

CAREER & TECHNICAL EDUCATION

	<u>Staff</u>	<u>Students</u>	<u>Budget</u>	<u>Cost Per Student</u>
(Business)	6.20	900	\$ 639,429	\$710
(Fam. & Cons.)	6.80	1,439	\$ 687,306	\$478
(Technology)	11.50	1,964	\$1,161,601	\$591

There are many ways of measuring how a program is progressing. For the purposes of this program summation, the focus is on enrollment trends, student success, courses offering college credit, and curriculum and instructional modifications. Below is a summation of how the Career and Technical Education program performed in total. The attached reports provide an evaluative review by discipline to better articulate progress within those specific departments.

The chart below provides a visual summation of the performance indicators noted above.

Department	School	Faculty (FTE's)	# of Crs	Enrollment	Student FTE's	Passing Rate	College Credit Courses	College Credit
Business	SHS	6.2	19	900	505	98%	5	100%
FACS	SHS	3.3	13	479	308	99%	1	100%
Home & Careers	SJHS	3.1	2	960	704	100%	N/A	N/A
Technology	SJHS	4.2	2	960	939	100%	N/A	N/A
Technology	SHS	6.9	25	1004	592	98%	3	100%
Totals	Both	237	61	4,261	3,048	99%	9	100%

Curriculum and Program Developments

Over the past three years, the CTE curriculum has undergone a careful review. As a result a number of course modifications were identified as well as a number of gaps in the existing course offerings. A number of courses were also identified as having the potential of offering college credit in addition to high school credit. The review has consisted of content review to ensure that courses reflect current industry trends, technology and standards; as well as a check of the alignment between the career interests of the student body and the electives being offered. Following is a listing of the various modifications completed or in progress. Most of these are discussed in more detail in the individual discipline reports that follow.

CAREER AND TECHNICAL EDUCATION (cont.)

- ❖ Business
 - Exploring a new offering addressing business fundamentals
 - Exploring a college articulated marketing elective
 - Increasing the number and variety of career sites available for seniors enrolled in the Career Exploration Internship Program
 - Instructional Technology updates
 - New Business Network Server
 - 26 new computer workstations in lab A202
 - New high production printers A201 & A202
 - New large screen projectors
 - Updating of the Microsoft Office and Desktop Publishing software

- ❖ Family & Consumer Sciences
 - Developed a new course in Clothing Design and Construction
 - Addition of two new computer workstations and a printer added to the FACS computer lab
 - Replacement of the dishwasher in A138 and a clothes washer in A136
 - Prepared plans for the renovation of the clothing & Textiles Lab. A135
 - Community Service projects including assisting in the Ronald McDonald House, local food pantry, and Thanksgiving at Equinox

- ❖ Home & Careers
 - Converting the student career portfolio work to a intranet based project
 - Expanding access and integration of the student portfolio to all CTE courses
 - The introduction of as a new faculty member to the department
 - Addition of two printers to the Home and Careers classroom
 - Addition of two sewing machines

- ❖ Junior High Technology
 - Prepared plans for the relocation of space between D116 and D118
 - Completed an interdisciplinary curriculum planning project which resulted in a new unit of study focused on communication systems
 - Exploring new lab activities focused on energy awareness and conservation

- ❖ Technology
 - Acquisition of new CNC equipment
 - Introduced a new Computer Integrated Manufacturing elective
 - Continued infusion of the Auto CADD/Inventor as the primary technological communications tool throughout the department.
 - Introduction of Video morning announcements for the high school
 - Completed a curriculum development project to re-design and update the Principals of Engineering elective.

CAREER AND TECHNICAL EDUCATION (cont.)

- Completed a curriculum development project to re-design and update the IRP 3 & 4 Technology/Math Science curriculum.
- Established a five-year plan for the development and implementation of a pre-engineering sequence of courses. We are currently entering year four and are on schedule.
- Established college credit options for Broadcast Communications and Residential Construction with Hudson Valley Community College. We also have received approval for Telecommunications and Networking with Schenectady County Community College.
- Three teachers have participated in ten days of in-service training in the use of the Auto Desk software over the last two summers.

