



RE-ENVISIONING CTE

Creating Future Ready Students

FY19-23

**5-Year Plan for Career & Technical Education in the
Fairbanks North Star Borough School District**

PLAN EXCERPT - EXECUTIVE SUMMARY

Current as of June 2018

FORWARD

As part of its vision to personalize learning for all students, the Fairbanks North Star Borough School District (FNSBSD) embarked upon the “Re-Envisioning CTE” process to define the future of Career Readiness and the CTE system for our students and community.

The FY19-23 CTE Plan was created through a comprehensive process that invited input and participation from students, parents, staff, employers, industry leaders, key stakeholders, school board, and the public at large. The plan identifies long-term strategic goals, objectives and actions that will be taken to achieve CTE’s vision for *creating future ready students*. The plan will serve as FNSBSD’s guide and roadmap as we continue to expand opportunities for students in an ever-changing environment.

OVERVIEW OF CTE & CURRENT STATE IN FNSBSD

What is CTE? The Fairbanks North Star Borough School District’s Career and Technical Education (CTE) program educates high school students for the academic and applied skills needed for today’s jobs. High school students who take CTE courses may also gain the technical training and earn certificates required by employers and for post-high school degrees.

Why is CTE Important? Surveys show employers cannot find people with the skill needed; particularly middle-skill technical jobs in fields like IT, health care and advanced manufacturing. These factors taken together would seem to argue for a much stronger push to better align our education system, especially our high schools and community colleges, with the needs of our economy in order to equip more young people with the skills they will need to take advantage of career opportunities in these high-demand, high-growth fields. This is the role that high-quality career and technical education (CTE) is designed to play.

MISSION – WHAT IS OUR PURPOSE?

Mission Statement: Our mission is to provide comprehensive technical training combined with relevant CTE experiences to increase student awareness of postsecondary options *and* prepare them for high skill, high demand careers.

GUIDING PRINCIPLES – OUR APPROACH

FNSBSD seeks to develop a CTE program that is ***inclusive, comprehensive and accessible***. Achieving the goals and objectives of the CTE plan will require a true community effort. Our approach involves the engagement of strategic partners, business community, stakeholders, students and staff to take CTE programming to the next level.

- **Inclusive:** Assist all students, regardless of their career plans and goals, to gain the essential skills to be future-ready.
- **Comprehensive:** Bring together, in a comprehensive system, the academic and technical preparation that students need to meet the challenges of the global workplace.
- **Accessible:** Make CTE options accessible through flexibility and innovative delivery methods.
- **Aligned:** Ensure cooperative curriculum planning and program development that is aligned to outcomes. *Career Planning/Exploration included and aligned with all CTE programs of study and student academic plans.*
- **Collaborative:** Engage and collaborate with parents, community, staff, local and regional employers, and other key stakeholder to provide excellent CTE programs.
- **Relevant:** Design relevant CTE offerings based on student interest, employment trends and ensuring real-world application as an integral part of the program.
- **Start Early:** Increase CTE exposure, skills development and exploratory options at the elementary and middle school level.

STRATEGIC DIRECTION

VISION – WHAT DOES SUCCESS LOOK LIKE?

The vision of the Fairbanks North Star Borough School District serves as the directional compass for the CTE plan.

FNSBSD Vision: We envision *learning without boundaries*, where every student achieves his/her path to academic and career success. Learning will be driven by student need, through flexible and adaptive options. Supporting the district's educational system are highly engaged families; proven technology infrastructure; staff that are continually raising the bar in their profession; and a community that is committed to growing our future.

Success for CTE looks like...

- Graduates have 21st century skills and are future ready
- Comprehensive CTE options for students across the district
- Students have flexibility with schedules & credit requirements to pursue courses that fit their personalized learning needs
- Increased student learning opportunities through collaboration with community stakeholders
- Infrastructure and resources to support a successful CTE program

STRATEGIC GOALS – HOW WILL WE SUCCEED?

