State Board for Career and Technical Education Agenda

June 22, 2026
10:00 AM CT
Hughes Board Room and Microsoft Teams

Microsoft Teams - Meeting Link

1) **Call to Order**
2) **Consent Agenda**
   a) **Approve May 18, 2026 Minutes**
   b) **Accept April and May 2026 Finance Reports**
   c) **Accept Director's Report – Agency update**
   d) **Approve Private Career Schools – 2026-27**
   e) **Approve Technology and Engineering Standards**
   f) **Approve Automated Manufacturing Standards**
   g) **Approve Building Trades Standards**
   h) **Approve NDCTE Staff Salary Increases**
   i) **Approve Revised State Director Job Description**
3) **Items for Discussion and Possible Action**
   a) **Review and Approve State Directors Evaluation**
   b) **Approve State Director Salary Increase**
   c) **Discuss Department Budget Request**
4) **Information Only**
   a) **May 2026 Board Time Tracker**
5) **Board Comments**
6) **Adjourn**

NOTE: The exact time each agenda item will be discussed cannot be assured. Therefore, individuals interested in attending any portion of the meeting should plan their schedules accordingly.

Persons requiring auxiliary aids or services must contact CTE at 701-328-3180 at least three working days prior to the scheduled meeting date.

Responses to Board Questions

3) a) Directors Evaluation

I'd like to hear analysis on why we believe we came up short on the percentage of qualified teachers. I'm wondering how the overall CTE teacher workforce looks (stable, improving, eroding), how we're tracking turnover, and any other factors that Wayde thinks is contributing to us not meeting our goal.

First, I feel I need to explain how the Department defines a "qualified" teacher. That is any individual that is teaching is not fully licensed or endorsed to teach CTE courses. We consider alternate access teachers "unqualified, until they complete their plan of study, and become fully licensed. They are teaching, but with some sort of provisional license, while working on their credentials. I feel I need to explain this since the guardrail isn't tracking vacancies. It is instead tracking the retention of teachers.

I would say the CTE Educator workforce is stable to growing, but still not keeping up with demand as CTE continues to grow. We do have steady turnover, but programs are typically able to find a replacement, but again, many start as a alternate certification, which starts the licensing process over again.

The Department does not have a formal process of tracking teacher retention. We learn about new teachers when we are contacted with certification questions.

Other potential factors of why we are not meeting are fewer people are going into education, which in CTE is compounded by the fact that we are looking for more specialized areas for programming, salary concerns, especially for those instructors who need to come from industry, and rural aspect of the state makes it difficult to find instructors willing to fill the remotely located positions.

We do have a number of processes in place to support recruitment and retention of CTE Educators, but it continues to be an uphill battle.

I think NDCTE has some great practices to aid in the recruitment and retention of CTE instructors

- **Multiple entry points into the classroom through alternative access, Transition to Teaching, etc.**
- **CTE Professional Development Conference – New instructor sessions for years 1 & 2**
- **New instructor visits**
- **Vision Visits**
- **CTE state supervisor customer service by timely responses to questions and concerns of their instructors**

1. Agenda Item 2a) Consent Agenda - Director's Report: New & Expanding Program Requests

a. Due to the fact that this list does not include notation of approval or denial, I perceive this a list of applications, as labeled. If I'm understanding correctly, can you remind us when approval/denial occurs?

Yes, these are the programs that have been approved by the Department. Historically, approval occurs in May/June, but moving forward, we will approve programs year-round, as the applications are submitted and sufficiently reviewed. The Department will determine a date, if applications are submitted after, where the program approval will roll into the following school year.

b. Do the programs listed reduce or exacerbate unnecessary duplication? How so? To what extent is access to CTE programming improved?

I don't believe any of these programs would be considered unnecessary duplication. These programs are locally and regionally provided. Prior to their approval, students in these regions did not have access to these programs. Due to this, access is improved by providing more programming for a total of 90+ schools.

c. How do you see these applications contributing to our goals and/or guardrails?

These applications can have impact on each of our Board Goals, increasing concentrator status, workforce readiness, and enrollment.