OBJECTIVES

- Work with the State Education Department to begin a review of our CTE content areas to determine if we are currently eligible for State Certification or what additional program modifications would be required to be eligible.

Evaluation: Was a review of the CTE certification eligibility status completed? Are there any recommendations for new courses or program modifications forthcoming?

We are continuing to work with the New York State Career and Technical Education Resource Center to establish CTE pathways that will meet the requirements for certification. This organization is principally charged by the State Education Department to assist districts with the certification process for career and technical education programs. The following points highlight our progress thus far:

- Exploring the possibility of offering Design and Drawing for Production to eighth grade students. This will allow students with engineering aspirations to begin the course of study prior to High School allowing increased opportunities to complete Science, Technology, Engineering and Mathematics courses prior to their senior capstone project. Encouraging students to explore a diverse variety of STEM electives helps student better identify their area of engineering interest and focus.
- We are also exploring additional finance and marketing course options to provide a Finance and Marketing career pathway that would be eligible for certification.
- We are just beginning to explore possible pathways in our Family and Consumer Science Department. There are a number of career options available; however, we need to determine the correct combination of courses to constitute an eligible career pathway.

CAREER AND TECHNICAL EDUCATION (cont.)

In addition to the programming advantages of identifying our courses in this manner, it is important to note that career programs that receive this certification from the State Education Department are eligible to apply directly for funding under the new Federal Perkins IV grant program.

- Continue to review all CTE course curricula in an effort to identify the need to update courses currently offered or identify new course topics needed. Particular attention will be given to continuing the planned development of the pre-engineering course cluster.

Evaluation: Was a review of course curricula conducted? Are there any recommendations for new courses or course content changes forthcoming?

Review of the Business, Family & Consumer Sciences and Technology courses currently being offered at the junior and the senior high school has resulted in a number of curriculum projects and new course initiatives.

- A new marketing course is being explored as part of a finance and marketing career pathway (sequence). We are currently comparing our outline with similar courses offered through the HVCC College in the High School program.
 - A new entry level business skills course for our more academically challenged students has been outlined and is being proposed for inclusion beginning in the 2009-2010 school year.
 - A new Family and Consumer Sciences course in the field of clothing design and construction will be offered for the first time next year. Please note the update on this objective is addressed more thoroughly under the technology department objectives.
 - The junior high technology education faculty will work together with a math and a science teacher this summer to complete planning for a new instructional unit based on communication technologies.
 - Auto CADD and Inventor software use is rapidly becoming the standard communication tools used in each of the Technology classes. This spring two of the High School faculty taught a staff development course for the Junior High Technology faculty on use of the Inventor design program, and it is now being phased in at the Junior High as well.
 - The Principles of Engineering course is being revised.
- Work to expand the use of the grade 8 career portfolio to Career and Technical Education courses offered at the High School.

Evaluation: Was a review of the use of the grade eight career portfolio in High School courses completed? Are there new applications being explored?

CAREER AND TECHNICAL EDUCATION (cont.)

The Home and Careers staff has been working on revising the career portfolio project completed by the 8th grade students. The intent is to move this unit to a web-based format that will not only allow students to compile a much more thorough portfolio but will also allow their work to be accessed and refined in the CTE elective courses that the students pursue while in high school. Additional training is being provided for all CTE faculty as part of our department faculty meetings on the information contained in the portfolios and how the portfolios can be accessed and integrated into all CTE courses.

- Facilitate the successful combination of all CTE areas into one cooperative and collaborative department. Continue to develop common goals.

Evaluation: What evidence is there that the content areas are working cooperatively and collaboratively?

The departments meet together on a regular basis to discuss developments and concerns of mutual interest. The inclusion of the web-based student career portfolio into all CTE electives is an excellent example of inter-departmental collaboration and support. Departments will also be collaborating on a number of the CTE career paths that will be proposed for State certification.

- Review and assess the new administrative structure implemented to oversee the Career & Technology Education departments and make recommendations for revision if needed.

Evaluation: Was a review conducted? What were the findings? What recommendations were made? What is the impact of these recommendations?

