



**Special School District
Career Education
Program Evaluation**

Randy Dillon, Chair

October 14, 2008



Career Education Standard Program Evaluation

Program Evaluation Question(s)

What career education programs are offered at SSD?

What does enrollment, completion, placement, and career readiness certification data indicate regarding career education programs at SSD?

What are teacher and student perceptions of the career education programs at SSD?

I. Program/Service Information

1. Name of Program or Services:

Career Education

2. Personnel Responsible for Evaluation and Program:

Dr. Randy Dillon

3. Demographic Description of Program:

Locations: North Tech, South Tech, Off-Campus Sites

Number of Staff:

13 Administrators
127 Certificated Faculty
35 Certificated Support Staff
6 Classified Support Staff
14 Para-Professional
15 Secretarial
21 Adult Education

Participants:

2000 Secondary Students
120 Full-time Adult
1500 Part-time Adult

Length of Program/Service:

Secondary Students – 2 years
Adult Education – Varies with Program

4. Date of Evaluation (Year/Duration):

July – October 2008

5. Goal/Objective of Program/Services:

The goal of Technical Education is to (1) provide secondary students with academic and technical skills which will enable them to become competitive entry-level workers or continue into a post-secondary program, (2) provide adults with initial skill training to enter or advance in a career, and (3) provide adult employed workers with skills to maintain their present employment or re-train for new jobs. This evaluation will preclude analysis of the Adult Education program as it will be covered in a separate program evaluation.



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6. Brief description of relationship between program goals, CSIP and MSIP Standards:
Program goals are related to CSIP and MSIP standards. Information gathered will assist in ensuring that career education is an integral part of the educational program (MSIP Standard 7.3). In addition, results of the evaluation will provide a review of program goals and effectiveness, as well as facilitate program improvement and efficient achievement of goals (MSIP Standard 8.1). Program goals are also related to CSIP goals 1 (Student Performance), II (Highly Qualified Staff), III (Facilities, Support and Instructional Resources), and IV (Parent and Community Involvement).

II. Evaluation Criteria for Programs/Services Offered (check type utilized)

Program Descriptions
Enrollment and Capacity Data
Retention to Enrollment and Completion/Graduation
Placement Data
Teacher Perception Data
Student Perception Data
Student Performance Data-Career Readiness Certification

III. Description of Stakeholders Engagement in Program Evaluation:

The program evaluation committee consisted of stakeholders from schools, community, and business/industry. Committee members and their respective roles are reported below. The program evaluation committee met three times during the year to discuss the evaluation. Agenda items included (a) identifying data needs, (b) determining pertinent data available to the members, (c) analyzing appropriate data, and (d) determining strengths, concerns, and recommendations.

Name	Role
Randy Dillon	Director, Technical Education
Shane Trafton	Administrator, Curriculum and Instruction
Chris Baldwin	Administrator, Program Evaluation
Mike Powers	Principal, North Tech
Dave Baker	Principal, South Tech
Dennis Mix	Administrator, Adult Education
Leigh Roberts	Facilitator – Assessment, South Tech
Kirsta Armstead	Facilitator – Assessment, North Tech
Don Hosutt	Administrator, Student Services and Admissions
Jane Kerlagon	Facilitator, Business/Industry Relations
Marti Garrett	Facilitator, Data, Research and Evaluation
John Gaal	Carpenters District Council



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IV. Results

Data gathered for this evaluation include descriptions of career education programs, capacity and enrollment, retention to enrollment and completion, placement rates, and career readiness certificates. Data for individual programs will be reported below and grouped according to the following career education areas: (a) Business and Graphics, (b) Construction, Mechanics and Technology, and (c) Medical Services, Public Safety and Services.

Business and Graphics

Program Description (Business and Graphics)

SSD currently offers nine programs within the Business and Graphics area. Descriptive program information taken from the SSD website is listed below.

Broadcast Captioning and Court Reporting: This program follows the curriculum of the National Court Reporters Association. Objectives include learning machine shorthand, computer aided transcription (CAT), communications access real-time translation (CART), speed building techniques, editing, court and information reporting, medical and legal terminology, transcript preparation, real-time single and multiple voice transcription. (Offered at South Technical High School)

Graphics Communication - Commercial Art: In Commercial Art students design the graphics and text for advertising, publishing and display purposes. Cross training helps develop an understanding of what it takes to make designs a reality. Students learn design principles, elements and color theory, typography, fundamentals of advertising, graphic design, graphic illustration and electronic media, production and camera ready art, Adobe in Design, Illustrator and Photoshop, Quarkxpress. (Offered at North and South Technical High School)

Graphics Communication - Printing: In Printing Technology students learn about conventional printing methods, flexography and silk screening. This program is PrintED certified and nationally accredited by the Graphic Arts Education and Research Foundation providing students with the opportunity to earn certifications in Introduction to Graphic Communications and Press Operations. Students learn to operate, maintain and troubleshoot equipment, offset inks and dampening chemistry, layout and design, typography, electronic imaging and state of the art direct to plate technology, process color photography, digital prepress activities, proofing procedures, legal considerations, cost awareness, print math, and binding and finishing. (Offered at North and South Technical High School)

Geospatial Technology (New for 2008-2009, formerly Engineering, Drawing and CAD):

Students are trained in the utilization of the latest laser surveying and digital imaging equipment, GPS locators, Adobe Photoshop and Illustrator. Students also learn to plan, interpret and design mechanical, architectural and structural drawings utilizing computer-aided drafting (CAD) techniques. (Offered at North and South Technical High School).



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Fashion Design: Students learn fashion history and trends, design and color theory, design sketching, fashion illustration, pattern making, clothing construction, hand and machine sewing techniques, draping and grading, textiles and trimmings, as well as fashion merchandising and computer aided design. (Offered at North and South Technical High School)

Financial Services: Students learn business ethics, accounts payable and receivable, expenditure and receipt processing, financial statements, billing, payroll, purchasing and inventory procedures. The real estate industry, banking and finance, communications support, basic and advanced skills in word processing, spreadsheet, presentation, desktop publishing and database software are also covered. Students also participate in mock interviews, resume preparation, leadership organizations and community service projects. (Offered at North Technical High School)

Network Administration: This is a college level course offered for honors credit. Network Administration is a comprehensive e-learning program providing internet technology skills essential in a global economy. Students have the opportunity to earn Network +, A +, Cisco Certified Entry Networking Technician (CCENT) and Cisco Certified Network Associate (CCNA) certifications. Students design, build and maintain wireless networks, internet and intranet, security and firewall systems, build and repair computers and printers, troubleshoot hardware and software, assist customers with computer training and problem resolution. This includes routers, switching, operating systems, multimedia capabilities, VLAN and WAN technologies. (Offered at North and South Technical High School)

Travel and Tourism: Students utilize the Sabre reservation system and work with industry partners including Marriott and Drury Hotels, Pinnacle Entertainment, Oceania Cruises, Globus Tours, and Apple Vacations. Students learn Greenwich mean time and the 24 hour clock, U.S. and world geography relative to tourism, customer service and develop sales presentations. Domestic and international fares, official recreation guides, tour packages, rail, air and cruise travel, car rentals and hotels are also covered. Students may earn several certifications through Sabre, Marriott and the Institute of Certified Travel Agents. (Offered at North Technical High School)

Web and Computer Programming: Students learn program logic and design, information systems for business, and a variety of programming languages including HTML, Visual Basic, JavaScript, Java and C++. Web and Computer Programming parallels courses taught at the college level and gives students the opportunity to earn Visual Basic certification. (Offered at North and South Technical High School)



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Enrollment and Capacity (Business and Graphics)

Enrollment and capacity for each of the programs in the Business and Graphics area are listed below in Table 1 (North County Tech) and Table 2 (South County Tech). Enrollment capacity, number of students enrolled on the last Wednesday in September, and percentage of capacity are reported for 2006-2007 and 2007-2008.

Table 1. Enrollment and Capacity: Business and Graphics Programs (North County Tech)

North Technical High School	2006-2007			2007-2008		
	Cap.	N	%	Cap.	N	%
Broadcast Captioning and Court Reporting	40	7	17.5%	NA	NA	NA
Graphics Communication: Commercial Art	40	30	75.0%	40	35	87.5%
Engineering, Drawing and CAD	40	27	67.5%	40	38	95.0%
Graphics Communication: Printing	40	21	52.5%	40	20	50.0%
Financial Services	40	24	60.0%	40	31	77.5%
Network Administration	40	25	62.5%	40	35	87.5%
Travel and Tourism	40	23	57.5%	40	25	62.5%
Web and Computer Programming	40	29	72.5%	40	30	75.0%
<i>Total*</i>	<i>320</i>	<i>186</i>	<i>58.1%</i>	<i>280</i>	<i>214</i>	<i>76.4%</i>

* Total percentages reflect data for active programs for the year ($Total\ N \div Total\ Capacity$).

The overall enrollment versus capacity percentage in the Business and Graphics area at North Technical High School increased from 2006-2007 to 2007-2008 (i.e., 58.1% to 76.4%). The largest increase in enrollment was noted in the Engineering, Drawing and CAD program; whereas the Graphics Communications: Printing program demonstrated a slight decline in enrollment. Broadcast Captioning and Court Reporting was not offered at North Technical High School for the 2007-2008 school year.



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Table 2. Enrollment and Capacity: Business and Graphics Programs (South County Tech)

South Technical High School	2006-2007			2007-2008		
	Cap.	N	%	Cap.	N	%
Broadcast Captioning and Court Reporting	40	12	30.0%	40	24	60.0%
Graphics Communication: Commercial Art	40	21	52.5%	40	16	40.0%
Engineering, Drawing and CAD	40	15	37.5%	40	13	32.5%
Graphics Communication: Printing	40	13	32.5%	40	6	15.0%
Fashion Design	NA	NA	NA	20	16	80.0%
Network Administration	40	15	37.5%	40	12	30.0%
Travel and Tourism	40	5	12.5%	NA	NA	NA
Web and Computer Programming	40	8	20.0%	40	17	42.5%
<i>Total*</i>	280	89	31.8%	260	104	40.0%

* Total percentages reflect data for active programs for the year ($Total\ N \div Total\ Capacity$).

The overall enrollment versus capacity percentage in the Business and Graphics area at South Technical High School increased from 2006-2007 to 2007-2008 (i.e., 31.8% to 40.0%). The largest increase in enrollment was noted in the Broadcast Captioning and Court Reporting program. The discontinuation of this program at North Technical likely contributed to the increased enrollment. The Graphics Communications: Printing program demonstrated the largest decline in enrollment. Travel and Tourism was not offered at South Technical High School for the 2007-2008 school year.



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Retention and Program Completion: Cohort Analysis (Business and Graphics)

Based on information contained in the student information system (SIS), a cohort analysis was conducted to determine the rate of juniors who continued as seniors the following year. In addition, the completion and/or graduation rate of the cohort was examined. Completion and/or graduation is based on students who successfully completed all program requirements and graduated from their home school or an SSD technical education school. Retention and completion status for students in the Business and Graphics area is reported below in Table 3 (North County Tech) and Table 4 (South County Tech).

Table 3. Cohort Analysis: Business and Graphics (North County Tech)

	05-06 Status	06-07 Enrollment and Completion Status		06-07 Status	07-08 Enrollment and Completion Status	
	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed
North County Tech.						
Broad. Capt. and Court Rpt.	5	3 (60%)	2 (40%)	14	4 (29%)	3 (21%)
Graphic Comm.: Comm. Art	16	9 (56%)	9 (56%)	21	14 (67%)	14 (67%)
Eng., Drawing and CAD	8	7 (88%)	5 (63%)	20	18 (90%)	16 (80%)
Graphics Comm. : Printing	13	9 (69%)	8 (62%)	20	9 (45%)	9 (45%)
Financial Services	10	9 (90%)	9 (90%)	17	12 (71%)	10 (59%)
Network Administration	10	8 (80%)	8 (80%)	17	15 (88%)	15 (88%)
Travel and Tourism	11	7 (64%)	4 (36%)	12	6 (50%)	6 (50%)
Web and Computer Prog.	13	11 (85%)	10 (77%)	13	10 (77%)	10 (77%)
<i>Total</i>	86	63 (73%)	55 (64%)	134	88 (66%)	83 (62%)

* Percentages reflect the proportion of the original cohort. Average Margin of Error = 3%.

The overall junior-to-senior cohort retention rate in the Business and Graphics area at North Technical High School declined from 2006-2007 to 2007-2008 (i.e., 73% to 66%). Subsequently, the overall cohort graduation/completion rate also declined across the two years examined (i.e., 64% to 62%). With regard to junior-to-senior cohort retention rate, the Broadcast Captioning and Court Reporting program evidenced the greatest decline across the two years examined; whereas the Graphics Communication – Commercial Art program evidenced the greatest increase. With regard to cohort graduation/completion rate, the Financial Services program evidenced the greatest decline across the two years examined; whereas the Engineering, Drawing and CAD program evidenced the greatest increase.



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Table 4. Cohort Analysis: Business and Graphics (South County Tech)

	05-06 Status	06-07 Enrollment and Completion Status		06-07 Status	07-08 Enrollment and Completion Status	
	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed	11 th Grade Cohort	11 th Grade Cohort	12 th Grade Enrolled
South County Tech.						
Broad. Capt. and Court Rpt.	6	5 (83%)	4 (67%)	6	2 (33%)	2 (33%)
Graphic Comm. Comm. Art	11	6 (55%)	5 (45%)	11	6 (55%)	6 (55%)
Eng., Drawing and CAD	7	5 (71%)	3 (43%)	8	8 (100%)	8 (100%)
Graphics Comm.: Printing	12	10 (83%)	10 (83%)	6	2 (33%)	1 (17%)
Network Administration	9	6 (67%)	6 (67%)	8	4 (50%)	4 (50%)
Travel and Tourism	7	3 (43%)	3 (43%)	2	1 (50%)	1 (50%)
Web and Computer Prog.	9	4 (44%)	4 (44%)	3	3 (100%)	3 (100%)
<i>Total</i>	<i>61</i>	<i>39 (64%)</i>	<i>35 (57%)</i>	<i>44</i>	<i>26 (59%)</i>	<i>25 (57%)</i>

* Percentages reflect the proportion of the original cohort. Average Margin of Error = 3%.

