Minnesota Department of Education

Rubrics for Assessing Career and Technical Education Programs

Minnesota Department of Education

Center for Postsecondary Success

Introduction

Background

Minnesota Rule 3505.1100 requires school districts to receive state approval for their secondary career and technical (vocational) education programs using a process and standards established by the Commissioner. In 2003, the Minnesota Department of Education instituted a process under which districts submitted information for approval or pre-approval their career and technical education programs. The Department also established a geographic cycle for districts to resubmit their programs on a five-year basis.

Minnesota Rule 3505.1100 also specifies that program approval will be contingent upon a district's demonstration that minimum standards are met. The Department has clarified these program standards, and has developed these rubrics that describe not only benchmarks to meet minimum standards, but also benchmarks for emerging, quality, and exemplary standards. These rubrics have been established in each of the following seven sections: Community Involvement, Personnel, Program Administration, Program Assessment, Program Design, Program Resources, and Support Services.

Program Assessment and Rubrics

Assessment is the systematic and ongoing method of gathering, analyzing and using information from measured outcomes to improve student learning.

Purpose of Program Assessment

1. **To improve** – the assessment process should provide feedback to determine how the program can be improved.
2. **To inform** – the assessment process should inform school board, administration, staff, and community of the contributions and impact of the program.
3. **To prove** – the assessment process should encapsulate and demonstrate to others what the program is accomplishing.
4. **To support** – the assessment process should provide support for CTE decision-making activities.

Characteristics of Effective Program Assessment

Effective program assessment should answer these questions:

1. What are you trying to do?
2. How well are you doing it?
3. Using the answers to the first two questions, how can you improve what you are doing?
4. What and how does a program contribute to the development and growth of its students?
5. How can student learning be improved?

Using Rubrics to Assess Program Effectiveness

Rubrics can be used to provide formative feedback to assess program effectiveness. They represent a clear format for classifying specific behaviors or products that vary along a continuum. A well-designed rubric should be an efficient method to focus on specific factors to determine the current level of program effectiveness and suggest areas of focus for program improvement.

Rubrics for Assessing Career and Technical Education Programs

The CTE Rubrics are organized into seven sections. The far left column in each section is the broad category. The scale across the top is the level of performance and is labeled minimal, emerging, quality, and exemplary. Each level of performance has descriptors that translate the level into examples reflecting that level. The level of performance builds upon the previous level with minimal the lowest and exemplary the highest level.

SECTION:

Category	Minimal	Emerging	Quality	Exemplary
Section	Descriptor	Descriptor	Descriptor	Descriptor

CAREER AND TECHNICAL EDUCATION PROGRAM QUALITY ASSESSMENT SECTIONS

1. COMMUNITY INVOLVEMENT
2. PERSONNEL
3. PROGRAM ADMINISTRATION
4. PROGRAM ASSESSMENT
5. PROGRAM DESIGN
6. RESOURCES
7. SUPPORT SERVICES

Supporting Evidence for Measuring Assessment

Section 1 COMMUNITY INVOLVEMENT

A. Advisory Committee membership roster with sector representation
B. Annual program of work
C. Meeting agendas
D. Record of minutes on file
E. Community needs assessment
F. Advisory committee plan of action
G. Documentation of guest speakers, career days, field trips

Section 2 PERSONNEL

A. Documentation of certification on file at district level
B. Documentation of industry certification
C. Portfolio of coursework
D. Written professional development plan
E. Documentation of participation in professional development activities
F. Documentation of membership or participation in professional groups(s), e.g. externships, union groups, industry or occupational organizations.
G. Paraprofessional/Technical Tutor – documentation of meeting NCLB professional requirements for paraprofessionals or Technical Tutor license.

Section 3 PROGRAM ADMINISTRATION

A. Budget
B. Financial – UFARS

Section 4 PROGRAM ASSESSMENT

A. District's annual performance report
B. Student enrollment and projections
C. Collection of data
D. Follow-up of CTE program participants after graduation
E. Program approval on file with the Minnesota Department of Education
F. Documentation of community input
G. Collection of student feedback

Section 5 PROGRAM DESIGN

A. Documentation of career development competencies and activities within the curriculum
B. Career Cluster and career pathway information (brochures, videos, software)
C. Documentation of local curriculum alignment
D. Local standards on file
E. Documentation of articulation agreements, concurrent enrollment, college in the schools.

F. Syllabi and lesson plans available.
G. Examples of student assessments and projects.
H. Student portfolios e.g. photo display, awards, certificates of recognition.
I. Student organizations – affiliation forms with membership lists, chapter program of work, newspaper clippings, awards program, program of work, and membership recruitment materials
J. Records of students participating in work-based learning experiences.

Section 6 RESOURCES

A. Review of program/course materials - Compare materials to curricula and class roster
B. Inventory and budgetary plan with proposed schedule of replacement priorities
C. Resource materials inventory
D. Equipment inventory
E. Records of expenditures, receipts, and account balances
F. Records of maintenance

Section 7 SUPPORT SERVICES

A. Documentation of class offerings through master schedule, student handbook, program brochure, publications, enrollment data
B. Teacher/paraprofessional/special education student ratio in classroom
C. List of accommodations and modifications
D. Student placement or scheduling process
E. Student performance level assessment results
F. Statement of non-discriminatory protocol
G. Review by advisory committee

Rubrics for Assessing Career and Technical Education Programs

A CROSSWALK with Career and Technical Education (CTE) Standards and Measures and Program Approval Assurance Statements

Section 1
COMMUNITY INVOLVEMENT:

- CTE Program STANDARD 2: Local Educational Agency (LEA) involves volunteer community partnerships in an advisory capacity to assist in planning, implementation, and evaluation of programs.
- CTE Program Approval Assurance Statement 1: Program Planning involved a local multi-sector partnership or a local CTE volunteer community partnership in an advisory capacity.
- CTE Program Approval Assurance Statement 2: The multi-sector partnership or local CTE volunteer community partnership will continue to provide ongoing assistance in the development, evaluation, and updating of the curricula.

Section 2
PERSONNEL:

- CTE Program STANDARD 8: LEA will use appropriately licensed teachers that have met the Minnesota Board of Teaching licensure requirements to teach Career and Technical Education Programs and will have an approved Career and Technical Program Proposal on file with the Minnesota Department of Education.
- CTE Program Approval Assurance Statement 10: An appropriately licensed career and technical education instructor will teach the program. (Form ED-02335-02) or for Youth with Disabilities: Coordination of the program must be done by 1) person who holds a valid Work Experience Coordinator-Handicapped License or 2) person who holds both a valid Teacher Coordinator of Work-Based Learning and a Special Education Teacher License. (Form ED-00381-14)

Section 3
PROGRAM ADMINISTRATION:

- CTE Program STANDARD 9: LEA will assess the degree of implementation of Standards 1-8.
- CTE Program Approval Assurance Statement 12: Annually, districts will assess programs and maintain data against CTE Program Approval Assurance Statements.

Section 4
PROGRAM ASSESSMENT:

- CTE Program STANDARD 8: LEA will use appropriately licensed teachers that have met the Minnesota Board of Teaching licensure requirements to teach Career and Technical Education Programs and will have an approved Career and Technical Program Proposal on file with the Minnesota Department of Education.
- Program Approval Assurance Statement 11: Upon request, the LEA shall supply program data necessary for program management, improvement, evaluation, and federal/state reporting.

Section 5
PROGRAM DESIGN:

- CTE Program STANDARD 1: LEA provides learners with opportunities to gain employability and career skills.
- CTE Program STANDARD 3: Learners have the opportunity to develop long-range academic and post high school plans and personal portfolios.
- CTE Program STANDARD 4: LEA supports the development of CTE curricula and teaching/learning techniques derived from knowledge and skill standards that reflect current business, industry and labor standards and trends, promising/emerging practices and the use of current technology.
- CTE Program STANDARD 6: LEA supports a coordinated program of school-, work-, and service-based learning opportunities including connecting activities and CTE Student Organizations.

- CTE Program STANDARD 8: LEA will use appropriately licensed teachers that have met the Minnesota Board of Teaching licensure requirements to teach Career and Technical Education Programs and will have an approved Career and Technical Program Proposal on file with the Minnesota Department of Education.
- CTE Program Approval Assurance Statement 3: The program provides learners with options for school-based learning.
- CTE Program Approval Assurance Statement 4: The program provides learners with options for school-based learning with a work-based/Co-op component including connecting activities/CTE student organizations.
- CTE Program Approval Assurance Statement 5: The curriculum is designed to achieve the curriculum standards and measures for the particular program area.
- CTE Program Approval Assurance Statement 6: The program will maintain class size conducive to efficient teaching and learning, and not exceed the number that the space and equipment will accommodate effectively and safely.
- CTE Program Approval Assurance Statement 8: The program will comply with all federal and state laws, rules and policies governing school- based and/or work-based educational programs.

Section 6
RESOURCES:

- CTE Program STANDARD 4: LEA supports the development of CTE curricula and teaching/learning techniques derived from knowledge and skill standards that reflect current business, industry and labor standards and trends, promising/emerging practices and the use of current technology.
- CTE Program STANDARD 5: LEA will develop and maintain teaching/learning environments that will maximize learning for students selecting curricula in CTE programs.
- CTE Program Approval Assurance Statement 6: The program will maintain class size conducive to efficient teaching and learning, and not exceed the number which the space and equipment will accommodate effectively and safely.
- CTE Program Approval Assurance Statement 7: Current business/industry equipment will be used in all areas of instruction. Equipment may be located in schools, business/industry, or in the community.