No formal review was conducted, however, evaluations and departmental feedback do not indicate any concerns with the new administrative structure for the Career and Technical Education Departments.

Business Education

Enrollment Trends

Enrollment in our Business Education electives continues to be strong showing growth in a number of electives. It is interesting to note that 7 of the 16 available electives had to be closed due to excessive enrollment as of May 1, 2008 and Business Statistics had to be canceled to provide sufficient staffing for the larger electives. In viewing enrollment trends by grade level, it should be noted that ninth grade students have very limited opportunities for electives in their academic schedule. It should also be noted that IRP Business does not begin until grade 10. The Career Exploration and Internship

CAREER AND TECHNICAL EDUCATION (cont.)

Program, which places students in a wide variety of career interest areas, remains a very popular option for Shaker High School seniors. Parents and businesses frequently express admiration for this program and the opportunities it provides our students.

Student enrollment by course

	2007-2008		2006-2007		2005-2006	
	Number of Students Enrolled	% of Student Body Enrolled	Number of Students Enrolled	% of Student Body Enrolled	Number of Students Enrolled	% of Student Body Enrolled
IRP 2	68	3.3	81	4.70%	95	4.70%
IRP 3	32	1.5	33	1.35	27	1.35
IRP 4	12	.6	16	.94	9	.45
Intro to Business I & II	21	1	19	1.18	47	2.35
Keyboarding	86	4.2	79	4.65	89	4.45
Advanced Keyboarding	23	1.1	21	1.24	17	.85
Accounting 1R	28	1.4	25	1.4	21	1.1
Business Computer App.	23	1	26	1.53	17	.85
Business Law	101	5	40	2.35	57	2.8
Business Ownership	63	3.3	80	4.71	58	2.9
Business Statistics	N/A	N/A	10	.5	13	.65
College Keyboarding	17	.8	18	1.16	19	.95
College Accounting	26	1.3	22	1.29	15	.75
E-Commerce	22	1	18	1.16	16	.8
Financial Decision Making	74	3.5	63	3.71	63	3.15
Organization & Mgmt.	22	1	21	1.24	46	2.3
Quantitative Business App.	21	1	17	1	14	.7
Sports & Entertainment Mktg.	123	6.2	97	5.71	111	5.55
CEIP	124	6.2	90	4.82	91	4.55
Totals Enrollment (full time equivalent)	900 (598)	25%	776 (505)	25%	825 (556)	28%

Student Success Rate

Students continue to achieve a high rate of success in their chosen Business electives. Of the 16 elective courses noted below, the average rate of success is 97%. This is due in large part to the perceived relevance of the topics and skills, as well as, a strong degree of content interest on the part of the students. Faculty members make an effort to use real world business examples and to employ a hands-on approach to learning through project work, numerous guest speakers, Junior Achievement activities, and field trip experiences. Textbooks and workbooks are kept current to ensure that students are exposed to the latest business practices and software.

CAREER AND TECHNICAL EDUCATION (cont.)

We are proud that all of the 125 students who enrolled in course work for college credit successfully completed their course work and received college credit.

Percentage of student success by course

	<u>2007-08</u>	<u>2006-07</u>	<u>2005-06</u>
Accounting	100%	95%	100%
Advanced Keyboarding	99%	92%	100%
Business Computer Applications	98%	100%	88%
Business Law	90%	93%	96%
Business Ownership	84%	100%	98%
Business Statistics	N/A	100%	100%
CEIP	100%	98%	97%
College Accounting	100%	100%	100%
College Keyboarding	100%	100%	100%
E-Commerce	100%	100%	94%
Financial Decision Making	98%	94%	93%
Intro. to Business I and II	100%	100%	93%
IRP 2	98%	98%	98%
IRP 3	99%	100%	92%
IRP 4	100%	100%	100%
Keyboarding	99.5%	97%	93%
Organization and Management	88%	90%	100%
Quantitative Business Applications	100%	100%	100%
Sports & Entertainment Marketing	98%	99%	97%

Participation and success in the College in the High School Program

COURSE	2007-08			2006-07	
	# Enrolled	# Paying Tuition	Credit Awarded	# Enrolled	Credit
Business Law (SCCC)	101	67	67	40	27
Business Statistics (HVCC)	N/O	N/O	N/O	10	7
College Accounting (SUNY Albany)	26	18	18	21	17
E-Commerce (SCCC)	22	7	7	18	9
Organization & Management (HVCC)	22	15	15	21	21
Quantitative Business Applications (HVCC)	21	11	11	13	11

CAREER AND TECHNICAL EDUCATION (cont.)

