

Secondary <u>Career and Technical Education</u> (CTE) Curriculum Review Year 1 Self-Study

West St. Paul - Mendota Heights - Eagan Area Schools School District 197

Prepared by:

Miles Lawson

Secondary Curriculum and Gifted and Talented Coordinator

August 19, 2024

<u>Background</u>	3
Why is reviewing the Background portion of this report important for our School Board?	3
Previous District-wide Career and Technical Education Review Processes.	4
A summary of the major work that was conducted collectively in the three areas is listed below.	4
Guiding Legislation, Statues, and Funding Mechanisms that impact CTE.	
A diagram of how each of these components interact with each other is below.	5
Perkins V Legislation	5
State-Wide Consortia Model	6
Policy and Funding	8
Safety Guidance for CTE	9
Career and Technical Education Teacher Licensing	10
Advisory Committees and Partnerships	10
Summary	11
Internal Environmental Scan	14
Internal Review Part 1 - Review of Previous Findings	14
Internal Review Part II: Considerations for future Perkins spending.	15
Near-future needs.	15
Needs on the horizon.	15
External Environmental Scan	17
External Scan Part I: Metro-Area CTE Programming	17
Program Development and Expansion	17
Curriculum and Program Review	17
Other Considerations	18
External Scan Part II: MDE Resources for CTE Programming	18
Core Beliefs and Outcomes that Matter to All	20
Strengths and Weaknesses	20
Survey Data/Input Gathering	20
Surveys	21
Summaries of CTE Curriculum Review team's reflection on School District 197 survey data.	21
Perspectives on CTE	21
Program Effectiveness and Improvement	21
Summaries of Dakota County Perkins Consortium survey data.	22
Below is a summary of the feedback from administrators from each of the consortium.	22
Which career fields are students in your district most interested in?	22
1. Transportation, Distribution & Logistics	22
2. Health Science	22
3. Architecture and Construction	22
4. Business, Management, & Administration	22
5. Information Technology	22
In your opinion, what are the greatest strengths of your district's CTE programs?	22
Below is a summary of the feedback from post-secondary educators from each of the consortium.	22
Summaries of Department of Employment and Economic Development (DEED)	23

Advisory Committees	24
Data Analysis	25
Educational Equity Analysis / Four Way Equity Test	29
Opportunities for Disadvantaged or Marginalized Students	29
Ensuring Equitable Access to More Students	29
Eliminating Barriers Based on Gender and Race	30
Ensuring Rigorous Standards for All Students	30
Early Implementation Actions	31
Next Steps	33
Near-future needs.	33

Background

Why is reviewing the Background portion of this report important for our School Board?

- As with any curriculum review report, this report serves as institutional knowledge of the process.
- This section helps our Board understand the review process(es) that were conducted before this one.
- Specifically for Career and Technical Education (CTE), the specific and precise work that is involved
 with licensure, funding, state-approval process, and how the CTE programs and courses connect with
 our taxpayers and industries in our community is important. All of these elements are specific to
 ONLY CTE courses and programs.
- A difference between all the previous reports in other departments, and this report, is that the most sensible way to both provide high level information, as well as how the district interacts with that information, sometimes is in this BACKGROUND section. This avoids unnecessary redundancies in the report, as well as provides immediate context of the overlap between each of these complicated layers of information.



To this end, when you see this image in the **BACKGROUND** section, it indicates a specific reference to how our district, or our high school, participates in the described activity or process.

Previous District-wide Career and Technical Education Review Processes.



Over the course of a three year period, School District 197 conducted individual department review processes for each of the typically categorized Career and Technical Education Areas, including; Business (2018), Family and Consumer Sciences (2015) and Technology Education (2015). Access to each of the year 1 board reports are included below for further information.

- Family and Consumer Science Year 1 Report May 2015
- Technology Education Year 1 Report May 2015
- Business Year 1 Report June 2018

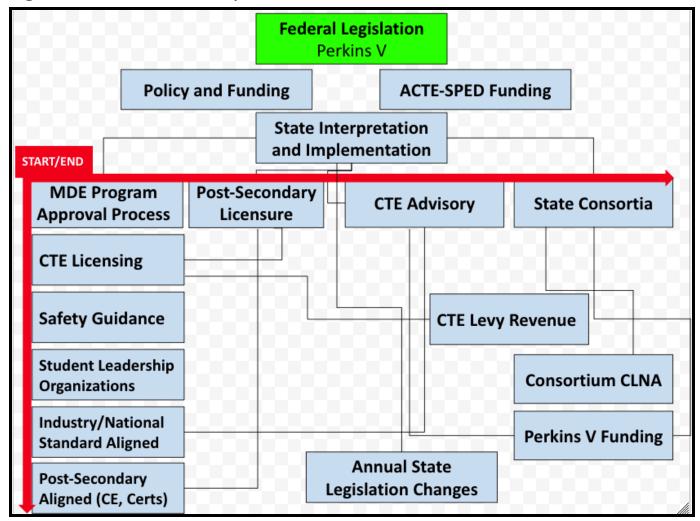
A summary of the major work that was conducted collectively in the three areas is listed below.

- New Courses were introduced: Personal Finance and Entrepreneurship, Culinary I, hybrid options for some courses
- New pathways created K-12 Project Lead the Way (PLTW) course sequence (Pilot Knob, both middle schools, and thru to the high school)
- Updated curriculum and resources: This was a big need in each area; Business, FACS and Tech Ed.
- Exploration of postsecondary credit and certifications in available courses/areas. Technical Skills
 Assessments (TSAs) were added in Business, FACS and Technology Education and options for college
 credits were made available through PLTW coursework.
- Alignment of Business, FACS and Tech Ed courses with national industry standards
- The need for consistent programming in the middle schools in applicable areas.

Guiding Legislation, Statues, and Funding Mechanisms that impact CTE.

The next section of information is interconnected with most elements of Career and Technical Education (CTE) programs, courses, and CTE licensed staff. While it is a large amount of information, each component plays a critical role in how we conduct work in CTE.

A diagram of how each of these components interact with each other is below.



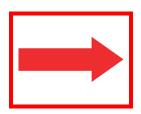
Perkins V Legislation

Technically, Perkins V is a federal law designed to improve and expand Career and Technical Education (CTE) programs. It emphasizes academic rigor, technical skills, and employability skills to prepare students for both college and careers. By fostering partnerships between schools, businesses, and postsecondary institutions, Perkins V aims to create high-quality CTE programs aligned with in-demand jobs. Minnesota uses a consortium model to distribute Perkins funding and requires local districts to have approved CTE programs to receive funds. Comprehensive Local Needs Assessments (CLNAs) guide program development.

Succinctly, Perkins V's purpose is to develop more fully the academic knowledge, technical skills, and employability of secondary and postsecondary education students who elect to enroll in CTE programs and programs of study.

State-Wide Consortia Model

Per federal and state guidelines, each district and postsecondary institution are combined into one of 23 consortia across the state of Minnesota.



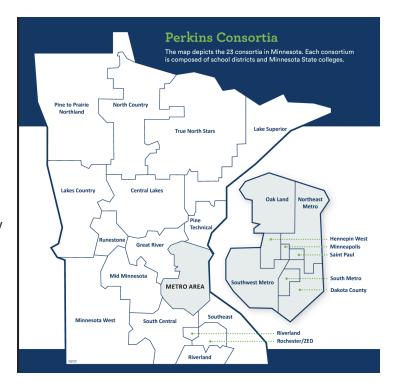
Two Rivers High School, as well as Inver Hills Community College and Dakota County Technical College, are included in the Dakota County consortium, which is located

inside the metro area map.

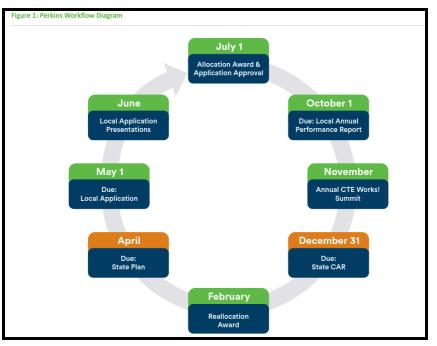
In addition to IHCC and DCTC, our members in the Dakota County Consortium include;

- School District 917
- ISD 199
- Bluesky Online
- Randolph
- Farmington
- Richfield
- Northfield
- South St. Paul





The work of the Dakota County Consortium is to identify program priorities within the consortium and then to provide support to those program priorities to help them develop, thrive, and then innovate. The responsibilities of each district is to develop structures for those programs to sustain beyond the consortium start-up support. The cycle for how this process, alongside the funding and comprehensive local needs assessment processes, is shown here to the right.