Section 7
SUPPORT SERVICES:

- CTE Program STANDARD 7: LEA will provide equal access and necessary support to diverse and special populations to ensure participation in all components of career and technical education.
- CTE Program STANDARD 3: Learners have the opportunity to develop long-range academic and post high school plans and personal portfolios.
- CTE Program Approval Assurance Statement 9: The program is designed to be sensitive to needs of a diverse population providing the support needed by the learner.

Bibliography

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"Quality Review Measures for Career and Technology Education," South Carolina Department of Education

"Rubrics for Scoring 2005 Exemplary Career Technical Education Applications", California Department of Education, California School Recognition Program

"Secondary Self-Assessment," Career and Technical Education Standards and Measures, Revised January 2004, MDE, Adult and Career Education

"Secondary Program Review Essential Components Rubrics," 9/2004, Idaho Division of Professional-Technical Education

"Utah Career and Technical Education Program Approval Standards," Utah State Office of Education, Utah Applied Technology Education

"What Makes a Career-Technical Education Program Exemplary? A Rubric for Secondary-Level Programs," National Dissemination Center for Career and Technical Education, Ohio State University, 2002

"2005-2006 Program Improvement Instrument," South Dakota Department of Education, Office of Career and Technical Education,

Minnesota Statutes

Section	Statute
120B.11	School district process for reviewing curriculum, instruction, and student achievement.
124D.454	Access to Minnesota's transition system for children with a disability.
124D.46	Education and employment transitions system
124D.47	Comprehensive youth apprenticeship program.
124D.49	Education and employment transitions partnerships
124D.50	Service-learning and work-based learning curriculum and programs.

Minnesota Rules

Subpart	Rule
3505.1100	Standards for Program Approval
3505.1300	Evaluation by Board of Trustees of the Minnesota State Colleges and Universities
3505.1400	Local Advisory Committee
3505.1800	Annual Reports
3505.2300	Student Eligibility for Programs
3505.2400	Scope
3505.2500	Instructional Program Approval
3505.4300	Community-Based Education
3505.4900	Support Services
3505.5900	Student Eligibility
5200.0930	Exceptions to Prohibitions Related to Employment of Minors.
8710.8000	Core Skills for Teachers of Career and Technical Education.

Section 1: **Community Involvement**	**Minimal**	**Emerging**	**Quality**	**Exemplary**
1. **Advisory Committee Role*** The primary function of an advisory committee is to connect programs with the larger community. **General CTE Advice** – advice on all CTE programs to maintain quality and relevance of CTE education and help strengthen support from the community. **CTE Program Specific Advice –** advice at the individual program level that focuses on curriculum content, equipment and facilities. *A district should have a program-specific advisory committee for each program, and may either have a general advisory committee or may rely on program-specific committees to provide general advice.	A. The advisory committee discusses current industry practices, program issues and needs, and curriculum.	A. The advisory committee provides input on program improvement, curriculum and work-based learning experiences. B. The advisory committee is involved in a process to determine the needs of students and programs. C. The advisory committee is aware of and supports Career and Technical Student Organizations (CTSO).	The advisory committee addresses the following areas: A. Assess/Advise Evaluates current needs and makes recommendations for program improvement. B. Assist Ensures programs reflect current industry standards, assists with student organizations, and informs program staff of workplace needs. C. Support/Advocate Promotes CTE program and CTSO organization throughout the community. D. Education/Transitions Fosters an alliance between secondary and postsecondary education institutions and promotes opportunities for articulation, dual credit, concurrent enrollment, industry certification, etc.	A. The advisory committee uses collected data to support its decisions and recommendations. B. The advisory committee represents the diverse business and industry community and is extensively involved in tangible, meaningful actions regarding program improvement, curriculum and work-based experiences. C. The advisory committee provides the school board, foundations and community with career and technical education program reports/updates
2. Advisory Committee Membership Community means business, industry and other organizations outside the school, including non- profits, parents, postsecondary education, labor, students and workforce development.	A. The local advisory committee includes representatives of the general public including representatives of directly related business, industry, and labor. B. Membership includes representatives of the community and the school or district administration with expertise in the CTE program area.	A. Membership includes parent and student representation.	A. Membership reflects the diversity of the community (e.g., business, industry, school administrators) ideally 6-12 members with a majority representation from outside the school setting. B. Membership represents a community cross-section in terms of gender, race, occupation, socioeconomic status, special populations and non-traditional workers.	A. Member's contributions are formally recognized. B. Advisory committee members serve both the secondary program and postsecondary program at a nearby technical or community college.

Section 1: Community Involvement	Minimal	Emerging	Quality	Exemplary
			C. The advisory committee has a process for membership recruitment, selection, appointment and retirement.	
3. Advisory Committee Operations	A. The advisory committee meets formally with a planned agenda at least twice per year. B. The advisory committee keeps on file the agenda and minutes for each meeting held.	A. The advisory committee holds meetings when there is business to conduct but no less often than twice yearly. B. The advisory committee has an organizational structure in place.	A. The advisory committee has established a program of work with periodic reviews for effectiveness. B. The advisory committee's meeting agenda follows the established program of work. C. The advisory committee holds meetings often enough to complete the program of work. D. The advisory committee maintains an open dialogue with staff, students, parents, administrators and committee members. E. The advisory committee reports outcomes as part of the district's review process under M.S. 120B.11, school district process for reviewing curriculum, instruction and student achievement.	A. The advisory committee conducts an ongoing self-evaluation to review its own effectiveness. B. The advisory committee's structure is defined, (e.g., chair, vice-chair selected from community members). C. The advisory committee's operating guidelines are established and followed (e.g., written by-laws and procedures). D. Advisory committee members are visible in and provide support to special program activities (e.g., preparation for competitive events). E. Advisory committee members' contributions and support of CTE programs are recognized and celebrated (e.g., MACTA/MNACTE awards). F. The advisory committee assists with CTE program alignment to other workforce development efforts using regional labor market information.
4. Community Partnerships/ Resources	A. Ongoing communication and networking takes place between CTE staff and business partners.	A. Partnerships are focused on industries and businesses that provide resources.	A. Local industry, business, workforce development, and government are affiliated with CTE programs to enhance program quality. B. Collaboration and networking with the	A. Partnerships contribute significant resources and time to enhance program quality and student achievement. B. CTE programs connect with the local Workforce Center to create awareness in

Section 1: Community Involvement	Minimal	Emerging	Quality	Exemplary
			community provides support and opportunities for career awareness, exploration and preparation through school-based, work-based and connecting activities. C. CTE staff are provided time to develop and maintain relationships with partners and the community.	students that career planning is a lifelong process and that Workforce Centers can assist in this process.

Section 2: Personnel	Minimal	Emerging	Quality	Exemplary
5. Teaching Credentials Required teaching credentials are determined by the Minnesota Board of Teaching (Minnesota Rules Chapter 8710 found at Visit Minnesota Office Revisor.	A. CTE teaching staff is working under a community expert, limited license, and/or specific variances, waivers or other as approved by the Minnesota Board of Teaching.	A. CTE teaching staff with less than full licensure shows evidence of working toward full licensure as prescribed by the Minnesota Board of Teaching. B. Administration or assigned school district personnel monitors the progress of teaching staff meeting the requirements for full license.	A. CTE teaching staff holds current CTE full licensure in program area.	A. CTE teaching staff has advanced degrees, credentials or endorsements. B. CTE teaching staff has appropriate and current industry certification, where applicable. C. CTE teaching staff possesses National Board Certification. D. CTE teaching staff are regarded as experts (or master teachers) by colleagues or serves as mentors to other teachers.
6. Professional Development Sustained and high-quality professional development focuses on improving student achievement, meeting the needs of a diverse student population, increasing staff collaboration, lasting impact on classroom instruction, extending over a period of time, and aligning with State and local academic standards.	A. Requirements for renewal of administrator, teacher and support staff credentials, as listed under the licensure area and governed by the Minnesota Board of Teaching, are satisfied through professional development opportunities.	A. CTE teaching staff identifies and accesses professional development activities that promote professional growth based on identified needs, and such activities are supported by the administration. B. CTE staff has opportunities available for professional growth through the school system.	A. Professional development is sustained, high-quality and available for all personnel (e.g., instructors, support staff, and administrators). B. Professional development activities focus on improved student achievement. C. A professional development plan addresses broader CTE issues and keeps staff current with state/federal initiatives. D. CTE teaching staff participates at least annually in comprehensive professional development activities.	A. Under a comprehensive professional development plan, CTE staff receives the support and resources necessary to continuously improve their skills. B. CTE teaching staff participates in externships and mentorships to stay current with industry standards and practices. C. CTE staff participates in the development and/or presentation of programs, workshops and products.
7. Professional Organizations A professional organization may be any group formed on the basis of the professional interests of its members (e.g., career and technical professional organizations, industry groups, or occupational organizations).	A. CTE teachers, administrators and support staff are aware of professional, industry, occupational or other organizations and are familiar with the benefits of professional development opportunities available through these	A. CTE teachers, administrators and support staff are encouraged and supported to participate in professional, industry, occupational or other organizations and their conferences.	A. CTE teachers, administrators and support staff are active in professional organizations and participate in conferences, workshops, meetings and activities. B. CTE program benefits from staff and administration participation in professional organizations (e.g., sharing	A. CTE teachers, administrators and support staff are in leadership roles in professional organizations that may include serving as officers or attending state/national conferences.