HIGHLIGHTS

- The Business Education Department had a very successful year with 900 participants, 172 of which enrolled and received college credit for their business elective.
- Based on changing student need and business trends, work was begun on designing new courses in the fundamentals of business and marketing. The Business Fundamentals course will be designed to address the career preparation needs of some of our more academically challenged students. Increased student interest in the pursuit of business marketing careers has resulted in the development of a college articulated marketing elective. To ensure course content and practices reflect current business practice, new textbook and workbooks have been adopted for our accounting and law.
- Further integration of instructional technology is reflected in the replacement of 25 workstations in A202 and additional SMART Boards, large screen projectors, and document projector.
- A new network server to accommodate business education applications was installed over the summer of 2008. This upgrade will result in significant improvement in network performance.
- The strength of this program lies in the commitment and professionalism of the faculty. Their commitment to our students and our program is unparalleled. The personal assistance they provide for students who are struggling, as well as the parental contacts they make, contribute greatly to the program success.
- Beyond the classroom, the faculty participates with interested students in a business club after school. The club hosted a number of business-related field trips and guest speakers. Activities of this type help to develop and sustain content interest and student/teacher rapport. For the second year, the club adopted a family with five children and provided gift cards for Thanksgiving. At Christmas, they provided food gift cards in addition to presents for the five children. They also raised enough money to go to New York City where they saw business activities at Times Square and attended a Broadway show.
- The Capital Region Business Review recognized one of our students, Dan Huang, as one of its Forty Under 40, most promising business leaders in the Capital Region.

CAREER AND TECHNICAL EDUCATION (cont.)

- As we look to the new school year, we can anticipate new course initiative proposals for both the Business Fundamentals and Business Marketing. Maintaining the program equipment and facilities continues to be a primary objective.
- Business education faculty and administration will be articulating a career pathway sequence to be submitted for state certification State Education Department Career and Technical Education certification. These career pathways help students, parents, and guidance counselors in planning the coursework that will best align with a student's career interests and aptitudes. Once established, we will review these course sequences with the State Education Department to determine if the pathways qualify for New York State Education Department Career and Technical Education certification.

OBJECTIVES

- Pursue inclusion of Business Computer Applications courses are part of the College in the High School program offered through Hudson Valley Community College.

Evaluation: Were these courses successfully included as part of the College in the High School program? How many students participated and successfully completed the courses?

The Business Computer Applications course that is currently offered was reviewed by Hudson Valley Community College. They determined that they do not currently have a course that aligns closely with ours. We will also be exploring the possibility of articulating the course with Siena College or Schenectady Community College.

Research the possible need to provide an opportunity for students to earn a third unit of Math credit via successful completion of a selected business education course.

Evaluation: Was a need for a Business Education alternative for a third unit of Math identified? If a need is identified, are there recommendations for how to best address this need?

A meeting with Mrs. Greenberg and discussions with guidance counselors indicated that there is not a clear demand for an alternative at this time.

CAREER AND TECHNICAL EDUCATION (cont.)

Family and Consumer Sciences 7–12

Enrollment Trends

Following several years of student course requests that far exceeded the available staffing, the Board of Education approved the addition of a .7 FTE Family and Consumer Science instructor as part of the 2008-2009 school budget. As a result of that increase in staffing, nearly all student requests for Family and Consumer Science courses for the 2008-2009 school year were accommodated. While course enrollment continues to be largely female, more young men are demonstrating an interest, particularly in the culinary arts based courses.