The six strategic goals provide the framework for the plan and long-term direction for CTE over the next five years. The explanations below clarify the rationale and intent for each goal as well as any *strategic shifts* from how we are doing things now in order to achieve the vision for Career and Technical Education.

6 Strategic Goals



Strategic Goal 1 - CTE Options: Provide comprehensive and relevant CTE options, aligned to student interest, industry standards, and employment data.

Rationale: At the core of the CTE plan is the intention to provide students with *relevant* CTE options that not only intrigue their interest, but are aligned to industry standards, employment trends and the ever-changing business environment. The Fairbanks North Star Borough School District has taken results of employer, community, student and staff input in combination with industry data to ensure that the CTE programs of study are aligned with student interest, growing occupations, and positions that are available in the region. The FY19-23 CTE plan includes a roadmap for CTE offerings/areas of focus over the next 3-5 years. Based on results of the 2017-18 needs assessment, specific career clusters and pathways have been identified as 1) areas to sustain; 2) areas for expansion; or 3) new clusters/pathways to be developed.

In addition to the selection and design of CTE offerings, ensuring relevancy also includes integration and alignment between CTE pathways and general/core academics as well as alignment with post-secondary programs. The CTE program will continue to be evaluated and assessed to ensure that programs of study remain comprehensive, relevant and aligned to outcomes.

Strategic Shift: Being intentional about student outcomes and the programs/pathways that are being offered. Ensuring our CTE programs are well matched with community and labor needs.

Strategic Goal 2 - Equity & Access: Provide equitable access across the District through innovative and flexible delivery of CTE options.

Rationale: As part of the *personalized learning approach*, providing equitable access and comprehensive opportunities for students across the Fairbanks North Star Borough School District is a high priority. The intent of this strategic goal is to be as innovative and flexible as possible to address the need for all students to have access to CTE opportunities that align with their personal interests and goals. CTE programming is currently delivered through a variety of methods including traditional classroom & lab, virtual classes, work base learning, courses delivered through the university and technical college, and after school programs. FNSBSD will continue to expand upon these methods and as well as other innovative options to increase student access. Some of the objectives in support of this goal include flexible bell schedules, transportation between sites, multiple pathways to graduation, online course offerings, summer programs and leveraging educational opportunities outside/beyond the district.

Strategic Shifts: Innovative delivery; more flexibility in the daily schedule; multiple pathways to graduation (grad requirements aligned with CTE offerings).

Strategic Goal 3 - Professional/Soft Skills: Integrate the teaching and application of professional skills across the curriculum.

Rationale: Feedback from the employer survey and voices of workforce leaders suggest that professional *soft skills* are lacking in recent graduates and a critical requirement not only for job placement, but integral to college and life success. Professional soft skills, also referred to as key competencies or employability skills, are those desirable qualities that apply across a variety of jobs and life situations - traits such as communication, responsibility, problem solving, and team work. Students who transition successfully from high school to college and/or the workplace show an ability to manage their time, meet deadlines, work well with others, show and demonstrate work ethic. The intent of the Professional/Soft Skills strategic goal is to better prepare our students through embedding the teaching and integration of soft skills not only in CTE courses, but across the FNSBSD K-12 curriculum. This will require coordination and collaboration across the district but has been deemed as a critical component not only to the CTE Plan but the district strategy as well.

Strategic Shift: Professional/soft skills are important in all contexts, including K-12 academics.

Strategic Goal 4 - Industry Collaboration: Build community/industry partnerships as a foundational component of our CTE program.

Rationale: Building sustainable community/industry partnerships is foundational to a successful CTE program. This is a shared goal that involves ongoing collaboration between educators and business leaders to ensure CTE programming stays relevant to the needs of the industry; and for creating expansive work-based learning opportunities for students. Internships are designed to connect students with the skills and knowledge learned in the CTE classroom with the real-world requirements of a business. The Fairbanks North Star Borough School District has a very strong connection with community stakeholders and local businesses; the intent of this strategic goal is to continue to prioritize, cultivate and expand these partnerships. Working together not only benefits students, but also the community at large as we better prepare our students to graduate with the skills and experience necessary to succeed and contribute to society.

