

East Greenbush Central School District

Final Report

Career Education Program Development and Enrichment Support

Prepared for

Jeffery Simons

Superintendent of Schools

By

Career and Technical Education Technical Support Center of New York¹

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¹ *The Career and Technical Education Technical Assistance Center of NY has made every effort to ensure the accuracy and reliability of the information contained in this proposal. The views expressed are theirs alone and do not necessarily represent the position of the NYS Board of Regents or the NYS Education Department.*

In September of 2016 at the request of Mr. Jeffery Simons, Superintendent of Schools the East Greenbush Central School District the Career and Technical Education Technical Assistance Center of New York was engaged to review of the district's career education offerings. and to make recommendations for the enhancement of those offerings. The district seeks to assure that the career and technical education offerings of the district are widely available to meet the needs and interests of all students, are of high quality and are offered in the most cost effective manner possible.

The study visit was conducted in early October of 2016 and included:

1. Meetings and visitations at the middle school and high school with teachers in the 6-12 STEM, FACS, technology, and business programs, building principals and assistant principals, and school counselors.
2. Visitations to classes in the career education programs at the middle and high school levels. The team reviewed space allocation, the condition of the facilities and other program resources and to observe instruction and the level of student engagement.
3. A review of numerous key curriculum, course offering, teacher certification, student performance documents and other program and student information.
4. A review of the district's Project Lead the Way effort by a CTE TAC consultant, Mr. Andrew Zefarano.
5. A phone interview with Questar III BOCES CTE leadership concerning East Greenbush participation and student success.
6. Although desired, the CTE TAC team was unable to meet with representatives of the post-secondary institutions and business partners that collaborate with the district.
7. A crosswalk of district career education offerings as they related to the 16 National Career Clusters, the Capital Region Regional Economic Development Council Focus Industries and NYSDOL information. This provided a picture of the alignment of district CTE programs to employment opportunities in the region consistent with the economic development and labor market needs of the region
8. A phone interview the Questar III BOCES Director of CTE to assess the status of the relationship between the district and BOCES programs. This discussion included a review of the performance of district students in the BOCES CTE programs and the BOCES plans for program review, revision, and development.

A report and associated findings and recommendations was presented to the Superintendent in December of 2016 and reviewed by the Education Committee on January 13, 2017 and the Board of Education on February 8, 2016. At the request of the Superintendent additional work

was undertaken with the Education Committee on March 7, April 13 and May 8, 2017. The purpose of this effort was to engage key school district leaders, faculty and community members in a visioning exercise for career education in the district. Time was taken to provide background information on High Quality CTE, the Career Clusters and Common Career Technical Core², the NYS Education Department Program Approval Process and Board of Regents graduation pathways. This was followed by two work sessions to develop a Suggested Vision for College and Career Readiness (definition) and a Suggested East Greenbush five-year Action Plan for realizing that Vision. These were active work sessions with the Education Committee and although no formal endorsements were made the documents offered here represent a wide range of thought and were deeply discussed and considered.

Provided here are the results of the work with the Education Committee:

1. A Suggested Vision for College and Career Readiness in East Greenbush Central School
2. A Suggested East Greenbush Action Plan for realizing that Vision
3. Notes and annotations on key questions explored by the Education Committee

Previously Provided were:

1. Final Report on the Status of Career Education
2. Regional Economic Labor Outlook Alignment

Recommendations:

1. Carefully review the Vision Statement and revise and prepare it for Board of Education review. Establishing a set of metrics will be key.
2. Carefully review the Action Plan and revise and prepare it for Board of Education review.
3. Use care to engage your building and faculty leadership in these deliberations to consider and/or resolve their dissent, build support, consider resource needs and to imply accountability. You have a pretty big cultural shift to achieve.
4. There are four actions that should be early wins for you from the 2017-18 elements of the work plan. First the Vision Statement and definition of college and career readiness (1), second the work to seek program approval for your business programs (3), addressing the need for specific curriculum in the Home and Career Skills and Technology programs at the middle school (6), and regular engagement of the HS and MS CTE and PLTW faculty to define, coordinate and articulate programs (7)
5. Staff from the TAC will reach out to Mr. McHugh to initiate the work on the Program Approval for the Business Programs
6. We continue to stand ready to support your efforts as you seek to develop and refine you career education programs. Edward Shafer remain your primary contact for additional support at ed@spnet.us or 315-269-7095.