Student enrollment by course

	2007 - 2008		2006 - 2007		2005 - 2006	
	# Students Enrolled	% Student Body	# Students Enrolled	% Student Body	# Students Enrolled	% Student Body
Intro. to Occ. I	0	0	0	0	0	0
Careers in Human Services	11	.5	N/O	N/O	21	1.07
Independent Living	13	.5	0	0	45	2.25
Intro. to Early Childhood	47	3	51	3	51	2.55
Adolescent Development	49	2.53	43	2.53	24	1.2
Housing and Interior Design	42	3.71	63	3.71	58	2.9
International Foods	61	3	66	3.88	69	3.45
Clothing & Textiles	N/O	N/O	71	4.18	54	2.70
Food & Nutrition	38	2	41	2.41	22	1.10
Fitness & Nutrition	N/O	N/O	25	1.47	23	1.15
Food Processing	11	.5	12	.55	11	.55
Families in a Diverse World	N/O	N/O	18	.9	20	.1
Child Development (HVCC)	21	1	25	1.47	18	.90
IRP I, III, IV	136	6.5	135	7.94	50	2.5
Total FACS	479	24	557	25	471	22

Percentage of student success by course

Student Success Rates – The overall success rate for all FACS courses for the 2007-08 school year was a very strong 99%. Student success in these courses is largely attributable to the content relevance and the application based style of presentation. Students receive individual assistance and support as required and parents are kept well informed of student progress.

CAREER AND TECHNICAL EDUCATION (cont.)

	2007-08	2006-07	2005-06
Introduction to Occupations 1	Not offered	N/O	N/O
Careers in Human Services	100%	N/O	100%
Independent Living	100%	N/O	90%
International Foods	93%	90%	98%
Fitness and Nutrition	Not offered	94%	100%
Food and Nutrition	100%	94%	100%
Human Development	100%	100%	100%
Introduction to Early Childhood	99%	100%	98%
Housing and Environment	97%	96%	96%
Families in a Diverse World	Not offered	100%	N/A
Clothing and Textiles	99%	100%	98%
Food Processing	100%	100%	100%
Child Development – HVCC	98%	90%	88%
IRP I	100%	100%	99%
IRP III	100%	100%	100%
IRP IV	100%	100%	91%

HIGHLIGHTS

- In addition to scholastic achievement, our students achieve employing their skills outside of the classroom and toward community based need. The Junior High School Home & Careers students complete a unit of study on global humanitarianism as part of the eighth grade syllabus. As part of this unit, the students designed and constructed fleece hats, mittens, neck warmers, and blankets. These items were sent to *Adoptions Together*, an organization that distributes the projects to orphanages in Russia and China. Additional fleece blankets were given locally to Unity House, Project Linus, and to students in crisis within our school district.
- At the high school, students participated in our FCCLA organization. These students volunteered at the Regional Food Bank, the Arbor Hill Soup Kitchen, the pediatrics ward at Albany Medical Center, and at the Ronald McDonald House in Albany. They also constructed and distributed pillows and craft kits for children at Albany Medical Center. At Thanksgiving, the group helped to prepare meals for needy families through the Equinox program, and they helped to provide food and gifts for those in need through the Adopt-a-Family program.
- The 2007-2008 school year brought a number of changes to the Family and Consumer Sciences program with the retirement of a long term faculty member and the addition of a new instructor.
- Seventh and eighth grade faculty continue to work to provide a fully web based student portfolio. The goal of the web based document is to provide students with

a dynamic document that will be universally accessible throughout their study in the North Colonie School District.

CAREER AND TECHNICAL EDUCATION (cont.)

- A new Clothing Design and Construction course began this year with an opening enrollment of 20 students. This career elective has certainly resonated with student interest.

OBJECTIVES

- Continue research and development new course initiatives in Clothing Construction, Gerontology and Food Science to be offered as part of the Family and Consumer Sciences program. The potential of including these courses in the College in the High School Program will also be investigated.

Evaluation: Was a review of course curricula conducted? Are there any recommendations for new courses or course content changes forthcoming?

A new Family and Consumer Sciences course in the field of clothing design and construction will be offered for the first time in the 2008-2009 school year. Initial student requests indicate that a minimum of one section will be required. This course is a response to the increased student interest in fashion and fashion-related careers, as well as the increased occupational demand in this career field.