Strategic Shifts: Increased focus on industry partnership and collaboration. Expanding network of partnerships resulting in more opportunities for students.

Strategic Goal 5 - CTE Awareness/Promotion: Cultivate awareness of CTE and engage the community around opportunities available at FNSBSD.

Rationale: The intent of this strategic goal is to promote the value and understanding of CTE through clear messaging and outreach. FNSBSD seeks to celebrate the successes and options available through CTE education; and increase awareness that skills developed through the CTE program prepare students for college, careers and future readiness regardless of their path. Proactive communication will ensure that all stakeholder groups remain consistently informed about CTE opportunities, student accomplishments, and the relevancy of CTE experiences for *all* students.

Strategic Shifts: Clarify and communicate the importance of CTE skills and experiences for *all* students. Develop intentional outreach to parents.

Strategic Goal 6 - Infrastructure: Ensure District infrastructure and resources to sustain a successful CTE program.

Rationale: Success of the CTE program relies on adequate resources, infrastructure and the availability of high quality, certified teachers. The recruitment and retention of qualified personnel is critical to sustaining and growing great CTE programs and is a high priority objective in the CTE plan. Initiatives to build instructional capacity include district training and mentorship programs, relevant professional development opportunities, and hiring CTE teachers that are attached to a program but not assigned to a specific building – enabling them to further serve the district.

Ensuring adequate equipment and facilities is an ongoing priority for career and technical education. Maximizing facilities and creating capacity for CTE programs will be a key component of the implementation plan; as well as securing the resources necessary to sustain and build over time.

Strategic Shifts: Continuation of the strategic plan and systems aligned.

2019-23 STRATEGIC GOALS & CTE OBJECTIVES

<p>CTE Options</p>	<ul style="list-style-type: none"> • CTE OPTIONS: Continue to strengthen CTE options, expanding in specific areas based on student demand and employment trends. • CURRICULUM ALIGNMENT & INTEGRATION: Further integration and alignment between CTE pathways and general/core academics, and with post-secondary programs. • MIDDLE SCHOOL EXPOSURE: Increase CTE exposure/exploratory opportunities at the Middle School Level.
<p>Equity & Access</p>	<ul style="list-style-type: none"> • INNOVATIVE DELIVERY: Investigate delivery models to maximize access to CTE options. (asynchronous and synchronous) • MULTIPLE GRADUATION PATHWAYS: Create multiple pathways to graduation to further incorporate/align with CTE offerings. • EXPAND OUTSIDE OPPORTUNITIES: Leverage and expand educational opportunities and capabilities beyond the district.
<p>Professional/ Soft Skills</p>	<ul style="list-style-type: none"> • DISTRICT-WIDE FRAMEWORK: Create a framework to embed professional/soft skills district-wide.
<p>Industry Collaboration</p>	<ul style="list-style-type: none"> • INDUSTRY PARTNERSHIPS: Increase student learning opportunities through collaboration with community stakeholders and expanding our network of industry partnerships. • INTERNSHIP/APPRENTICESHIP PROGRAM: Expand the internship & apprenticeship programs, ensuring real-world application opportunities for students across the district, in all CTE pathways of study. • INDUSTRY IN THE SCHOOL: Bring industry experts into CTE classrooms to further expose students to various professions. • COMMUNITY FACILITIES/ASSETS: Explore community assets and expertise as alternative CTE delivery options and a means to expand opportunities. • EXTERNSHIP OPPORTUNITIES: Partner with industry to provide externship and internship opportunities for teachers and staff.
<p>CTE Awareness & Promotion</p>	<ul style="list-style-type: none"> • COMMUNICATION & MESSAGING: Provide simplified communication material and messaging emphasizing the value of CTE, and how it prepares students for future readiness. • OUTREACH: Ensure all stakeholder groups are informed about CTE opportunities through targeted outreach to students, parents, employers, and staff. • STUDENT RECOGNITION: Increase recognition and celebration of student CTE accomplishments (certificates, apprenticeships, military, etc.)
<p>Infrastructure</p>	<ul style="list-style-type: none"> • QUALIFIED TEACHERS: Recruit and retain qualified personnel in order to sustain and grow great CTE programs. • DISTRICT POLICIES: Ensure district policies align with and support CTE programs. • FACILITIES & EQUIPMENT: Maximize facilities and ensure up to date and relevant equipment to support programming.