New and Expanding Program Requests, New Center Transfers – Career Impact Academy for Career Development, $329,448. This is more than half of the total amount approved. This must be multiple programs/positions and must be transferring from school districts which have been funded at lower rates, correct?

Yes, this is correct.

Do you expect that these transfers from school districts to centers will improve student outcomes, and if so, how?

The value of the Career Development Counselors under the umbrella of the Center strengthens the awareness of the availability of Center programs to the rural schools. With that heightened awareness, Center enrollments increase, which impacts all three goals of Concentrator Status, Workforce Readiness, and CTE Enrollment.

2) d) Approve Private Career Schools – for PowerHouse, West Fargo, you noted this is the second year of provisional approval. Please remind us of what provisional status means.

Provisional status is given until the school is fully accredited by a national accreditor (which can take many years). We can only give full authorization once they are fully accredited.

Agenda Item 2)a)

Minutes for State Board for Career and Technical Education
May 18, 2026 Meeting

Call to Order:

The regular meeting of the State Board for Career and Technical Education was held on Monday, May 18, 2026, in the Sakakawea Room at the State Capitol and via Microsoft Teams. It was called to order by Chair Sonia Meehl at 10:00 am CT. Voting members present include:

Board Member Patrick Bertagnolli
Board Member Lyndsi Engstrom
Board Member Morgan Forness
Deputy Commissioner Lisa Johnson
Vice-Chair Mike McHugh
Chair Sonia Meehl
Board Member Eric Nelson
Board Member Jason Rohr

Also present: Wayde Sick, Gwen Ferderer, John Gruenberg, Mark Openshaw, Duane Poitra, Brad LaRocque, Daniel Driessen, Lyle Krueger, Laurie Elliott, Marcia McMahon, Mike Hanson, Pat Phillips, Kellie Hall, Becky Ulberg, Pam Stroklund, Jessica DeVaal, Kelly Pierce, Dawn Ulmer and Lorie Ruff.

Meeting chat information for this meeting does not exist.

Be Legendary Governance – Student Outcome Goal GPM 2.2-WBL Completion

Director Sick referenced the PowerPoint presentation that was included in the material packet and reviewed Goal 2 and Goal Progress Measure 2.2. The target for 2024-25 was 45% and our progress is currently 62.9%. The next step to continue attaining our goal is to identify schools/consortiums that have not met the WBL target and provide technical assistance.

Director Guardrail 3.1-Trained WBL Coordinators and 3.2-Employed WBL Coordinators

Director Sick then reviewed Director Guardrail 3 and his progress measures. The 2025-26 target for number of individuals that are trained as WBL Coordinators is 85. Our current progress is 123. As we have surpassed our target, we will evaluate the necessity of continuing to provide full WBL Coordinator training. We plan to develop and deliver instructor WBL training, which would not provide for an endorsement, but expand awareness of WBL.

Director Sick then reviewed Progress Measure 3.2 – the number of individuals employed as WBL Coordinators. The target for 2025-26 was 20 and our current progress is 20. Next steps include continuing to strengthen the WBL Coordinator network, providing mentorship and train the trainer opportunities as well as secure additional funding to support local WBL Coordinators operations.

Morgan Forness moved to accept Director Sick's Progress Monitoring report as presented and it was seconded by Mike McHugh. The motion passed unanimously.

Consent Agenda:

Mike McHugh moved to approve and accept the items listed on the consent agenda and it was seconded by Lyndsi Engstrom. The motion passed unanimously.

Items for Discussion and Possible Action – Approve the TMACTC Proposal:

Director Sick gave an overview of the proposal that was included in the material packet and introduced Dr. Kellie Hall, CTE Director; Brad LaRocque, High School Principal and Duane Poitra, Business Manager.

Eric Nelson moved to approve the Turtle Mountain Area Career and Technology Center proposal and it was seconded by Lyndsi Engstrom.