² Achieve CTE, National State Directors of CTE

SUGGESTED VISION FOR COLLEGE AND CAREER READINESS

Definition of College and Career Readiness

College and Career Readiness is a set of student attributes that are not defined by, but enabled through, a variety of strongly supported educational programs and structures which include Career and Technical Education. The East Greenbush school community embraces the following vision for *all students* as demonstration that they are College and Career Ready.

Vision Statement

All students upon graduation from East Greenbush Central School District will have the academic, technical and career/life abilities to persist and succeed in postsecondary education including corporate training, the military, apprenticeships, certificate programs and degree bearing programs and:

- a) Have met the graduation requirements of the Board of Regents and Board of Education
- b) Completed a pathway program of study in the Humanities, STEM, CTE, the Arts or Languages other than English having explored various pathways in grades 6-10.
- c) Have a career pathway plan linked to their adult learning and employment goals
- d) Experience in work based learning or service learning
- e) Demonstrated mastery of district defined career/life skills
- f) Earned advanced standing and/or dual credit from a postsecondary institution
- g) Competency in Career and Financial Management
- h) For those completing the CTE and STEM pathways, earning power in the form of an industry approved entry level certificate

Commentary based on Education Committee Feedback

Item **b)** refers to a set of capstone courses within each pathway. Care will have to be exercised provide “rail guards and off ramps” to other pathways. This flexibility should not mitigate the learning that comes from finishing something in high school that clarifies for the student that this is not the path they wish to follow in their future.

Item **d)** must be broadly defined and reflect the needs, interests and time demands on students. This may require faculty experiences in local work settings to encourage the development teacher understanding of the relationship of their content to work.

Item **e)** provides the opportunity for the district to define what is meaningful to the students, community and faculty.

Item **f)** is informed by the research of the Georgetown University Center on Education and the Workforce that education beyond the high school diploma will be required for adult success.

For some, this comes in the form of a certificate program, or articulation with an apprenticeship or even a BOCES sponsored adult program like Licensed Practical Nursing

Item **g)** refers to competency. Thus, options include a course in Career and Financial Management, an online course or even a competency test to demonstrate mastery

Of course, the district will have to assure that there is sufficient leadership and resources provided to realize the vision.

Other Comments by the Committee

Facilitator/Director to oversee implementation and planning for CTE programs (this is about leadership not title, who is going to be responsible to make this work.

Updated facilities to reflect industry/workplace environments (classrooms that are movable, modern, allow for group /individual work and updated regularly

Sequence of coursework available to all students that direct and support career pathways

Comprehensive (K-12) guidance program

Financial literacy for all

Cross curricular common language across the board

Career education for all

Soft skills integrated into all courses in a purposeful way

Real world experiences for students and staff (capstone projects, portfolios, internships, coop, apprenticeships, bring speakers in)

Opportunities to incorporate project based learning (student led)

Suggested East Greenbush Action Plan

Prerequisite

Professional Development-Expanding the focus on career education will require a shift in perspective for the leadership, faculty, students, and community. All faculty members will need to have their awareness raised and to alter instructional approaches and content. Key will be the Board of Education policy on college and career readiness. Instructional leadership at the district and building levels will need to develop embedded and explicit professional development consistent with that policy and strategies for its implementation. This will require deep involvement of the leadership to help faculty grasp the need to balance career education with college readiness, embrace the change and enhance their skills in academic integration, problem and project based learning, and aligning instruction to the career goals/interests of students.

Early Actions (2017-18)

1. Define College and Career Readiness and establish metrics for achievement
2. Explore Academy, Project/Problem Based Learning, ConnectEd and other integrated career education models and the Career Cluster model and the Common Career Technical Core as a base for career education.
3. Explore, develop and submit for approval by NYSED business program(s) in finance and/or marketing
4. Have students who complete the PLTW sequence challenge the NOCTI or other recognized certification examination in engineering (at no cost to the student) and monitor student success
5. Move to implement the recommendations made by the CTE TAC of NY concerning PLTW (Report on the Status of Career Education, recommendation #12)
6. Modify the Middle Level CTE offerings consistent with new Commissioner regulations by:
 - a. Selecting and providing training for technology instructors in a third-party curriculum which supports engineering principles to serve as the base for the middle level technology program that supports CTE/PTLW offerings at the high school, and
 - b. Modifying the Home and Career Skills program consistent with the revised curriculum guidance provided by the Family and Consumer Science and Business Educators Associations