The overall junior-to-senior cohort retention rate in the Business and Graphics area at South Technical High School declined from 2006-2007 to 2007-2008 (i.e., 64% to 59%). However, the overall cohort graduation/completion rate remained consistent (i.e., 57%). With regard to junior-to-senior cohort retention rate, the Broadcast Captioning and Graphics Communication – Printing program evidenced the greatest decline across the two years examined; whereas Web and Computer Programming evidenced the greatest increase. With regard to cohort graduation/completion rate, the Graphics Communication – Printing program evidenced the greatest decline across the two years examined; whereas the Engineering, Drawing and CAD program evidenced the greatest increase.



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Placement Data (Business and Graphics)

Per DESE regulations, follow-up placement data must be collected on any student who earns credit in a vocational/technical education school and subsequently graduates from their home school or the vocational/technical education school. Placement data for the Business and Graphics area is reported below in Table 5 (North County Tech) and Table 6 (South County Tech). Placement reflects the number of students from the follow-up cohort identified as (a) employed in a related field, (b) continuing their education, or (c) serving in the military. Placement data was collected 180 days following student exit from the program.

Table 5. Placement: Business and Graphics Programs (North County Tech)

North Technical High School	2005-2006			2006-2007		
	Cohort	Placed	%	Cohort	Placed	%
Broadcast Capt. and Court Reporting	7	7	100.0%	6	6	100.0%
Graphics Comm. : Commercial Art	14	13	92.9%	14	12	85.7%
Engineering, Drawing and CAD	13	10	76.9%	11	10	90.9%
Graphics Comm. : Printing	15	12	80.0%	14	13	92.9%
Financial Services	11	10	90.9%	10	10	100.0%
Network Administration	9	8	88.9%	9	9	100.0%
Travel and Tourism	17	12	70.6%	14	11	78.6%
Web and Computer Programming	20	19	95.0%	15	14	93.3%
<i>Total*</i>	<i>106</i>	<i>91</i>	<i>85.8%</i>	<i>93</i>	<i>85</i>	<i>91.4%</i>

** Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).*

The overall placement rate in the Business and Graphics area at North Technical High School increased from 2005-2006 to 2006-2007 (i.e., 85.8% to 91.4%). The largest increase in placement percentage was noted in the Engineering, Drawing and CAD program; whereas the Graphics Communications: Commercial Art program demonstrated the largest decline in placement percentage. Detailed placement data is reported in Appendix A – Table 1.



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Table 6. Placement: Business and Graphics Programs (South County Tech)

South Technical High School	2005-2006			2006-2007		
	Cohort	Placed	%	Cohort	Placed	%
Broadcast Capt. and Court Reporting	6	3	50.0%	4	3	75.0%
Graphics Comm. : Commercial Art	9	6	66.7%	13	7	53.8%
Engineering, Drawing and CAD	14	11	78.6%	8	6	75.0%
Graphics Comm. : Printing	15	7	46.7%	10	6	60.0%
Network Administration	9	4	44.4%	11	8	72.7%
Travel and Tourism	7	5	71.4%	4	4	100.0%
Web and Computer Programming	13	12	92.3%	7	6	85.7%
<i>Total*</i>	73	48	65.8%	57	40	70.2%

* Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).

The overall placement rate in the Business and Graphics area at South Technical High School increased from 2005-2006 to 2006-2007 (i.e., 65.8% to 70.2%). The largest increase in placement percentage was noted in the Travel and Tourism program; whereas the Graphics Communications: Commercial Art program demonstrated the largest decline in placement percentage. Detailed placement data is reported in Appendix A – Table 2.

Career Readiness Certificates (Business and Graphics)

The Career Readiness Certificate (CRC) is a credential based on ACT's WorkKeys assessment that gives employers and career seekers a uniform measure of key workplace skills. WorkKeys is an assessment tool that defines, measures and certifies that individuals have the skills and abilities they need to succeed in entry-level work in the 21st century workplace. These skills are for any occupation - skilled or professional - and at any level of education. WorkKeys “job profiles” identify workplace skills and skill level an individual must have to perform successfully. If you score at certain levels on three WorkKeys assessments—Applied Mathematics, Reading for Information, and Locating Information—you qualify for a National Career Readiness Certificate (i.e., Gold, Silver or Bronze). Gold level certificates indicate possession of core employability skills for approximately 85% of the jobs profiled by WorkKeys. Silver level certificates indicate possession of core employability skills for approximately 65% of the jobs profiled. Bronze level certificates indicate possession of core employability skills for 30% of the jobs profiled. The number of seniors assessed and earning certificates in the Business and Graphics area is reported below in Table 7 (North County Tech) and Table 8 (South County Tech).



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Table 7. Career Readiness Certificates: Business and Graphics Programs (North County Tech)

North Technical High School	2006-2007					2007-2008				
	N	Gold	Silver	Bronze	None	N	Gold	Silver	Bronze	None
Broadcast Capt. and Crt. Rpt.	4	0	1	2	1	0	0	0	0	0
Grph. Comm. : Comm. Art	9	1	3	3	2	9	0	5	3	1
Eng., Draw. and CAD	6	0	2	1	3	9	0	6	2	8
Grph. Comm. : Printing	11	0	1	4	6	8	0	0	3	5
Network Admin.	7	0	4	3	0	11	5	4	2	0
Travel and Tourism	8	0	0	4	4	4	0	1	2	1
Web and Comp. Prog.	12	3	2	5	2	7	0	3	1	3
<i>Total N</i>	<i>57</i>	<i>4</i>	<i>13</i>	<i>22</i>	<i>18</i>	<i>48</i>	<i>5</i>	<i>19</i>	<i>13</i>	<i>11</i>
<i>Total %</i>	<i>100</i>	<i>7.0</i>	<i>22.8</i>	<i>38.6</i>	<i>31.6</i>	<i>100</i>	<i>9.6</i>	<i>39.6</i>	<i>27.1</i>	<i>22.9</i>

The total number of students tested on the WorkKeys assessment in the Business and Graphics area at North Technical High School decreased across the two years examined (2006-2007=57, 2007-2008=48). However, the total number of career readiness certificates earned remained relatively consistent (2006-2007=39, 2007-2008=37). With regard to the relative percentage of students receiving certificates, the percentage of students tested who received a certificate increased across the two years examined (2006-2007=68%, 2007-2008=77%). During the 2007-2008 school year, students did receive proportionately more silver level certificates in relation to bronze certificates compared to 2006-2007.



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Table 8. Career Readiness Certificates: Business and Graphics Programs (South County Tech)

South Technical High School	2006-2007					2007-2008				
	N	Gold	Silver	Bronze	None	N	Gold	Silver	Bronze	None
Broadcast Capt. and Court Rpt.	5	2	1	0	2	5	0	3	2	0
Grph. Comm. : Comm. Art/Prt	16	1	5	5	5	7	0	6	0	1
Engineering, Drawing and CAD	5	1	2	1	1	10	3	5	2	0
Network Administration	6	3	3	0	0	3	2	1	0	0
Travel and Tourism	3	0	1	2	0	NA	NA	NA	NA	NA
Web and Comp. Prog.	3	0	1	1	1	3	1	2	0	0
<i>Total N</i>	<i>38</i>	<i>7</i>	<i>13</i>	<i>9</i>	<i>9</i>	<i>28</i>	<i>6</i>	<i>17</i>	<i>4</i>	<i>1</i>
<i>Total %</i>	<i>100</i>	<i>18.4</i>	<i>34.2</i>	<i>23.7</i>	<i>23.7</i>	<i>100</i>	<i>21.4</i>	<i>60.7</i>	<i>14.3</i>	<i>3.6</i>

The total number of students tested on the WorkKeys assessment in the Business and Graphics area at South Technical High School decreased across the two years examined (2006-2007=38, 2007-2008=28). However, the total number of career readiness certificates earned remained relatively consistent (2006-2007=29, 2007-2008=27). With regard to the relative percentage of students receiving certificates, the percentage of students tested who received a certificate increased across the two years examined (2006-2007=76%, 2007-2008=96%). During the 2007-2008 school year students received proportionally more silver level certificates and fewer bronze level certificates in relation to the 2006-2007 school year.

Teacher Perceptions (Business and Graphics: All Programs)

Teachers in the Business and Graphics area were administered a survey (Appendix B) to ascertain their perceptions regarding a variety of program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program (MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The teacher survey items were clustered into 7 scales (i.e., School Climate, Instructional Setting and Materials, Parental Involvement, Library Resources, Professional Development, Instructional Efficacy, and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Teacher survey items contributing to each scale can be found in Appendix C along with scale reliability estimates. Teacher results for the Business and Graphics area are reported below in Table 9.



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Table 9. Teacher Perceptions: Business and Graphics (All Programs)

School	Survey Scale	2006-2007		2007-2008	
		N	Mean	N	Mean
South Technical High School	School Climate	7	4.51	8	4.66
	Inst. Setting and Materials	7	4.07	8	4.38
	Parental Involvement	7	4.54	8	4.62
	Library Resources	7	4.19	8	3.88
	Professional Development	7	4.71	8	4.55
	Instructional Efficacy	7	4.67	8	4.77
	Technology Resources	7	4.71	8	4.28
North Technical High School	School Climate	7	4.04	8	4.17
	Inst. Setting and Materials	7	3.91	8	4.11
	Parental Involvement	7	4.04	8	4.20
	Library Resources	7	3.95	8	4.04
	Professional Development	7	4.23	8	4.05
	Instructional Efficacy	7	4.37	8	4.46
	Technology Resources	7	4.09	8	4.43

As indicated in Table 9, perceptions of teachers in the Business and Graphics area at South Technical High School reflected improvement on 4 of 7 scales over the past two years. Scores for the remaining 3 scales showed some decline. The largest improvement in teacher perceptions at South Technical High School was noted on the Instructional Setting and Materials scale. Conversely, the largest decline in teacher perceptions was related to Technology Resources. Perceptions of teachers in the Business and Graphics area at North Technical High School reflected improvement on 6 of 7 scales over the past two years. The largest improvement in teacher perceptions at North Technical High School was noted on the Technology Resources scale. Conversely, the only decline noted was on the Professional Development scale. An Analysis of Variance (ANOVA) with Bonferroni correction was conducted on scale scores to assess the significance of scale score differences across years. Results indicated no significant differences between the 2006-2007 and 2007-2008 scale scores for North or South Technical High School.

Student Perceptions (Business and Graphics: All Programs)

Students enrolled in the Business and Graphics area were administered a survey (Appendix D) to ascertain their perceptions regarding program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program (MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The student survey items were clustered into 3 scales (i.e., School Climate, Quality Learning Environment, and Media and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher



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scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Student survey items contributing to each scale can be found in Appendix E along with scale reliability estimates. Student results for the Business and Graphics area are reported below in Table 10.

Table 10. Student Perceptions: Business and Graphics (All Programs)

School	Survey Scale	2006-2007		2007-2008	
		N	Mean	N	Mean
South Technical High School	School Climate	73	4.05	106	4.11
	Quality Learning Environment	73	4.08	106	4.13
	Media and Technology Resources	73	4.09	106	4.25
North Technical High School	School Climate	165	3.73	195	3.88
	Quality Learning Environment	165	3.79	195	3.93
	Media and Technology Resources	165	4.10	195	4.12

Perceptions of students in the Business and Graphics area at South Technical High School reflected improvement on all scales over the past two years. The largest improvement in student perceptions at South Technical High School was noted on the Media and Technology Resources scale. Perceptions of students in the Business and Graphics area at North Technical High School also reflected improvement on all scales. The largest improvement in student perceptions at North Technical High School was noted on the School Climate scale. An Analysis of Variance (ANOVA) with Bonferroni correction was conducted on scale scores to assess the significance of scale score differences across years. Results indicated no significant differences between the 2006-2007 and 2007-2008 scale scores for North or South Technical High School.



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Construction, Mechanics and Technology

Program Description (Construction, Mechanics and Technology)

SSD currently offers fourteen programs within the Construction, Mechanics and Technology area. Descriptive program information taken from the SSD website is listed below.

Automotive Collision Repair: This program follows the international curriculum of the Inter-Industry Conference on Automotive Collision Repair (I-CAR). Students learn welding, detailing, metal straightening, plastic panel and structural repair, refinishing, painting, glass and body panel replacement, parts, molding and trim repair and replacement. Frame and Unibody construction and repair, electrical, lighting, cooling, engine, steering and suspension systems and the preparation of damage reports are also covered. (Offered at North and South Technical High School)

Automotive Technology: This program is certified by the National Institute of Automotive Service Excellence (ASE) and follows their curriculum. These standards reflect the skills that must be mastered to be prepared for ASE certification and offer employees an edge when applying for jobs. Our ASE certified instructors train students in vehicle preparation and maintenance, tire, wheel, alignment, brake, steering and suspension service, lubrication, cooling, fuel and exhaust systems, electrical, starting, charging and ignition systems, engine, power train and air conditioning service, emission testing and vehicle safety inspection. (Offered at North and South Technical High School)

Bricklaying and Masonry: This program was developed by the St. Louis Mason Contractors Association, and follows their curriculum for entry level bricklayers and mason tenders. Students learn welding, rigging and scaffolding, estimating, blueprint reading, wall, chimney and fireplace layout and construction utilizing mortars, block, brick and stone. Customized and architectural masonry and glass block, sills, lintels, copings, control joints, working with concrete panels, slate, marble, granite, wall and floor tile are covered as well. (Offered at South Technical High School)

Carpentry: Students learn blueprint reading, the operation of various saws, nail guns, drills, laser levels and other tools, site preparation, residential and commercial forming and framing, interior and exterior finishing. The curriculum adheres to building codes and is patterned after the carpentry apprenticeship program. During the summer, qualified students have the opportunity to work with Associated General Contractor builders. (Offered at North and South Technical High School)

Diesel Technology: Students learn preventive maintenance techniques, welding, hydraulics and engine service. Students will also cover brake, power train, steering and suspension, electrical, electronic, air induction, exhaust, fuel, lubrication and cooling systems and service. (Offered at North and South Technical High School)