The Dakota County Consortium has developed its Comprehensive Local Needs Assessment for the next two years, 2024 through 2026. Those priorities are identified by reviewing state and national needs in labor and industry, as well as supporting established state approved programs or developing new programs and pathways within the consortium. These needs are identified in collaboration with the consortium's postsecondary partners, IHCC and DCTC, to ensure the high school programs connect to postsecondary programs as well as what the state labor market needs are. The 2024-2025 CLNA priorities for Dakota County Perkins Consortium is shown below.

Prioritized Needs / Barriers:		Narratives to Address the Need									
	1 CLNA	2 POS	3 WIOA	4 Skills	5 Pops	6 WBL	7 PS	8 Prof	9 Gap s	10 Gov	11 Res
Element 1: Student Performance of Required Performance Indicators											
Need A:Improve Secondary Math Proficiency		х		х				х			
Need B: Improve Secondary Reading Proficiency		x		x				х			
Element 2: Program Size, Scope, and Quality to Meet the Needs of All Students											
Need A:Size - Increase Number of Secondary CTE Participants		х		х							
Need B: Size - Increase Number of Secondary CTE Concentrators		х									
Need C: Scope - Increase Alignment of Programs of Study with Local Needs and Industry		х	х			х				х	
Need D: Quality - Increase Number of Post-Secondary Credentials Earned By Secondary Students		х		х							
Element 3: Progress Towards Implementation of CTE Programs of Study											
Need A: Increase Number of Post-Secondary Credits Earned By Secondary Students							х				
Need B: Increase Number and Percentage of Secondary CTE Staff With Concurrent Enrollment Credentials								x			х
Need C: Increase Number of Entry and Exit Points for Students Within Programs of Study		х									
Element 4: Improving Recruitment, Retention, and Training of CTE Professionals											
Need A: Improve Recruitment of CTE Professionals											x
Need B: Improve Training of CTE Professionals								х			х
Element 5: Progress Towards Equal Access to CTE Programs for all Students											
Need A: Address Gender Imbalances in Secondary CTE Programs					х				х		
Need B: Increase Racial/Ethnic Diversity in Secondary CTE Programs					x				x		



These are the consortium's priorities as a whole, not necessarily what Two Rivers High School's priorities are, so it is important to see where those overlaps might be. Our most direct connections with our consortium's priorities are;

- Improve secondary math and reading proficiency
- Increase the number of secondary CTE concentrators (students who take 2 or more CTE courses in all)
- Increase number of postsecondary credentials earned by secondary students
- Increase number of postsecondary credits earned by secondary students
- Increase number and percentage of secondary CTE staff with concurrent enrollment credentials
- Increase the exit and entry points for students within programs of study
- Address gender imbalances in secondary CTE programs

The annual budgets by consortia are developed in collaboration with each district in the consortium, and are to primarily support the CLNA priorities shown above for the consortium. The general budget framework for 2024-2025 is outlined below, for both Basic and Reserve funds. Reserve funds are what can be accessed

starting Jan 1 of each year, and these funds are not as specifically tied to the consortium's Basic Fund priorities,

which are specific and clear. Reserve funds can be requested, and used, to support other CTE programs that are not within the program priorities of the consortium.



Typically, Two Rivers HIgh School has used the Perkins funding for covering substitute costs, busing costs, and when it is aligned with

the consortium's priorities, at times the equipment portion.



If there is one important take-away from how Perkins V, and its mechanism for funding now, interacts with our state consortia and their CLNAs, it is that before Perkins V, the majority of the Perkins funds were being distributed in ways that were not originally intended, and oftentimes to buy new equipment, materials, and resources only. These purchases were not always for starting up new programs, or helping them to innovate, they were many times used to help CTE programs sustain. This is a byproduct of the funding structures of state and federal funds, which were not sufficient to cover all the curriculum areas in a full way already. CTE programs, if they had not used the Perkins I-IV funding structures the way they did, may have disappeared altogether in most school districts because of the tight funding needs of a district.



Perkins V has established a structure that does not allow for that flexibility any more - therefore it is now on local school districts to create structures of their own to develop, implement, sustain, and innovate CTE programs, just as we do with any other curriculum department. ISD 197 is currently managing this process satisfactorily, through the curriculum review structure and development of an official CTE Advisory Committee.

However, in order to support courses that require industry relevance and connection on a very frequent basis, needs for materials, equipment, costs related to certifications and college credentials, and yearly safety training, among other things, it is recommended that there is an exploration into the locally generated CTE levy revenue. The CTE department generates revenue through its licensure, courses taught, and materials. There has been an increase in the CTE Levy Revenue in the last 5 years due to strong program development at TRHS.

Policy and Funding

Minnesota's Career and Technical Education (CTE) programs are designed to prepare students for high-demand jobs. Funded by the federal Perkins V grant and state CTE levies, these programs focus on developing academic, technical, and employability skills. The Minnesota Department of Education and the Minnesota State Colleges and Universities System collaborate to ensure CTE programs meet industry standards and provide students with opportunities for work-based learning and postsecondary education.

CTE Revenue is a permissive levy that school districts can use to support their CTE programs. Districts receive 35% of their approved CTE expenditures in CTE revenue. To qualify for the levy, districts must submit annual CTE budget projections and actual expenditure reports. Eligible CTE expenses include classroom support, teacher travel, instructional supplies, curriculum development, and contracted services.



Included here is a table showing the amount of money that was forecasted each year for the CTE Levy Revenue. The increases

here are a combination of many elements. Important to note that most of the generated funding is NOT as a result of inflation, due to

Fiscal Yr	CTE Levy Amount	Yearly Increase	% Increase Since 2020
FY 2020	\$386,695.19	NA	NA
FY 2021	\$482,530.00	\$95,835	125%
FY 2022	\$482,530.00	\$0	125%
FY 2023	\$554,494.40	\$71,964	143%
FY 2024	\$731,874.40	\$177,380	189%

most of the funding being associated with the salaries of the CTE licensed staff teaching the CTE courses.

The increases between FY 2020 and FY 2024 are associated almost exclusively with the following factors;

- 1. Increase in new CTE courses developed and offered,
- 2. Increase in the number of sections for CTE courses being run that year.

Personal Learning Plans - <u>Legislation Minn Stat. 120B.022</u> requires all students starting in ninth grade to have a Personal Learning Plan. This plan should include academic scheduling, career exploration, 21st Century Skills, community partnerships, college access, all forms of postsecondary training, and experiential learning opportunities.



School District 197's approach to meeting the legislation is through mainly one of two ways;

- Grade 9 Warrior Seminar or AVID 9
- Grades 10-12 High School Counseling Curriculum

In the 2024-2025 school year we will be reviewing our work in this area.

Safety Guidance for CTE

Safety plays a vital role in every Career and Technical Education (CTE) program. It is important to keep everyone safe in the CTE classroom and to properly prepare students with the best safety practices for when they enter the workforce. Several resources help guide school districts in developing a culture of safety in their CTE programs and laboratories and can all be found on the CTE portion of the MDE Website. Students, educators, administrators and industry professionals should consider use of these resources in developing and maintaining safe and effective CTE environments and programs.



School District 197 worked with current CTE teachers, particularly in the Technology Education department, to identify gaps and overlaps with CTE classrooms, equipment and training (based on the Minnesota Career and Technical Education (CTE) Safety Manual). A report was submitted to TRHS administration, as well as the Secondary Curriculum Coordinator, to assist in addressing the

needs from within that report. Currently, we are in full compliance with safety requirements due to this work from the tech ed department.

Career and Technical Education Teacher Licensing

The Minnesota Department of Education (MDE) approves Career and Technical Education (CTE) Programs meeting program criteria, including appropriate teacher licensing requirements. These programs are eligible to access federal Carl D. Perkins and CTE Levy funds. Districts that accept these federal dollars must report enrollment and student proficiency for CTE courses and programs to the department. To be eligible for Perkins and/or CTE Levy funding with an approved program, a teacher must hold the appropriate license or permission.