PLAN DETAIL

STRATEGIC GOAL #1: CTE OPTIONS

1 **CTE OPTIONS**: Provide comprehensive and relevant CTE options, aligned to student interest, industry standards, and employment data.

Success Measures/Indicators:

- Delineate pathways
- Expanded opportunities in specified focus areas (ex: health care)
- Course alignment (within CTE clusters, with Core Academics, with post-secondary programs)
- Student acceptance/enrollment in post-secondary education
- Student post-secondary employment
- # of certificates received

CTE Objectives

1.1 CTE OPTIONS: Continue to strengthen CTE options, expanding in specific areas based on student demand and employment trends.

Career/Interest Matrix

<u>Student Interest</u> <i>(Out of 1,300)</i>	<u>High-Wage Jobs?</u>	<u>District Direction/Action</u>
Health Science/Medical (450) - 12%	Yes	Expand
STEM (392) - 10%	Yes	Maintain
Arts/ A/V Communications (366) - 9%	No	Maintain
Military (257) - 7%	N/A	Support JROTC Program
Law, Public Safety, Corrections (241) - 7%	Yes	Develop
Architecture & Construction (199) - 7%	Yes	Maintain
Information Technology (157) - 4%	Yes	Expand
Transportation, Distribution, Logistics	Yes	Expand aviation specifically
Business Mgmt. (171) - 5%	Yes	Develop

Areas of Focus – Summary/Overview

SUSTAIN/STRENGTHEN - The following CTE programs have been implemented at FNSBSD, and will continue to be strengthened over the next five years:

- **Architecture & Construction** – Maintain and continue to integrate with other pathways of study.
- **Arts, A/V Tech & Communications** – Integrate with IT and the strong connection that currently exists; there is high student interest in graphic design.
- **Hospitality & Tourism** – Maintain existing food service program.
- **STEM** – Maintain and monitor existing Project Lead the Way.
- **Government & Public Administration** - Maintain; support advancement in military careers through JROTC program.

EXPAND - Focused expansion in the following areas:

- **Health Science** – Expand more broadly across the district.
- **IT** - Fully develop as it is built out nationally - Network systems, Information Support, Web & Digital Communications, and Programming as software development (*Pathway to expand beyond HHS; not limited by facility).
- **Transportation, Distribution & Logistics** – Develop Aviation program.

DEVELOP - Career Clusters/pathways to be developed include:

- **Law & Public Safety** – Develop based on high demand and interest.
- **Agriculture, Food & Natural Resources** - Build Natural Resources program of study based on courses offered.
- **Business Management & Administration** – Designed/integrated with Marketing, Communications, Finance and Public Administration.

1.2 CURRICULUM ALIGNMENT & INTEGRATION: Further integration and alignment between CTE pathways and general/core academics, and with post-secondary programs.

Supporting Activities:

- **CTE Program/Pathway Alignment:** Alignment between CTE courses/clusters, including cross-cluster articulation.
- **CTE/Core Academic Alignment:** Ensure integration of academic and CTE content, skills and knowledge in core subject areas.
- **Post-Secondary Program Alignment:** Align our high school academic programs directly with post-secondary programs. Continue to develop collaborative advisory committees for our pathways with UAF-CTC.