Duane Poitra informed Board Members of the collaborative efforts between Turtle Mountain School District and surround school districts to establish the Center. Partners for the Center include St. John Public School, Mt. Pleasant Public School, Rolette Public School, Turtle Mountain Community High School and Turtle Mountain Community College. Future plans include the potential addition of Dunseith High School. The Center will originate as a satellite sharing instructors and facilities with the goal of securing future funds to expand facilities.

Discussion was held on the challenges they had with school district schedules.

Levi Bachmeier arrived at the meeting at 10:50 am.

With no further discussion a roll call vote was administered:

Board Member Lyndsi Engstrom - Yes
Board Member Morgan Forness – Yes
Deputy Commissioner Lisa Johnson – Yes
Vice-Chair Mike McHugh – Yes
Board Member Eric Nelson – Yes
Board Member Jason Rohr - Yes
Superintendent Levi Bachmeier – Yes
Board Member Pat Bertagnolli – Yes
Chair Sonia Meehl - Yes
9-0-0 Absent

Information Only:

Chair Meehl reported that the ND FFA State Convention invitation and April 2026 Board Time Tracker were included in the material packet.

Mark Openshaw gave background information on the makeup of this Board and how election of the President is handled. He informed members that during the retreat, the Board should develop an election policy that includes how to nominate someone and term limit for the President. Lyndsi Engstrom emphasized that this policy will be included in the Procedural Manual when created.

Board Comments:

Chair Meehl thanked Mr. Bertagnolli for his service on this Board and to the State of North Dakota as this will be his last meeting. He will be retiring June 12.

She then welcomed Deputy Commissioner Lisa Johnson as the official designee to this Board by Commissioner Brent Sanford.

Finally, Chair Meehl thanked Laurie Elliott and Marcia McMahon for their training to the Board. Their contract will end in May.

Director Sick informed members that an email invite to the CTSO Banquet will be coming to them this afternoon. Chair Meehl expressed that this may be an opportunity for members to present our community engagement presentation.

Chair Meehl informed members that her term as well as Jason Rohr's will terminate in June.

There being no other business brought before the Board, the meeting adjourned at 11:09 am.

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Sonia Meehl
SBCTE Chairperson

DEPARTMENT OF CAREER AND TECHNICAL EDUCATION

APPROPRIATION STATUS REPORT

FOR THE MONTH ENDED APRIL 30, 2026

	ORIGINAL APPROPRIATION	CURRENT APPROPRIATION	BIENNIUM TO DATE EXPENSE	%	BALANCE OF APPROPRIATION
EXPENDITURES BY LINE ITEM					
SALARIES AND WAGES	$5,964,593.00	$5,838,390.00	$2,255,833.39	39%	$3,582,556.61
NEW & VACANT FTE POOL	$0.00	$126,203.00	$0.00	0%	$126,203.00
OPERATING EXPENSES	$4,745,611.00	$4,745,611.00	$2,114,557.44	45%	$2,631,053.56
GRANTS	$14,007,349.00	$14,007,349.00	$260,787.51	2%	$13,746,561.49
GRANTS - SECONDARY	$52,037,780.00	$52,037,780.00	$19,037,454.58	37%	$33,000,325.42
GRANTS - STEM	$100,000.00	$100,000.00	$10,500.00	11%	$89,500.00
INITIATIVE GRANT PROGRAM	$0.00	$5,460,835.89	$5,460,835.89	100%	$0.00
WORKFORCE TRAINING	$3,500,000.00	$3,500,000.00	$1,557,500.00	45%	$1,942,500.00
MARKETPLACE FOR KIDS	$400,000.00	$400,000.00	$146,921.68	37%	$253,078.32
TOTAL EXPENDITURES	$80,755,333.00	$86,216,168.89	$30,844,390.49	36%	$55,371,778.40
EXPENDITURES BY SOURCE					
GENERAL FUND EXPENDITURES	$62,077,324.00	$62,077,324.00	$23,246,260.15	37%	$38,831,063.85
FEDERAL FUND EXPENDITURES	$17,273,035.00	$22,733,870.89	$6,565,851.42	29%	$16,168,019.47
SPECIAL FUND EXPENDITURES	$1,404,974.00	$1,404,974.00	$1,032,278.92	73%	$372,695.08
TOTAL EXPENDITURES	$80,755,333.00	$86,216,168.89	$30,844,390.49	36%	$55,371,778.40