A CTE license is a classroom teaching license that authorizes the holder to teach a specific subject in a Minnesota public high school or charter school. The difference between a CTE license and other teaching licenses is that a CTE license places an emphasis on career development and occupational experiences and is designed for teachers in programs preparing high school students for specific occupations and postsecondary training and education.

Special Permissions

Minnesota school districts that are unable to hire a fully-licensed teacher in a particular teaching assignment may be able to seek an Out-of-Field Permission (OFP) from the <u>Professional Educator Licensing and Standards</u>
<u>Board (PELSB)</u>

Advisory Committees and Partnerships

Minnesota requires local districts that receive state and/or federal funding for CTE and WBL programs to create and use local "advisory committees" that include these employer partners. Minnesota Rule 3505 requires that at least 50% membership on these committees be composed of business and industry professionals who work in career pathways related to the CTE or WBL program. Other valuable committee members may include school administrators and counselors, postsecondary instructors, community members and students.

Local school districts may establish other types of partnerships and advisory committees to address specific projects. Advisory committees are essential to ensuring program relevance and quality, providing students and school districts with new opportunities and resources, and connecting students and educators with the larger regional, state and national employment communities. Related offsite resources offer guidance to help educators:

- Design an effective advisory committee structure.
- Recruit employer members.
- Coordinate and manage the committee to set and achieve district goals.
- Create and use instruments and processes to measure the effectiveness of the committee.



School District 197 began hosting the first district-wide CTE Advisory Committee in February, and with a fall and spring meeting held each year 2022 - 2023 and 2023 - 2024. The committee membership changes each year as local needs and contacts change and grow. Among the work they have helped take on was to set goals for the next 3-5 years in CTE programming, which have

then been used to direct district-wide planning to install and implement these goals. Further explanation of these goals are found in the **SUMMARY** section of this report.

Summary

The work of the Career and Technical Education review process unofficially began in Fall 2022 with meetings with the CTE staff to provide details on the upcoming review process that would officially begin in 2023. During these foundation setting meetings there were many timeline and task updates discussed with the team, which are included below;

- MDE CTE Program Approval Process
- Upcoming ISD 197 Curriculum Review details
- Perkins V legislation, requirements and impact in ISD 197
- Approval process for Perkins funding requests through the Dakota County Perkins Consortium
- Establishing and preparing for the first District-wide CTE Advisory Committee meeting
- Leadership goals for CTE leadership; 2021-2022 (e.g., explore CTE Levy Revenue options w/department)

These two meetings in 2022-2023 helped to establish a unified and comprehensive process for bringing all our CTE programs, courses and teachers together as one larger team, and provided useful direction for both staff and leadership.

In order to gather input from local business, industry and postsecondary partners prior to beginning the larger curriculum review work, the first of two CTE Advisory Committee meetings were held between 2022 and 2023. These were important to hold prior to the teams' curriculum review process because;

- it established a broad and deeper connection to the business, industry and postsecondary partners in our area
- Provided our CTE team with early information on what trends are developing in labor and employment
- Three to five year goals were established which both the advisory committee and the CTE review team could focus their efforts on.

The co-developed goals for our CTE Programs that emerged by the fall of 2023 are listed below, and are also found in several places within our ISD 197 Strategic Planning documents, efforts, and implementation targets.

- Create full pathways (introductory, intermediate and advanced courses) in each program area
- Design and implement a sustainable work-based learning program, which may include, but is not limited to, components such as on-the-job training (OJT), internships, apprenticeships, and job shadowing.
- Offer at least one course in each CTE program area with concurrent enrollment or other value-add trait (certification, accreditation, etc.).

Here is a timeline, with some notable highlights, of the work that our CTE Advisory has helped to develop, implement and/or support, since its inception in 2022.



For reference, here are the links to the CTE Advisory School Board Updates for the past two years.

- □ CTE Advisory Presentation Board Dec 2022
- □ CTE Advisory Presentation Board Feb 2024

Officially, the CTE Curriculum Review Process began in the spring of 2023, where a review team (Appendix A) was put together including all staff from the Business, Family and Consumer Science, Technology Education, Work-based learning and TriDistrict CAPS programs. The team had originally planned on meeting in-person three times during the school year, however, due to issues, which included but are not limited to, substitute shortages, we made the decision to adjust our meeting plans. Instead of three in-person meetings, we held two.

The first meeting, in March 2023, was focused on introducing the team to the review process, and how each of the layers of CTE programming, federally, at the state level, in our local consortium, and then locally in School District 197, would overlap and support each other. This was a critical, and intentional, decision to make, because if not carefully planned, CTE departments might end up doing each of those levels of work in silos, which would at least triple the time spent doing what the team was able to accomplish in four meetings, as well as align as many efforts in a singular way to improve program effectiveness and efficiency.

Additionally, the team worked through some early features of the first year of curriculum review processes, such as conducting the internal and environmental scans, discussing how to solicit input from our students,

staff and community, and developing an understanding of both our Dakota County Perkins Consortium's priorities, as well as the new funding structure and requirements of Perkins V legislation.

The final meeting of the 2022-2023 school year included continued discussion of the features noted above, as well as identifying goals of the review process for the department, developing early versions of a student, staff and family survey, and working through some details of potential new areas of growth, such as work-based learning.

The following year, 2023-2024, we held four meetings, which helped to accomplish the large tasks that were ahead for the team around seeking MDE program approval for all the CTE Programs and Courses. In addition to this large task, which would end up taking up at least 75% of the entire year's work, the team worked through the following features of the first year of curriculum review.

- Continuing the work towards completing external scan activities, identifying gaps and overlaps, strengths and areas for improvement, and reviewing enrollment, performance, and participation data.
- Reviewing labor and market patterns, trends, and changes in the broader metro-land area
- Providing consultation for middle school staff on what would be great ways to expand CTE programming due to the middle school schedule change process.
- Working through new safety guidance from the state of Minnesota on CTE safety.
- Preparing for and/or responding to feedback from meetings held with our CTE Advisory Committee.

Additional consultation with parallel organizations, such as Junior Achievement of American and the West St. Paul Youth Workforce department through Dakota Country programming, were layered into the work of the team.

Internal Environmental Scan

In order to get a broad sense of what students' career and technical education experience looks like across the district, our curriculum review team conducted both an internal and external environmental scan of Career and Technical Education (CTE) programming and instruction. Included is a summary of the themes from their work.

Internal Review Part 1 - Review of Previous Findings

As stated in the BACKGROUND section of this report, School District 197 conducted individual department review processes for each of the typically categorized Career and Technical Education Areas, including; Business (2018), Family and Consumer Sciences (2015) and Technology Education (2015) over the course of a three year period. The major themes of that work are included below.

- Lack of student knowledge about classes taught at HS
- Lack of pathways before HS
- Increase graduation requirements has negatively impacted CTE programming
- Increase in options for students in general disperse student enrollment more now
- Changing population EL students in particular, and their access to CTE programs
- Demographics in general have changed, even since the most recent review

- Students choose TRHS courses from outside 197 because of CTE offering
- CTE programming is the best way to show students relevancy in their lives, use that
- Certifications for students that are industry recognized puts VALUE in their pockets
- Lower soft skills development observed in students - <u>refocus on</u> <u>this</u>
- Hearing from speakers, community, and seeing examples are drawing students attention

The first task for this review team was to review these processes and documents and evaluate the implementation of them over the course of the past several years. Their insights on the previous board reports and department efforts are included below.

Incomplete understanding of CTE courses or programs.

- Students lack knowledge about the specific classes offered at the high school level.
- There is a lack of clear pathways for students to follow before reaching high school.

Changing student enrollment over time.

- The student population is changing, particularly with an increase in English Language Learner (ELL) students, affecting their access to CTE programs.
- The overall demographics of the student population have changed since the last review.
- Students are choosing to take courses due to the CTE offerings available.
- The increase in overall options for students has led to a more dispersed student enrollment.

Connection to life beyond the walls of the classroom.

- CTE programming is an effective way to demonstrate the relevance of education to students' lives.
- Obtaining industry-recognized certifications provides students with valuable credentials.
- Inviting speakers, involving the community, and providing real-world examples are effective strategies for engaging students.

Potential areas for continued investigation.