1.3 MIDDLE SCHOOL EXPOSURE: Increase CTE exposure/exploratory opportunities at the Middle School Level.

Supporting Activities:

- Increase exploratory wheels, courses and other career exploration opportunities for middle school students.
- Career exploration and awareness – ensuring students understand, at an early age, what is required for certain career fields.

STRATEGIC GOAL #2: EQUITY & ACCESS

2 Equity & Access: Provide equitable access across the District through innovative and flexible delivery of CTE options.

Success Measures/Indicators:

- Increase in access > increase in student participation across the District

CTE Objectives

2.1 INNOVATIVE DELIVERY: Investigate delivery models to maximize access to CTE options. (asynchronous and synchronous)

Supporting Activities:

- **Blended Learning:** Implement a blended learning delivery model (combination of online and in-person) that does not require seat time on a certain given day.
- **Virtual Conferencing:** Increase virtual delivery options to maximize teacher expertise and expand reach to students across the district.
- **Online Learning:** Expand online course offerings in identified areas.
- **Flexible Scheduling:** Provide flexibility in the structure of the schedule to expand access to CTE offerings and allow for extended time blocks for CTE hands-on courses.
- **Afterschool and Summer Academies:** Offer afterschool CTE programs and summer academies to broaden opportunities for students.

2.2 MULTIPLE GRADUATION PATHWAYS: Create multiple pathways to graduation to further incorporate/align with CTE offerings.

Supporting Activities:

- More flexibility in graduation requirements; better alignment with CTE offerings

2.3 EXPAND OUTSIDE OPPORTUNITIES: Leverage and expand educational opportunities and capabilities beyond the district.

Supporting Activities:

- Leveraging programs offered by industry, community colleges, etc.
- Certifications

STRATEGIC GOAL #3: INTEGRATION OF PROFESSIONAL SKILLS

3 Professional/Soft Skills: Integrate the teaching and application of professional skills across the curriculum.

Success Measures/Indicators:

- District-Wide “Professional Readiness” - articulation of these essential skills
- Positive feedback from Community Stakeholders

CTE Objectives

3.1 DISTRICT-WIDE FRAMEWORK: Create a framework to embed professional/soft skills district-wide.

Supporting Activities:

- **Professional Readiness Grade:** Implement a professional readiness grade (that goes right next to grade on report card) based on student performance/acquisition of critical professional skills.
- **Teacher PD:** Provide district-wide PD and collaboration around integration of professional skills across the curriculum.

STRATEGIC GOAL #4: INDUSTRY COLLABORATION

4 Industry Collaboration: Build community/industry partnerships as a foundational component of our CTE program.

Success Measures/Indicators:

- Increase in apprenticeship opportunities
- Increase in internship opportunities & student participation
- Industry participation in schools (guest speakers/teachers)
- Active advisory committees

CTE Objectives

4.1 INDUSTRY PARTNERSHIPS: Increase student learning opportunities through collaboration with community stakeholders and expanding our network of industry partnerships.

Supporting Activities:

- Ongoing efforts to sustain existing partnerships
- Increase school/industry collaboration, build network
- Solidifying partnerships/connect with local employers (enabling more internships; hands-on opportunities for students)

4.2 INTERNSHIP/APPRENTICESHIP PROGRAM: Expand the internship & apprenticeship programs, ensuring real-world application opportunities for students across the district, in all CTE pathways of study.

Supporting Activities:

- Expand the length of internships/externships/job shadows (more than a semester)
- Continue/expand these opportunities district-wide
- Real world application critical to the CTE program

4.3 INDUSTRY IN THE SCHOOL: Bring industry experts into CTE classrooms to further expose students to various professions.

Supporting Activities:

- Industry Speakers and Teachers in the classroom
- Speaker Series at K-12 (as part of Exploratory)

4.4 COMMUNITY FACILITIES/ASSETS: Explore community assets and expertise as alternative CTE delivery options and a means to expand opportunities.