Section 2: Personnel	Minimal	Emerging	Quality	Exemplary
	organizations.		information with staff, incorporating new techniques in the classroom).	
8. Paraprofessionals/ Technical Tutors* (if applicable) *PARA eLINK, Minnesota Competencies for Paraprofessionals Paraprofessional – a non-licensed individual providing instructional support under direct supervision of a licensed teacher. Technical Tutor an individual holding a nonteaching, technical tutor license recognized by the Minnesota Board of Teaching and working under direct supervision of a licensed teacher.	A. Individuals working in instructional support positions hold either a technical tutor license or meet NCLB (No Child Left Behind) paraprofessional requirements. B. Paraprofessional works with students in close proximity and under direct supervision of a licensed teacher.	A. Paraprofessional participates directly or indirectly in the Individual Education Plan (IEP) process.	A. Paraprofessional understands assessment strategies and participates in the development of transition-related goals and objectives. B. Paraprofessional facilitates and supports student involvement in decision-making C. Paraprofessional develops accommodations and supports in the work setting. D. Paraprofessional can perform in all nine areas under the Minnesota Paraprofessional Core Competencies. E. Paraprofessional has occupational experience.	A. Paraprofessional is working on full teacher licensure. B. Paraprofessional is encouraged and supported to participate in paraprofessional organizations. C. Paraprofessional provides supplemental instruction and support in work-related behaviors. D. Paraprofessional has a professional development plan.

Section 3: Program Administration	Minimal	Emerging	Quality	Exemplary
9. Local Career and Technical Education Program Administration	A. Administration is responsible for the implementation of local CTE programs. B. Administration exhibits an understanding of school law and finance, including the permissible use of funds. C. Administration implements procedures to assure equal access and full participation of special populations in CTE programs. D. Administration submits required reports in a timely manner (e.g., student data, program data, program	B. Administration develops and periodically reviews policies that ensure equal access and full participation of special populations in CTE Programs. C. Administration supports effective working relationships between secondary and postsecondary institutions to assist with student transition. D. Administration monitors partnerships and grant development.	A. Administration is responsible for the development and implementation of local CTE program plans and collaborates with local advisory committees and staff in the development and review of those plans. B. Administration exhibits an understanding of federal/state legislation, rules and regulations, school law and finances including the permissible use of funds to assure quality and continual program	A. Administration promotes and supports the development of CTE programs that focus on improving student performance. B. Administration assures CTE program plans are specific and consistent with state guidelines. C. Administration promotes the annual review and update of CTE program plans. D. Administration is instrumental in establishing working relationships between secondary and

Section 3: Program Administration	Minimal	Emerging	Quality	Exemplary
	approval, staffing). E. Administration ensures that Personnel Activity Reports (PAR) are on file for staff funded by federal Carl D. Perkins. F. Administration maintains records required for internal and external audits following record retention rules. G. Administration ensures that staff meets qualifications and oversees the retention, replacement and recruitment of staff.		improvement, such as CTE program leadership, program planning and development, personnel management, public relations and communications. C. Administration assists in the development of policies and procedures to assure equal access and full participation of special populations in CTE programs Including the smooth transition from secondary to postsecondary education. D. Administration coordinates annual program evaluations leading to continuous program improvement. E. Administration keeps up-to-date with changes in the field of CTE as well as related laws and regulations. F. Administration works with staff to establish working relationships between secondary and postsecondary institutions.	post- secondary institutions to ensure a smooth transition. E. CTE administrator holds and maintains appropriate licensure in administration of CTE programs under Minnesota Board of Teaching (BOT) (licensure code - 00.0110)
10. Financial Responsibilities	A. Administration works with the district's business office to utilize the Uniform Financial Accounting and Reporting Standards (UFARS) system to ensure proper revenue and expenditure guidelines are followed. (CTE levy funds are used only for state-approved CTE programs.) B. Federal EDGAR regulations are followed, when applicable.	A. Administration verifies that program budget expenditures are aligned with local CTE program plans. B. Administration requests input from CTE staff prior to the development of program budgets.	A. Administration supports CTE programs through a budget process that considers curriculum, program needs and number of students. B. Administration uses a process to determine appropriate purchase and replacement of equipment and instructional materials.	A. Program budget is clearly appropriate for the curriculum. Long- range program goals are considered. B. Administration regularly keeps staff involved in the budget management process.

Section 4: Program Assessment:	Minimal	Emerging	Quality	Exemplary
11. Program Assessment Assessment provides a means to evaluate goals and strategies	A. The following data elements are systematically collected and reported to appropriate state agencies in an accurate and timely manner: • Academic Attainment and Technical Skill Proficiencies Attainment • Completion – Percent of CTE students graduating • Placement – Percent of CTE students who have graduated and are continuing on in the military, advanced education/ training and/or employment • Participation and completion of students in programs not traditional for their gender B. CTE program assessment is based on meeting negotiated performance targets under each required data element. C. CTE program is part of the school district's curriculum review process.	A. CTE programs informally ask students, parents, and community members to provide feedback on program quality. B. CTE program assessment is based on meeting negotiated performance targets under each required data element and targeted funds are used to address areas where student performance falls below negotiated levels. C. CTE program assessment includes any skill certificates students may earn that demonstrate mastery of a set of skills according to predefined standards. D. CTE programs demonstrate some evidence that students are making gains in academic achievement.	A. CTE programs use feedback from students, parents, and community for program evaluation, planning and improvement. B. CTE program assessment is based on meeting negotiated performance targets under each required data element and program performance is of sufficient level that targeted funds are not needed for program improvement C. CTE program offers students the opportunity to earn certificates reflective of technical proficiency. D. CTE program collects and analyzes, and uses valid and reliable performance data to develop and implement continuous program improvement plans. E. CTE program reviews student achievement data for evidence of progress made on narrowing the achievement gaps among groups of students. F. CTE program assessment demonstrates a connection between program goals and student outcomes.	A. CTE program uses valid and reliable data to demonstrate students gain a high level of academic, technical, And employability skills and addresses equity and diversity issues among students as evidenced by enrollment, retention and completion rates of non-traditional students. B. CTE programs record skill certificates earned by students on the students' transcripts and submit with application to postsecondary institutions.
12**. Continuous Program Improvement (CPI) Process** Involves a commitment to improving performance using a team approach to decision-making and a systematic collection and analysis of performance data.	A. The CTE continuous program improvement process (CPI) is described in writing and has been partially implemented. B. The CPI is used to identify emerging industries and changes in industries for addition and revision of CTE course offerings.	A. The CPI process uses selected student and performance data to make program improvement. B. Assessment of CTE program design components is used for program improvement.	A. The CPI process is fully implemented and regularly utilizes student and performance data to make program improvement. B. The CPI process involves external and support to assure CTE programs are relevant and meet the needs of students. C. The CPI process includes a	A. An integral part of the CPI process is the use of all data and written feedback gathered from advisory committees, teachers, students, community partners and parents. B. The CPI process is viewed as critical for program sustainability and appropriate funding is

Section 4: Program Assessment:	Minimal	Emerging	Quality	Exemplary
			long-term professional development plan that addresses areas of need and individual professional growth. D. The CPI plan reflects changes in technology, employment and educational reform. E. The CPI plan includes curriculum development activities as part of a five-year plan for improvement based on program assessment. (Minn. Stat. Statute 124D.4531, Sub.1, (2) (V)	targeted to assure completion of process. C. The CPI process views a comprehensive professional development process as fundamental to program improvement. D. The CPI process incorporates effective practices and current research.

Section 5: Program Design	Minimal	Emerging	Quality	Exemplary
13. Career Development For more information on a comprehensive career development program go to www.acrnetwork.org for the National Career Development Guidelines Framework.	A. CTE program provides students with opportunities for career awareness, career exploration and career preparation.	A. CTE program promotes the use of career resources to assist students in exploring a variety of career options.	A. CTE program assists students in gaining an understanding of the career planning process. B. CTE program provides students with an opportunity to develop career portfolios. C. CTE program uses a variety of strategies (e.g., mentorships, e-learning), to enhance the student's career development process. D. Community partners assist a CTE program by providing direct career development links for students.	A. CTE program assists students with individual student career plans and promotes self-reflection by students. B. CTE program supports the existence of a career resource center at the school that is open to students, families and community.
14. Programs of Study Career Clusters - groupings of occupations and broad industries based on	A. CTE program reflects an understanding of programs of study. B. CTE program has identified	A. A coherent sequence of courses is available within a program of study. B. Schools/districts have a	A. Schools/district or other educational settings offer a broad array of activities in multiple programs of study.	A. Programs of study are a vital component of CTE program design. B. Programs of study provide