- A decline in soft skills development among students has been observed, indicating a need to refocus on these skills.
- Increased graduation requirements with specific credit requirements have had a negative impact on enrollment in Career and Technical Education (CTE) courses.

Internal Review Part II: Considerations for future Perkins spending.

The team identified what they believe are future needs are on the horizon where Perkins V funds could potentially be used. Many of these costs are beyond the traditional site and curriculum budgets.

Near-future needs.

- Curriculum Development: Writing curriculum for new or existing courses (e.g., whole foods, Intro to FACS).
- **Equipment:** Purchasing essential tools and equipment for various programs (e.g., small engines set, tools, shed kit, sewing and embroidery machines, Real care babies, CAD program, Cricut Cutter, Button Assembler).
- Experiential Learning: Funding field trips and other experiential opportunities (e.g., Youth in Government, Youth Day at the Capitol, St. Paul tech college, U of MN).

Needs on the horizon.

- Curriculum Development: Continued curriculum development, including writing for developing worksites and virtual job shadowing.
- **Equipment:** Ongoing equipment needs as programs evolve (e.g., miscellaneous kitchen items, virtual reality glasses).
- Professional Development: Opportunities for teachers to attend off-site training (e.g., ProStart).

These themes highlight a focus on enhancing curriculum, providing students with hands-on and immersive experiences, and equipping classrooms with necessary resources to support CTE programs.

External Environmental Scan

Once the team had conducted their internal environmental scan, they turned their attention towards what is observable externally in terms of how CTE courses and programs are approached across the metro, as well as through leading research from state and national organizations.

External Scan Part I: Metro-Area CTE Programming

The first phase of our external environmental scan focused on exploring how districts across the metro approached CTE instruction, curriculum, and secondary courses and course pathways. The review team studied over 30 districts' course registration guides and district websites/related materials during this process, from districts that are either comparable to ours.



Below is a summary of the team's findings from this stage of the work.

Program Development and Expansion

- Explore the feasibility of implementing an EL Sheltered Keyboarding course.
- Initiate the credentialing process for staff that are near or at completion of their collegiate coursework.
- Investigate WBL program models implemented in Bloomington, SSP, and Roseville for adaptation.
- Explore creating a Business program focused on sports, entertainment, and marketing, utilizing data from Metro Scan. Consider a low-incident enrollment approach similar to Bloomington's CS class.
- Expand Technology Education offerings to include CAD using Solidworks software, architectural and mechanical drafting/drawing, and a capstone "Make Anything" class. Explore the possibility of a Unified Tech Ed course and capstone internships for top-level Auto courses.
- Develop a Unified FACS program and analyze data from Metro Scan for potential enhancements.

Curriculum and Program Review

- Revisit middle school CTE programming to identify potential improvements and alignment with high school offerings.
- Conduct a thorough evaluation of the PLTW program at the high school level to determine its viability.
- Explore alternative agriculture options for CAPS students in light of the failed partnership with Dodge.

Other Considerations

- Collaborate with fine arts departments to align CTE program requirements with fine arts credits.
- Develop a Continuing Education (CE) course for Accounting II.

As the team completed its work from the 2022-2023 review process, several action steps were identified as focus topics in 2023-2024 and beyond.

Soon follow-ups

- Field Trips (Tech Ed, FCS, WBL, CS/IT, Tech Warriors) and Speakers (WBL, Tech Ed)
- Develop course descriptions for middle school CTE courses
- Visit Edina for their Unified FCS course
- Finalize the name for the Intro to Engineering course

Later follow-ups

- Hybrid or online versions of On Your Own
- EL Co-Taught or EL Sheltered Intro to Foods, Keyboarding
- YouScience exams: WBL
- CAD use and expansion
- ASE Certification
- Concurrent enrollment courses at DCTC and Business

Down the road tasks:

- Exploration of Drivers Ed for WBL
- Bio and Foods course
- Personal Finance requirement what standards, where met
- Live Event Production YouScience exams

External Scan Part II: MDE Resources for CTE Programming

The second investigation the review team conducted was to identify which resources and information might be helpful specifically from the Minnesota Department of Education's (MDE) resources for CTE programming, with a specific focus on the upcoming CTE program approval process. A significant amount of legislation impacting schools passed in May 2023, this results in a change in graduation requirements. In the spring of 2023 the school board also approved a new middle school schedule. The team considered the impact of these changes on programming and the 5 year CTE plan they were developing. Below is a summary of their findings.

- The 2022 safety/technical manual had a significant impact on programs.
- A decrease in elective credits may negatively impact CTE program enrollment.
- Increased CE class offerings could divert potential students from CTE programs.
- There may be an increased emphasis on students completing required credits.
- WBL opportunities could be expanded through collaboration with CTE classes.
- New courses are planned to expand program offerings.

- A full-time WBL position is under consideration.
- Focus on obtaining CE class approval for each program strand or finding a way to access college credits.
- Maintain stable enrollment numbers by analyzing enrollment trends.
- Develop mentorship, internship, and apprenticeship programs.
- Collaborate with instructors of new courses to integrate WBL opportunities.
- Explore potential partnerships with external organizations (e.g., fashion industry, fitness centers, tech companies).

Overall, the information suggests a need to adapt CTE programs to changing educational and workforce demands while maintaining student enrollment and engagement.

For the second portion, staff reviewed documentation from MDE resources regarding what is needed overall for MDE program approvals. Specifically, the team was asked to look for details on the following information.

- State-Recognized Programs of Study User Guide
- Programs of Study
- Career and Technical Education Program Approval Process
- Building Effective Advisory Committees and Business Partnership

Below is what the team identified as the key requirements for MDE program approval.

• Programs of Study (POS):

- Clearly defined with multiple entry and exit points.
- Aligned with local and regional industry needs.
- o Include authentic internship experiences.
- Equipped with industry-standard facilities, materials, and resources.

Advisory Committees:

- Composed of at least 50% business and industry representatives.
- Include members from various roles in the industries (techs, management, customer service).
- Actively involved in program development and evaluation.

• Program Alignment:

- Reflect career and industry needs.
- Continuously updated based on feedback from partners.

Additional Considerations

- **Program Renewal:** CTE programs must be renewed every 5 years.
- Credentialing: Incorporate opportunities for students to earn industry-recognized credentials.
- **Partnerships:** Build strong relationships with business partners to provide students with real-world experiences.
- State Requirements: Adhere to MDE guidelines and checklists for program approval.

Teams also took the time to review the actual application process and documentation that is needed as they prepared for the final work of the 2023-2024 school year. The application process is critical for appropriate funding.

Core Beliefs and Outcomes that Matter to All

As a team we continue to come back to our School District 197 Strategic Framework. The core beliefs lead us in all of the work that we do. The team has not yet reviewed and developed their Core Beliefs and Outcomes that Matter to All. This information will be provided as it is developed in future board reports and updates.

Strengths and Weaknesses

Typically, a curriculum review team dedicates specific time across the year discussing what they believed to be the strengths and weaknesses of their programming and coursework options provided in their department in School District 197. As each team's work unfolds over the course of the year, similarities and differences appear in how that department is conducting its work compared to previous departments.

The Career and Technical Education review process, very early on, was moving in and out of year 1 and year 2 (even year 3 in some cases) areas of work, and specifically because as more urgent and pressing needs (areas for improvement) emerged, the team observed that there were decisions they could move quickly to mitigating these needs. Therefore, rather than producing a list of these strengths and weaknesses, the team mobilized efforts quickly to address these more swiftly than a three year process would typically deliver.

As a result, a noticeable change that this report has over other reports is that there is not necessarily a separate section, dedicated to only strengths and weaknesses. Instead, these areas for celebration (such as the reinvestment and expansion of work-based learning) and improvement (exploring ways to sufficiently fund CTE programs and courses), were integrated in the report. This helps to provide the context necessary to understand the reason why they are celebrations or concerns, and what might be early ways in which the department was working towards building on strengths or reducing concerns.

Survey Data/Input Gathering

Curriculum review teams during the first year of review conduct input-gathering activities that collect information from students, staff, families, and community members. Typically teams collect this through a combination of surveys, panels, focus groups, and within several advisory committees in School District 197. As mentioned in several instances already in this report, CTE is fortunate to have an advisory committee, the Career and Technical Education Advisory Committee, specifically created to provide feedback from another set of constituents, post-secondary partners and local area businesses and industries. Each method of input collection is provided in more detail below.