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Electrical Trades: This program is patterned after electrical apprenticeship programs and adheres to the national electrical code. Students also have the opportunity to earn CPR, first aid and OSHA certifications. Students learn to interpret schematics, read blueprints, install, connect, test and maintain electrical wiring systems in residential and commercial settings. AC circuits and wiring methods, conductors, low voltage wiring and over current protection, load centers and safety switches, service entrance construction, rough-in and trim out, transformers, motors, controllers, 2 and 3 wire controls, reversing starters, lighting, sequence and jogging controls, special and separate control circuits are all covered in this comprehensive program. (Offered at North and South Technical High School)

Electronics and Robotics: In our electronics lab students will learn math and electrical concepts, schematics, AC, DC, analog and digital electronic circuits, network theorems and methods, robotics design and programming, computer technology, and work with a variety of testing equipment and power supplies. Students also have the opportunity to earn Electronic Technicians Association and International Society of Certified Electronic Technicians certifications. (Offered at North and South Technical High School)

Floor Layers Middle Apprenticeship: This program utilizes the Floor Layers Apprenticeship curriculum. Students learn estimating, blueprint reading, covering removal, surface preparation, layout, fitting, adhesive and installation techniques for carpeting, ceramic tile, hardwood and resilient flooring. Students also have the opportunity to earn OSHA and U.S. Department of Labor, Bureau of Apprenticeship and Training certifications. During the summer, qualified students can work for a contractor. (Offered at Bayless High School)

General Construction Trades: Students learn blueprint reading, concrete forming, brick and block masonry, wall, stair, roof, ceiling and sub-floor framing, dry wall installation, flooring, trimming and painting, roofing, door, window, siding, and gutter installation, heating, ventilation and air conditioning systems maintenance, plumbing fixture, supply line, drain and vent installation. (Offered at North and South Technical High School)

Heating, Ventilation and Air Conditioning: This program is certified by HVAC Excellence providing students with the opportunity to earn certifications in HVAC electrical, heat pumps, electrical heat, gas heat, residential air conditioning and EPA refrigerant recovery. Students learn to install, maintain, diagnose, repair and service residential gas furnaces, electrical heating and cooling systems utilizing specialized tools and testing instruments. Soldering and brazing, mechanical refrigeration, electricity, low and high voltage control circuitry, metal fabrication, blueprint reading, tubing, pipe, relays and capacitors and electric motors are also covered. (Offered at North and South Technical High School)

Machining Technology: Students learn to transform blueprints into finished products utilizing precision measuring, laser and photo sensing inspection instruments, manipulating metal by cutting, forming and shaping it with vertical and horizontal mills, lathes, power saws, and grinders. Students also utilize computer aided design and manufacturing (CAD/CAM), computer



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driven inspection equipment and CNC (computer numerical control) machine programming techniques. (Offered at North and South Technical High School)

Motorcycle/Outdoor Power Equipment Technology: Student training covers everything from lawn equipment and tractors to snowmobiles, ATVs, personal watercraft and motorcycles. Students learn to inspect, diagnose, maintain and repair wheels, tires, brakes, and drive trains. Tune ups, engine overhauls, diagnostic testing equipment, carburetion, starter, fuel, governor, throttle, engine, ignition, electrical and fuel systems are also covered. Students have the opportunity to take Outdoor Power Equipment and Engine Service Association certification exams. (Offered at North and South Technical High School)

Plumbing: Following the Associated General Contractors, Building Officials Code Administrators and Plumbing, Heating and Cooling Contractors National Association curricula students learn soil, waste and vent systems, water distribution, soldering, brazing, welding, fixture and appliance installation, residential rough-in and finish techniques, commercial construction, plumbing design and blueprint reading. Students have the opportunity to earn OSHA certification and work as a plumber's helper during the summer to gain work experience. (Offered at North Technical High School)

Welding: Students learn a multitude of welding processes, blueprint reading and metallurgy, as well as inspection and testing aligned with current welding code standards. This program is certified by the American Welding Society allowing you to earn AWS and OSHA certifications. (Offered at North and South Technical High School)



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Enrollment and Capacity (Construction, Mechanics and Technology)

Enrollment and capacity for each of the programs in the Construction, Mechanics and Technology area are listed below in Table 11 (North County Tech) and Table 12 (South County Tech). Enrollment capacity, number of students enrolled on the last Wednesday in September, and percentage of capacity are reported for 2006-2007 and 2007-2008.

Table 11. Enrollment and Capacity: Construction, Mechanics, and Tech. (North County Tech)

North Technical High School	2006-2007			2007-2008		
	Cap.	N	%	Cap.	N	%
Automotive Collision Repair	40	26	65.0%	40	26	65.0%
Automotive Technology	80	64	80.0%	80	70	87.5%
Carpentry	40	30	75.0%	40	22	55.0%
Diesel Technology	40	14	35.0%	40	23	57.5%
Electrical Trades	40	34	85.0%	40	36	90.0%
Electronics and Robotics	40	7	17.5%	40	9	22.5%
General Construction Trades	40	33	82.5%	40	31	77.5%
HVAC	40	30	75.0%	40	38	95.0%
Machining Technology	40	13	32.5%	40	13	32.5%
Motorcycle/Outdoor Power Equipment Technology	40	25	62.5%	40	18	45.0%
Plumbing	40	21	52.5%	40	38	95.0%
Welding	40	15	37.5%	40	26	65.0%
<i>Total*</i>	<i>520</i>	<i>312</i>	<i>60.0%</i>	<i>520</i>	<i>350</i>	<i>67.3%</i>

* Total percentages reflect data for active programs for the year ($Total\ N \div Total\ Capacity$).

The overall enrollment versus capacity percentage in the Construction, Mechanics and Technology area at North Technical High School increased from 2006-2007 to 2007-2008 (i.e., 60.0% to 67.3%). The largest increase in enrollment was noted in the Plumbing program; whereas the Carpentry program demonstrated the largest decline in enrollment.



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Table 12. Enrollment and Capacity: Construction, Mechanics, and Tech. (South County Tech)

South Technical High School	2006-2007			2007-2008		
	Cap.	N	%	Cap.	N	%
Automotive Collision Repair	40	32	80.0%	40	28	70.0%
Automotive Technology	80	71	88.8%	80	66	82.5%
Bricklaying and Masonry	40	20	50.0%	40	26	65.0%
Carpentry	40	31	77.5%	40	33	82.5%
Electrical Trades	40	27	67.5%	40	28	70.0%
Electronics and Robotics	40	15	37.5%	40	11	27.5%
Floor Laying (Bayless)	30	7	23.3%	30	19	63.3%
General Construction Trades	40	35	87.5%	40	35	87.5%
HVAC	40	22	55.0%	40	21	52.5%
Machining Technology	40	18	45.0%	40	20	50.0%
Motorcycle/Outdoor Power Equipment Technology	NA	NA	NA	20	12	60.0%
Welding	40	20	50.0%	40	15	37.5%
<i>Total*</i>	<i>470</i>	<i>298</i>	<i>63.4%</i>	<i>490</i>	<i>314</i>	<i>64.1%</i>

* Total percentages reflect data for active programs for the year ($Total\ N \div Total\ Capacity$).

The overall enrollment versus capacity percentage in the Construction, Mechanics and Technology area at South Technical High School increased slightly from 2006-2007 to 2007-2008 (i.e., 63.4% to 64.1%). The new Floor Laying program at Bayless was added at South Technical High School for the 2006-2007 school year; whereas the Motorcycle/Outdoor Equipment program was added in 2007-2008. The largest increase in enrollment was noted in the Floor Laying program at Bayless; whereas the Welding program demonstrated the largest decline in enrollment.



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Retention and Program Completion: Cohort Analysis (Const., Mech. and Technology)

Based on information contained in the student information system (SIS), a cohort analysis was conducted to determine the rate of juniors who continued as seniors the following year. In addition, the completion and/or graduation rate of the cohort was examined. Completion and/or graduation is based on students who successfully completed all program requirements and graduated from their home school or an SSD technical education school. Retention and completion status for students in the Construction, Mechanics and Technology area is reported below in Table 13 (North County Tech) and Table 14 (South County Tech).

Table 13. Cohort Analysis: Construction, Mechanics and Technology (North County Tech)

	05-06 Status	06-07 Enrollment and Completion Status		06-07 Status	07-08 Enrollment and Completion Status	
	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed
Auto Collision Repair	16	10 (63%)	9 (56%)	14	9 (64%)	9 (64%)
Automotive Technology	32	25 (78%)	18 (56%)	41	33 (80%)	29 (71%)
Carpentry	16	10 (63%)	9 (56%)	12	7 (58%)	3 (25%)
Diesel Technology	8	5 (63%)	3 (38%)	12	10 (83%)	10 (83%)
Electrical Trades	20	14 (70%)	13 (65%)	19	17 (89%)	16 (84%)
Electronics and Robotics	3	2 (67%)	1 (33%)	8	5 (63%)	5 (63%)
General Const. Trades	13	12 (92%)	9 (69%)	21	11 (52%)	10 (48%)
HVAC	15	10 (67%)	9 (60%)	18	17 (94%)	14 (78%)
Machining Technology	10	8 (80%)	6 (60%)	11	3 (27%)	3 (27%)
Cycle/Outdoor Equip.	8	6 (75%)	4 (50%)	13	9 (69%)	7 (54%)
Plumbing	13	11 (85%)	9 (69%)	22	16 (73%)	15 (68%)
Welding	NA	NA	NA	12	8 (67%)	7 (58%)
<i>Total</i>	<i>154</i>	<i>113 (73%)</i>	<i>90 (58%)</i>	<i>203</i>	<i>145 (71%)</i>	<i>128 (63%)</i>

* Percentages reflect the proportion of the original cohort. Average Margin of Error = 3%.

The overall junior-to-senior cohort retention rate in the Construction, Mechanics and Technology area at North Technical High School declined slightly from 2006-2007 to 2007-2008 (i.e., 73% to 71%). However, the overall cohort graduation/completion rate increased across the two years examined (i.e., 58% to 63%). With regard to junior-to-senior cohort retention rate, the



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Machining Technology program evidenced the greatest decline across the two years examined; whereas the HVAC program evidenced the greatest increase. With regard to cohort graduation/completion rate, the Machining Technology program evidenced the greatest decline across the two years examined; whereas the Diesel Technology program evidenced the greatest increase.

Table 14. Cohort Analysis: Construction, Mechanics and Technology (South County Tech)

	05-06 Status	06-07 Enrollment and Completion Status		06-07 Status	07-08 Enrollment and Completion Status	
	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed
Auto Collision Repair	19	12 (63%)	12 (63%)	19	14 (74%)	14 (74%)
Automotive Technology	38	31 (82%)	31 (82%)	42	36 (86%)	35 (83%)
Bricklaying and Masonry	4	2 (50%)	2 (50%)	16	12 (75%)	12 (75%)
Carpentry	18	13 (72%)	11 (61%)	18	17 (94%)	17 (94%)
Electrical Trades	12	10 (83%)	10 (83%)	17	15 (88%)	15 (88%)
Electronics and Robotics	10	8 (80%)	8 (80%)	5	5 (100%)	5 (100%)
Floor Laying (Bayless)	NA	NA	NA	7	6 (86%)	6 (86%)
General Const. Trades	19	13 (68%)	12 (63%)	21	17 (81%)	17 (81%)
HVAC	13	10 (77%)	10 (77%)	13	11 (85%)	11 (85%)
Machining Technology	7	6 (86%)	6 (86%)	11	11 (100%)	10 (91%)
Welding	12	8 (67%)	7 (58%)	8	7 (88%)	7 (88%)
<i>Total</i>	<i>152</i>	<i>113 (74%)</i>	<i>109 (72%)</i>	<i>177</i>	<i>151 (85%)</i>	<i>149 (84%)</i>

* Percentages reflect the proportion of the original cohort. Average Margin of Error = 3%.

The overall junior-to-senior cohort retention rate in the Construction, Mechanics and Technology area at South Technical High School increased from 2006-2007 to 2007-2008 (i.e., 74% to 85%). The overall cohort graduation/completion rate also increased across the two years examined (i.e., 72% to 84%). With regard to junior-to-senior cohort retention rate, all programs evidenced increases across the two years examined with the Bricklaying and Masonry program demonstrating the greatest increase. In addition, all programs also evidenced an increase in the cohort graduation/completion rate with Carpentry demonstrating the greatest increase.



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Placement Data (Construction, Mechanics and Technology)

Per DESE regulations, follow-up placement data must be collected on any student who receives credit in a vocational/technical education school and subsequently graduates from their home school or the vocational/technical education school. Placement data for the Construction, Mechanics, and Technology area is reported below in Table 15 (North County Tech) and Table 16 (South County Tech). Placement reflects the number of students from the follow-up cohort identified as (a) employed in a related field, (b) continuing their education, or (c) serving in the military. Placement data was collected 180 days following student exit from the program.

Table 15. Placement: Construction, Mechanics, and Tech. (North County Tech)

North Technical High School	2005-2006			2006-2007		
	Cohort	Placed	%	Cohort	Placed	%
Automotive Collision Repair	15	11	73.3%	16	12	75.0%
Automotive Technology	42	32	76.2%	29	21	72.4%
Carpentry	15	11	73.3%	14	12	85.7%
Diesel Technology	11	8	72.7%	8	8	100.0%
Electrical Trades	15	12	80.0%	17	15	88.2%
Electronics and Robotics	6	6	100.0%	3	3	100.0%
General Construction Trades	19	15	78.9%	13	11	84.6%
HVAC	11	6	54.5%	15	10	66.7%
Machining Technology	4	4	100.0%	11	8	72.7%
Motorcycle/Outdoor Equip. Tech.	12	11	91.7%	10	5	50.0%
Plumbing	16	10	62.5%	13	8	61.5%
Welding	11	6	54.5%	9	6	66.7%
<i>Total*</i>	<i>177</i>	<i>132</i>	<i>74.6%</i>	<i>158</i>	<i>119</i>	<i>75.3%</i>

* Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).

The overall placement rate in the Construction, Mechanics and Technology area at North Technical High School increased from 2005-2006 to 2006-2007 (i.e., 74.6% to 75.3%). The largest increase in placement percentage was noted in the Diesel Technology program; whereas the Motorcycle/Outdoor Power Equipment program demonstrated the largest decline in placement percentage. Detailed placement data is reported in Appendix A – Table 3.