DEPARTMENT OF CAREER AND TECHNICAL EDUCATION

CTE ADMINISTRATIVE BUDGET

2025 - 2027 Biennium

Apr-26	25 - 27 BUDGET	CURRENT MONTH EXPENDITURES	YEAR TO DATE EXPENDITURES	BALANCE OF BUDGET	PERCENT OF BUDGET EXPENDED	PERCENT OF TIME ELAPSED
SALARIES	$5,964,593.00	$221,149.27	$2,255,833.39	$3,708,759.61	37.82%	41.67%
OPERATING EXPENSES	$4,745,611.00	$79,533.64	$2,114,557.44	$2,631,053.56	44.56%	41.67%
TRAVEL	$380,000.00	$13,383.93	$121,893.69	$258,106.31	32.08%	41.67%
DUES & PROFESSIONAL DEVELOPMENT	$359,111.00	$147.50	$52,697.62	$306,413.38	14.67%	41.67%
PROFESSIONAL SERVICES	$1,361,500.00	$20,650.00	$943,509.35	$417,990.65	69.30%	41.67%
RENT/LEASES/UTILITIES/REPAIRS	$450,000.00	$30,185.34	$121,398.24	$328,601.76	26.98%	41.67%
POSTAGE	$25,000.00	$983.23	$3,326.81	$21,673.19	13.31%	41.67%
OPERATING FEES	$200,000.00	$15.00	$23,501.85	$176,498.15	11.75%	41.67%
SUPPLIES	$1,500,000.00	$4,034.58	$680,976.44	$819,023.56	45.40%	41.67%
PRINTING & PAPER	$100,000.00	$1,812.02	$17,346.52	$82,653.48	17.35%	41.67%
TELEPHONE	$20,000.00	$616.68	$6,613.82	$13,386.18	33.07%	41.67%
ITD	$200,000.00	$7,705.36	$113,104.14	$86,895.86	56.55%	41.67%
FURNITURE & EQUIPMENT	$150,000.00	$0.00	$30,188.96	$119,811.04	20.13%	41.67%
TOTAL	$10,710,204.00	$300,682.91	$4,370,390.83	$6,339,813.17	40.81%	41.67%

DEPARTMENT OF CAREER AND TECHNICAL EDUCATION

APPROPRIATION STATUS REPORT

FOR THE MONTH ENDED MAY 31, 2026

	ORIGINAL APPROPRIATION	CURRENT APPROPRIATION	BIENNIUM TO DATE EXPENSE	%	BALANCE OF APPROPRIATION
EXPENDITURES BY LINE ITEM					
SALARIES AND WAGES	$5,964,593.00	$5,838,390.00	$2,466,068.68	42%	$3,372,321.32
NEW & VACANT FTE POOL	$0.00	$126,203.00	$0.00	0%	$126,203.00
OPERATING EXPENSES	$4,745,611.00	$4,745,611.00	$2,154,297.79	45%	$2,591,313.21
GRANTS	$14,007,349.00	$14,007,349.00	$299,822.51	2%	$13,707,526.49
GRANTS - SECONDARY	$52,037,780.00	$52,037,780.00	$19,037,454.58	37%	$33,000,325.42
GRANTS - STEM	$100,000.00	$100,000.00	$14,500.00	15%	$85,500.00
INITIATIVE GRANT PROGRAM	$0.00	$5,460,835.89	$5,460,835.89	100%	$0.00
WORKFORCE TRAINING	$3,500,000.00	$3,500,000.00	$1,651,250.00	47%	$1,848,750.00
MARKETPLACE FOR KIDS	$400,000.00	$400,000.00	$146,921.68	37%	$253,078.32
TOTAL EXPENDITURES	$80,755,333.00	$86,216,168.89	$31,231,151.13	36%	$54,985,017.76
EXPENDITURES BY SOURCE					
GENERAL FUND EXPENDITURES	$62,077,324.00	$62,077,324.00	$23,576,188.52	38%	$38,501,135.48
FEDERAL FUND EXPENDITURES	$17,273,035.00	$22,733,870.89	$6,622,683.69	29%	$16,111,187.20
SPECIAL FUND EXPENDITURES	$1,404,974.00	$1,404,974.00	$1,032,278.92	73%	$372,695.08
TOTAL EXPENDITURES	$80,755,333.00	$86,216,168.89	$31,231,151.13	36%	$54,985,017.76