Surveys

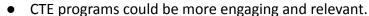
There were three variations of data collected for CTE programming in 2023-2024, one in the form of the typical ISD 197 community (staff, students, and survey), the second was conducted through our Dakota County Perkins Consortium as a part of the Comprehensive Local Needs Assessment (CLNA), and the third was indirectly influential from another large project in 2022-2024, the middle school schedule review process. As reference, the CLNA is described in more detail in the **BACKGROUND** section of this report. Summaries of each method are described below, and examples of questions, and the actual responses, are included in **APPENDIX B.**

Summaries of CTE Curriculum Review team's reflection on School District 197 survey data.

Perspectives on CTE

- Strong preference for hands-on learning.
- Desire for real-world application.
- Need for better information about CTE programs.
- Interest in exploring various career paths.

Program Effectiveness and Improvement

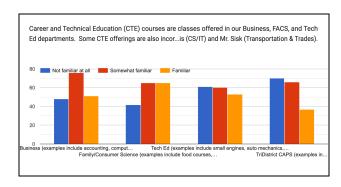


- Increased communication and promotion are essential.
- Expanding course offerings and providing additional support can enhance student success.
- Stronger connections to industry and potential careers are needed.

Based on students, staff, and community input on the surveys, CTE programs have the potential to significantly impact student success by providing relevant, engaging, and hands-on learning experiences. To maximize this potential, TRHS should focus on improving communication, and expanding offerings.

After reviewing the data, the CTE curriculum review staff were also asked to reflect on what surprised them the most about the results. Here are themes for their reactions.

- **Student Interest:** A significant portion of students expressed interest in earning college credit in CTE classes.
- Course Selection: Students primarily rely on catalog descriptions to choose courses.
- **Communication Preferences:** Students prefer email and presentations as methods to learn about courses.
- Course Goals: Students are divided between pursuing certificates/college credit & earning high school
 credit.



Summaries of Dakota County Perkins Consortium survey data.

Below is a summary of the feedback from administrators from each of the consortium.

Which career fields are students in your district most interested in?

- 1. Transportation, Distribution & Logistics
- 2. Health Science
- 3. Architecture and Construction
- 4. Business, Management, & Administration
- 5. Information Technology

In your opinion, what are the greatest strengths of your district's CTE programs?

- 1. Hands-on learning: This is a recurring theme, emphasizing the practical nature of CTE programs.
- 2. Career focus: The importance of preparing students for careers through CTE is highlighted.
- 3. Variety of programs: A wide range of CTE courses is seen as a benefit.
- 4. Effective instruction: The quality of teaching and the instructional methods used in CTE programs are valued.
- 5. Student success: CTE programs are associated with improved student outcomes in areas like attendance, behavior, and academic performance.

In your opinion, what are the greatest needs of your district's Career & Technical Education (CTE) programs?

- 1. Resources and Funding: Adequate funding for facilities, equipment, and program expansion is crucial.
- 2. Program Development: Creating clear pathways through CTE programs and expanding programs.
- 3. Student Recruitment and Awareness: Increasing student interest and enrollment in CTE programs.
- 4. Industry Partnerships: Collaborating with industry for support, equipment updates is vital.
- 5. Staff Development: Well-trained and informed staff are essential for CTE program success.

Below is a summary of the feedback from post-secondary educators from each of the consortium.

What are the greatest STRENGTHS of your current students?

- 1. Critical Thinking and Problem Solving
- 2. Communication and Teamwork
- 3. Technology Application
- 4. Employability Skills
- 5. Cultural Competence

What are the greatest CHALLENGES of your current students?

- 1. Communications
- Continued focus on Critical Thinking and Problem Solving
- 3. Academic Foundations
- 4. Financial Well-being
- 5. Leadership and Teamwork

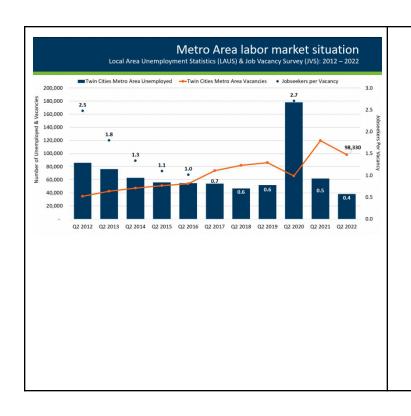
Summaries of Department of Employment and Economic Development (DEED)

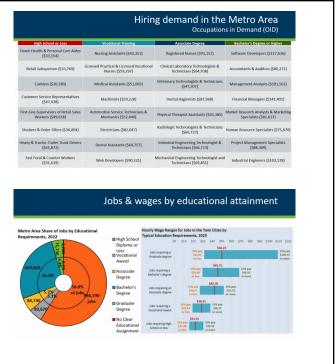
Industry	Number of Jobs	Share of Total Jobs
Total, All Industries	250,817	100.0%
Health Care and Social Assistance	30,153	12.0%
Retail Trade	29,913	11.9%
Manufacturing	26,226	10.5%
Transportation and Warehousing	23,390	9.3%
Accommodation and Food Services	23,056	9.2%
Construction	18,554	7.4%
Educational Services	15,544	6.2%
Wholesale Trade	12,136	4.8%
Administrative and Support Services	11,255	4.5%
Finance and Insurance	10,023	4.0%
Professional, Scientific, and Technical Services	9,477	3.8%
Other Services	9,257	3.7%
Public Administration	9,129	3.6%
Arts, Entertainment, and Recreation	7,411	3.0%
Information	5,476	2.2%
Management of Companies and Enterprises	4,644	1.9%
Real Estate and Rental and Leasing	2,777	1.1%
Agriculture, Forestry, Fishing and Hunting	1,434	0.6%
Utilities	757	0.3%
Mining	194	0.1%

The top five-employing industries in WDA 14 (Dakota-Scott) include;

- Health Care & Social Assistance
- Retail Trade
- Manufacturing
- Transportation & Warehousing
- and Accommodation & Food Services.

The table to the left outlines employment levels for all 20 major industry sectors.





Advisory Committees

While it has been referenced in several places on this report in relation to the larger processes of federal, state and regional CTE programming, we have included a very high summary of the input received through our advisory committees here as a function of the CTE curriculum review process.

Curriculum Advisory Committee and the Gifted and Talented Committee:

- Expand career-focused courses with certificate options.
- Enhance support for diverse learners in CTE courses, including improved 504 plans.
- Strengthen communication with students and parents about CTE opportunities.
- Provide comprehensive guidance for students to explore career paths.
- Identify/support/challenge students who are developing a clearer/more intense pursuit of CTE courses.

Career and Technical Education Advisory Committee

- Create full pathways (introductory, intermediate and advanced courses) in each program area
- Design and implement a sustainable work-based learning program, which may include, but is not limited to, components such as on-the-job training (OJT), internships, apprenticeships, and job shadowing.
- Offer at least one course in each CTE program area with concurrent enrollment or other value-add trait (certification, accreditation, etc.).

Data Analysis

A large difference between how and when data is collected within the CTE department and other curricular areas is that the CTE department, due to the need to stay industry-relevant, the team is continually integrating new information all the time. Therefore, the examples included below are a sampling of the data that was collected this year during the process as a way to indicate the types of information they are reviewing and integrating continually. These examples are listed below.

- Industry-relevant certifications
- **Immersive Experiences**
- Data collected in the Middle School Schedule Change Process
- CTE Course Enrollment data

Industry-relevant certifications: Industry certifications are credentials that demonstrate a person's skills and abilities in a specific occupation or field. They are often administered by industry groups or third parties and can be in the form of an assessment, exam, or license. Industry certifications are based on industry standards and are intended to show that someone has the skills to enter the workforce and compete in a particular occupational area. They can be recognized at the local, state, or national level.

Included here is a list of certifications that currently exist within courses taught at Two Rivers High School. \rightarrow

The chart below shows how students have performed on several of our certification assessments over the past several years. While these exams are all managed through a single platform by Two Rivers High School staff, it's important to note that this data doesn't encompass all certifications attempted or obtained across TRHS CTE programs.