Section 5: Program Design	Minimal	Emerging	Quality	Exemplary
commonalities linking what students learn in school with the knowledge and skills they need for success in college and careers. Career Pathways - progressive steps of development within a career cluster that generally include a career-education plan.	specific program of study for the area. C. CTE program assists students in understanding program of study concepts. D. CTE program provides students with core knowledge and skills that can apply to multiple programs of study. E. Programs of study are determined, in part, by current Labor Market Information (LMI).	formal process in place to inform students of a variety of programs of study. C. Career and Technical Student Organizations (CTSO) enhance students' understanding of programs of study.	B. Programs of study demonstrate a linkage to both academic and technical content.	specific knowledge and skill development that enables students to explore or prepare for a variety of career options.
15. Curriculum Content SCANS – Secretary's Commission on Achieving Necessary Skills	A. CTE curriculum addresses components common to all CTE courses: career development, technological literacy and workplace skills. B. CTE curriculum is aligned with locally developed CTE standards and assessments. C. CTE curriculum addresses student safety based on state/local health/safety policies and state/federal laws and regulations. D. CTE curriculum supports a broad understanding of the industry. E. CTE curriculum is reviewed at least once during program approval cycle. F. CTE curriculum is developmentally appropriate and gender/culturally neutral. G. CTE curriculum provides students with access to career awareness through work-based learning opportunities (e.g., guest	A. CTE curriculum addresses some of the K-12 Minnesota Academic Standards, industry standards, technology literacy standards, and state CTE standards and measures. B. CTE curriculum identifies employability skills (see Secretary's Commission on Achieving Necessary Skills [SCANS]).	A. CTE curriculum addresses elements and components specific to CTE content areas. B. CTE curriculum supports reinforcement of employability skills (SCANS). C. Rigorous and relevant CTE curriculum is aligned with: Current industry standards wherever applicable; and, Program area local CTE standards and assessments. D. CTE curriculum provides at least one credentialing option for students (e.g., articulation agreements with postsecondary institutions, industry certifications). E. CTE curriculum prepares students for the transition to related educational opportunities, postsecondary institutions, employment and lifelong learning.	A. CTE curriculum provides opportunities for students to gain a thorough understanding of All Aspects of Industry. B. Employability (SCANS) skills are integrated into the curriculum and assessments measure students' progress. C. Local CTE Standards are clearly assessed and attainment of standards is recorded. D. CTE curriculum provides multiple credentialing options for students, (e.g., College in the Schools concurrent enrollment, Tech Prep articulation or industry certification), on a comparable basis to postsecondary enrollment options and academic credit. E. CTE curriculum is reviewed and revised at least annually to reflect new competencies/standards, new technologies, changing

Section 5: Program Design	Minimal	Emerging	Quality	Exemplary
	speakers, field trips, job shadowing and nonpaid community experiences).			labor market needs and updated teaching strategies.
16. Instructional Delivery The use of a variety of teaching tools and methods that teachers use in an effort to maximize student acquisition of knowledge and skills and development of personal and professional abilities.	A. CTE instruction incorporates a balance of classroom and laboratory experiences. B. CTE instructional strategies are somewhat varied based on limited knowledge of student's learning styles. C. CTE instruction consists of limited access to and use of technology. D. CTE staff provides and documents safety instruction to students prior to use of equipment and makes certain students operate equipment in a safe manner. E. CTE program models and reinforces safe practices on an ongoing basis. F. CTE program ensures that students demonstrate safe practice and competence in use of equipment.	A. CTE instructional strategies include contextual instruction. B. CTE instructional strategies are minimally adapted to increase success for students. C. CTE instruction consists of access to and use of current technology. D. CTE instructional support is provided to assist students with preparation for college readiness.	A. CTE instructional strategies include competency-based contextual instruction and differentiated instruction. B. CTE instructional strategies are adapted to maximize success for each student. C. CTE instruction consists of providing all students equitable access to technology. D. CTE instruction is linked to current research and best practice in learning theory and design.	A. CTE instruction is continually modified to maximize student attainment of assessed skills. B. CTE instructional strategies are based on current research and best practices. C. CTE instruction consists of access to state-of-the art technology based on industry trends. D. CTE instruction uses innovative methods whose success is indicated by student achievement data. E. CTE instruction is high-quality, as reflected by student achievement data. F. CTE instruction uses a variety of resource people from the community, businesses, industry, organizations and government (e.g., mock Occupational Safety and Health Administration inspectors).
17. Student Assessment The measure of a student's competence and Proficiency in a specific area of study.	A. CTE courses measure student knowledge attainment and skill proficiency through authentic assessment.	A. CTE course assessments demonstrate acquired knowledge and skills in academic, technical, interpersonal and career areas.	A. CTE course assessments are based on national or regional education or industry standards.	A. CTE courses use multiple assessment tools that reflect a variety of learning styles. B. CTE program provides the opportunity for students to gain postsecondary credit through Advanced

Section 5: Program Design	Minimal	Emerging	Quality	Exemplary
				Placement (AP) or College Level Examination Program (CLEP) assessments.
18. Leadership Development/ Student Organizations (Business Professionals of America (BPA), Distributive Education Clubs of America (DECA), Future Business Leaders of America (FBLA), Family, Career and Community Leaders of America (FCCLA), FFA, Home Economics Related Occupations (HERO), Health Occupations Students of America (HOSA), Skills USA (formerly VICA-Vocational Industrial Clubs of America)	A. CTE program provides students with opportunities to develop leadership skills through planned activities.	A. CTE program makes local Career and Technical Student Organization (CTSO) chapters available for students. B. School/district assigns and supports staff in their roles as CTSO advisor.	A. CTE student organization chapters are affiliated with their state and national organizations. B. Recognized CTE student organizations are an integral part of CTE program. C. All CTE students have the opportunity to participate in a student organization. D. CTSOs assist students to develop leadership skills through a variety of activities and/or competitions at conferences on the local, regional, state and national levels. E. Local CTSOs have a written program of work that reflects education, service and social activities. F. CTSOs are recognized and supported in the CTE program budget.	A. Students are encouraged to participate in CTSOs at the district, state and national levels. B. CTSOs provide students with effective leadership and community involvement opportunities.
19. Work-Based Learning (WBL) Program This category is for a comprehensive WBL program whose focus is primarily on students receiving an in-depth (more than 40 hours per semester) workplace or nonpaid community-based experience. The scope of work-based learning activities includes: guest speakers, field trips, job shadowing, practicums, mentorships, service learning, cooperative work- experience programs,	A. Work-Based Learning (WBL) program places students in long- term work-based learning opportunities (e.g., paid and nonpaid cooperative work-experiences). B. A classroom component (work-based learning seminar) is required for all students participating in a long-term worksite placement (e.g., cooperative work-experience, internship, youth apprenticeship or	A. A few businesses, industries and community organizations provide in-depth opportunities for students in WBL program. B. Training plans for individual students are minimally customized to each individual student's needs.	A. WBL program offers opportunities designed to meet an individual student's needs. B. The WBL classroom component (work- based learning seminar) is connected to the work experience and designed to help students make the transition from school to postsecondary education and/or career. C. Individual Training Agreement clarifies the relationships and	A. WBL program is viewed as providing capstone experiences in career preparation and is a key component in career and technical education. B. WBL program is able to demonstrate that student learning has transferred to real-world settings. C. Long-standing relationships exist among all partners participating in WBL program.

Section 5: Program Design	Minimal	Emerging	Quality	Exemplary
community-based experiences, internships, entrepreneurship and youth apprenticeship.	community-based activity). C. WBL program has developed, and keeps on file, a Training Plan and Training Agreement signed by the employer, parent/guardian and school for each student. D. WBL program communicates with the employer, parent/guardian and student during the worksite placement.		responsibilities among employer, parent/guardian, student and school. D. Individual Training Plan is designed to identify skill and competency development and support academic learning.	

Section 6: Resources	Minimal	Emerging	Quality	Exemplary
20. Curriculum/Instructional Resources	A. CTE program instructional materials and supplies are appropriate for the number of students enrolled to meet program objectives. B. CTE program has basic resources available to provide for an adequate learning environment. C. CTE program includes curriculum materials that are culturally inclusive and free of bias.	A. CTE program has a variety of resources and materials available that contribute to a constructive learning environment. B. CTE program ensures the majority of curriculum materials are culturally inclusive and free of bias.	A. CTE program has resources available to accommodate individual student needs. B. CTE program ensures all curriculum materials reflect the diversity of the student population and are free of bias. C. CTE program has up-to-date instructional technology available and accessible.	A. CTE program has a wide array of resources and materials that provide for challenging and enriched learning. B. CTE program resources reflect technological advances in the CTE content area.
21. Equipment All equipment used in CTE programs must meet safety standards (e.g., industry, OSHA, manufacturer, federal/state/local standards).	A. CTE program equipment is adequate for the program's goals and objectives. B. CTE program equipment is properly installed, shielded, guarded and ventilated. C. CTE program equipment is in place to address fire safety, material storage and waste disposal.	A. CTE program equipment is maintained, inventoried and replaced as necessary. B. CTE program provides safe operating instruction with reminders posted to ensure proper operation and protection from injury. C. CTE program has lock-out/tag-out procedures in place and puts them into practice.	A. CTE program equipment is representative of industry standards in classroom, laboratory and off-campus worksites. B. CTE program has adequate funding available so that equipment is systematically updated, maintained, inventoried and replaced.	A. CTE program and work-based learning employers provide students with equipment that is aligned with industry recommendations.