Technology 7–12

Enrollment Trends

Technology Education enrollments have remained largely consistent over the past two years. However, many of the section enrollments were significantly larger than the optimum class sizes designated for the courses. This resulted in decreased student access to lab facilities, equipment, and instructor assistance. This concern was addressed by increasing staffing by a .4FTE in the 2008-09 school budget.

CAREER AND TECHNICAL EDUCATION (cont.)

Student enrollment by course	2007-08		2006-07		2005-06	
	# of Students	% of Students	# of Students	% of Students	# of Students	% of Students
Principles of Engineering	32	1.7	17	.94	11	.5
Residential Construction	57	2.9	68	3.8	50	2.5
Audio Electronics	18	1.0	35	1.9	29	1.45
Graphic Communications	18	1.0	22	1.2	19	.95
Broadcast Communications	36	1.8	68	3.6	0	0
Computer Aided Drafting	19	1.0	24	1.3	21	1.05
Architectural Drawing	38	1.8	22	1.2	18	.9
Computer Applications	58	2.9	51	2.8	44	2.2
Design & Drawing for Prod.	101	5.0	84	4.67	87	4.35
Energy Systems	11	.50	13	.72	0	0
Exploring Telecommunications	60	3.0	60	3.3	33	1.65
Home Electricity	18	1.0	23	1.5	26	1.3
Intro. to Tech Occupations	0	0	0	0	0	0
IRP I	94	4.8	92	5.1	87	.5
IRP II	79	4.0	81	4.50	95	4.1
IRP III	30	1.5	29	1.61	19	.95
IRP IV	16	.90	13	.72	20	1
Land Transportation	50	2.5	75	4.17	65	3.25
Manufacturing Processes	11	.5	17	.94	19	.95
Materials Processing – Metals	43	2.1	56	3.1	49	2.45
Materials Processing – Plastic	23	1.1	15	.83	14	.7
Materials Processing – Wood	55	2.7	56	3.1	43	2.2
Networking and the Internet	44	2.2	40	2.2	42	2.1
Technical Photography	48	2.4	64	3.4	61	3.05
Transportation Systems	32	1.5	36	2.00	31	1.55
Total (Full Time Equivalent)	1004 (592)	30%	1061 (602)	30%	883 (594)	25%

Student Success Rate

Student performance in the Technology electives remains very strong with an average of a 98% success rate. Technology courses, like other career based electives, allow students to explore both career and avocation interests and to apply many of the academic skills they have learned. In addition, many students find in these courses an opportunity to be creative and learn kinesthetically. Instructors make an effort to ensure that the content being presented is current and utilize examples that are relevant to their students. Students who encounter difficulty are provided with additional assistance as needed.

CAREER AND TECHNICAL EDUCATION (cont.)

Three University in the High School electives were offered and all students enrolling in the college credit option for these classes successfully completed their course work receiving both local and Hudson Valley Community College credit for the class.

Percentages of student success by course

	2007-08	2006-07	2005-06
	% of Students Passing	% of Students Passing	% of Students Passing
Architectural Drawing	99%	100%	94%
Architectural Drawing II	100%	New Course in '07	New Course in '07
Audio Electronics	100%	97%	93%
Broadcast Communications		100%	N/A
Computer Aided Drafting	100%	100%	100%
Computer Applications	100%	96%	100%
Design & Drawing for Production	100%	100%	99%
Energy Systems	100%	100%	N/A
Exploring Telecommunications	95%	100%	94%
Graphic Communications	97%	67%	100%
Home Electricity	100%	100%	88%
Introduction to Tech Occupations	Not Offered	Not Offered	Not Offered
IRP I	97%	93%	100%
IRP II	100%	100%	98%
IRP III	98%	100%	95%
IRP IV	100%	100%	100%
Land Transportation	100%	100%	100%
Manufacturing Processes	100%	100%	79%
Materials Processing – Metals	96%	96%	100%
Materials Processing – Plastics	99%	100%	100%

	2007-08	2006-07	2005-06
	% of Students Passing	% of Students Passing	% of Students Passing
Materials Processing – Wood	95%	98%	100%
Networking and the Internet	99%	97%	90%
Principles of Engineering	100%	100%	100%
Residential Construction	92%	100%	97%
Technical Photography	95%	93%	93%
Transportation Systems	100%	100%	100%

CAREER AND TECHNICAL EDUCATION (cont.)

