actions address challenges from the surveys.

- (1) Provide meaningful and appropriate professional development for staff.
- (2) Improve the sharing of student assessment data with staff.
- (3) Improve communications with component districts, particularly regarding accessibility of programs and the application and selection process.

CHAPTER VI

RECOMMENDATIONS

The following recommendations derive from the findings of the program review.

- Recommendation 1: Install ventilation hoods in all science rooms.
- Recommendation 2: Improve communications with component districts by allowing Admissions Representatives to relocate on a part-time basis to component districts, serving as Career Facilitators.
- Recommendation 3: Work with component districts to provide support for the academies and other new program initiatives which can provide services at either the component district schools or at off-campus extension sites.
- Recommendation 4: Address the lack of capacity in vocational enrollments by assisting the new Technical Education Advisory Board in attracting students to under-enrolled programs.
- Recommendation 5: Develop school websites that can provide extended learning opportunities for students, professional development for staff and increased communication with component districts including an on-line application process.
- Recommendation 6: Improve communication efforts with local districts, particularly counselors and principals, as well as parents.
- Recommendation 7: Improve professional development with staff by offering opportunities commensurate with the needs of the students and major program initiatives.

CHAPTER VII

COST ANALYSIS

The cost per student is calculated according to an agreement arrived at between SSD and the St. Louis Public School District. For FY05 the cost per student at North Tech was \$18,030 while South Tech was \$17,124.

REFERENCES

- Forget, M. A.(2004). MAX Teaching with Reading and Writing. Trafford. Victoria, British Columbia.
- Gaal, J. (2005). Educational Rigor & Relevance: An Interview with Willard Daggett. Techniques 80(6), 34-7.
- High Schools That Work (2003). Technical Assistance Report. North Technical High School Southern Regional Education Board. Atlanta, GA.
- High Schools That Work (2005). Technical Assistance Report. South Technical High School Southern Regional Education Board. Atlanta, GA.
- Imel, S. (2001). Business-Industry Relationships and CTE. InBrief No. 12 National Dissemination Center for Career and Technical Education. Columbus, OH.
- Kerka, S. (2000). Career and Academies. In Brief No. 1. National Dissemination Center for Career and Technical Education. Columbus, OH.
- Kerka, S. (2000). Career and Technical Education: A New Look. In Brief No. 8. National Dissemination Center for Career and Technical Education. Columbus, OH.
- Missouri Department of Elementary and Secondary Education (2004). Missouri School Improvement Program: Advanced Questionnaire. Jefferson City, MO.
- Missouri Department of Elementary and Secondary Education (2004). Missouri School Improvement Program: Integrated Standards and Indicators Manual. Jefferson City, M).
- Missouri Department of Elementary and Secondary Education (2004). Missouri School Improvement Program: Third Cycle Procedures Handbook. Jefferson City, MO.
- Missouri Department of Elementary and Secondary Education (2001). Missouri School Improvement Program: Special School District of St. Louis County. State Board Summary, July, 2001. Jefferson City, MO.
- Missouri Department of Elementary and Secondary Education (2004). Report Writing Form for Third Cycle: Instructional Design and Practices Report. Jefferson City, MO.

- Muss, S.N. and Banks, A. L.(2001). Career and Technical Education; Getting School Counselors on Board. In Brief No. 15. National Dissemination Center for Career and Technical Education. Columbus, OH.
- Payne, R. (2005). A Framework for Understanding Poverty. 4th Edition. Aha! Process. Highlands, TX.
- Special School District (2005). Program Performance Report, 2005. Town & Country, MO.
- Special School District (2005). School Climate Surveys. Town & Country, MO.
- Special School District (2003). Counselor Surveys, Technical Education Division. Town & Country, MO.
- Special School District (2003). Principal Surveys, Technical Education Division. Town & Country, MO.
- Wonacott, M. E, (2001). CTE Contributions to Learning and Earning. In Brief No. 11. National Dissemination Center for Career and Technical Education. Columbus, OH.

APPENDICES

**If you would like to see appendices for this program evaluation
please call Dr. Randy Dillon at 989-8243**

APPENDIX 1

**High Schools That Work (HSTW)
Report for North Tech**

APPENDIX 2

**High Schools That Work (HSTW)
Report for South Tech**

APPENDIX 3

**MSIP Teacher/Administrator Survey
2004**

APPENDIX 4

**MSIP Student Survey
2004**

APPENDIX 5

**MSIP Parent Survey
2004**

APPENDIX 6

**Administrator Climate Survey
2005**

APPENDIX 7

**Teacher Climate Survey
2005**

APPENDIX 8

**Parent Climate Survey
2005**

APPENDIX 9

**Component District Counselor Survey
2003**

APPENDIX 10

**Component District Principal Survey
2003**

APPENDIX 11

**Administrator Climate Survey
2004**

APPENDIX 12

**Teacher Climate Survey
2004**

APPENDIX 13

**Parent Climate Survey
2004**

APPENDIX 14

**Program Performance Review
2005**

APPENDIX 15