YouScience Exams (Accessed through a variety of Career and Technical Education courses) Sewing Construction and Textiles I Sewing Construction and Textiles II Child Development Food and Nutrition I Nutrition and Wellness **Red Cross Certifications** (Lifeguard Certification Course) CPR (Infants, children, adults) First Aid and blood borne pathogens Water Safety Certification Lifeguarding plus Waterpark Module Certification (pools, waterparks, and waterfronts) **Healthcare Certifications**

2023-2024 TRHS Certifications

Certified Nursing Assistant Certification (CNA Course)

Narcan Certification (Healthcare Careers CAPS)

Technology Certifications (Through Tech Warriors and/or CAPS CS/IT)

Certified Technology Specialist (AVIXIA) Student Repair Academy (SRA) - Vivacity Tech Google IT Certification

Interior Design I

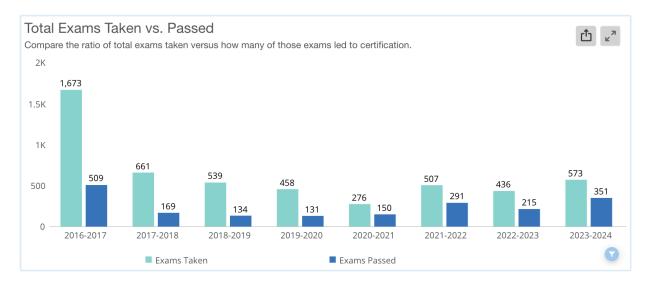
AED Certification

Culinary I

Nationally Recognized Hospitality Certifications

ServSafe Certification (Introduction to Foods Course)

Foundations of Restaurant Management & Culinary Arts Level 1 (Culinary I course)



There were a large number of tests administered in 2016-2017, largely due to it being the first year of

installation across many of the CTE courses following some earlier curriculum review work. Additionally the format of the exams has changed over time. In the beginning students took a pre and post test, whereas today, most of the tests administered in years following were just post-tests (to secure the certification).

Overall, the number of assessments was relatively similar across all years except the first year and in 2020-2021 which was the year that COVID impacted our instruction and assessment approaches. Two large differences noticed in this most

recent year's data is in both the number of assessments administered as well as the success rate in which students were passing those assessments which were both larger than any year in the past (again, minus the bloated 16-17 installation data on tests taken).

CTE Enrollment: Included in these images below are some of the examples of course enrollment data that the CTE team reviewed. The first graph shows total student enrollment, across all CTE courses and departments, and includes duplicate enrollments.

Enrollment was on a slow decline in CTE courses from 2016 to 2019. In 2020-2021, COVID deeply impacted enrollment, with the lowest enrollment in CTE courses in recent history. However, the enrollment has quickly recovered, and by 2023-2024, enrollment was even 400 more students than any year prior, and had nearly doubled since 20-21.

Quite possibly though, the most incredible data that summarizes the impact that CTE courses have on our students' experience at TRHS is seen through how our student groups participate in those courses. Below is a table showing enrollment broken down by race across all CTE course participation. Not only is the data for a single year nearly perfect in terms

Year	Total
2016-2017	1307
2017-2018	1251
2018-2019	1026
2019-2020	1010
2020-2021	979
2021-2022	1451
2022-2023	1393
2023-2024*	1740

Exams Taken

Exams Passed

Certifications Earned

573

351

351

of proportionality by race, it has been that way over the course of the last 6 years as well. **This is the single** biggest point of pride within the CTE department.

Accessing CTE programs at TRHS:

	African American	American Indian	Asian	Caucasian	Hawaiian / PI	Hispanic	Multi-Racial
6Yr Trend	13%	~1%	5%	49%	<1%	29%	3%
2021-22	11%	~1%	4%	50%	<1%	27%	7%
2022-23	12%	~1%	3%	50%	<1%	29%	6%
Actual	11%	~1%	4%	50%	NA	28%	6%

CTE Concentrators: A CTE concentrator is defined as a student who has focused their studies on a specific CTE program or pathway. CTE concentrators are one of the key data points that the Perkins V legislation and state level data collection is focused on as well. This type of data is new for the CTE department to look at. Here is an early look at how many students are identified locally as CTE concentrators for the past two years in each of the larger three CTE departments.

2022-2023 Data Only	Business	FCS	Tech ED	All
Single Participant	289	342	252	883
Two Course Participant	50	66	102	218
Concentrator	10	8	24	42

Preliminary Fa 2023	Business	FCS	Tech ED	All
Single Participant	349 (79%)	371 (73%)	281 (66%)	1001
Two Course Participant	74 (17%)	117 (23%)	107 (25%)	298
Concentrator	12 (3%)	21 (4%)	35 (8%)	68

Number of field trips/immersive experiences:

This is a new data point that the team is beginning to collect and review on a more regular basis. Because it is a new data point, there are not clean and structured ways to collect it yet, similar to both the CTE

concentrators above, as well as the certifications earned. However, efforts to make data collection, review and report on these measurements is a key effort moving into future work with the team.

Included here in these two images are some highlights of where students have been going recently.

Through the expanding rigorous course grant, we have added immersive experiences for students.

Vivacity Tech

9th Gr- College of Biological Science (U of MN)

AP Bio - Dodge Nature Center Field Experience

Uponor and Metals Class

Rondo Neighborhood ← AP Human Geography → B'dote

Below is a list of additional field trips that the students have been taking over the past two years at TRHS.

AP Biology (Dodge Nature Center)

AP Biology (Great River Greening)

- CAPS and AVID (CCR Fair)
- Math For Trades (DCTC)
- PreAP Science (College of Biological Sciences - UMN)
- Small Engines and Metals (DCTC)
- Small Engines and Metals (Uponer)
- CIS Exploring the Teaching Profession (Target Field)

- Tech Warriors (Vivacity)
- Auto mechanics (DCTC)
- Woods I, II and III (Construct Tomorrow)
- CS/IT CAPS (Microsoft)
- Tech Warriors and CS/IT CAPS (Infinite Campus)
- Interior Design (JJ Hill House)

Educational Equity Analysis / Four Way Equity Test

Throughout the entire curriculum review process, the team was charged with routinely asking how the questions included in the Four Way Equity Test could be used to address findings from each particular stage in the review process. Examples for how this work was integrated throughout the process are noted below.

For reference, the Four Way Equity Test questions are provided below as well:

- 1. Does this help to provide opportunities for students who have historically been underserved, underrepresented, or disadvantaged by the current system?
- 2. Does this help to ensure equitable access for all?
- 3. Does this help to eliminate barriers based on gender, race/ethnicity, national origin, color, disability, age or other protected group?
- 4. Does this ensure the same rigorous standards for academic performance exist for all students?

Opportunities for Disadvantaged or Marginalized Students

The report indicates a strong focus on addressing the needs of disadvantaged and marginalized students. Key points include:

- **Identification of barriers:** The report acknowledges the impact of factors such as English Language Learner (ELL) status, changing demographics, and increased graduation requirements on CTE access.
- **Focus on equity:** There's a clear emphasis on expanding CTE offerings and providing support to ensure all students have equal opportunities.
- Addressing soft skills: Recognizing the importance of soft skills, the report highlights the need to refocus on their development, which can be particularly beneficial for disadvantaged students.
- **EL support:** The mention of EL Sheltered Keyboarding and co-taught courses demonstrates a commitment to supporting ELL students.
- Pathway development: The emphasis on creating clear pathways for students to follow before high school can help prevent students from falling behind.

Ensuring Equitable Access to More Students

The report outlines several strategies to increase equitable access to CTE programs:

- Expanding offerings: The plan to introduce new courses and programs, such as those in business, technology, and family and consumer sciences, will provide more options for students.
- **Improving communication:** Better informing students about CTE programs will help ensure that all students are aware of the opportunities available to them.
- Addressing student needs: By gathering feedback from students, staff, and the community, the district can tailor CTE programs to better meet the needs of all students.

• **Collaborations:** Partnerships with other departments, such as fine arts, and external organizations can create more opportunities for students to explore their interests.

Eliminating Barriers Based on Gender and Race

While the report doesn't explicitly address gender and race, it does lay the groundwork for addressing potential disparities:

- **Inclusive language:** The focus on all students and the acknowledgment of changing demographics suggest an inclusive approach.
- **Data-driven decisions:** By collecting and analyzing data, the district can identify potential disparities in access and outcomes.
- **Diverse perspectives:** Involving students, staff, and community members in the review process can help ensure that different perspectives are considered.