DEPARTMENT OF CAREER AND TECHNICAL EDUCATION

CTE ADMINISTRATIVE BUDGET

2025 - 2027 Biennium

May-26	25 - 27 BUDGET	CURRENT MONTH EXPENDITURES	YEAR TO DATE EXPENDITURES	BALANCE OF BUDGET	PERCENT OF BUDGET EXPENDED	PERCENT OF TIME ELAPSED
SALARIES	$5,964,593.00	$210,235.29	$2,466,068.68	$3,498,524.32	41.35%	45.83%
OPERATING EXPENSES	$4,745,611.00	$39,740.35	$2,154,297.79	$2,591,313.21	45.40%	45.83%
TRAVEL	$380,000.00	$12,020.91	$133,914.60	$246,085.40	35.24%	45.83%
DUES & PROFESSIONAL DEVELOPMENT	$359,111.00	$1,234.00	$53,931.62	$305,179.38	15.02%	45.83%
PROFESSIONAL SERVICES	$1,361,500.00	$8,095.43	$951,604.78	$409,895.22	69.89%	45.83%
RENT/LEASES/UTILITIES/REPAIRS	$450,000.00	$185.34	$121,583.58	$328,416.42	27.02%	45.83%
POSTAGE	$25,000.00	$208.93	$3,535.74	$21,464.26	14.14%	45.83%
OPERATING FEES	$200,000.00	$250.00	$23,751.85	$176,248.15	11.88%	45.83%
SUPPLIES	$1,500,000.00	$974.19	$681,950.63	$818,049.37	45.46%	45.83%
PRINTING & PAPER	$100,000.00	$2,819.50	$20,166.02	$79,833.98	20.17%	45.83%
TELEPHONE	$20,000.00	$640.04	$7,253.86	$12,746.14	36.27%	45.83%
ITD	$200,000.00	$7,440.12	$120,544.26	$79,455.74	60.27%	45.83%
FURNITURE & EQUIPMENT	$150,000.00	$5,871.89	$36,060.85	$113,939.15	24.04%	45.83%
TOTAL	$10,710,204.00	$249,975.64	$4,620,366.47	$6,089,837.53	43.14%	45.83%

Agenda Item 2)a)

CTE State Director's Report
June 2026

General Updates

Executive Officer for State Board for CTE

Staffing update

Nicole Kessler has accepted our offer to join NDCTE as our new Finance Director. Nicole has years of accounting experience, most recently with the Burleigh County Housing Finance Agency. She will start on June 22nd, to allow for some time with Gwen.

I am also happy to announce Karlie Hicks has been selected as our new Program Specialist. She is currently in the Air Force, residing in Minot. We will be joining us on September 8th.

Also, as a reminder, the following will be coming on board in July.

Starting 7/1
Karlee Benth, FACS Supervisor
Callahan Lemar, Ag Ed Assistant Supervisor

Starting 7/15
Krista Olson, Career Development Supervisor

Interpret and Implement Board Policy and State and Federal Law

I continue to monitor the President's Budget as it moves through the budget process. Currently Perkins funds are held flat in that budget. It also prohibits Perkins funds from being used for post-secondary programs. The House Appropriations committee released its bill on June 4th. It includes a $10M increase for Perkins, but cuts USED by $8B and USDOL by $3.7B.

I continue to work with various groups to interpret and determine how to best implement Workforce Pell. I am on a planning group with Adult Education, Commerce, JSND, NDUS and the Tribal College System. I have also met with the TrainND Directors and Lisa Johnson, to determine if any of their programs may align with Workforce Pell parameters.