Section 7: Support Services	Minimal	Emerging	Quality	Exemplary
23. Program Awareness/ Accessibility Special Populations are defined as: 1) Individuals with disabilities; 2) Economically disadvantaged individuals, including foster children; 3) Individuals preparing for non-traditional training and employment; 4) Single parents, including single pregnant women; 5) Dis-placed homemakers; and 6) Individuals* with other barriers to educational achievement, including individuals with limited English proficiency. (Carl D. Perkins Vocational and Applied Technology Education Act of 1998). * In Minnesota this includes disadvantaged persons and persons with 504 plans	A. CTE program provides equal access to all students, including members of special populations. B. CTE program has written recommended policies and procedures in place to ensure the learning environment is barrier free. C. When appropriate, CTE program makes basic accommodations that allow participation of all students. D. CTE program offerings are promoted to all students through the student registration process.	A. CTE program encourages all students to participate in a content area based on the student's interest levels. B. CTE program accessibility is ensured through reasonable modifications or accommodations to equipment, laboratory stations and facilities. C. CTE program selection by students is coordinated in partnership with special education and with assistance from the counselor, principal, teacher or other support providers.	A. CTE program educational environment honors diversity and respects all students. B. CTE program promotional, curricula and instructional materials are delivered in a non-discriminatory manner. C. CTE program presents a broad range of career options to all students regardless of race, national origin, religion, age, disability or gender. D. Awareness of CTE program offerings occurs through presentations by currently enrolled students and staff.	A. CTE program is adapted, modified and supported to ensure accessibility by all students. B. Awareness of CTE program offerings occurs through opportunities for students to observe or participate in CTE programs prior to course registration.
24. Program Support	A. CTE staff is given the opportunity to be involved in the development and implementation of Individualized Educational Programs (IEPs and 504 plans) for each student with disabilities enrolled in a CTE program, as appropriate.	A. CTE program staff consults with Special Education staff to address individual student needs and determine an appropriate level of support for each student from special populations.	A. CTE program uses support services, as needed, to ensure the success of each enrolled student from special populations. B. CTE program staff is actively involved in the development and implementation of IEP and transition plans for each student: accommodations, adaptations, needs, abilities, interests and career goals. C. CTE program uses paraprofessionals or technical tutors to provide assistance to students in the learning environments and the worksite, as	A. CTE program data demonstrate a broad range of students are successful in CTE programs (e.g., special populations and students in programs not traditional for their gender). B. CTE staff advocates for accommodations specific to the students needs. C. Dialogue about the CTE program among CTE staff, special education staff, and parents is open and ongoing. D. CTE program promotes student self- advocacy for accommodations and career planning.

Section 7: Support Services	Minimal	Emerging	Quality	Exemplary
			needed, based on the needs of individual students and composition of student enrollment in a class. D. CTE program is assisted by support services with strategies and activities to support and maximize each student's ability to learn.	
25. Career Guidance and Counseling Program	A. CTE program connects with the school guidance and counseling program that supports CTE students in their transition from secondary to postsecondary education, the military and/or employment.	B. CTE program works together with the school counseling program to provide student access to career information, assessments, planning, CTE student organizations, activities and resources in order to investigate the world of work and make informed decisions.	A. CTE program involves the school guidance and counseling program to assist students in the selection of appropriate CTE courses (e.g., Tech Prep, work-based learning, specific program areas).	A. CTE program collaborates with the school guidance and counseling program to: Deliver and interpret a student's interest and skills inventories and assessments; or, Reinforce the relationship between academic strengths and career options; or, Help students gain an understanding of the relationship between personal behavior, education, training and work. B. CTE program is viewed by the school guidance and counseling program as an integral part of the career development process.

Career and Technical Terms	Definitions of key career and technical education terms
Adult and Career Education	A department within the Minnesota Department of Education that works with adult basic education, community education, service-learning, and career and technical education programs.
Advanced Placement (AP)	Through college-level AP courses and AP Exams, high school students have the opportunity to earn credit or advanced standing at most of the nation's colleges and universities.
Advanced Standing	Credit for college level coursework completed in high school is evidenced by meeting competency requirements as determined by the enrolling college or university. Tech Prep courses intended for articulation as advanced standing must be equivalent to college or university courses numbered above 100 and that count toward the credit requirements of a certificate, diploma, associate degree, or baccalaureate degree. (MnSCU, 2000) Developmental courses are not eligible for advanced standing credit.
Advisory Committee	A group of persons with competence or interests in an occupational field related to the program(s) being served. Members are selected to offer advice to teachers or administrators regarding career and technical education. At least 50 percent of the members shall be representatives of a directly related business, labor or industry. (MN Rules 3505.1000 Subpart 4c).
Agriculture Education	A secondary career and technical education program that focuses on developing
All Aspects of Industry	Nine aspects of industry that are common to any enterprise. Students should gain strong experience in, and understanding of: 1. Planning – How an organization plans (including goals and objectives); types of ownership (public or private); relationship of the organization to economic, political and social context; assessment of needs. 2. Management – Structure and process for effectively accomplishing the goals and operations of the organization using facilities, staff, resources, equipment and materials. 3. Finance – Accounting and financial decision-making process, method of acquiring capital to operate management of financial operations including payroll. 4. Technical and Production Skills – Basic skills in math, communications, computer, time management and thinking; specific skills for production; interpersonal skills within the organization. 5. Underlying Principles of Technology – Technological systems used in the workplace and their contributions to the product or service of the organization. 6. Labor Issues – Rights of employees and related issues; wages, benefits and working conditions. 7. Community Issues – Impact of the company on the community, impact of the community on the organization. 8. Health, Safety, and Environment – Practices and laws affecting the employee, the surrounding community and the environment. 9. Personal Work Habits – Non-technical skills and characteristics expected in the workplace.
Articulation	A process for coordinating the linking of two or more educational systems within a community to help learners make a smooth transition from one level to another without experiencing delays, duplication of courses or loss of credit. Horizontal articulation generally refers to learner transfer of credit from one program to another within one institution or from one institution to another; vertical articulation refers to the transfer of credit from a lower-level institution to a higher-level one. The term is used both in higher education and in a secondary/postsecondary connection. The secondary/postsecondary version describes a high school/college connection; the higher education version of vertical articulation describes a junior college/senior college connection.
Articulation Agreement	A commitment to a program designed to provide students with a non-duplicative sequence of progressive achievement and credit transfer.

Career and Technical Terms	Definitions of key career and technical education terms
Assessment	The process of measuring student performance against a set of standards.
Authentic Assessment	A form of assessment in which students are asked to perform real-world tasks that demonstrate meaningful application of essential knowledge and skills.
Authorized Local Administrator	The licensed career and technical administrator who has major responsibility for career and technical education at the secondary level for a school district or center and is assigned to provide management and leadership in secondary career and technical education. The superintendent may act as the authorized local administrator in the absence of a local career and technical administrator. (MN Rules 3505.1000 Subpart 3)
Bona Fide Sale	The competitive sale of unneeded property which results in the highest possible investment return. (MN Rules 3505.1000 Subpart 4)
Business and Marketing Education	Secondary career and technical education programs that focus on the development and understanding of the factors affecting business. Students learn the basic principles of business and marketing. In business courses students study personal finance, develop techniques for making wise consumer decisions, master economic principles, and learn how businesses operate.
Career Education	The process of helping individuals acquire and use those attitudes, skills, and knowledge needed to develop and manage a reasoned, socially purposeful, and personally valued life pattern in relation to work of whatever kind. (MN Rules 3505.1000 Subpart 5)
Career and Technical Education	Organized educational programs, services and activities which are related to the preparation of individuals for paid or unpaid work for additional preparation for a career requiring technical competencies or a postsecondary or higher education advanced degree. (MN Rules 3505.1000, Subpart 4a).
Career and Technical Education Revenue	State funding for secondary career and technical education programs meeting criteria set forth in rules. (Minnesota Statutes Statute 124D.4531, MN Rules 3505.1000 Subpart 4d)
Career and Technical Education Program Areas	Occupational areas of agriculture (see agriculture education), business and marketing occupations (see business and marketing education), health occupations (see health science and technology education), home economics/service occupations (see family and consumer education), and trade and industrial occupations (see trade and industry technologies). (MN Rules 3517.0010 Subpart 47)
Career and Technical Student Organization (CTSO)	An organization of individuals enrolled in a career and technical education program that provides the opportunity for the development of leadership abilities and personal improvement of individual members, and aids in their transition from school to career. (MN Rules 3505.1000 Subpart 4e)
Career Assessment	The process of measuring career aptitude, career interest and academic and career achievement. Career Assessment may also include such factors as work history, physical capacity, work values and temperament. Career Assessment may be accomplished through formal, standardized instruments or through informal means such as interviews or observing work samples.
Career Clusters	A grouping of occupations and broad industries based on commonalities. The U.S. Department of Education has identified 16 career/occupation clusters: 1. Agriculture, Food and Natural Resources 2. Architecture and Construction 3. Manufacturing 4. Transportation, Distribution and Logistics 5. Information Technology 6. Marketing 7. Finance 8. Hospitality and Tourism 9. Business, Management and Administration 10. Health Science 11. Human Services