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Table 16. Placement: Construction, Mechanics, and Tech. (South County Tech)

South Technical High School	2005-2006			2006-2007		
	Cohort	Placed	%	Cohort	Placed	%
Automotive Collision Repair	9	8	88.9%	16	13	81.3%
Automotive Technology	34	29	85.3%	37	26	70.3%
Bricklaying and Masonry	17	5	29.4%	5	2	40.0%
Carpentry	15	10	66.7%	12	6	50.0%
Electrical Trades	20	15	75.0%	11	11	100.0%
Electronics and Robotics	16	14	87.5%	12	10	83.3%
Floor Laying (Bayless)	NA	NA	NA	1	1	100.0%
General Construction Trades	12	8	66.7%	19	13	68.4%
HVAC	17	15	88.2%	13	5	38.5%
Machining Technology	12	11	91.7%	8	5	62.5%
Motorcycle/Outdoor Equip. Tech.	NA	NA	NA	0	0	0.0%
Welding	21	12	57.1%	13	10	76.9%
<i>Total*</i>	<i>173</i>	<i>127</i>	<i>73.4%</i>	<i>147</i>	<i>102</i>	<i>69.4%</i>

* Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).

The overall placement rate in the Construction, Mechanics and Technology area at South Technical High School decreased slightly from 2005-2006 to 2006-2007 (i.e., 73.4% to 69.4%). The largest increase in placement was noted in the Electrical Trades program; whereas the HVAC program demonstrated the largest decline in placement percentage. The Floor Laying and Motorcycle/Outdoor Power Equipment programs were not offered at South Technical High School for the 2005-2006 school year. Detailed placement data is reported in Appendix A – Table 4.



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Career Readiness Certificates (Construction, Mechanics and Technology)

The Career Readiness Certificate (CRC) is a credential based on ACT's WorkKeys assessment that gives employers and career seekers a uniform measure of key workplace skills. WorkKeys is an assessment tool that defines, measures and certifies that individuals have the skills and abilities they need to succeed in entry-level work in the 21st century workplace. These skills are for any occupation - skilled or professional - and at any level of education. WorkKeys "job profiles" identify workplace skills and skill level an individual must have to perform successfully. If you score at certain levels on three WorkKeys assessments—Applied Mathematics, Reading for Information, and Locating Information—you qualify for a National Career Readiness Certificate (i.e., Gold, Silver or Bronze). Gold level certificates indicate possession of core employability skills for approximately 85% of the jobs profiled by WorkKeys. Silver level certificates indicate possession of core employability skills for approximately 65% of the jobs profiled. Bronze level certificates indicate possession of core employability skills for 30% of the jobs profiled. The number of seniors tested and earning certificates in the Construction, Mechanics and Technology area is reported below in Table 17 (North County Tech) and Table 18 (South County Tech).

Table 17. Career Readiness Certificate: Construction, Mech., and Tech. (North County Tech)

North Technical High School	2006-2007					2007-2008				
	N	Gold	Silver	Bronze	None	N	Gold	Silver	Bronze	None
Auto. Collision Repair	9	1	6	1	1	4	2	0	1	1
Auto. Technology	21	2	6	4	9	21	1	11	3	6
Carpentry	10	2	6	1	1	0	0	0	0	0
Diesel Tech.	3	1	0	1	1	9	0	2	4	3
Electrical Trades	9	0	3	6	0	14	1	7	3	3
Electronics and Robotics	1	0	0	1	0	4	0	1	2	1
Gen. Construction Trades	11	1	6	3	1	11	4	2	2	3
HVAC	9	0	1	5	3	10	1	2	5	2
Machining Tech.	8	0	5	3	0	4	0	3	1	0
Motorcycle/Power Tech.	5	0	3	1	1	8	0	1	4	3
Plumbing	5	0	1	3	1	8	0	1	1	6
Welding	8	0	2	1	5	7	1	1	1	4
<i>Total N</i>	<i>99</i>	<i>7</i>	<i>39</i>	<i>30</i>	<i>23</i>	<i>100</i>	<i>10</i>	<i>31</i>	<i>27</i>	<i>32</i>
<i>Total %</i>	<i>100</i>	<i>7.1</i>	<i>39.4</i>	<i>30.3</i>	<i>23.2</i>	<i>100</i>	<i>10.0</i>	<i>31.0</i>	<i>27.0</i>	<i>32.0</i>



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The total number of students tested on the WorkKeys assessment in the Construction, Mechanics, and Technology area at North Technical High School remained generally consistent across the two years examined (2006-2007=99, 2007-2008=100). However, the total number of career readiness certificates earned declined somewhat (2006-2007=76, 2007-2008=68). With regard to the relative percentage of students receiving certificates, the percentage of students tested who received a certificate decreased across the two years examined (2006-2007=77%, 2007-2008=68%). During the 2007-2008 school year, students received proportionately less silver level certificates in relation to the 2006-2007 school year.

Table 18. Career Readiness Certificate: Construction, Mech., and Tech. (South County Tech)

South Technical High School	2006-2007					2007-2008				
	N	Gold	Silver	Bronze	None	N	Gold	Silver	Bronze	None
Auto. Collision Repair	11	3	5	1	2	11	2	5	2	2
Auto. Tech.	28	1	21	2	4	35	5	16	11	3
Bricklaying and Masonry	5	0	1	3	1	9	0	3	3	3
Carpentry	11	0	7	2	2	16	2	5	7	2
Electrical Trades	10	1	9	0	0	11	0	7	2	2
Electronics and Robotics	9	1	8	0	0	5	2	1	2	0
Gen. Construction Trades	12	0	4	2	6	12	0	6	4	2
HVAC	9	0	2	4	3	6	0	3	2	1
Machining Tech.	6	0	4	0	2	11	2	5	3	1
Welding	7	0	4	2	1	7	0	3	2	2
<i>Total N</i>	<i>108</i>	<i>6</i>	<i>65</i>	<i>16</i>	<i>21</i>	<i>123</i>	<i>13</i>	<i>54</i>	<i>38</i>	<i>18</i>
<i>Total %</i>	<i>100</i>	<i>5.6</i>	<i>60.2</i>	<i>14.8</i>	<i>19.4</i>	<i>100</i>	<i>10.6</i>	<i>43.9</i>	<i>30.9</i>	<i>14.6</i>

The total number of students tested on the WorkKeys assessment in the Construction, Mechanics, and Technology area at South Technical High School increased across the two years examined (2006-2007=108, 2007-2008=123). The total number of career readiness certificates earned also increased (2006-2007=87, 2007-2008=105). With regard to the relative percentage of students receiving certificates, the percentage of students tested who received a certificate increased across the two years examined (2006-2007=81%, 2007-2008=85%). During the 2007-2008 school year students received proportionally fewer silver level certificates, but received more gold and bronze level certificates in relation to the 2006-2007 school year.



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Teacher Perceptions (Construction, Mechanics and Technology: All Programs)

Teachers in the Construction, Mechanics and Technology area were administered a survey (Appendix B) to ascertain their perceptions regarding a variety of program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program (MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The teacher survey items were clustered into 7 scales (i.e., School Climate, Instructional Setting and Materials, Parental Involvement, Library Resources, Professional Development, Instructional Efficacy, and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Teacher survey items contributing to each scale can be found in Appendix C along with scale reliability estimates. Teacher results for the Construction, Mechanics and Technology area are reported below in Table 19.

Table 19. Teacher Perceptions: Construction, Mechanics and Technology (All Programs)

School	Survey Scale	2006-2007		2007-2008	
		N	Mean	N	Mean
South Technical High School	School Climate	12	4.68	12	4.57
	Inst. Setting and Materials	12	4.10	12	4.34
	Parental Involvement	12	4.30	12	4.33
	Library Resources	12	3.72	12	3.58
	Professional Development	12	4.55	12	4.58
	Instructional Efficacy	12	4.62	12	4.63
	Technology Resources	12	4.28	12	4.08
North Technical High School	School Climate	12	4.04	12	4.15
	Inst. Setting and Materials	12	4.23	12	4.05
	Parental Involvement	12	4.33	12	4.28
	Library Resources	12	3.71	12	3.83
	Professional Development	12	4.48	12	4.27
	Instructional Efficacy	12	4.44	12	4.49
	Technology Resources	12	4.02	12	4.18

Perceptions of teachers in the Construction, Mechanics and Technology area at South Technical High School reflected improvement on 4 of 7 scales over the past two years. Scores for the remaining 3 scales remained the same or declined somewhat. The largest improvement in teacher perceptions at South Technical High School was noted on the Instructional Setting and Materials scale. Conversely, the largest decline in teacher perceptions was related to Library Resources. Perceptions of teachers in the Construction, Mechanics and Technology area at North Technical High School also reflected improvement on 4 of 7 scales over the past two years. The largest improvement in teacher perceptions at North Technical High School was noted on the Technology Resources scale. Conversely, the largest decline in teacher perceptions



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was noted on the Professional Development scale. An Analysis of Variance (ANOVA) with Bonferroni correction was conducted on scale scores to assess the significance of scale score differences across years. Results indicated no significant differences between the 2006-2007 and 2007-2008 scale scores for North or South Technical High School.

Student Perceptions (Construction, Mechanics and Technology: All Programs)

Students enrolled in the Construction, Mechanics and Technology area were administered a survey (Appendix D) to ascertain their perceptions regarding program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program (MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The student survey items were clustered into 3 scales (i.e., School Climate, Quality Learning Environment, and Media and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Student survey items contributing to each scale can be found in Appendix E along with scale reliability estimates. Student results are reported below in Table 20.

Table 20. Student Perceptions: Construction, Mechanics and Technology (All Programs)

School	Survey Scale	2006-2007		2007-2008	
		N	Mean	N	Mean
South Technical High School	School Climate	241	4.11	253	4.09
	Quality Learning Environment	241	4.16	253	4.12
	Media and Technology Resources	240	3.72	251	3.62
North Technical High School	School Climate	254	3.89	272	3.72
	Quality Learning Environment	254	3.95	272	3.71
	Media and Technology Resources	254	3.58	272	3.43

Perceptions of students in the Construction, Mechanics and Technology area at South Technical High School reflected a decline on all scales over the past two years. The largest decline in student perceptions at South Technical High School was noted on the Media and Technology Resources scale. Perceptions of students in the Construction, Mechanics and Technology area at North Technical High School also reflected a decline on all scales. The largest decline in student perceptions at North Technical High School was noted on the Quality Learning Environment scale. An Analysis of Variance (ANOVA) with Bonferroni correction was conducted on scale scores to assess the significance of scale score differences across years. Results indicated statistically significant differences between the 2006-2007 and 2007-2008 scores for North Technical High School on the School Climate and Quality Learning Environment scales.



Career Education

Standard Program Evaluation

Medical Services, Public Safety and Services

Program Description (Medical Services, Public Safety and Services)

SSD currently offers thirteen programs within the Medical Services, Public Safety and Services area. Descriptive program information taken from the SSD website is listed below.

Cosmetology: Our program follows the same curriculum used by private cosmetology schools. Students cover both theory and technical skills to gain an understanding of the real world of professional hairstyling. Students learn about shampooing and scalp treatments, permanent waving and chemical relaxing, hair cutting, coloring, bleaching and toning, styling and texture services, skin care and makeup, manicures and pedicures, hair removal, and salon management. After completing the program and passing the Missouri State Board of Cosmetology exam, the license received is the key to your salon or spa career success. (Offered at North and South Technical High School)

Culinary Arts: This is one of the few high school programs in the country accredited by the prestigious American Culinary Federation. Students have the opportunity to earn the ACF Culinary Secondary Graduate certificate, as well as ServSafe certification from the National Restaurant Association. Students prepare for professional culinary careers in our full size state of the art restaurant kitchen. Students learn to prepare and serve recipes for special breakfast and luncheon meetings and a variety of catered functions. This includes the preparation of fruits and vegetables, salads and dressings, stock, soups and sauces, meats and poultry, fish and seafood, eggs, pastries and desserts, pastas, rice and cereals, sandwiches, canapés and hord'oeuvres. Nutrition, menu planning, knife skills, safety and sanitation procedures are also covered. (Offered at North and South Technical High School)

Dental Assistant: Dental hygiene is a rapidly growing career field and dentists are giving their assistants and hygienists many more responsibilities than in the past. Students learn infection control, hazards management, general health, emergency and preventive procedures, chair side assistance procedures for patient examinations and treatments, dental specialties, dental lab and radiographic procedures and dental office administration. Students have the opportunity to participate in a clinical internship with a dentist. (Offered at South Technical High School)

Early Childhood Careers: Gain teaching experience, build a portfolio, earn certification and college credits in this rewarding program. Students study classroom management, evaluation techniques, guidance, health, safety and the physical, social and cognitive child development. Students plan lessons, prepare activities and teach 2 to 5 year old children in our child development center. Seniors can apply for cadet teaching internships in their home districts. Students' portfolio of work and teaching hours can qualify them for Child Development Association certification. Students may also earn first aid and CPR/AED certifications. In addition, a ½ credit of health and ½ credit of language arts are embedded into the curriculum. (Offered at North and South Technical High School)



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Emergency Medical Technician: This program follows the National EMT-Basic, Department of Homeland Security and American Heart Association curricula, as well as OSHA standards, making it possible for you to earn numerous certifications. Students spend 32 hours of clinical time with local fire and hospital emergency departments. This prepares them for the Missouri and National EMT written and practical certification exams. Students learn basic life support, patient assessment, management of bleeding, fractures, respiratory, cardiac and trauma emergencies, ambulance operations, burns, hazardous materials and environmental emergencies, emergency management of special patients, multiple casualty situations, patient transport, rope rescue operations and motor vehicle extrication. (Offered at North and South Technical High School)

Firefighting: Our program is certified as a fire academy by the Department of Public Safety-Division of Fire Safety. Students learn firefighting techniques, fire suppression, emergency first responder, incident management and rescue procedures. Students gain fire combat experience utilizing industry equipment and the fire tower, and complete hazardous materials awareness and operations training. This curriculum follows Missouri Firefighter I and II, National First Responder and American Heart Association curricula, as well as OSHA standards, allowing students to earn numerous certifications. (Offered at North and South Technical High School)