Planning and Coordination

I attended the North Dakota Small Business Development Centers Stakeholders Summit on May 20th. The focus of the Summit was to develop a plan and a process to strengthen North Dakota's Manufacturing Ecosystem.

I participated in the Workforce Development Council In-Demand Occupations workgroup meeting on May 21st. A recommendation will be provided to the full WDC in June, to review and approve. NDCTE uses the In-Demand list as a resource to approve new CTE programs.

We will hold the CTE Directors quarterly meeting on June 15-16. Below is the agenda.

Monday, June 15

1:00-2:00 pm	NDCTEA Meeting
2:00-2:15 pm	Cosmetology Program Discussion

2:15-3:00 pm	The Connected Path Vision Discussion
3:00-3:15 pm	Break
3:15-3:45 pm	Update on Fluxx Adoption
4:00-6:00 pm	GNDC Social - Luft

Tuesday, June 16

8:00-8:30 am	WBL Teacher Training
8:30-9:00 am	Rural Health Care Grant Discussion
9:00-9:30 am	Modernized Career Clusters Update
9:30-10:00 am	CTE Course Codes Discussion
10:00-10:15 am	Career Ready Practices Guidance – Final Review
10:15-10:30 am	Break
10:30-11:00 am	Funding Policy Discussion – Tiers Feedback
11:00 am-12:00 pm	Legislative Agenda Discussion
12:00 pm	Adjourn

Fiscal Management

New and Expanding Programs:

The next page of the Board Packet provides the list of new and transferred programs approved since the prior Board meeting.

The Department continues to plan for submitting or 2027-29 Budget request. Budgets are due to OMB by July 15th.

Advocate for Career and Technical Education

I attended the FFA Education Leaders Social on June 1st, which was help in conjunction with the 97th Annual State FFA Convention. I was able to provide comments of welcome to those in attendance of the social. As a bonus, we were given the NDSU Partnership Award, due to the years of support the Department, specifically the Agricultural Education and Family and Consumer Science offices have provided to NDSU.

New & Expanding Program Requests
Fiscal Year 2027

New Program Requests

Bakken Area Skills	Auto Technology	46,350.00
Belfield	Family & Consumer Sciences	16,550.00
Cass County CTC	Public Safety - Fire Fighters	11,587.50
Central Regional CTC	Public Safety - Fire Fighters	18,620.00
Central Regional CTC	Public Safety - Military	9,310.00
Heart River CTC	T&I - Culinary	23,275.00
Roughrider CTC	Tech & Engineering	23,275.00
Roughrider CTC	T&I Welding	9,310.00
Southeast CTC	Business	13,499.50
Turtle Mountain CTC	Agriculture	46,550.00
Turtle Mountain CTC	Tech & Engineering	46,550.00
Williston Basin CTC	T&I - CDL	4,655.00
		$269,532.00

New Center Transfers

Career Impact Academy	Career Development	329,448.00
Central Regional CTC	Business	13,965.00
Turtle Mountain CTC	Information Technology	31,800.00
		$375,213.00

TOTAL	**$644,745.00**

Agenda Item 2)d)

2026-27 Private Career Schools Renewal Applicants For Authorization to Operate in North Dakota

1. Elite Massage Academy, Fargo, North Dakota
2. Fargo School of Massage Therapy, Fargo, North Dakota
3. Gemological Institute of America, Carlsbad, California
4. Josef's School of Hair, Skin, and Body, Grand Forks, North Dakota
5. Josef's School of Hair, Skin, and Body, Fargo, North Dakota
6. Lynnes Welding Training, Bismarck, North Dakota
7. Lynnes Welding Training, Fargo, North Dakota
8. PowerHouse, West Fargo, North Dakota (2nd Year of Provisional)
9. The Salon Professional Academy, Fargo, North Dakota
10. Spectrum School of Massage, Minot, North Dakota

Method

All private schools are notified on December 1 that they must submit the following online by April 1:

> Application Fee, Career School's Identification and Affidavit, Current Financial Statement, Surety Bond, Advertising, Student Catalogs, Accreditation*, Enrollment Agreement, Student Costs, Administrative and Instructional Personnel, Programs Offered, Enrollment Numbers, Facilities Design and Scope, Equipment List, Educational Credential (copy of Diploma printed for students), Placement, Statement of Compliance with the state Refund Policy, Multiple Location Information, and Distance Education Requirement.