Supporting Activities:

- There are established programs that are looking for outreach. For example, every fire station has to do outreach and awareness; and there are instructors that could be available to supplement CTE programming.

4.5 EXTERNSHIP OPPORTUNITIES: Partner with industry to provide externship and internship opportunities for teachers and staff.

STRATEGIC GOAL #5: CTE AWARENESS & PROMOTION

5 CTE Awareness/Promotion: Cultivate awareness of CTE and engage the community around opportunities available at FNSBSD.

Success Measures/Indicators:

- Increase in student participation

CTE Objectives

5.1 COMMUNICATION & MESSAGING: Provide simplified communication material and messaging emphasizing the value of CTE, and how it prepares students for future readiness.

Supporting Activities:

- **Purposeful Communication:** Design purposeful communication for various audiences
- **Defining Future Readiness:** Promoting how CTE prepares students for college and not only the “real world” and careers. *“CTE and college is NOT an either or (it’s an AND).”*

5.2 OUTREACH: Ensure all stakeholder groups are informed about CTE opportunities through targeted outreach to students, parents, employers, and staff.

Supporting Activities:

- **Outreach:** Market CTE opportunities and get the word out (CTC Facebook Page is a good example).
- **CTE Open House:** Invite parents and students in for an open house to help explain CTE, value for all students, and opportunities available.
- **Showcase Events:** Reach out to Parents/Community, inviting them into schools to share some of the great things we are doing as it relates to CTE programming (expand open house concept beyond students).
- **Industry PR:** Targeted PR to the industry to increase awareness of programs; so they are aware of what District is offering and how they can connect with student candidates.
- **Parents:** Keep parents informed with purposeful communication related to CTE opportunities. Use Parent/Teacher conferences as a venue to share promotional materials and provide information. *Target transition times* (into 7th and into 9th) when parents are still very involved.

- **Counselors:** Keep Counselors Informed – to better reach/inform/serve students. Ensure that counselors know what industry requirements are, in order to make conversation with students richer and more directive.
- **Teachers:** Keep teachers informed and aware of what post-secondary education and career requirements are.

5.3 STUDENT RECOGNITION: Increase recognition and celebration of student CTE accomplishments (certificates, apprenticeships, military, etc.)

Supporting Activities:

- Expand what is in the graduation programs to include all post-secondary accomplishments (beyond just scholarships)
- At graduation ceremony (and other options throughout the year) to further recognize and celebrate ALL certificate accomplishments, not just scholarships (ex: Apprenticeships, students going into military/service)

STRATEGIC GOAL #6: INFRASTRUCTURE

6 Infrastructure: Ensure District infrastructure and resources to sustain a successful CTE program.

Success Measures/Indicators

- Updated policies & processes that align with the CTE program
- Alignment with the District’s Strategic Plan
- Qualified Teachers
- CTE Teacher Retention
- CTE Staffing/Positions Filled
- CTE Teacher Certifications/Credentials/Industry Experience

CTE Objectives

6.1 QUALIFIED TEACHERS: Recruit and retain qualified personnel in order to sustain and grow great CTE programs.

Supporting Activities:

- **Hiring/Retention:** Collaborate with HR and High School Principals to hire, certify and retain qualified CTE teachers.
- **CTE Program Position:** Hire CTE Teachers that are attached to a program; and not assigned to a specific building.
- **District Training & Development:** Develop CTE teachers through training and mentorship opportunities.
- **Professional Development:** Support professional development/life-long learning for CTE teachers to support the programs and industry needs.

6.2 DISTRICT POLICIES: Ensure district policies align with and support CTE programs.

6.3 FACILITIES & EQUIPMENT: Maximize facilities and ensure up to date and relevant equipment to support programming.

Supporting Activities:

- **Full Utilization:** Maximizing student use of facilities and equipment.
- **Maintenance:** Maintenance and upkeep of current facilities and equipment.
- **Transportation:** Identify the transportation needs/options to get students to various CTE opportunities (within community or at other school campuses).