Ensuring Rigorous Standards for All Students

The report demonstrates a commitment to maintaining high standards for all students:

- **Industry alignment:** The emphasis on aligning CTE programs with industry standards ensures that students are acquiring the skills needed for success in the workforce.
- **Certifications:** The focus on obtaining industry-recognized certifications indicates a commitment to preparing students for post-secondary education and careers.
- **Curriculum development:** The plan to develop and improve curriculum demonstrates a focus on providing students with a high-quality education.
- Assessment: The use of surveys and other data collection methods to assess student needs and program effectiveness suggests a commitment to continuous improvement.

Overall, the report provides a strong foundation for creating a more equitable and rigorous CTE program. By addressing the needs of disadvantaged students, expanding access, and maintaining high standards, the district can help ensure that all students have the opportunity to succeed.

Early Implementation Actions

Due to several timelines, processes and procedures, some earlier next steps than usual were able to shape for CTE programming during a review process, which usually doesn't officially begin until Year 2 or Year 3 of the review process. These timelines include the middle school and high school registration processes for the following year. The early implementation actions that are underway already are noted below, as well as the rationale for the early actions.

New Middle school electives: As a result of two main factors, one being the feedback about offering CTE courses earlier in our students secondary experience, and because of the middle school schedule changes, which includes an expansion opportunity for electives, the middle school's Project Lead the Way staff met with the larger CTE Curriculum Review team to discuss what kind of options could be good options for middle school students to experience before they enter the high school. The courses that were developed as a result from this collaboration between middle and high school are below.

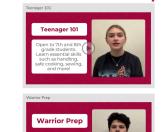
Coding and Mechanical Systems
Automation and Robotics
Design and Modeling
Motors and Engines
Teenage Survival Skills
Building and Construction

Early course descriptions were created for each of these CTE-related courses to help indicate that the general content of the course would be. Before officially placing these courses in the 2024-2025 middle school registration materials, student interest was gathered through a survey that was administered to students in the middle school. As a result of this data collection, and in consultation with the administration at both middle schools, the final list of courses to be included in the middle school registration guide for 24-25 was created.

Project based learning
Youth Participatory Action Research
Genius Hour
Computer software and applications
PLTW Medical Detectives

Career and Technical Education Pathways





This new CTE-related course list is below (new MS courses in other areas, such as Fine Arts, are not included).

- Coding and Mechanical Systems (supporting the Computer Science and Technology Ed pathways)
- Design and Modeling (supporting the Technology Ed pathways)
- Teenager 101 (supporting the Family and Consumer Sciences, Business, and Technology Ed pathways)
- Medical Detectives (supporting the health sciences pathway)

As of the time of this report, student enrollment was sufficient enough to run multiple sections of each of the courses above, excluding Medical Detectives.

TRHS new CTE courses: Several CTE courses were inlouded in the annual Two Rivers High School new course proposal process in 2023-2024. These were courses that helped to address gaps in programming that were detected in the earliest stages of this review process. These courses are noted below, as well as why they were expedited.

- Work-Based Learning Seminar I/INTS 1010 Job Search Skills (meet CTE Advisory's goal to expand WBL)
- Work-Based Learning Seminar II (same as above)
- Work-Based Field Experience I and II (same as above)
- Live Event Production Workshop (filling a gap made aware to us through CTE Advisory)
- Unified Introduction to Foods (expanding access to more students to CTE courses)
- Computer Aided Design / Drafting (Cadd) In Engineering (aligning to industry needs in engineering)
- College Health Concurrent Enrollment (expand options for students to pursue study in health sciences)

Next Steps

In addition to the typical work conducted in year 2 of curriculum review, the CTE department will begin prioritizing and work on the topics listed below.

Near-future needs.

- Submitting the paperwork necessary for program approval with MDE
- Integrating feedback from MDE following submission to ensure program approval
- Supporting the installation of all new middle and high school CTE courses in 2024-2025.
- Purchasing essential tools and equipment for various programs
- Explore ways to fund field trips and other experiential opportunities
- Continue tracking and meeting, the Personal Finance requirements
- Proposing a fifth CAPS course in Agriculture, food, and natural resources.
- Creating a method in which to collect data related to certification attempts and completion across all
 CTE courses and assessment platforms
- Creating a method in which to collect data on CTE-related immersive experiences (e.g., number of students participating, which courses)

Later follow-ups

- Explore ways for utilizing the funds collected through the CTE Levy for CTE purposes
- Explore hybrid or online opportunities in applicable courses
- Expanding certifications
- Expanding concurrent enrollment opportunities in CTE programs
- Explore EL Co-Taught or EL Sheltered courses in applicable courses
- Explore how to potentially create double-hour sections of courses to utilize limited space (such as running more foods courses in limited kitchen space)
- Continued expansion of work-based learning
- Explore approaches for expanding TRHS's CTE opportunities for students in Branch Out
- Explore opportunities for integrating Drivers Education in school-day courses
- Explore new courses that integrate other areas (science and CTE, math and CTE)

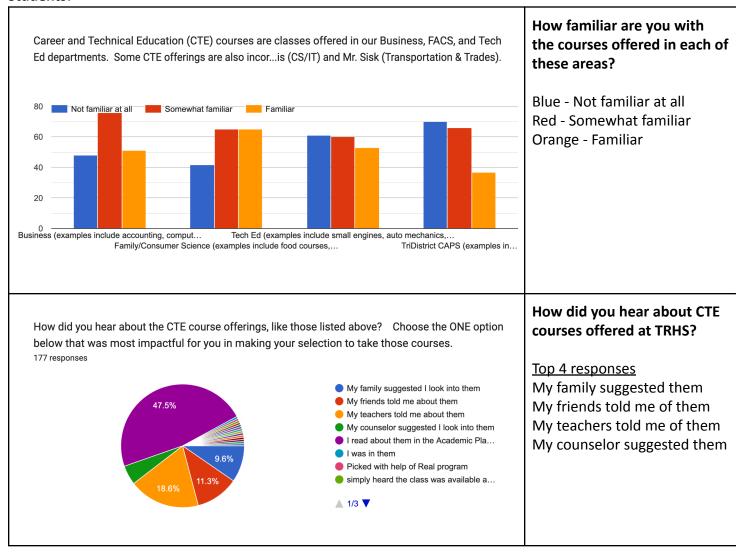
Appendix A: Career and Technical Education Review Team

Team Member	Title	Site
Beth Coleman	FACS Teacher	Two Rivers High School
Brian Whalen	Technology Ed Teacher	Two Rivers High School
Katie Carter	FACS Teacher	Two Rivers High School
Linda Zurn	FACS Teacher	Two Rivers High School
Nancy Coffeen	WBL Teacher (Special Programs)	Two Rivers High School
Ryan Pagenkopf	Business Teacher	Two Rivers High School
Bill Larsen	AV Technology Coordinator	Two Rivers High School
Bill Troolin	Technology Professional	Two Rivers High School
Grant Moris	Math and CAPS Teacher	Two Rivers High School
Ann Henry	ELA and WBL Teacher	Two Rivers High School
Doug Sisk	Technology Ed and CAPS Teacher	Two Rivers High School
Ben Geiger	CCR Specialist	Two Rivers High School
Chris Gustillo	Business Teacher	South St. Paul High School
Mitchell Mollet	Math Teacher	Simley High School
Bill Skar	ELA Teacher	Simley High School
Hannah O'Brien	ELA Teacher	South St. Paul High School
Joe Burk	Business Teacher	South St. Paul High School
Carol Caywood	ELA Teacher	Simley High School
Mary Jo Gardner	Director, K12 Partnerships	DCTC and IHCC
Ben Kusch	TriDistrict Administrator	TriDistrict
Scott Karlen	Associate Principal	Two Rivers High School
Dr. Albert Johnson	Principal	District Office
Miles Lawson	Secondary Curriculum Coordinator	District Office

Appendix B: Survey Questions

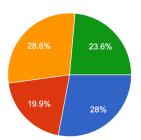
School District 197 Surveys: Below is a sampling of several questions included in each survey, and if applicable, high level observations.