Career and Technical Terms	Definitions of key career and technical education terms
	12. Arts, Audio-Video Technology and Communications 13. Law, Public Safety, Corrections and Security 14. Science, Technology, Engineering and Mathematics 15. Education and Training 16. Government and Public Administration.
Career Development	The process through which individuals come to understand their place in the world of work. People develop and identify career choices through a continuum of career awareness, exploration, preparation and application.
Career Guidance & Counseling	1. Pertains to the body of subject matter and related techniques and methods organized for the development in individuals of career awareness; career planning; career decision-making; placement skills; and knowledge and understanding of local, state, and national occupational, educational, and ongoing market needs, trends and opportunities; 2. Assists individuals in making and implementing informed educational and occupational choices; and 3. Helps a learner develop career options with attention to gender, race, ethnicity, disability, language or socioeconomic impediments, and encourages careers in non-traditional employment.
Career Pathways	Progressive steps of development within a career cluster that link what students learn in school with the knowledge and skills they need for success in college and careers. Career Pathways generally include a career-education plan. (See Coherent Sequence of Courses)
Carl D. Perkins Career and Technical Education Act	Federal funds that support career and technical education programs and services for youth and adults. The majority of funds appropriated under the Perkins Act are awarded as grants to state education agencies. These State Basic Grants are allotted to states according to a formula based on state population in certain age groups and per capita income.
Center	A career and technical education or cooperative center. (MN Rules 3505.1000 Subpart 6)
Classroom Instruction	An in-school instructional method involving discussion, simulation, problem solving, decision making, computers, and other forms of communication. (MN Rules 3505.1000 Subpart 7
Coherent Sequence of Courses	A series of courses in which career & technical and academic education are integrated and which directly relate to, and lead to, both academic and occupational competencies. The term includes competency-based education, academic education and adult training or retraining that meets these requirements. [P.L. 109-270, Sec. 135(b)(1)]
Collaboration	A mutually beneficial and well-defined relationship entered into by two or more organizations to achieve common goals. The relationship includes a commitment to: a definition of mutual relationships and goals; a jointly developed structure and shared responsibility; mutual authority and accountability for success; and sharing of resources and rewards. (Amherst H. Wilder Foundation)
College Level Examination Program (CLEP)	The College-Level Examination Program® or CLEP provides students of any age with the opportunity to demonstrate college-level achievement through a program of exams in undergraduate college courses.
Community- Based	A service, program, or environment located outside the district with non-district governance (MN Rules 3525.0210 Subpart 7)
Competencies	Skills, knowledge, or attitudes necessary for functioning in a specific occupation. (MN Rules 3505.1000 Subpart 8)
Competency- based Instruction	Learner focused development and delivery of curriculum. The curriculum is based on identified, verified competencies required to effectively complete a project in a real life situation as it relates to the program. Many terms are used to express competency- based instruction (hands-on, active learning, etc.), but the essence of this type of instruction is rooted in the idea that the student actually performs a competency in practice and assessments.

Career and Technical Terms	Definitions of key career and technical education terms
Component	A unit of instruction that contributes to the accomplishment of the program objectives. (MN Rules 3505.1000 Subpart 9)
Completer (Career & Technical Education)	Secondary – Any concentrator who attains academic and technical knowledge and skills and graduates from high school. Postsecondary – A student who is awarded a certificate, diploma, AAS or AS degree in a Perkins approved career & technical education program.
Concentrator (Career & Technical Education)	Secondary – Any student successfully enrolled in a single CTE field for more than 240 hours (successful is defined as a passing grade). Postsecondary – A student with a declared major in a Perkins approved career & technical education program that has completed 35% of the program requirements.
Concurrent Enrollment	The process where high school students are enrolled in college courses in the high school that meets both high school and college course requirements at the same time and receive credit for both.
Consortium	A group of two or more agencies that enter into a cooperative agreement to share information or provide services that benefit learners. Participating groups may pool their individual fiscal, human, and material resources to take advantage of economies of scale, or arrange to share staff technical expertise. Consortia may be formed within educational sectors, as when a number of secondary schools collaborate to offer advanced instructional services, or across educational sectors, as when a secondary and postsecondary institution arrange articulated programs.
Contextual Learning	Learning that occurs in close relationship with actual experience. Contextual learning enables students to test academic theories via tangible, real world applications. Stressing the development of “authentic” problem-solving skills, contextual learning is designed to blend teaching methods, content, situation, and timing.
Continuous Program Improvement	Commitment to improving performance using a team approach to decision making using systematic collection and analysis of performance data
Continuous Program Improvement Process	A formal process that may include the following steps: 1) Establish a team, 2) Review achievement and demographic data, 3) Evaluate school environment, 4) Conduct external and/or internal evaluation, 5) Identify needs, 6) Create a plan, 7) Monitor the implementation, and 8) Evaluate results.
Cooperative Center	Two or more districts meeting all provisions of Minnesota statutes, which provide expanded educational options by sharing career and technical programs which have been approved by the Commissioner of Education. (MN Rules 3505.1000 Subpart 10)
Cooperative Education	A method of instruction for individuals who, through written cooperative arrangements between a school and employers, receive instruction, including required academic courses and related career and technical education instruction, by alternation of study in school with a job in any occupational field, which alternation shall be planned and supervised by the school and employer so that each contributes to the education and employability of the individual, and may include an arrangement in which work periods
Core Indicators– OVAE	Indicators of performance required under the Carl D. Perkins Career and Technical Education Act: 1S1 Academic Attainment (Secondary) – Reading/Language Arts 1S2 Academic Attainment (Secondary) – Mathematics 2S1 or 1P1 Technical Skill Attainment 3S1 or 2P1 Completion; Credential, Certificate or Degree 4S1 or 3P1 Graduation Rate; Student Retention or Transfer 5S1 or 4P1 Placement 6S1 or 5P1 Nontraditional Participation 6S2 or 5P2 Nontraditional Completion

Career and Technical Terms	Definitions of key career and technical education terms
Curriculum Alignment	Curriculum alignment occurs when academic and career & technical curricula are linked so that course content and instruction dovetail across and/or within subject areas. Curriculum alignment may take two forms: horizontal alignment, when teachers within a specific grade level coordinate instruction across disciplines; and vertical alignment, when subjects are connected across grade levels, in a cumulative manner, to build comprehensive, increasingly complex instructional programs.
Differentiated Instruction	Recognizes students possess a varying background of knowledge, readiness, and language, preferences in learning, interests, and reactions. Differentiated instruction is a process to approach teaching and learning for students of differing abilities in the same class. The intent of differentiating instruction is to maximize each student's growth and individual success by meeting each student where he or she is, and assisting in the learning process.
Disability	The 1990 Americans with Disabilities Act defines individuals with disabilities as including any individual who: 1. Has a physical or mental impairment that substantially limits one or more of the major life activities of that individual; 2. Has a record of an impairment described in paragraph (1); or 3. Is regarded as having an impairment described in paragraph (1). This definition includes any individual who has been evaluated under Part B of the Individuals with Disabilities Education Act and determined to be an individual with a disability who is in need of special education and related services; and any individual who is considered disabled under section 504 of the Rehabilitation Act of 1973. At the secondary level, counts of disabled learners are typically based on whether a learner has an Individualized Educational Program (IEP). At the postsecondary level, counts of disabled learners are typically based on learner self-reports of disabling conditions.
Disadvantaged	Disadvantaged students are those who have academic or economic disadvantages and require special programs, modified programs or supportive services to assist them to succeed in a career and technical education program.
Displaced Homemaker	An individual who: 1. Has worked primarily without remuneration to care for a home and family, and for that reason has diminished marketable skills; and 2. Has been dependent on the income of other family member but is no longer supported by that income; or a. Is a parent whose youngest dependent child will become ineligible to receive assistance under part A of title IV of the Social Security Act (42 U.S.C. 601 et seq.), not later than 2 years after the date on which the parent applies for assistance under this title; and b. Is unemployed or underemployed and is experiencing difficulty in obtaining or upgrading employment. [P.L. 109-270, Sec 3(10)]
Dropout (School)	An individual who is no longer attending any school and who has not received a secondary school diploma or its recognized equivalent. [P.L. 109-270, Sec 3(24)]
Dual Enrollment	A program of study allowing high school students to simultaneously earn credits toward a high school diploma and a postsecondary degree or certificate.
Economically Disadvantaged	An economically disadvantaged student is one for whom the family income is at or below the national poverty level, the student or the student's parents or guardian is unemployed, the student or the student's parents are recipients of public assistance, or the student is institutionalized or under the state's guardianship. A student is economically disadvantaged if the student qualifies for free or reduced price meals under the Richard B. Russell National School Lunch Act.
Education Department General Administrative Regulations (EDGAR)	A manual published by the U. S. Department of Education that defines the Code of Federal Regulations. These regulations are codified at 34 CFR Parts 74-86 and 97-99.