*Accreditation for applicants with Provisional Authorization by providing the name of the accrediting agency from which the school will seek accreditation, documentation of intent to undergo accreditation procedures, and a timetable for completion of accreditation which is reasonable and in accordance with the selected agency's procedures. This is a multiple-year process for most and full authorization cannot be granted until fully accredited (exception is Amendment to NDCC 15-20.4-04).

I recommend the approval of the above-listed applications for renewal of Authorization to Operate in North Dakota, as they have provided all the necessary documentation we require in our policy.

Private Career Schools 2026-2027

--program(s) offered at each--

Elite Massage Academy

1121 Westrac Dr Suite 202

Fargo, ND 58103

- Massage Therapy

Fargo School of Massage Therapy

4480 23rd Ave S Suite 103

Fargo, ND 58104

- Massage Therapy

Gemological Institute of America

5345 Armada Drive

Carlsbad, CA 92008

- Graduate Gemologist Online
- Graduate Pearls Online
- Graduate Diamonds Online
- Graduate Colored Stones Online

Josef's School of Hair, Skin & Body

Esthetics and Massage Therapy Campus

2011 South Washington Street

Grand Forks, ND 58201

- Massage Therapy

Josef's School of Hair, Skin & Body

3223 13th Avenue South Suite A

Fargo, ND 58103

- Massage Therapy

Lynnes Welding Training – Bismarck Campus

4329 Centurion Drive Unit #9

Bismarck, ND 58504

- Aluminum Gas Metal Arc Welding (Mig) & Gas Tungsten Arc Welding (40 Hours)
- Combination Welder II Program (640 hours)
- Combination Welder I Program (480 hours)
- Gas Metal Arc Welding (GMAW) Skills (200 hours)
- Gas Metal Arc Welding (GMAW) Skills (120 hours)
- Gas Tungsten Arc Welding (GTAW) Skills (120 hours)
- Lean Welding (32 hours)
- PIPE Welding (STICK Uphill) Skills (200 hours)
- PIPE Welding (TIG) Skills (200 hours)
- Prep – Certified Welding Inspector (36 hours)
- Shielded Metal Arc Welding (SMAW) Skills (120 hours)

- Electrician Apprentice

Lynnes Welding Training – Fargo Campus

2717 3rd Ave North

Fargo, ND 58102

- Aluminum Gas Metal Arc Welding (Mig) & Gas Tungsten Arc Welding (40 Hours)
- Combination Welder II Program (640 hours)
- Combination Welder I Program (480 hours)
- Gas Metal Arc Welding (GMAW) Skills (200 hours)
- Gas Metal Arc Welding (GMAW) Skills (120 hours)
- Gas Tungsten Arc Welding (GTAW) Skills (120 hours)
- Lean Welding (32 hours)
- PIPE Welding (STICK Uphill) Skills (200 hours)
- PIPE Welding (TIG) Skills (200 hours)
- Prep – Certified Welding Inspector (36 hours)
- Shielded Metal Arc Welding (SMAW) Skills (120 hours)

PowerHouse

455 Christianson Dr W

West Fargo, ND 58078

The Salon Professional Academy

4377 15th Avenue South

Fargo, ND 58103

- Massage Therapy

Spectrum School of Massage

1915 N. Broadway

Minot, ND 58703

- Massage Therapy

Private Career Schools – Emerging Digital Academy Status

The Emerging Digital Academy has chosen to stop offering education to "re-tool and investigate the current state of the market under the new era of AI technology." They have thus opted not to authorize as a private career school any longer. The agency has started the process of collecting all student records from them during their years of operating, as mandated by ND Century Code 15-20.4-03.5 for a closed school situation.