7. Hold regular meetings with HS and MS CTE faculty to coordinate and articulate offerings and course content, strengthen instructional approaches, organized student leadership opportunities, review student performance, calibrate assessment to a common rubric on all ELA and Math extended responses, formulate program resource requests and engage in professional development.
8. Conduct a cost benefit analysis for IT pathway offerings in the district vs. BOCES or participation in a consortium of district option.
9. Commence discussion on the facilities needs for career instruction and involve the CTE faculty and other instructors in defining these needs and how to address them in a facilities project

Intermediate Term Actions (2018-2021)

1. Commence tracking of student performance in each CTE course against agreed upon rubrics and other metrics.
2. Establish goals and begin tracking the number of students who earn technical endorsements on their diplomas and/or pass certification on industry based examinations.
3. Conduct a review of the district's portfolio of career education courses and their curriculum. This will help assure that the district has control of the content, that the courses are vertically articulated and aligned from middle school through high school and with local post-secondary and employment opportunities.
4. Develop a comprehensive, board-approved set of curricula, with units, anchor activities, maps and pacing guides, for all local career education courses and programs offered in any department.
5. Review the structures and career content in the K-12 general curriculum and refine and develop the curriculum and student supports in K-12 make career awareness and planning a priority.
6. Unify the various career-based courses in the academic and CTE departments into a coherent set of offerings and pathways of study within the high school course guide. This would allow students to see how they can select a set of electives consistent with their career goals and plan.
7. Explore additional opportunities to create NYS Approved CTE Programs within offerings at the high school.

8. Explore and develop content and course structures to include Career and Financial Management in instruction for all students.
9. Assure that all faculty have practical experience in their area of career instruction or are provided with the opportunity for externships to businesses in their instructional area.
10. Complete the construction and renovations of modernized facilities for career education instruction
11. Establish or participate in forums for working with the Capital Region community colleges and business/industry (Partnership Council). Use this group to advise on program offerings and curriculum, provide work-based learning opportunities, help assess students' technical skills, and assist in aligning the 6-12 career offerings with post-secondary options.
12. Design develop and implement the capacity to support the participation of all students in work based or service learning
13. Working with the partnership council establish and fund externships for school faculty with local businesses, manufacturers, finance backrooms, personal service providers and others to allow teachers to connect their content to the world of work.
- 14. Balance the career offerings at the high school with other electives to assure access, opportunity, and the ability to deliver full career sequences with incentives for completion. This may require a review of the 8-period schedule and the option to move to a full or modified block schedule. Minimally the schedule should include double or triple periods based upon the content and skills needs of the program. *Development of a new schedule will require the participation of all departments to address the response to multiple needs of students. (Added)***
15. Establish systemic structures for curriculum and cross curriculum planning that includes regular meetings of the career education 6-12 faculty and the opportunity for them to co-plan with their academic colleagues, calibrate faculty to the rubrics for scoring extended ELA and math student responses, and collaborate on project-based learning.
16. Make program of study/pathway investments by:
 - a. Continue to invest in engineering
 - b. Increase exposure and access to the trades
 - c. Explore program possibilities in Healthcare
 - d. Review IT courses and create coherent programs of study at the HS and/or BOCES
 - e. Continue participation in TEC SMART

- f. Others as the Partnership Council may endorse through alignment with economic development and DOL information would suggest

Long Term Actions (2022)

1. Implement a full set of pathways so graduates complete a program of study (7units) in the Humanities, STEM, CTE, the Arts or Languages other than English that are aligned with post-secondary opportunities. These programs of study are built upon a core of courses (15 Units) completed by all students that include, ELA (3), Social Studies (2), Science (2), Mathematics (2), Health (.5), Arts (1), Languages other than English (1), CTE (1) and Career and Financial Management (.5).
2. Every student will leave HS with a career plan and assessment of Career Ready Practices
3. Every student completing a CTE program of study will have an employability profile assessing academic, technical and career ready practices