Career and Technical Terms	Definitions of key career and technical education terms
Electronic Data Reporting System (EDRS)	A system for the reporting of required data for career and technical education programs for students with disabilities and to access state transition-disabled aid.
Employment Related Community- Based Education	Instruction enabling students to prepare for their tentative career objectives or develop general employability skills through the coordination of career related in school instruction and supervised part time on the job training. (MN Rules 3505.1000 Subpart 11)
English as a Second Language (ESL)	See Limited English Proficiency (LEP).
English Language Learner (ELL)	See Limited English Proficiency (LEP).
Entrepreneur- ship	A school supervised business venture undertaken to teach the free enterprise system, including the functions of organizing and managing the factors of production or a distribution of goods or services. (MN Rules 3505.1000 Subpart 12)
Entry Level Skills	Basic occupational competencies and work readiness skills including application of basic skills, work attitudes, and problem solving skills which enable a person to enter initial employment. (MN Rules 3505.1000 Subpart 13)
Equality	A state of being equal, usually used in reference to equal treatment without regard to gender or ethnicity.
Equitable Participation	Providing members of special populations with an opportunity to enter career & technical education that is equal to that afforded to the general student population.
Equity	A state beyond nondiscrimination that is characterized by fair and just treatment rather than equal treatment.
Essential Licensed Personnel	Staff assigned to approved career and technical education programs who meet criteria for career and technical education licensure stated in rule at the Department of Education and who have been issued the appropriate career and technical education license. (MN Rules 3505.1000 Subpart 14)
Exploratory Work Experience	A school supervised career and technical program designed to provide students with paid or unpaid work experience in a variety of occupations, to help the students identify job traits in relation to their abilities and characteristics and to assist them in making realistic and appropriate occupational choices. (MN Rules 3505.1000 Subpart 15)
Extended Employment	Paid time when staff is employed beyond the regular school calendar, which is necessary for job placement and coordination, development of training plans and training agreements, equipment maintenance, supply procurement, inventory and storage, curriculum development, staff development, or career and technical student organization activities. (MN Rules 3505.1000 Subpart 16)
Extended Time Student	A student who is in attendance more than six hours but less than nine hours per day. (MN Rules 3505.1000 Subpart 17)
Family and Consumer Science (FACS)	A secondary career and technical education program that focuses on preparing students for family life and the interrelationships among family, community and work. Students achieve academic and skills attainment through problem-solving, decision- making, critical thinking, communications, literacy and numerical skills in applied contexts. Programs exist in the areas of interpersonal communications, family systems, human development, parenting, resource management, community service, consumerism, housing and interior design, foods and nutrition, textiles, and apparel.
Family Educational Rights and Privacy Act (FERPA)	A Federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. (20 U.S.C. Statute 1232g; 34 CFR Part 99)
Full Participation	Providing the supplementary and other services necessary for special populations to succeed in career & technical education.
General Occupational Skills	See All Aspects of Industry.
Higher Order Skills	Thinking skills used to integrate basic skills and knowledge to solve problems, make decisions, and better understand information, situations, and people. They include critical and creative thinking as well as

Career and Technical Terms	Definitions of key career and technical education terms
	metacognition (being aware of and managing one's thoughts and thought processes).
Health Science and Technology Education (HSTE)	A secondary career and technical education program that provides students with the knowledge and skills to pursue career development and employment options in a variety of health care settings. Health science and technology courses connect students to the health care industry through a variety of laboratory and work-based learning experiences.
Individualized Education Program (IEP)	A written statement for an individual with a disability developed in accordance with sections 612(4) and 614(a)(5)] the IDEA [20 U.S.C. 1412(4) and 1414(a)(5)] [Federal Register, Section 400.4(b)]
Industry Skill Standards	Knowledge and competencies required to perform successfully in a specific workplace, occupation and/or career.
Instructional Site	A facility or location where students have an opportunity to achieve educational goals and individual program objectives. (MN Rules 3505.1000 Subpart 19)
Internship	A training program involving class instruction followed by a supervised, full-time or part-time position at an approved training station. (MN Rules 3505.1000 Subpart20)
Laboratory Instruction	An in-school instructional method involving the practice of skills with appropriate equipment and supplies used within the occupation. (MN Rules 3505.1000 Subpart 21)
Labor Market Area	As defined by the U.S. Bureau of Labor Statistics, a labor market area is “an economically integrated geographic area within which individuals can reside and find employment within a reasonable distance, or can readily change employment without changing their place of residence.” Labor markets are classified as either metropolitan on non-metropolitan (small labor market) areas.
Labor Market Information (LMI)	A body of information dealing with the functioning of labor markets and the determination of the demand for supply of labor. It includes, but is not limited to, such key factors as changes in the level and/or composition of economic activity, the population, employment and unemployment, income and earnings, and wage rates and fringe benefits. Additionally, it concerns itself with the effects that changes in technology and production processes have on the demand for labor and which education, mobility, the work ethic, and income from work and non-work has on the supply of labor.
Limited-English Proficiency (LEP)	The term “individual with limited English proficiency” means a secondary school student, an adult, or an out-of-school youth, who has limited ability in speaking, reading, writing, or understanding the English language, and 1. Whose native language is a language other than English; or 2. Who lives in a family or community environment in which a language other than English is the dominant language. [P.L. 109-270, Sec 3(16)]
Local Career and Technical Education Administrator	The licensed career and technical education administrator who has the major responsibility for duties including budget, curriculum, and supervision in career and technical education at the secondary level for a district, center, or technical college. The superintendent is the authorized local administrator in the absence of a licensed career and technical education administrator. For licensure of career and technical education staff serving in a nonpublic school, the chief executive officer of the nonpublic school or a designee may be authorized by the commissioner to recommend licensure. (MN Rules 3517.0010 Subpart 32)
Local Education Agency	A public educational agency, at the local level, which exists primarily to operate schools or to contract for educational services. (MN Rules 3505.1000 Subpart 22)
Lock-Out/Tag- Out	Uniform requirements established by the OSHA Control of Hazardous Energy Sources Standard to ensure that hazards of unexpected energizing or start-up of machinery and equipment in U.S. workplaces are evaluated, safety procedures implemented, and that the proper hazard information is transmitted to all affected workers.
Maintenance of Effort	Specific language contained in the Carl D. Perkins Career and Technical Education Act to ensure that states

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	continue to provide funding for career and technical education programs at least at the level of support of the previous year. The U.S. Secretary of Education may grant a waiver of up to 5% for exceptional or uncontrollable circumstance (such as a natural disaster or a dramatic financial decline) that affect the state's ability to continue funding at the prior year's levels. [P.L. 109-270, Sec 311(b)]
Minnesota Department of Education (MDE)	State agency whose mission is to improve educational achievement by establishing clear standards, measuring performance, assisting educators and increasing opportunities for lifelong learning.
Measurable Objectives	A specific statement of intended results. Characteristics of a measurable objective include the following: a definite time frame, the audience, degree of measurement, and resources needed.
Measure	The process to determine that an outcome has been addressed.
Minnesota Academic Standards	The Academic Standards division of the Minnesota Department of Education is responsible for the development and implementation of the statewide expectations for educational achievement known as the Minnesota K-12 Academic Standards. The state standards identify the knowledge and skills that are to be mastered by all students by the end of the grade level or grade band, help define the requirements for course credit and graduation from high school, and guide educators in the adoption and design of curricula. Student mastery of the standards is measured through state and local assessments.
Minnesota Graduation Requirements	Students must meet the following credit requirements before graduation from high school (grades 9-12, with a credit comparable to a year of study or equivalent): • 4 credits of English/language arts • 3 credits of mathematics encompassing at least algebra, geometry, statistics and probability • 3 credits of science including at least one credit of biology and one of chemistry or physics • 3½ credits encompassing United States history, geography, government and citizenship, world history, and economics OR • 3 credits encompassing at least United States history, geography, government and citizenship, and world history and ½ credit of economics taught in social studies, business or agriculture • 1 credit in the arts 7 elective credits
National Career Development Guidelines (NCDG)	A framework for building and evaluating a comprehensive career development program for youth in a variety of settings that:
Non-traditional Training and Employment	Occupations or fields of work, including careers in computer science, technology, and other emerging high skill occupations, for which individuals from one gender comprise less than 25 percent of the individuals employed in each such occupation or field Work. [P.L. 109-270, Sec 3(20)]
Necessary Equipment	Items of equipment that meet the criteria as defined in the uniform financial accounting and reporting system (UFARS), and are identified by the local school district as essential to support the teaching of occupational competencies in approved career and technical education programs. (MN Rules 3505.1000 Subpart 23)
Nonexpendable Personal Property	Tangible personal property having a useful life of more than one year and an acquisition cost of $500 or more, per unit. (MN Rules 3505.1000 Subpart 24)
Occupation	Paid or unpaid work including, but not limited to, salaried jobs, self-employment, and homemaking. (MN Rules 3505.1000 Subpart 25)
Occupational Relations	Learning experiences including work adjustment concepts, interpersonal skills involving relationships with other workers and supervisors, understandings and attitudes common to all work stations, and