Health Sciences: Our program combines classroom with actual patient care and clinical experiences at area hospitals and long term care facilities. This provides students with first hand exposure to a wide variety of health careers before you graduate. You will learn asepsis, assessment of vital signs, examination, medical and minor surgical procedures, body systems and their function, home health care, medical terminology, disease processes, anatomy and physiology, teamwork and human relations skills. One science credit is embedded into the curriculum. Students also have the opportunity to become certified nurse assistants and earn first aid, CPR and AED certifications. (Offered at North and South Technical High School)

Laboratory and Pharmacy Technician: Enter the exciting fields of medical, industrial, environmental and agricultural science as a skilled lab, clinical or pharmacy technician. Students learn lab and pharmacy math and procedures, quality control, identification of bacteria, urinalysis, advanced biology and microbiology, anatomy and physiology, hematology, phlebotomy, serology, chemistry, histology. Biotechnology is taught through shared faculty, facilities and distance learning with St. Louis Community College. Students have the opportunity to earn pharmacy technician certification. One credit of science is also embedded into the curriculum. (Offered at North and South Technical High School)

Law Enforcement: Students are trained in human relations and ethics, physical fitness, defensive tactics, first aid, emergency care, radio and patrol procedures. Students also study law, report writing, traffic control and enforcement, juvenile justice, criminal investigation, conflict resolution and administration of justice, corporate and private security. Students have the opportunity to earn CPR and AED certifications, and participate in an internship with a police



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Standard Program Evaluation

department. Advanced students have the option of moving into the Domestic Preparedness and Security program. (Offered at North and South Technical High School)

Domestic Preparedness and Security: North and South Tech were the first high schools in the country to develop a cutting-edge homeland security program following the Department of Homeland Security curriculum. Our students have the opportunity to earn National Emergency Telecommunicator, Department of Homeland Security weapons of mass destruction for law enforcement, Federal Emergency Management Agency and other certifications. Students learn emergency responses to chemical, biological, nuclear, radioactive and explosive hazards, emergency dispatching procedures, disaster plan development, incident command, community based corrections and private security. Students also develop an understanding of cultural diversity, domestic and international terrorism, homeland security, weapons of mass destruction, terrorist threats, prevention and deterrence activities. Students completing either the one-year Law Enforcement or Firefighting program have first priority for this senior year program. (Offered at North and South Technical High School)

Sports Medicine (New for 2008-2009): This program combines classroom and clinical experiences at area hospitals and training facilities, giving you first hand exposure to a wide variety of physical therapy and training careers. Students also have the opportunity to earn personal trainer, first aid, CPR and AED certifications. Students learn emergency procedures and safety, teamwork and human relations, ethics and legal responsibilities along with the treatment and management of athletic injuries and development of exercise programs. This program also covers kinesiology, biomechanics, nutrition, weight management, behavior modification, assessment and training concepts, medical terminology, personal training procedures, physical therapy and fitness training careers. (Offered at South Technical High School)

Turf Management and Landscape Design: Students learn plant propagation and identification, soils, planting techniques, pest management, disease control, greenhouse and landscape maintenance, crop production, turf management, landscape design, specialty landscaping and business procedures. Students have the opportunity to participate in an internship and earn Missouri commercial and residential pesticide application licenses. (Offered at North Technical High School)

Veterinary Assistant: Students learn medical terminology, diseases and parasites, grooming and bathing, clinical, examination, treatment and common surgical procedures, patient management, scheduling and records maintenance. Animal anatomy, physiology, nutrition, behavior, handling and restraining are also covered. Students also have the opportunity to participate in an internship and earn pet first aid certification. (Offered at North and South Technical High School)



Career Education Standard Program Evaluation

Enrollment and Capacity (Medical Services, Public Safety and Services)

Enrollment and capacity for each of the programs in the Medical Services, Public Safety and Services area are listed below in Table 21 (North County Tech) and Table 22 (South County Tech). Enrollment capacity, number of students enrolled on the last Wednesday of September, and percentage of capacity are reported for 2006-2007 and 2007-2008.

Table 21. Enrollment and Capacity: Med. Services, Pub. Safety and Svcs. (North County Tech)

North Technical High School	2006-2007			2007-2008		
	Cap.	N	%	Cap.	N	%
Cosmetology	80	73	91.3%	80	76	95.0%
Culinary Arts	60	47	78.3%	60	53	88.3%
Early Childhood Careers	60	47	78.3%	60	41	68.3%
EMT/Fire Fighting	40	25	62.5%	40	31	77.5%
Health Sciences	120	123	102.5%	120	114	95.0%
Law Enforcement and Domestic Preparedness	40	22	55.0%	40	24	60.0%
Turf and Landscape Management	NA	NA	NA	40	11	27.5%
Veterinary Assistant	40	27	67.5%	40	33	82.5%
<i>Total*</i>	<i>440</i>	<i>364</i>	<i>82.7%</i>	<i>480</i>	<i>383</i>	<i>79.8%</i>

* Total percentages reflect data for active programs for the year ($Total\ N \div Total\ Capacity$).

The overall enrollment versus capacity percentage in the Medical Services, Public Safety and Services area at North Technical High School decreased slightly from 2006-2007 to 2007-2008 (i.e., 82.7% to 79.8%). One new program option was added at North Technical High School for the 2007-2008 school year. The largest increase in enrollment was noted in the EMT/Firefighting and Veterinary Assistant programs; whereas the Early Childhood Careers program demonstrated the largest decline in enrollment.



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Table 22. Enrollment and Capacity: Med. Services, Pub. Safety and Svcs. (South County Tech)

North Technical High School	2006-2007			2007-2008		
	Cap.	N	%	Cap.	N	%
Cosmetology	80	71	88.8%	80	77	96.3%
Dental Assistant	40	28	70.0%	40	33	82.5%
Early Childhood Careers	60	34	56.7%	60	28	46.7%
EMT/Fire Fighting	40	31	77.5%	40	24	60.0%
Health Sciences	120	77	64.2%	120	76	63.3%
Laboratory/Pharmacy Technology	40	16	40.0%	40	17	42.5%
Law Enforcement and Domestic Preparedness	20	21	105.0%	20	16	80.0%
Turf and Landscape Management	40	11	27.5%	40	14	35.0%
Veterinary Assistant	40	31	77.5%	40	28	70.0%
<i>Total</i>	<i>480</i>	<i>320</i>	<i>66.7%</i>	<i>480</i>	<i>313</i>	<i>65.2%</i>

* Total percentages reflect data for active programs for the year (Total N ÷ Total Capacity).

The overall enrollment versus capacity percentage in the Medical Services, Public Safety and Services area at South Technical High School decreased slightly from 2006-2007 to 2007-2008 (i.e., 66.7% to 65.2%). The largest increase in enrollment was noted in the Dental Assistant program; whereas the Law Enforcement and Domestic Preparedness program demonstrated the largest decline in enrollment.



Career Education Standard Program Evaluation

Retention and Program Completion: Cohort Analysis (Med. Svcs., Pub. Safety and Svcs.)
Based on information contained in the student information system (SIS), a cohort analysis was conducted to determine the rate of juniors who continued as seniors the following year. In addition, the completion and/or graduation rate of the cohort was examined. Completion and/or graduation is based on students who successfully completed all program requirements and graduated from their home school or an SSD technical education school. Retention and completion status for students in the Medical Services, Public Safety and Services area is reported below in Table 23 (North County Tech) and Table 24 (South County Tech).

Table 23. Cohort Analysis: Med. Services, Pub. Safety and Services (North County Tech)

	05-06 Status	06-07 Enrollment and Completion Status		06-07 Status	07-08 Enrollment and Completion Status	
	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed
Cosmetology	36	29 (81%)	24 (67%)	44	34 (77%)	30 (68%)
Culinary Arts	28	19 (68%)	19 (68%)	29	18 (62%)	17 (59%)
Early Childhood Careers	26	20 (77%)	19 (73%)	27	16 (59%)	15 (56%)
EMT/Fire Fighting	12	8 (67%)	8 (67%)	19	9 (47%)	8 (42%)
Health Sciences	61	46 (75%)	30 (49%)	51	40 (78%)	33 (65%)
Law Enf. / Dom. Prep.	8	4 (50%)	4 (50%)	14	6 (43%)	5 (36%)
Turf /Landscape Mgt.	2	1 (50%)	0 (0)	NA	NA	NA
Veterinary Assistant	17	11 (65%)	11 (65%)	14	12 (86%)	7 (50%)
<i>Total</i>	<i>190</i>	<i>138 (73%)</i>	<i>115 (61%)</i>	<i>198</i>	<i>135 (68%)</i>	<i>115 (58%)</i>

* Percentages reflect the proportion of the original cohort. Average Margin of Error = 3%.

The overall junior-to-senior cohort retention rate in the Medical Services, Public Safety and Services area at North Technical High School declined slightly from 2006-2007 to 2007-2008 (i.e., 73% to 68%). The overall cohort graduation/completion rate also declined slightly across the two years examined (i.e., 61% to 58%). With regard to junior-to-senior cohort retention rate, the EMT/Fire Fighting program evidenced the greatest decline across the two years examined; whereas the Veterinary Assistant program evidenced the greatest increase. With regard to cohort graduation/completion rate, the EMT/Fire Fighting program evidenced the greatest decline across the two years examined; whereas the Health Sciences program evidenced the greatest increase.



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Table 24. Cohort Analysis: Med. Services, Pub. Safety and Services (South County Tech)

	05-06 Status	06-07 Enrollment and Completion Status		06-07 Status	07-08 Enrollment and Completion Status	
	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed	11 th Grade Cohort	12 th Grade Enrolled	Graduate or Completed
Cosmetology	43	32 (74%)	31 (72%)	40	32 (80%)	31 (78%)
Dental Assistant	14	13 (93%)	13 (93%)	13	12 (92%)	12 (92%)
Early Childhood Careers	18	10 (56%)	7 (39%)	20	8 (40%)	8 (40%)
EMT/Fire Fighting	17	11 (65%)	10 (59%)	17	11 (65%)	11 (65%)
Health Sciences	34	26 (76%)	22 (65%)	39	26 (67%)	26 (67%)
Lab./Pharmacy Tech.	11	8 (73%)	8 (73%)	8	6 (75%)	6 (75%)
Law Enf./Dom. Prep.	15	8 (53%)	5 (33%)	10	4 (40%)	4 (40%)
Turf /Landscape Mgt.	4	3 (75%)	3 (75%)	6	4 (67%)	4 (67%)
Veterinary Assistant	17	16 (94%)	16 (94%)	14	11 (79%)	10 (71%)
<i>Total</i>	<i>173</i>	<i>127 (73%)</i>	<i>115 (66%)</i>	<i>167</i>	<i>114 (68%)</i>	<i>112 (67%)</i>

* Percentages reflect the proportion of the original cohort. Average Margin of Error = 3%.

The overall junior-to-senior cohort retention rate in the Medical Services, Public Safety and Services area at South Technical High School declined slightly from 2006-2007 to 2007-2008 (i.e., 73% to 68%). However, the overall cohort graduation/completion rate increased slightly across the two years examined (i.e., 66% to 67%). With regard to junior-to-senior cohort retention rate, the Early Childhood Careers program evidenced the greatest decline across the two years examined; whereas the Cosmetology program evidenced the greatest increase. With regard to cohort graduation/completion rate, the Veterinary Assistant program evidenced the greatest decline across the two years examined; whereas the Law Enforcement and Domestic Preparedness program evidenced the greatest increase.



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Placement Data (Medical Services, Public Safety and Services)

Per DESE regulations, follow-up placement data must be collected on any student who receives credit in a vocational/technical education school and subsequently graduates from their home school or the vocational/technical education school. Placement data for the Medical Services, Public Safety and Services area is reported below in Table 25 (North County Tech) and Table 26 (South County Tech). Placement reflects the number of students from the follow-up cohort identified as (a) employed in a related field, (b) continuing their education, or (c) serving in the military. Placement data was collected 180 days following student exit from the program.

Table 25. Placement: Med. Svcs., Public Safety and Svcs. (North County Tech)

North Technical High School	2005-2006			2006-2007		
	Cohort	Placed	%	Cohort	Placed	%
Cosmetology	18	15	83.3%	35	32	91.4%
Culinary Arts	20	18	90.0%	27	24	88.9%
Early Childhood Careers	31	26	83.9%	24	22	91.7%
EMT/Fire Fighting	20	14	70.0%	14	14	100.0%
Health Sciences	69	61	88.4%	80	67	83.8%
Law Enf. and Domestic Preparedness	16	10	62.5%	7	3	42.9%
Turf and Landscape Management	9	9	100.0%	2	2	100.0%
Veterinary Assistant	5	5	100.0%	19	17	89.5%
<i>Total</i>	<i>188</i>	<i>158</i>	<i>84.0%</i>	<i>208</i>	<i>181</i>	<i>87.0%</i>

** Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).*

The overall placement rate in the Medical Services, Public Safety and Services area at North Technical High School increased from 2005-2006 to 2006-2007 (i.e., 84.0% to 87.0%). The largest increase in placement percentage was noted in the EMT/Firefighting program; whereas the Law Enforcement and Domestic Preparedness program demonstrated the largest decline in placement percentage. Detailed placement data is reported in Appendix A – Table 5.



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Table 26. Placement: Med. Svcs., Pub. Safety and Svcs. (South County Tech)

South Technical High School	2005-2006			2006-2007		
	Cohort	Placed	%	Cohort	Placed	%
Cosmetology	20	16	80.0%	34	21	61.8%
Dental Assistant	22	17	77.3%	16	10	62.5%
Early Childhood Careers	22	16	72.7%	14	9	64.3%
EMT/Fire Fighting	3	2	66.7%	15	10	66.7%
Health Sciences	54	15	27.8%	40	34	85.0%
Laboratory/Pharmacy Technology	7	4	57.1%	10	9	90.0%
Law Enf. and Domestic Preparedness	1	0	0.0%	16	10	62.5%
Turf and Landscape Management	24	14	58.3%	7	5	71.4%
Veterinary Assistant	18	13	72.2%	20	16	80.0%
<i>Total*</i>	<i>171</i>	<i>97</i>	<i>56.7%</i>	<i>172</i>	<i>124</i>	<i>72.1%</i>

* Total percentages reflect data for active programs for the year (Total Placed ÷ Total Completed).