Notes and Key Annotations Explored by the Education Committee

College and Career Ready Characteristics of the East Greenbush Graduate

YOURS

Ability to apply technical and academic skills in various/unpredictable environments

Soft Skills

Humanities

Growth Mind Set

Citizen

- a. Ability to participate in the democratic process*
- b. Awareness of place in global workforce and systems*

Suggested

Ability to participate and successfully complete a program of study in post-secondary education, certificate programs, apprenticeship, military or corporate training without academic remediation

Demonstrate in various settings the Career Ready Practices³

- a. Act as a responsible and contributing citizen and employee.
- b. Apply appropriate academic and technical skills.
- c. Attend to personal health and financial well-being.
- d. Communicate clearly and effectively and with reason.
- e. Consider the environmental, social and economic impacts of decisions.
- f. Demonstrate creativity and innovation.
- g. Employ valid and reliable research strategies.
- h. Utilize critical thinking to make sense of problems and persevere in solving them.
- i. Model integrity, ethical leadership and effective management.
- j. Plan education and career paths aligned to personal goals.
- k. Use technology to enhance productivity.
- l. Work productively in teams while using cultural global competence.

³ Advance CTE

Note: Defining College **and** Career Ready is critical to establishing the role of career education in East Greenbush and the Board of Education should establish a definition in the 2017-18 school year.

May 8 Reflection

- **Looking at monitoring guidance involvement and how our work is integrated. Starting at MS level: career exploration and HS initiatives**
- **Culture to support the process. Students need to be encouraged to explore.**
- **Look at non-traditional planning, career planning vs scheduling. Help students navigate post-secondary choices.**
- **Focus on the “average” middle level group of students—academic middle. Not honors, not classified.**
- **Modernize facilities.**
- **Life skills in addition to “soft skills”**
- **Don’t implement mandates based on a one size fits all—meet needs of individual students**
- **Development of pathways: role of exploration, requirements, identifying criteria to determine success, creation of a 4-year plan**
- **What is growth mindset? Based on community inquiry. Global concept, define success and what it is (make a shift in what educators think), integration of soft skills—clear and apparent throughout our work.**

How Will East Greenbush Prepare Students to Be College and Career Ready

YOURS

Foster an environment that facilitates teamwork and independence

Financial Literacy for all

Integrate (academic, technical and career ready skills-added) across all courses and settings

K-5 Approach with uniform and consistent exposure to careers

Student centered instruction which results in students as critical thinkers

Develop sequences and programs of study

Hold students to high expectations and responses to rigorous instruction

Suggested Additions

College and Career Plan

Employability profile

Work based or service learning experience for all students

Align 6-8 programs with the 9-12 programs and pathways and with post-secondary pathways

Cross curricular planning to integrate technical and academic skills in all course work

May 8 Reflection

- **K-12 focus not just 6-12 (keep K-5 approach separate so there is consistency in the elementary schools)**
- **Attributes of CCR—curricular opportunities throughout school experience should integrate attributes.**
- **How to bring in family and community**
- **Integrating employability profile**
- **Aligning of MS and HS**
- **Is there a way to incorporate work based/service based experiences into the profile?**

- **Career/college planning needs to take place earlier in the MS**

How will East Greenbush Align its Career Offerings for Students with the Demands of Business and Industry and Post-Secondary Education

Yours

Business Advisory Board: adjust curriculum to reflect needs of the business community and define trends in industry, human services, etc.

Professional Development Experiences in the form of externships at businesses

Evaluate the progress of our graduates (in post-secondary, certificate, apprenticeships, military and employment-added)

Suggested Additions

Combine representatives from economic development agencies and key post-secondary institutions with the business advisory board and create a partnership council **or** join a regional partnership council in conjunction with the BOCES or a consortium of other districts.

Working with the partnership council carefully align your career pathways with regional/state economic development priority employment areas and DOL fastest growing and most stable employment areas.

Work with post-secondary partners to expand and align advance standing and dual credit opportunities within career programs and pathways, track participation and awarding of the benefit.