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	specific instruction as identified in a training plan. (MN Rules 3505.1000 Subpart 26)
Occupational Skill Standards	Performance specifications that are business or industry based, and that identify knowledge, skills, and abilities essential for individuals to succeed in the respective business or industry.
Occupational Safety and Health Administration (OSHA)	An office within the U.S. Department of Labor that works to assure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health.
Office of Vocational & Adult Education (OVAE)	An office with the U.S. Department of Education that works to ensure all Americans have the knowledge and technical skills necessary to succeed in postsecondary education, the workforce, and life. Through comprehensive policies, programs, and activities of the Preparing America's Future initiative, OVAE is helping to reform America's high schools, to support America's community colleges, and to expand America's adult education programs.
Paraprofessional	A non-licensed individual providing instructional support under direct supervision of a licensed teacher.
Portfolio	A collection of work documenting a student's educational performance and/or career planning.
Postsecondary Career and Technical Education	Occupational education for persons who have completed or left high school and who are enrolled in organized programs of study. (MN Rules 3505.1000 Subpart 28)
Postsecondary Educational Institution	Is defined as: 1. An institution of higher education that provides not less than a 2-year program of instruction that is acceptable for credit toward a bachelor's degree; 2. A tribally controlled college or university; or 3. A nonprofit educational institution offering certificate or apprenticeship programs at the postsecondary level. ([P.L. 109-270, Sec 3(22)]
Preparatory Services	Services, programs, or activities designed to assist individuals who are enrolled in career & technical education programs in the selection of, or preparation for participation in, an appropriate career & technical education training program. Preparatory services include, but are not limited to: 2. Career counseling and personal counseling; 3. Career & technical assessment and testing; and 4. Other appropriate services, programs, or activities. [Federal Register, Section 400.4(b)]
Pre-Career and Technical Education	Programs, services, or activities designed to provide youth and adults with orientation, guidance, exploration, and instruction to assist them in making meaningful career decisions. (MN Rules 3505.1000 Subpart29)
Program Participant	**Secondary** - Any student enrolled in a Career and Technical Education (CTE) approved program. **Postsecondary** - Students enrolled in one or more courses within a Perkins approved career & technical education program.
Secondary Career and Technical Education Teacher Full- time Equivalent	A licensed career and technical education teacher who teaches the equivalent of six hours per day for 175 days per year or within an approved career and technical education program. (MN Rules 3505.1000 Subpart 31a)
Secondary Career and Technical Education Course	One or more components of a secondary career and technical instructional program. (MN Rules 3505.1000 Subpart 30)
Secondary Career and Technical Education	Programs for grades 10 to 12 that meet the requirements of part 3505.2500, items A to C, and work experience/career exploration programs. (MN Rules 3505.1000 Subpart 31)
Secretary's Commission on Achieving Necessary Skills (SCANS)	The Secretary's Commission on Achieving Necessary Skills (SCANS) was convened by the U.S. Department of Labor in February 1990 to examine the demands of the workplace and to determine whether the current and future workforce is capable of meeting those demands. The Commission was directed to:

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	1. Define the skills needed for employment; 2. Propose acceptable levels in those skills; 3. Suggest effective ways to assess proficiency; and 4. Develop a strategy to disseminate the findings to the nation's schools, businesses, and homes. The Commission identified five competencies (i.e. skills necessary for workplace success) and three foundations (i.e., skills and qualities that underlie competencies). Competencies - effective workers can productively use: 1. Resources - allocating time, money, materials, space, and staff; 2. Interpersonal Skills - working on teams, teaching others, serving customers, leading, negotiating and working well with people from culturally diverse backgrounds; 3. Information - acquiring and evaluating data, organizing and maintaining files, interpreting and communicating, and using computers to process information; 4. Systems - understanding social, organizational, and technological systems, monitoring and correcting performance, and designing or improving systems; and 5. Technology - selecting equipment and tools, applying technology to specific tasks, and maintaining and trouble-shooting technologies. Foundations - competence requires: 1. Basic Skills - reading, writing, arithmetic and mathematics, speaking, and listening; 2. Thinking Skills - thinking creatively, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning; 3. Personal Qualities - individual responsibility, self-esteem, sociability, self- management, and integrity.
Service Learning	A form of experiential learning whereby students apply content knowledge, critical thinking and good judgment to address genuine community needs.
Sequential Course of Study	An integrated series of courses that are directly related to the educational and occupational skills preparation for individuals for jobs or preparation for postsecondary education. [Federal Register, Section 400.4(b)]
Simulation	An in-school instructional method involving the application of skills with a realistic flow of work and in a realistic setting for the occupation. (MN Rules 3505.1000 Subpart 32)
Single Parent	An individual student who is unmarried or legally separated from a spouse; and 1. Has a minor child or children for which the parent has either custody or joint custody; or 2. Is pregnant. [P.101-392, Section 521 (301)]
Skill Certification	A formal process used to ascertain and distinguish the mastery of a set of skills according to predefined standards. May be linked to either a particular occupation or trade, or a particular job or process.
Skill Standard	Performance specifications that identify the knowledge, skills, and abilities an individual needs to succeed in a workplace; they define a common language of quality and level of achievement.
Special Education	Any specially designed instruction and related services to meet the unique cognitive, academic, communicative, social and emotional, motor ability, vocational, sensory, physical, or behavioral and functional needs of a pupil as stated in the IEP. (MN Rules 3525.0210 Subpart 42)
Special Populations	1. Individuals with disabilities;* 2. Individuals from economically disadvantaged families, including foster children; 3. Individuals preparing for non-traditional fields; 4. Single parents, including single pregnant women; 5. Displaced homemakers; and 6. Individuals with limited English proficiency. ([P.L. 109-270, Sec 3(29)] *In Minnesota this includes persons with 504 plans.

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Standard	The level or rate of an outcome. [Federal Register, Section 400.4(b)]
Standards for Technological Literacy	Technological literacy is the ability to use, manage, assess, and understand technology. The Standards for Technological Literacy provides the content basis upon which the study of technology may be built.
Student Full- time Equivalent (FTE)	A student enrolled full-time in an approved educational program, six hours per day for 175 days per year or its equivalent. (MN Rules 3505.1000 Subpart 33)
Student Staff Ratio	The relationship between the number of FTE students and the number of FTE teachers in each approved career and technical education program. (MN Rules 3505.1000 Subpart 34)
Students with Special Needs	Students with disabilities or students who are disadvantaged.
Supplement Not Supplant	Specific provisions in the Carl D. Perkins Career and Technical Education Act (Section 311. Fiscal Requirements) which prohibit the use of federal funds to replace state and local funds for career and technical education and tech-prep activities.
Support Services	Non-instructional activities, services, and functions carried out to aid and improve the quality of career and technical education programs. (MN Rules 3505.1000, Subpart 36)
Technical Tutor	An individual holding a nonteaching, technical tutor license recognized by the Minnesota Board of Teaching and working under direct supervision of a licensed teacher.
Tech-Prep Program	A program of study that: 1. Combines at least 2 years of secondary education (as determined under State law) and 2 years of postsecondary education in a non-duplicative sequential course of study; 2. Strengthens the applied academic component of career and technical education through the integration of academic, and career and technical, instruction; 3. Provides technical preparation in an area such as engineering technology, applied science, a mechanical, industrial, or practical art or trade, agriculture, a health occupation, business, or applied economics; 4. Builds student competence in mathematics, science and communications (including through applied academics) in a specific career field, and to high skill, high wage employment, or further education; and 5. Leads to an associate degree or a certificate in a specific career field and to high skill, high wage employment, or further education. [P.L. 109-270, Sec 203(c)(2)]
Third Party Appraisal	Establishing a price for nonexpendable personal property by an independent appraiser who is free from any conflicting interests. (MN Rules 3505.1000 Subpart 38)
Trades and Industry Technologies	Secondary career and technical education programs designed to prepare secondary students for rewarding careers in high-demand, high-paying occupations. Trade and industrial instructional areas include education in the following career cluster: construction, communication, manufacturing, transportation.
Training Agreement	An agreement signed by the employer, the student, the parent or guardian when student is below 18, and the instructor coordinator, which defines their respective responsibilities, and includes pertinent information regarding supervision of the student at the training station. (MN Rules 3505.1000 Subpart 39)
Training Plan	A written plan developed by the instructor coordinator, the employer and/or supervisor, and the student that indicates what is to be learned by that student and whether it is to be learned in the classroom or at the training station after a careful analysis of the student's career objective and the learning opportunities available at the training station. (MN Rules 3505.1000 Subpart 40)
Training Station	A worksite where a student acquires actual work experience. (MN Rules 3505.1000 Subpart. 41)
Transition- Disabled Program	Enables students with disabilities to access career and technical education programs based on their assessed interests and abilities. Transition-disabled programs are designed for students who require curriculum modifications and other supplemental services that are not generally available in regular secondary career and technical education programs.

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Uniform Financial Accounting and Reporting Standards (UFARS)	Used by Minnesota school districts, charter schools, and cooperatives to report financial activities in a uniform manner. The standards are revised and updated each year at the completion of the legislative session. UFARS became law in 1976 and requires all reporting units to use modified accrual accounting for revenue and expenditures. (MN Statute 477A.017)
Vocational Aid	See Career and Technical Education Revenue.
Vocational Education	See Career and Technical Education.
Vocational Program Advisory Committee	See Advisory Committee.
Vocational Program Areas	See Career and Technical Education Program Areas.
WIA (Workforce Investment Act of 1998)	Federal legislation designed to coordinate and streamline all components of the nation's workforce development system, including employment, job training, education, and vocational rehabilitation services for youth (ages 14-21), adults, and dislocated workers.
Work-Based Learning	A component of Career and Technical Education programs designed to help students explore and make informed career decisions. Specifically, any learning that ordinarily occurs at an off-campus worksite through a partnership between an employer/business and the school. It involves learning experiences and activities including instruction in workplace skills and competencies, instruction in all aspects of industry and actual paid or unpaid work experiences. The types of work-based learning experiences are work-site field trip, job shadowing, practicums, mentorships, cooperative work-experience, community-based experiences, internships, entrepreneurship, service-learning and youth apprenticeships.