The overall placement rate in the Medical Services, Public Safety and Services area at South Technical High School increased from 2005-2006 to 2006-2007 (i.e., 56.7% to 72.1%). The largest increase in placement was noted in the Law Enforcement/Domestic Preparedness program; whereas the Cosmetology program demonstrated the largest decline in placement percentage. Detailed placement data is reported in Appendix A – Table 6.

Career Readiness Certificates (Medical Services, Public Safety and Services)

The Career Readiness Certificate (CRC) is a credential based on ACT's WorkKeys assessment that gives employers and career seekers a uniform measure of key workplace skills. WorkKeys is an assessment tool that defines, measures and certifies that individuals have the skills and abilities they need to succeed in entry-level work in the 21st century workplace. These skills are for any occupation - skilled or professional - and at any level of education. WorkKeys "job profiles" identify workplace skills and skill level an individual must have to perform successfully. If you score at certain levels on three WorkKeys assessments—Applied Mathematics, Reading for Information, and Locating Information—you qualify for a National Career Readiness Certificate (i.e., Gold, Silver or Bronze). Gold level certificates indicate possession of core employability skills for approximately 85% of the jobs profiled by WorkKeys. Silver level certificates indicate possession of core employability skills for approximately 65% of the jobs profiled. Bronze level certificates indicate possession of core employability skills for 30% of the jobs profiled. The number of seniors tested and earning certificates in the Medical



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Services, Public Safety and Services area is reported below in Table 27 (North County Tech) and Table 28 (South County Tech).

Table 27. Career Readiness Certificate: Med. Svcs., Pub. Safety and Svcs. (North County Tech)

North Technical High School	2006-2007					2007-2008				
	N	Gold	Silver	Bronze	None	N	Gold	Silver	Bronze	None
Cosmetology	20	1	6	4	9	10	0	3	5	2
Culinary Arts	13	1	3	3	6	13	1	3	4	5
Early Childhood Careers	14	1	0	8	5	9	0	1	4	4
EMT/Fire Fighting	8	2	2	0	4	7	1	3	1	2
Health Sciences	20	0	8	7	5	22	0	10	4	8
Law Enf. / Domestic Prep.	3	1	2	0	0	7	0	2	3	2
Veterinary Assistant	8	1	2	1	4	9	0	2	3	4
<i>Total N</i>	86	7	23	23	33	77	2	24	24	27
<i>Total %</i>	100	8.1	26.7	26.7	38.4	100	2.6	31.2	31.2	35.1

The total number of students tested on the WorkKeys assessment in the Medical Services, Public Safety and Services area at North Technical High School declined across the two years examined (2006-2007=86, 2007-2008=77). However, the total number of career readiness certificates earned remained relatively stable (2006-2007=53, 2007-2008=50). With regard to the relative percentage of students receiving certificates, the percentage of students tested who received a certificate increased across the two years examined (2006-2007=62%, 2007-2008=65%). During the 2007-2008 school year, students earned proportionally fewer gold level certificates in relation to the 2006-2007 school year. However, the proportion of silver and bronze certificates earned increased.



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Table 28. Career Readiness Certificate: Med. Svcs., Pub. Safety and Svcs. (South County Tech)

South Technical High School	2006-2007					2007-2008				
	N	Gold	Silver	Bronze	None	N	Gold	Silver	Bronze	None
Cosmetology	28	0	19	5	4	28	1	12	11	4
Dental Assistant	13	0	7	6	0	11	0	4	7	0
Early Childhood Careers	13	0	3	3	7	6	0	0	0	6
EMT/Fire Fighting	11	1	2	5	3	16	6	7	2	1
Health Sciences*	23	3	13	5	2	0	0	0	0	0
Lab./Pharmacy Tech.	7	0	6	1	0	8	0	5	2	1
Law Enforce./Domestic Prep.	7	1	4	2	0	5	1	2	2	0
Turf and Landscape Mgt.	4	0	0	0	4	5	0	0	3	2
Veterinary Assistant	15	0	8	4	3	9	0	3	3	3
<i>Total N</i>	<i>121</i>	<i>5</i>	<i>62</i>	<i>31</i>	<i>23</i>	<i>88</i>	<i>8</i>	<i>33</i>	<i>30</i>	<i>17</i>
<i>Total %</i>	<i>100</i>	<i>1.0</i>	<i>51.2</i>	<i>25.6</i>	<i>19.0</i>	<i>100</i>	<i>9.1</i>	<i>37.5</i>	<i>34.1</i>	<i>19.3</i>

* Seniors in Health Sciences did not test in 2007-2008

The total number of students tested on the WorkKeys assessment in the Medical Services, Public Safety and Services area at South Technical High School declined across the two years examined (2006-2007=121, 2007-2008=88). It is noted that seniors in the Health Sciences program were not assessed during the 2007-2008 school year. As a result, the total number of career readiness certificates earned also declined (2006-2007=98, 2007-2008=71). With regard to the relative percentage of students receiving certificates, the percentage of students tested who received a certificate remained relatively stable across the two years examined (i.e., 81%). During the 2007-2008 school year, students received proportionally fewer silver level certificates in relation to the 2006-2007 school year. However, the proportion of gold and bronze level certificates increased.

Teacher Perceptions (Medical Services, Public Safety and Services: All Programs)

Teachers in the Medical Services, Public Safety and Services area were administered a survey (Appendix B) to ascertain their perceptions regarding a variety of program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The teacher survey items were clustered into 7 scales (i.e., School Climate, Instructional Setting and Materials, Parental



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Involvement, Library Resources, Professional Development, Instructional Efficacy, and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Teacher survey items contributing to each scale can be found in Appendix C along with scale reliability estimates. Teacher results for the Medical Services, Public Safety and Services area are reported below in Table 29.

Table 29. Teacher Perceptions: Med. Services, Public Safety and Svcs. (All Programs)

School	Survey Scale	2006-2007		2007-2008	
		N	Mean	N	Mean
South Technical High School	School Climate	15	4.36	14	4.40
	Inst. Setting and Materials	15	4.34	14	4.34
	Parental Involvement	15	4.28	14	4.29
	Library Resources	15	3.76	13	3.46
	Professional Development	15	4.32	14	4.44
	Instructional Efficacy	15	4.45	14	4.64
	Technology Resources	15	4.08	14	3.86
North Technical High School	School Climate	13	4.05	14	4.25
	Inst. Setting and Materials	13	3.98	14	4.15
	Parental Involvement	13	4.18	14	4.49
	Library Resources	13	4.18	14	4.12
	Professional Development	13	4.08	14	4.30
	Instructional Efficacy	13	4.33	14	4.40
	Technology Resources	13	3.89	14	3.74

Perceptions of teachers in the Medical Services, Public Safety and Services area at South Technical High School reflected improvement on 4 of 7 scales over the past two years. Scores for the remaining 3 scales remained the same or declined somewhat. The largest improvement in teacher perceptions at South Technical High School was noted on the Instructional Efficacy scale. Conversely, the largest decline in teacher perceptions was related to Technology Resources. Perceptions of teachers in the Medical Services, Public Safety and Services area at North Technical High School reflected improvement on 5 of 7 scales over the past two years. The largest improvement in teacher perceptions at North Technical High School was noted on the Parental Involvement scale. Conversely, the largest decline in teacher perceptions was noted on the Technology Resources scale. An Analysis of Variance (ANOVA) with Bonferroni correction was conducted on scale scores to assess the significance of scale score differences across years. Results indicated no significant differences between the 2006-2007 and 2007-2008 scale scores for North or South Technical High School.



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Student Perceptions (Medical Services, Public Safety and Services: All Programs)

Students enrolled in the Medical Services, Public Safety and Services area were administered a survey (Appendix D) to ascertain their perceptions regarding program and school-related factors. The survey consisted of items from the Advanced Questionnaire which is used in the Missouri School Improvement Program (MSIP). Individual survey items were worded positively and rated on a scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The student survey items were clustered into 3 scales (i.e., School Climate, Quality Learning Environment, and Media and Technology Resources). Individual items were aggregated and averaged based on the scale they contributed to. Higher scale scores reflect more positive perceptions, whereas lower scale scores indicate poorer perceptions. Student survey items contributing to each scale can be found in Appendix E along with scale reliability estimates. Student results are reported below in Table 30.

Table 30. Student Perceptions: Med. Services, Public Safety and Svcs. (All Programs)

School	Survey Scale	2006-2007		2007-2008	
		N	Mean	N	Mean
South Technical High School	School Climate	252	4.13	272	4.02
	Quality Learning Environment	252	4.22	272	4.12
	Media and Technology Resources	252	4.06	272	3.91
North Technical High School	School Climate	252	3.99	281	3.77
	Quality Learning Environment	252	4.04	281	3.84
	Media and Technology Resources	252	3.83	281	3.74

Perceptions of students in the Medical Services, Public Safety and Services at South Technical High School reflected a decline on all scales over the past two years. The largest decline in student perceptions at South Technical High School was noted on the Media and Technology Resources scale. Perceptions of students in the Medical Services, Public Safety and Services area at North Technical High School also reflected a decline on all scales. The largest decline in student perceptions at North Technical High School was noted on the School Climate scale. An Analysis of Variance (ANOVA) with Bonferroni correction was conducted on scale scores to assess the significance of score differences across years. Results indicated a statistically significant difference between the 2006-2007 and 2007-2008 scores for South Technical High School on the Media and Technology Resources scale. Results for North Technical High School indicated statistically significant differences on the School Climate and Quality Learning Environment scales.



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V. Discussion

Strengths

North Technical

- Commercial Arts, Engineering Drawing/CAD and the CISCO Network Administration program show enrollment over 85% in the Business & Graphics area. Likewise, there is high enrollment in Automotive Technology, Electrical Trades, HVAC and Plumbing in the Construction, Mechanics and Technology area. In the Medical Services, Public Safety and Services area Cosmetology, Culinary Arts, Health Science and Veterinary Assistant all have high enrollments.
- Commercial Arts, Engineering Drawing/CAD and the CISCO Network Administration programs in the Business and Graphics area have high (over 80%) retention to completion rates. Among the Construction, Mechanics and Technology area programs Electrical Trades and Diesel Technology have the highest rates of retention to completion.
- All programs in the Business and Graphics area exhibit high placement rates ranging from 78.6% to 100%. In the Construction, Mechanics and Technology area, 5 of 12 programs have 80% or higher placement rates including Carpentry, Diesel Technology, Electrical Trades, Electronics and Robotics, and General Construction Trades. In the Medical Services, Public Safety, and Services area 7 of 8 programs have high placement rates including Cosmetology, Culinary Arts, Early Childhood Careers, EMT/Firefighting, Health Science, Turf and Landscape Management and Veterinary Assistant.
- In the Business and Graphics area the percentage of students earning a gold, silver or bronze certificate increased from 68.4% to 77.1% between 2006-07 and 2007-08. In the Construction, Mechanics and Technology area the number of students achieving gold increased slightly. In the Medical Services, Public Safety and Services area there was a slight increase in the silver and bronze certificates.
- Teacher perceptions are very high in Instructional Efficacy (4.46) and Technology Resources (4.43) for faculty in the Business and Graphics area. In the Construction, Mechanics and Technology area the highest ratings were in Instructional Efficacy (4.49), Parental Involvement (4.28), and Professional Development (4.27). In the Medical Services, Public Safety, and Services area the highest faculty ratings were in Parental Involvement (4.49), Instructional Efficacy (4.40) and Professional Development (4.30).
- Student perceptions reflected teacher perceptions with high marks in Media and Technology Resources (4.12) and Quality Learning Environment (3.93) for the Business and Graphics area. In the Construction, Mechanics and Technology area the highest rated items were School Climate (3.72) and Quality Learning Environment (3.71). In the Medical Services, Public Safety and Services area the highest items were Quality Learning Environment (3.84) and School Climate (3.77).



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South Technical

- Fashion Design showed an enrollment of 80% in the Business and Graphics area. In the Construction, Mechanics and Technology area there were 3 programs with an enrollment higher than 80% of capacity including Automotive Technology, Carpentry, and General Construction Trades. In the Medical Services, Public Safety and Services area the high enrollment programs were Cosmetology, Dental Assistant and Law Enforcement.
- In the Business and Graphics area the highest rates of retention to completion were in Engineering, Drawing and CAD, as well as Web and Computer Programming. In the Construction, Mechanics and Technology cluster 9 of 11 programs had retention to completion rates of 80% or higher including Automotive Technology, Carpentry, Electrical Trades, Electronics and Robotics, Floor Laying, General Construction Trades, HVAC, Machining Technology and Welding. In the Medical Services, Public Safety and Services cluster Cosmetology and Dental Assistant demonstrated high retention rates.
- Web and Computer Programming and Travel and Tourism had a placement rate in excess of 80% for the Business and Graphics area. In the Construction, Mechanics and Technology area Automotive Collision Repair, Electrical Trades, Electronics and Robotics and Floor Laying all had placement rates above 80%. In the Medical Services, Public Safety and Services cluster Health Services, Lab/Pharmacy Tech and Veterinary Assistant had placement rates at 80% or better.
- Students achieving a gold, silver or bronze certificate in the Business and Graphics area improved from 76.3% in 2006-07 to 96.7% in 2007-08. In the Construction, Mechanics and Technology area the total improved from 80.6% to 85.4%. In the Medical Services, Public Safety and Services area the overall percentage remained stable but there was a noticeable increase in the number of gold certificates earned.
- Teacher perceptions were high for Instructional Efficacy (4.77), School Climate (4.66), Parental Involvement (4.62) and Professional Development (4.55) for faculty in the Business and Graphics area. In the Construction, Mechanics and Technology area, the highest rated items were Instructional Efficacy (4.63), Professional Development (4.58) and School Climate (4.57). In the Medical Services, Public Safety and Services area the highest items were Instructional Efficacy (4.64), Professional Development (4.44) and School Climate (4.40).
- Student perceptions were similar to those of the faculty. In the Business and Graphics area the highest rated items were Media and Technology Resources (4.25) and Quality Learning Environment (4.13). In the Construction, Mechanics and Technology area the highest items were Quality Learning Environment (4.12) and School Climate (4.09). In the Medical Services, Public Safety and Services area the highest items were Quality Learning Environment (4.12) and School Climate (4.02).