May 8 Reflection

- **Don't lose academic focus for its own reward**
- **Awareness of career opportunities that exist in our own community: Do teachers/students have that information**
- **Needs to be intellectual curiosity in the context of "real world" experiences/needs. Getting the "tools" that help you be successful in the 21st century beyond school/college.**
- **Increase the exposure to career areas for all students in MS and HS.**
- **Culture of HS—increase awareness of all educators on the "career" of College and Career readiness**
- **Don't lose the importance of "teaching as a career" in this conversation.**

- **Trade schools/unions not emphasized or part of the conversation relative to post-secondary options and success rate.**
- **Follow up with graduates to see what we are doing right and what we a missing.**

What will Career Education Look Like in East Greenbush in 2022?

Yours

Facilitator/Director to oversee implantation and planning for CTE programs (this is about leadership not title who is going to be responsible to make this work.

Updated facilities to reflect industry/workplace environments (classrooms that are movable, modern, allow for group /individual work and updated regularly

Sequence of coursework available to all students that direct and support career pathways

Comprehensive (K-12) guidance program

Financial literacy for all

Cross curricular common language across the board

Career education for all

Soft skills integrated into all courses in a purposeful way

Real world experiences for students and staff (capstone projects, portfolios, internships, coop, apprenticeships, bring speakers in)

Opportunities to incorporate project based learning (student led)

Suggested Additions

A focus on the academic, career/career life and technical education skills that empower students to enter and complete post-secondary education, apprenticeships, the military, employment training without the need for remediation.

Defined pathways of study in the Humanities, STEM, CTE, the Arts or Languages other than English and the necessary student support services to guide student choices and ensure pathway completion

Career pathway planning that links students to their adult learning and employment goals

All students participate in work based learning or service learning

Opportunities for and an expectation that all students will achieve advanced standing and/or dual credit from a postsecondary institution

Incorporation of Career and Financial management instruction in all pathways

Students who complete a CTE or STEM pathway have earning power in the form of an industry approved entry level certificate for those completing the CTE and STEM pathways

30% of all graduates have earned a technical endorsement on their diploma and/or passed an entry level industry recognized certification examination in their pathway.

May 8 Reflection

- **Integrating academics/career education to help students pursue post-secondary opportunities**
- **Soft skills**
- **Work based learning—trying to incorporate work/service experience from students' entire life experience.**
- **Programs of study (sequence of coursework)—take what we already have, align them, and make them meaningful.**
- **Concern that all students may not reach advanced standing in all areas.**
- **Focus college credit opportunities based on the needs of the individual student.**

Big Ideas

Yours

District needs to make a serious commitment to follow through with the plan Financial resources

Career fair to bring in local businesses so students have exposure to what's out there

Update facilities and equipment (capital project) Grant writer to find the \$\$\$

Work based experiences, internships, etc.

Academics: Pathways that lead to something

Scheduling: afford opportunities and flexibility in course selection

Project based learning (rigorous, present, feedback, interdisciplinary)

Explore interdisciplinary courses/projects/opportunities

Create an environment that facilitates thinking and coaching thinking

Suggested

Define College **and** Career Ready (First Order Action)

Explore Academies, problem based learning, ConnectEd and other integrated (academic, technology, career/life skills) models to determine what works and fits your culture

Revise the high school experience to include a floor of experiences for all students and a set of capstone courses for designated and elected pathways in Humanities, STEM, CTE, Arts and LOTE

Modernize facilities, equipment, technology and instructional resources to mirror modern workplaces

Review and revise the districts portfolio of courses and curricula to provide district control of the content, assure vertical articulation and alignment from middle school to high school and to post-secondary education and employment

Provide systemic opportunities for cross curriculum planning to permit academic integration in career courses and instruction geared to career interests in the academic settings.

Make program of study/pathway investments by:

- a. Continue to invest in engineering
- b. Increase exposure and access to the trades
- c. Explore program possibilities in Healthcare
- d. Review IT courses and create and extend coherent programs of study at the HS and/or BOCES
- e. Continue participation in TEC SMART

Raise faculty awareness and change instructional approaches and content consistent with the Board of Education Policy on College and Career Readiness. Instructional leadership at the district and building levels will need to develop embedded and explicit professional development consistent with that policy and strategies for its implementation.

Continue to enhance the relationship with BOCES to assure that offerings available to students are consistent with district goals in career education and that access to programs is provided in an open a way possible within district fiscal constraints and other student obligations.

Establish career awareness, knowledge and planning as a K-12 focus

May 8 Reflection

- **Upon the creation of CTE Plan for East Greenbush, provide staff that can meet the needs of the students.**