Participation and success in the College in the High School program

COURSE	2007-08			2006-07		
	# Enrolled	# Paying Tuition	Credit Awarded	# Enrolled	# Paying Tuition	Credit Awarded
Broadcast Communications	36	12	12	53	27	27
Manufacturing Processes	11	11	11	15	10	10
Residential Construction	57	24	24	64	24	24

HIGHLIGHTS

- The 2007-2008 school year brought the inclusion of computer integrated manufacturing to our program. In addition to the CIM course, the new computer numeric controlled (CNC) machinery is being infused as an instructional tool in many of the technology electives. The scale and versatility of the new equipment provides potential for a variety of new laboratory applications.
- The 21st century skill initiatives introduced with the redesign of the foundational course Design and Drawing for Production are now reflective throughout the technology education electives. Auto CADD/Inventor software has been adopted as the primary technical communications tool used throughout the High School Technology Department; and as a result of the infusion of PC based computers and in-service training provided by high school faculty, this software is now being adopted in the Junior High Technology program as well.

- The introduction of new faculty in Telecommunications and Electronics has brought curriculum modification and stability to those content areas. In addition to modifications in course content, we have seen a resurgence of interest in the Robotics Club and the study of digital electronics.
- In response to the need to provide a more structured curriculum for third year IRP students, extensive content revision and course planning was completed over the summer months. The new course outline helps to address content relevancy, career path articulation, and math science technology integration. In addition, curriculum work was completed for the Principals of Engineering Course, revising course content and including course recommendations made by engineering staff at both RPI and Union College. The new course will provide students with direct contact to professionals in the field and to current engineering challenges. This course will provide the foundational skills for those students

CAREER AND TECHNICAL EDUCATION (cont.)

who will go on to complete the Grade 12 Engineering Capstone course/project to be introduced in the fall of 2009.

- Additional curriculum work completed in the summer of 2007 included revision of the IRP IV course content to better align with new revisions in IRP III and the development of an interdisciplinary Junior High technology communications unit, that was developed collaboratively with representatives of the Junior High Math and Science programs. This unit will be provided as part of the Junior High Technology program in the 2008-2009 school year.
- As we look to the new school year, we welcome the .5 FTE increase in Technology Education at the high school and .3 FTE at the junior high. This additional staffing ensures that both junior high mandated programs and high school electives are provided in a safe and conducive learning environment.
- Instructional technology additions to both the junior high and high school laboratories planned for the 2008-09 school year will increase student access to laboratory software and equipment acquired over the last two years. In addition, planning is underway to implement the facilities modifications to the junior high and high school technology laboratories approved as part of the district's EXCEL project.
- The district's commitment to provide 21st technical career education is clearly evident through the program modifications and resulting student success.

OBJECTIVES

- Begin the review and revision of the Principals of Engineering course to better align with current university and industry standards.

Evaluation: Was a review of course curricula conducted? Are there any recommendations for new courses or course content changes forthcoming?

We have spoken with RPI and Union College and we are also investigating high school programs at Albany HS and Shenendehowa. Mr. Clayton and Mr. Ashline will be completing a curriculum development project this summer to complete the planning for this course.

- Explore the possibility of offering the Design and Drawing for Production course as an accelerated High School credit option for eighth graders.

Evaluation: How was the possibility of offering this accelerated option explored? Are there any recommendations for new courses or course content changes forthcoming?

CAREER AND TECHNICAL EDUCATION (cont.)

Initial discussions regarding the scheduling and facilities modifications required to offer Design and Drawing for Production as an accelerated course offering at the Junior High School have occurred. Discussions will continue with the goal of formulating a proposal to implement instruction beginning in the fall of 2009.