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Concerns

North Technical

- In the Business & Graphics area, Graphics Communications: Printing and Travel and Tourism are experiencing low enrollment. In the Construction, Mechanics and Technology area low enrollment is an issue in Machining Technology, Motorcycle Technology, and Electronics. In the Medical Services, Public Safety and Services area Turf and Landscape Management enrollment is low.
- In the Business and Graphics area, Graphics Communications: Printing and Travel and Tourism have low retention to completion rates. In the Construction, Mechanics and Technology area low retention to completion is an issue in Carpentry, General Construction Trades and Machining Technology. In the Medical Services, Public Safety and Services area Law Enforcement, Firefighting/EMT and Veterinary Assistant have low retention to completion rates.
- In the Business and Graphics area only Travel and Tourism exhibits a low placement percentage. In the Construction, Mechanics and Technology area Motorcycle Technology, Plumbing, Welding and HVAC have low placement rates. In the Medical Services, Public Safety and Services cluster only Law Enforcement is experiencing a low placement rate.
- The achievement of the Career Readiness Certificates (CRC) is low in two programs in the Business and Graphics area: Engineering Drawing/CAD and Graphic Communications-Printing. In the Construction, Mechanics and Technology area Plumbing is low. In the Medical Services, Public Safety and Services area the only issue with CRC is the drop in those achieving the gold certificate.
- Teacher perceptions in the Business and Graphics area are not low in any area. In the Construction, Mechanics and Technology area, Library Resources (3.83) are lowest. In the Medical Services, Public Safety and Services area Technology Resources (3.74) is rated low.
- Student perceptions in the Business and Graphics area are relatively lower in School Climate (3.88) and Quality Learning Environment (3.93), but not noticeably so. In the Construction, Mechanics and Technology area student perceptions are lowest in Media and Technology Resources (3.43). In the Medical Services, Public Safety and Services area the lowest item was Media and Technology Resources (3.74) which is not substantially lower than the higher rated items.

South Technical

- Enrollment in the Business and Graphics area is low in Graphics Communications: Printing, Network Administration, Engineering Drawing/CAD, Graphic Communications: Commercial Art, and Web and Computer Programming. In the Construction, Mechanics and Technology area low enrollment exists in Electronics and Robotics, Welding and Machining Technology. In the Medical Services, Public Safety and Services area Turf and Landscape Management, Early Childhood Careers and Lab/Pharmacy Technician are the programs with low enrollment.
- Retention to completion is an issue in the Business and Graphics area in Graphic Communications: Printing and Broadcast Captioning/Court Reporting. In the Construction, Mechanics and Technology area retention is not a major issue in any program. In the Medical



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Services, Public Safety and Services area retention is an issue in Early Childhood Careers and Law Enforcement.

- Placement is an issue mostly in the Business and Graphics area of Graphic Communications: Commercial Art. In the Construction, Mechanics and Technology area it is an issue in HVAC and Bricklaying/Masonry. In the Medical Services, Public Safety and Services area there are no major concerns with placement.
- Achievement of the Career Readiness Certificate (CRC) is not a concern in any of the programs in the Business and Graphics area or in the Construction, Mechanics and Technology area. In the Medical Services, Public Safety and Services area it is a concern only in Early Childhood Careers.
- Teacher perception in the Business and Graphics area is lowest in the area of Library Resources (3.88). In the Construction, Mechanics and Technology area it is also lowest in Library Resources (3.58). In the Medical Services, Public Safety and Services area Library Resources (3.46) and Technology Resources (3.86) are the lowest rated areas.
- Student perception in the Business and Graphics area is not low in any area. In the Construction, Mechanics and Technology area only Media and Technology Resources (3.62) is an issue. In the Medical Services, Public Safety and Services area it is similar with Media and Technology Resources (3.91) rated lowest.

Recommendations

- Re-organize the approach to admissions to reflect the need to promote low enrolled programs. Meet the minimum 10 student enrollment in junior program or consider closing a program.
- Improve placement in programs with rates less than 60% by 20% annually to at least 60% in three years.
- Improve the media and instructional technology resources available to students.
- Continue with all initiatives contributing to high climate ratings by students and faculty.
- For programs with retention to completion rates less than 50%, improve the rate by 10% annually to a minimum of 60% with a goal of reaching 80%.
- Continue using the CRC as one aspect of student achievement with the goal of increasing the number of students receiving certificates by 10% at each school with specific improvement in programs with less than 50% of students receiving a certificate.

Person responsible to champion action plan: Randy Dillon

Timeframe for reporting updates to Board of Education: Annually

_____ Date: _____
Signature of Administrator Responsible for Chairing Evaluation



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Appendix A

Detailed Follow-Up Placement Data

Appendix A – Table 1: North County Technical: Detailed Follow-Up Placement Data (Business and Graphics)

North County Tech 2005-2006	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related	Military Not Rel.
Broadcast Capt. and Court Rpt.	7	0	0	6	0	0	0	0	1	0
Graphics Comm.: Comm. Art	14	0	0	13	0	1	0	0	0	0
Eng., Drawing and CAD	13	1	1	8	1	1	1	0	0	0
Graphics Comm.: Printing	15	0	3	8	4	0	0	0	0	0
Financial Services	11	0	0	10	0	0	1	0	0	0
Network and Administration	9	0	0	8	0	1	0	0	0	0
Travel and Tourism	17	0	1	12	0	4	0	0	0	0
Web and Computer Prog.	20	0	1	19	0	0	0	0	0	0
North County Tech 2006-2007	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related	Military Not Rel.
Broadcast Capt. and Court Rpt.	6	0	0	6	0	0	0	0	0	0
Graphics Comm.: Comm. Art	14	0	1	12	0	0	1	0	0	0
Eng., Drawing and CAD	11	0	1	8	2	0	0	0	0	0
Graphics Comm.: Printing	14	1	0	8	4	1	0	0	0	0
Financial Services	10	1	0	9	0	0	0	0	0	0
Network and Administration	9	0	0	9	0	0	0	0	0	0
Travel and Tourism	14	2	2	9	0	1	0	0	0	0
Web and Computer Prog.	15	1	1	12	1	0	0	0	0	0

Appendix A – Table 2: South County Technical: Detailed Follow-Up Placement Data (Business and Graphics)

South County Tech 2005-2006	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related	Military Not Rel.
Broadcast Capt. and Court Rpt.	6	0	2	2	1	0	0	1	0	0
Graphics Comm.: Comm. Art	9	2	2	2	2	1	0	0	0	0
Engineering, Drawing and CAD	14	0	2	8	3	0	0	1	0	0
Graphics Comm.: Printing	15	0	7	1	6	0	1	0	0	0
Network and Administration	9	0	4	2	2	1	0	0	0	0
Travel and Tourism	7	0	2	1	4	0	0	0	0	0
Web and Computer Prog.	13	1	1	6	3	1	0	0	0	1
South County Tech 2006-2007	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related	Military Not Rel.
Broadcast Capt. and Court Rpt.	4	0	1	2	1	0	0	0	0	0
Graphics Comm.: Comm. Art	13	0	4	4	3	1	0	1	0	0
Engineering, Drawing and CAD	8	0	1	1	4	1	0	0	0	1
Graphics Comm.: Printing	10	0	4	2	3	0	0	0	0	1
Network and Administration	11	1	1	5	1	2	0	0	0	1
Travel and Tourism	4	0	1	0	3	0	0	0	0	0
Web and Computer Prog.	7	0	1	1	5	0	0	0	0	0

Appendix A – Table 3: North County Technical: Detailed Follow-Up Placement Data (Const., Mechanics and Technology)

North County Tech 2005-2006	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related	Military Not Rel.
Automotive Collision Repair	15	4	2	3	3	2	0	0	1	0
Automotive Technology	42	2	5	20	10	4	1	0	0	0
Carpentry	15	3	0	6	2	4	0	0	0	0
Diesel Technology	11	2	1	4	2	2	0	0	0	0
Electrical Trades	15	3	1	7	1	2	0	0	1	0
Electronics and Robotics	6	0	0	6	0	0	0	0	0	0
General Construction Trades	19	4	3	4	4	4	0	0	0	0
HVAC	11	2	3	4	0	2	0	0	0	0
Machining Technology	4	0	0	2	0	0	0	0	2	0
Cycle/Outdoor Equipment Tech.	12	0	1	5	5	1	0	0	0	0
Plumbing	16	2	2	1	7	4	0	0	0	0
Welding	11	4	3	0	2	2	0	0	0	0
North County Tech 2006-2007	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related	Military Not Rel.
Automotive Collision Repair	16	4	1	6	2	2	1	0	0	0
Automotive Technology	29	9	5	10	2	3	0	0	0	0
Carpentry	14	7	2	5	0	0	0	0	0	0
Diesel Technology	8	4	0	2	1	0	0	0	1	0
Electrical Trades	17	2	2	12	1	0	0	0	0	0
Electronics and Robotics	3	0	0	2	1	0	0	0	0	0
General Construction Trades	13	7	1	3	1	1	0	0	0	0
HVAC	15	4	2	4	2	1	2	0	0	0
Machining Technology	11	0	2	8	0	1	0	0	0	0
Cycle/Outdoor Equipment Tech.	10	3	3	2	0	1	1	0	0	0
Plumbing	13	3	2	4	1	2	1	0	0	0
Welding	9	0	2	5	1	1	0	0	0	0

Appendix A – Table 4: South County Technical: Detailed Follow-Up Placement Data (Const., Mechanics and Technology)

South County Tech 2005-2006	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related	Military Not Rel.
Auto Collision Repair	9	0	2	4	2	1	0	0	0	0
Automotive Technology	34	11	7	8	6	0	0	0	1	1
Bricklaying and Masonry	17	2	7	0	3	4	0	1	0	0
Carpentry	15	2	3	2	6	2	0	0	0	0
Electrical Trades	20	5	5	5	4	0	0	0	1	0
Electronics and Robotics	16	0	1	4	8	1	0	0	2	0
General Construction Trades	12	5	4	0	1	0	0	0	0	2
HVAC	17	7	2	7	0	0	0	0	0	1
Machining Technology	12	0	0	8	3	0	1	0	0	0
Welding	21	2	6	3	6	2	0	1	0	1
South County Tech 2006-2007	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related	Military Not Rel.
Auto Collision Repair	16	2	3	5	5	0	0	0	0	1
Automotive Technology	37	6	7	14	4	1	3	0	0	2
Bricklaying and Masonry	5	1	3	0	0	0	0	0	0	1
Carpentry	12	2	4	1	2	1	1	0	1	0
Electrical Trades	11	2	0	5	3	0	0	0	0	1
Electronics and Robotics	12	0	1	6	3	0	0	1	1	0
Floor Laying (Bayless)	1	1	0	0	0	0	0	0	0	0
General Construction Trades	19	5	4	3	5	1	0	1	0	0
HVAC	13	3	7	1	0	0	1	0	0	1
Machining Technology	8	1	2	2	1	0	1	0	0	1
Motorcycle/Outdoor Power	0	0	0	0	0	0	0	0	0	0
Welding	13	0	2	5	1	0	1	0	1	3

Appendix A – Table 5: North County Technical: Detailed Follow-Up Placement Data (Med. Services, Public Safety and Svcs.)

North County Tech 2005-2006	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related	Military Not Rel.
Cosmetology	18	6	1	0	9	2	0	0	0	0
Culinary Arts	20	5	0	8	3	4	0	0	0	0
Early Childhood Careers	31	2	1	21	3	4	0	0	0	0
EMT/Fire Fighting	20	2	4	9	3	2	0	0	0	0
Health Sciences	69	9	0	41	11	8	0	0	0	0
Law /Domestic Prep.	16	0	1	9	1	4	1	0	0	0
Turf / Landscape Mgt	9	2	1	2	4	0	0	0	0	0
Veterinary Assistant	5	1	0	2	2	0	0	0	0	0
North County Tech 2006-2007	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related	Military Not Rel.
Cosmetology	35	13	1	1	18	2	0	0	0	0
Culinary Arts	27	8	1	12	4	2	0	0	0	0
Early Childhood Careers	24	1	1	20	1	1	0	0	0	0
EMT/Fire Fighting	14	1	0	11	2	0	0	0	0	0
Health Sciences	80	17	4	47	3	7	2	0	0	0
Law/Domestic Prep.	7	0	2	3	0	1	1	0	0	0
Turf /Landscape Mgt.	2	0	0	0	2	0	0	0	0	0
Veterinary Assistant	19	2	2	12	3	0	0	0	0	0

Appendix A – Table 6: South County Technical: Detailed Follow-Up Placement Data (Med. Services, Public Safety and Svcs.)

South County Tech 2005-2006	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related
Cosmetology	19	7	3	2	6	1	0	0	0
Dental Assistant	22	2	4	5	10	0	0	1	0
Early Childhood Careers	22	5	1	6	5	1	3	1	0
EMT/Fire Fighting	3	0	1	1	1	0	0	0	0
Health Sciences	54	12	5	17	17	1	1	1	0
Laboratory/Pharmacy Tech.	7	0	0	3	0	0	0	3	0
Law /Domestic Prep.	1	0	1	0	0	0	0	0	0
Turf and Landscape Mgt.	24	4	9	1	7	1	0	0	0
Veterinary Assistant	18	1	4	4	8	0	0	1	0
South County Tech 2006-2007	Actual Graduates	Employed Related	Employed Not Related	Cont Ed Related	Cont Ed Not Related	Not Placed	Not Available	Status Unknown	Military Related
Cosmetology	34	8	9	0	13	1	1	2	0
Dental Assistant	16	0	5	6	4	0	0	1	0
Early Childhood Careers	14	0	5	5	4	0	0	0	0
EMT/Fire Fighting	15	2	2	4	1	1	2	0	1
Health Sciences	40	9	2	20	5	0	3	1	0
Laboratory/Pharmacy Tech.	10	0	1	7	2	0	0	0	0
Law /Domestic Prep.	16	0	5	2	4	1	0	0	1
Turf and Landscape Mgt.	7	0	2	1	4	0	0	0	0
Veterinary Assistant	20	6	2	6	4	0	2	0	0



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Appendix B

Career Education: Teacher Survey



Technical Education Schools Program Evaluation Teacher Survey



The purpose of this survey is to study your perception about your school and program. The results of this survey will help the Technical Education Division to improve educational services and your input is important to the success of this evaluation.