Students:





Have you heard of the CAPS courses at our high school? These course are offered to 11/12th grade students at TRHS, as well as Simley and Sout...rict CAPS Student/Program Profiles (short videos) 161 responses



 No - I have no idea what these courses are

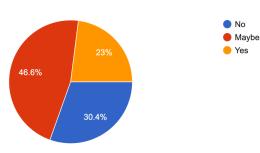
 No - I have heard of them, but don't really know too much about them

- Yes I have heard of them before, however they don't sound interesting to me
- Yes I have heard of them, and either am currently in one of them, or will be interested in taking one next year

Have you heard of the TriDistrict Center for Applied Professional Studies (CAPS) courses offered at TRHS?

Blue - No Red - Yes- don't know much Orange - Yes- not interested Green - Yes, and interested

We are currently considering offering a fifth CAPS course in the future that would have an Agriculture/Food Systems & Science, Natural Resour... yourself being interested about in future years? 161 responses



Would you be interested in learning more about a potential additional 5th CAPS course focusing on Agriculture/Food Systems?

Blue - No Red - Maybe Orange - Yes

STAFF

How satisfied are you with How satisfied are you with the variety of Career and Technical Education (CTE) course offerings? **CTE course offerings at TRHS?** Please use the scale below. 9 responses Blue - Relatively unsure of CTE Red - Should offer more CTE I am relatively unsure of what our CTE course offerings are, and therefore ca... Orange - Variety, need more Our high school ought to offer more variety in our CTE courses Red - Solid variety Our high school offers some variety, Purple - Regionally impressive however more would be better Our high school offers a solid variety of CTE courses, although there is alway... Our high school offers as a competitive and diverse menu of high quality CTE... Have you heard of the Have you heard of the CAPS courses at our high school? These course are offered to 11/12th **TriDistrict Center for Applied** grade students at TRHS, as well as Simley and South...eneurship, and Transportation & Skilled Trades. **Professional Studies (CAPS)** 9 responses courses offered at TRHS? No - I have no idea what these courses are Blue - No Somewhat - I have heard of them, but don't really know too much about them Red - Yes- don't know much Yes - I have heard of them before, and Orange - Yes-I know them well feel I understand them well enough. 44 4%

Parents

What CTE class(es) has your student(s) taken at Two Rivers High School? Check all that apply. /¿Qué clase(s) de CTE ha tomado su(s) estudiante...aria Two Rivers? Marque todo lo que corresponda. I am unsure / No estoy seguro 4 (21.1%) Business (examples include 12 (63.2%) accounting, computer science,.. Family/Consumer Science -6 (31.6%) (examples include food course... Tech Ed (examples include small 10 (52.6%) engines, auto mechanics, woo.. TriDistrict CAPS (examples 1 (5.3%) include CS/IT, Health Careers,... 0.0 2.5 5.0 7.5 10.0 12.5

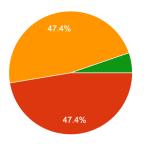
What courses have your student(s) taken at THRS?

Business - 63% Family/Consumer Sci - 32% Tech Ed - 53%

Unsure - 21%

CAPS - 5%

Have you heard of the TriDistrict CAPS courses at our high school? These course are offered to 11/12th grade students at TRHS, as well as Simley a...o, y Carreras en Transporte y Oficios Calificados. 19 responses



- No I have no idea what these courses are / No, no tengo idea de cuáles son astos cursos
- Somewhat- I have heard of them, but don't really know too much about them / Algo... He oido hablar de ellos, pero r...
- Yes I have heard of them before, and feel I understand them well enough. /...
- Yes I have heard of them, and my student has taken one of them. / Sí, h...

Have you heard of the TriDistrict Center for Applied Professional Studies (CAPS) courses offered at TRHS?

Blue - No Red - Yes- don't know much Orange - Yes- not interested Green - Yes, and interested



CTE at Middle School



SCHOOL DISTRICT 197

Student Input Sessions Themes



- Teacher relationships were key for students
- Best Teacher characteristics:
 - Relatable, way they organize learning, have fun, connect learning to varying and individual needs of students, restate the information so all students can understand.
- More choice
 - other options for music requirement
 - other languages
 - other art classes
 - other electives
- Free time built in to the regular school day
- Time of the lunch period (not too early or late, unless snacks are ok at other times)

Survey Responses - Students



Q: What are some other areas you would like to learn about in school?

Overall, there were nearly 20 common themes for responses to this question. The five most common themes for what other areas would students like to learn about were (most common is first)

- 1. World Languages (more Spanish as well as other languages)
- Science (e.g., astronomy, engineering)
- 3. Family and Consumer Science (e.g., cooking, baking)
- 4. Life Skills (e.g., taxes, finances)
- 5. Art (e.g, pottery, more art in general)

Important note: Students of color, and in particular Hispanic students, disproportionately preferred Art and FACS as areas they would like to learn more about in school, whereas white students indicated a disproportionate preference for science and world languages.

The next tier of common responses included but were not limited to; history, computer science, LGBTQ+, and sports/physical education.

Survey Responses - Students



Q: What is one thing you would like to change about the middle school schedule?

Overall, there were over 10 common themes for responses to this question. The four most common themes for what students thought they would like to change about the schedule are (most common is first):

- 1. Breaks in the school day (passing time, longer recess, recess at 7th/8th).
- 2. Having time in the day to do classwork/homework (e.g., study hall)
- 3. More choice in classes they have / choice in when they can take them.
- Shorten the class periods that exist.

The second tier of common responses were centered on specific courses, and included requests for loosening requirements for music classes, adding in more classes (e.g., more gym time) and removing specific CAB classes.

Important note: Students of color, and in particular Hispanic students, disproportionately preferred that Gym and Homeroom not change.



Survey Responses - Staff



Q: What are some other areas you thinks students would like to learn about?

Overall, there were over 20 common themes for responses to this question. The area that had nearly double the amount of requests over any other topic and was, by far, the most requested topic was related to family and consumer sciences (e.g., cooking, fashion, life skills).

The next set of common themes include:

- 1. Financial literacy
- 2. Technology education/Industrial Arts (e.g., woods, metals, repair)
- Mindfulness/social emotional learning

The third tier of common responses were centered on more specific coursework, such as more art offerings, expanding world language studies, offering alternatives to student's music courses (e.g, non-performance-based), computer science and programming, theater, and time set aside for students to work on completing their work, having a break in the day and/or developing skills of independence (study skills, etc).

Survey Responses - Family



SCHOOL DISTRICT 197

Q: Is there anything specific you would like to add about your responses about the middle school experience?

Overall, there were over 20 common themes for responses to this question. The majority of the responses (89%) were provided by either multi-racial families (11%) or white families (77%). There were no discernible patterns for within the responses from families of color.

The six most common themes for the additional feedback are noted below (most common is first). The differences between each item is minimal.

- Middle school staff are excellent
- Requests to loosen the requirements on music courses
- 3. A general feeling of disrespect within the student population exists
- 4. Requests to raise the academic rigor for students
- Requests for more elective choices that students can choose from
- Ongoing issues of bullying by students



Survey Responses - Family



Q: What other classes and activities do you wish you child's middle school offered?

Overall, there were more than 20 themes for responses to this question. The seven most common themes were (most common is first)

- 1. World Languages (earlier language options, include other languages)
- 2. STEM (e.g., coding, computer science, engineering)
- 3. Creating at least a few options for 5th graders, increasing options for Gr. 6
- 4. Art (specifically offering Art year-round)
- 5. Family/Consumer Science (e.g. cooking, baking) and Life Skills (e.g. finances)
- 6. Tech Ed (e.g. woodworking)
- 7. Creative expression (e.g., theater, drama, speech, debate, creative writing)

Important note: Of the themes noted above, STEM-based courses, increased options for World Languages, Creative expression, and Family and Consumer Science were the themes that were requested more frequently than the others for families of students of color, while the remainder were requested mostly by white families.

Survey Responses - Family



SCHOOL DISTRICT 197

SCHOOL DISTRICT 197

Q: What is one thing you would like to change about the middle school schedule?

Overall, there were over 10 common themes for responses to this question. Providing breaks within the school day (e.g., recess, longer passing time, more time for lunch) was the highest request, nearly three times larger than the next most common themes. The next set of common themes that families requested included (most common is first):

- 1. Consider changing the start/end times
- 2. Providing more elective course opportunities
- 3. Creating ways in which individual students can access teacher support
- 4. Loosening requirements in music

The remainder of the responses were mostly singular in nature, and therefore resulted in no additional common themes.