1. Your School.

- South Technical High North Technical High Bayless High School

2. What program are you teaching? (part I)

- | | | |
|---|---|---|
| <input type="radio"/> Automotive Collision Repair | <input type="radio"/> Automotive Technology | <input type="radio"/> Bricklaying and Masonry |
| <input type="radio"/> Broadcast Captioning | <input type="radio"/> Carpentry | <input type="radio"/> Commercial Art |
| <input type="radio"/> Cosmetology | <input type="radio"/> Culinary Arts | <input type="radio"/> Dental Assisting |
| <input type="radio"/> Diesel Technology | <input type="radio"/> Early Childhood Careers | <input type="radio"/> Electrical Trades |
| <input type="radio"/> Electronics and Robotics | <input type="radio"/> EMT/Firefighting | <input type="radio"/> Engineering Drawing & CAD |

3. What program are you teaching? (part II)

- | | | |
|---|--|--|
| <input type="radio"/> Fashion Design | <input type="radio"/> Financial Services | <input type="radio"/> Floorlaying |
| <input type="radio"/> General Construction Trades | <input type="radio"/> Health Sciences | <input type="radio"/> Horticulture |
| <input type="radio"/> HVAC | <input type="radio"/> Laboratory/Pharmacy Tech. | <input type="radio"/> Law/Domestic Preparedness & Sec. |
| <input type="radio"/> Machining Technology | <input type="radio"/> Motorcycle Mechanics | <input type="radio"/> Network Administration |
| <input type="radio"/> Plumbing | <input type="radio"/> Printing Technology | <input type="radio"/> Travel and Tourism |
| <input type="radio"/> Veterinary Assistant | <input type="radio"/> Web & Computer Programming | <input type="radio"/> Welding |

4. How frequently do you use the curriculum guide?

- Daily Monthly Weekly Semi-annually Bi-weekly Annually

5. In the past two years how many professional development activities directly related to improving student performance or instructional improvement have you participated in?

- 0-2 3-4 5-6 7+

6. I use computers and related technology in my classes.

- Daily Monthly Weekly Semi-annually Bi-weekly Annually

7. I have received training in the following classroom strategies.

- MAX Training Ruby Payne eMINTS Senior Projects Instructional System Manager (ISMs)

Response Definition: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree

	SD	D	N	A	SA
8. The Board of Education and the administration have high expectations for student learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. The community is proud of this school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I think all children can learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Parents believe their children can do well in this program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Students like attending this program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. This program is a good place to learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. I really care about my students.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Teachers talk about student achievement improvement issues on a regular basis.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. There are open channels of communication among students, staff, and administrators.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





Technical Education Schools Program Evaluation Teacher Survey



Response Definition: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree

	SD	D	N	A	SA
17. There are avenues for recognizing and rewarding the accomplishments of my students.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. My school provides parents with information about the programs available for students at my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. My school provides regular communications to parents about their child's progress.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. My school views parents as partners in the educational process.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. I provide suggestions to parents on ways to assist at home with their student's learning.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I have created specific strategies to better involve parents in the education of their child.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. I communicate to students and parents what they are supposed to be learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I frequently provide information about student performance to parents.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Parents are welcome to discuss their child's educational needs with the school and with me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	SD	D	N	A	SA
26. I have a curriculum guide for my program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. My curriculum guide provides me with ways to measure whether students have attained each objective. ...	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. The curriculum guide is useful to me in designing lesson plans.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. I teach research skills as an integral part of my instruction.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. I teach critical-thinking skills in my program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. My instructional materials support the curriculum.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. Class interruptions are kept to a minimum..	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. In this program I make learning interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. If students in this program have problems, I will listen and help.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. There is good communication between my students and me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. I hold students accountable for doing quality work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. I use student assessment/performance data to plan my instruction.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Students are frequently provided information about their performance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. I have high expectations for student learning.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. I expect all students to achieve at a high level.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. I have the tools and supplies I need to teach.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. The equipment in the program is up-to-date and well maintained.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. Overall, my shop/lab/classroom is in good condition.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. I have the opportunity to share with the administration what materials are needed in my program prior to the adoption of the budget.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	SD	D	N	A	SA
45. The librarian assists students and staff with individual class projects.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. I have input into the selection of library materials.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
47. The library media center materials are current and in good condition.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





Technical Education Schools Program Evaluation Teacher Survey



48. I have received the training I need to help students effectively use computers.....

Response Definition: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree

- | | SD | D | N | A | SA |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 49. Technology in my school is considered an integral part of the instruction program. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 50. I use and integrate computers into my program activities. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 51. Access to the Internet in my building is reliable. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 52. Incorporating the Internet into my instructional programs is a high priority. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 53. I have the educational technology I need to support my instructional program..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- | | SD | D | N | A | SA |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 54. Students are treated fairly in this school. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 55. Students are friendly to each other. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 56. I treat students with respect..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 57. Students understand what conduct is expected of them..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 58. Rules of conduct for students are consistently enforced..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 59. Students feel safe in this program..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 60. I feel safe at this school. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 61. I make students feel they belong in my program. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 62. Discipline is handled fairly in this school. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

- | | | | | | |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 63. The district has provided me with specific professional development opportunities in the development and revision of my curriculum..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 64. The professional development activities I attend are related to district wide instructional improvement.... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 65. I am expected by my administrator to participate in professional development activities..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 66. I believe professional development is an integral part of my job. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 67. The professional development activities I have attended have changed the way I teach..... | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |





Technical Education Schools Program Evaluation Teacher Survey



68. Comments:





Career Education Standard Program Evaluation

Appendix C

Teacher Survey: Scale Items and Reliability



Career Education Standard Program Evaluation

Teacher Survey Scale Items

School Climate (Chronbach's Alpha = .89)

The community is proud of this school.
Parents believe their children can do well in this program.
Students like attending this program.
This program is a good place to learn.
I really care about my students.
There are open channels of communication among students, staff, and administrators.
There are avenues for recognizing and rewarding the accomplishments of my students.
Students are treated fairly in this school.
Students are friendly to each other.
I treat students with respect.
Students understand what conduct is expected of them.
Rules of conduct for students are consistently enforced.
Students feel safe in this program.
I feel safe at this school.
I make students feel they belong in my program.
Discipline is handled fairly in this school.

Instructional Setting and Materials (Chronbach's Alpha = .71)

Teachers talk about student achievement improvement issues on a regular basis.
I have a curriculum guide for my program.
My curriculum guide provides me with ways to measure whether students have attained each objective.
The curriculum guide is useful to me in designing lesson plans.
My instructional materials support the curriculum.
Class interruptions are kept to a minimum.
I have the tools and supplies I need to teach.
The equipment in the program is up-to-date and well maintained.
Overall, my shop/lab/classroom is in good condition.
I have the opportunity to share with the administration what materials are needed in my program prior to the adoption of the budget.

Parental Involvement (Chronbach's Alpha = .76)

My school provides parents with information about the programs available for students at my school.
My school provides regular communications to parents about their child's progress.
My school views parents as partners in the educational process.
I provide suggestions to parents on ways to assist at home with their student's learning.
I have created specific strategies to better involve parents in the education of their child.
I communicate to students and parents what they are supposed to be learning.
I frequently provide information about student performance to parents.
Parents are welcome to discuss their child's educational needs with the school and with me.



Career Education Standard Program Evaluation

Library Resources (Chronbach's Alpha = .79)

The librarian assists students and staff with individual class projects.
I have input into the selection of library materials.
The library media center materials are current and in good condition.

Professional Development (Chronbach's Alpha = .82)

The district has provided me with specific professional development opportunities in the development and revision of my curriculum.
The professional development activities I attend are related to district wide instructional improvement.
I am expected by my administrator to participate in professional development activities.
I believe professional development is an integral part of my job.
The professional development activities I have attended have changed the way I teach.

Instructional Efficacy (Chronbach's Alpha = .80)

The Board of Education and the administration have high expectations for student learning.
I think all children can learn.
I teach research skills as an integral part of my instruction.
I teach critical-thinking skills in my program.
In this program I make learning interesting.
If students in this program have problems, I will listen and help.
There is good communication between my students and me.
I hold students accountable for doing quality work.
I use student assessment/performance data to plan my instruction.
Students are frequently provided information about their performance.
I have high expectations for student learning.
I expect all students to achieve at a high level.

Technology Resources (Chronbach's Alpha = .63)

I have received the training I need to help students effectively use computers.
Technology in my school is considered an integral part of the instruction program.
I use and integrate computers into my program activities.
Access to the Internet in my building is reliable.
Incorporating the Internet into my instructional programs is a high priority.
I have the educational technology I need to support my instructional program.



Career Education Standard Program Evaluation

Appendix D

Career Education: Student Survey



Technical Education Schools Program Evaluation Student Survey



The purpose of this survey is to study your perception about your school and program. The results of this survey will help the Technical Education Division to improve educational services and your input is important to the success of this evaluation.

1. Your School.

- South Technical High North Technical High Bayless High School

2. What program are you in? (part I)

- | | | |
|---|---|---|
| <input type="radio"/> Automotive Collision Repair | <input type="radio"/> Automotive Technology | <input type="radio"/> Bricklaying and Masonry |
| <input type="radio"/> Broadcast Captioning | <input type="radio"/> Carpentry | <input type="radio"/> Commercial Art |
| <input type="radio"/> Cosmetology | <input type="radio"/> Culinary Arts | <input type="radio"/> Dental Assisting |
| <input type="radio"/> Diesel Technology | <input type="radio"/> Early Childhood Careers | <input type="radio"/> Electrical Trades |
| <input type="radio"/> Electronics and Robotics | <input type="radio"/> EMT/Firefighting | <input type="radio"/> Engineering Drawing & CAD |

3. What program are you in? (part II)

- | | | |
|---|--|--|
| <input type="radio"/> Fashion Design | <input type="radio"/> Financial Services | <input type="radio"/> Floorlaying |
| <input type="radio"/> General Construction Trades | <input type="radio"/> Health Sciences | <input type="radio"/> Horticulture |
| <input type="radio"/> HVAC | <input type="radio"/> Laboratory/Pharmacy Tech. | <input type="radio"/> Law/Domestic Preparedness & Sec. |
| <input type="radio"/> Machining Technology | <input type="radio"/> Motorcycle Mechanics | <input type="radio"/> Network Administration |
| <input type="radio"/> Plumbing | <input type="radio"/> Printing Technology | <input type="radio"/> Travel and Tourism |
| <input type="radio"/> Veterinary Assistant | <input type="radio"/> Web & Computer Programming | <input type="radio"/> Welding |

4. What do you plan to do when you leave high school?

- | | |
|---|--|
| <input type="radio"/> Work full-time | <input type="radio"/> Attend a 2-year, vocational-technical or business school |
| <input type="radio"/> Attend a 4-year, service academy, or university | <input type="radio"/> Serve in the military |
| <input type="radio"/> Other _____ | |

Response Definition: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree

	SD	D	N	A	SA
5. My teacher really cares about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. My teacher thinks I can learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. The community is proud of this school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. This program is a good place to learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I like going to this school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I have been encouraged to establish career or educational goals at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. If I have a personal problem, I can talk to the counselor.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. My counselor has helped me create a plan to reach my educational and/or career goals.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	SD	D	N	A	SA
13. My parents have a good idea of what goes on at school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. My family believes that I can do well in this program.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. The class I have at school covers material that is important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. My teacher makes clear to me what I am supposed to learn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Technical Education Schools Program Evaluation Student Survey



Response Definition: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree

	SD	D	N	A	SA
17. My teacher is organized and well prepared to teach.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. My teacher informs me about my progress in class.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. My teacher makes learning interesting.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. I am given opportunities to work and learn independently.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. My teacher wants me to contribute my thoughts in class.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. In my program all students are given a chance to succeed.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. In my program there is good communication between the teacher and students.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. If a student has a problem the teacher will listen and help.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. Class interruptions are kept to a minimum.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. My program provides me with the textbooks, tools, supplies, and learning materials I need to learn.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. The equipment in this program is up-to-date and well maintained.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. My classroom/shop/lab is in good condition.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. My teacher expects very good work from me.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. My teacher is a good teacher.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



	SD	D	N	A	SA
31. I use computers in my program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. I know how to find information I need to complete class projects.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. My teacher can assist me in using computers effectively.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. I know how to use electronic resources to locate information.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. I can get access to the Internet at school when I need it.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. The library has up-to-date resource materials.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



	SD	D	N	A	SA
37. I feel safe in my program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. I have a feeling of belonging in my program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. Students in my program are friendly.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. My teacher treats me with respect.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. I am treated fairly in my program.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. Discipline is handled fairly in this school.....	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





43. Comments:







Career Education Standard Program Evaluation

Appendix E

Student Survey: Scale Items and Reliability



Career Education Standard Program Evaluation

Student Survey Scale Items

School Climate (Chronbach's Alpha = .88)

My teacher really cares about me.
The community is proud of this school.
This program is a good place to learn.
I like going to this school.
If I have a personal problem, I can talk to the counselor.
I feel safe in my program.
I have a feeling of belonging in my program.
Students in my program are friendly.
My teacher treats me with respect.
I am treated fairly in my program.
Discipline is handled fairly in this school.

Quality Learning Environment (Chronbach's Alpha = .94)

My teacher thinks I can learn.
I have been encouraged to establish career or educational goals at school.
My counselor has helped me create a plan to reach my educational and/or career goals.
My parents have a good idea of what goes on at school.
My family believes that I can do well in this program.
The class I have at school covers material that is important to me.
My teacher makes clear to me what I am supposed to learn.
My teacher is organized and well prepared to teach.
My teacher informs me about my progress in class.
My teacher makes learning interesting.
I am given opportunities to work and learn independently.
My teacher wants me to contribute my thoughts in class.
In my program all students are given a chance to succeed.
In my program there is good communication between the teacher and students.
If a student has a problem the teacher will listen and help.
Class interruptions are kept to a minimum.
My program provides me with the textbooks, tools, supplies, and learning materials I need to learn.
The equipment in this program is up-to-date and well maintained.
My classroom/shop/lab is in good condition.
My teacher expects very good work from me.
My teacher is a good teacher.

Media and Technology Resources (Chronbach's Alpha = .78)

I use computers in my program.
I know how to find information I need to complete class projects.
My teacher can assist me in using computers effectively.
I know how to use electronic resources to locate information.
I can get access to the Internet at school when I need it.
The library has up-to-date resource materials.