Agenda Items 2) e)f)g)

The Department of Career and Technical Education staff has reviewed and updated the North Dakota Technology and Engineering Education Standards. These Standards were also reviewed by the North Dakota Technology and Engineering Education Instructors.

I recommend approval of the ND Technology and Engineering Education Standards as presented.

The Department of Career and Technical Education staff has reviewed and updated the North Dakota Automated Manufacturing Education Standards. These Standards were also reviewed by the North Dakota Automated Manufacturing Education Instructors.

I recommend approval of the ND Automated Manufacturing Education Standards as presented.

The Department of Career and Technical Education staff has reviewed and updated the North Dakota Building Trades Education Standards. These Standards were also reviewed by the North Dakota Building Trades Education Instructors.

I recommend approval of the ND Building Trades Education Standards as presented.

Area	Date Last Updated	Notes	Next Update Needed	ated on CASE/Open
Agriculture	5/1/2025		2030	Dec-25
Agriculture				
Automated Manufacturing	8/1/2021		2026	Nov-21
Automated Manufacturing Standards				
Auto Collision	5/1/2025		2030	Dec-25
Auto Collision Standards				
Automotive Technology	5/1/2024		2029	25-Dec
Automotive Technology				
Aviation	5/1/2024		2029	25-Dec
Aviation				
Business	6/1/2021		2026	Nov-21
Business and Office Technology Standards				
Building Trades	10/1/2021		2026	Nov-21
Building Trades				
Career Development	9/1/2023		2028	25-Dec
Career Development				
Electronics	3/1/2022		2027	25-Dec
Electronics Standards				
Emergency Medical Services	3/1/2025		2030	25-Dec
EMS				
Family and Consumer Science	1/1/2018	Leaving as is until 2028, when nationals will be redone	2028	21-Nov
FACS Standards				
Graphic Communications	6/23/2025		2030	25-Dec
Graphic Communications				
Health Sciences	10/1/2023		2028	25-Dec
Health Sciences Standards				
Information Technology	5/1/2025		2030	25-Dec
Information Technology Standards				
Marketing	9/1/2017		2027	21-Nov
Marketing				
Technology Education				
Technology Education Standards	2/1/2021		2026	21-Nov
Emerging Technology Modules	9/1/2025		2030	
Welding	5/1/2024		2029	21-Nov
Welding				
Possibly Soon---New				
Firefighter				
Retired				
Power Sports	5/1/2016			21-Nov

North Dakota Technology and Engineering Education

Content Standards

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North Dakota Department of Career and Technical Education
Wayde Sick, State Director and Executive Officer
Hughes Educational Center | 806 N Washington ST
Bismarck, North Dakota 58501

Standards Development Process

Standards development is a multi-phase process. Existing and/or industry standards are the basis for the North Dakota Program Standards. A team of expert secondary and postsecondary teachers, business and industry representatives, and the state program supervisor draft the standards document. Once the document is finalized, the State Board for Career and Technical Education approves and adopts the standards.

Course Frameworks are also developed by the writing team. A framework includes a brief overview of the course content, topical units of study, and identifies the standards recommended for inclusion within the course. The frameworks are tailored to prepare young people for the opportunities in North Dakota. School Districts will use the frameworks as a guide for developing curriculum that reflects local needs.

This set of standards was reviewed by North Dakota Technology & Engineering Education teachers.

Adapted from *Standards for Technological and Engineering Literacy*, International Technology and Engineering Educators Association, 2020.

North Dakota State Board for Career and Technical Education
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Jamestown, ND

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North Dakota University System
Bismarck, ND

Vision

A Future-Ready Workforce for North Dakota

Mission

Delivering high-quality Career and Technical Education to empower all students to achieve workforce readiness for lifelong success.

Key Principles of Career and Technical Education

We believe that Career Technical Education:

1. **Draws its curricula, standards, and organizing principles from the workplace.**
   The workplace provides the context, objectives, and organizing constructs for instruction and assessment. The workplace also defines the standards of performance necessary, including those required for academic, technical, and employability skills.

2. **Is a critical and integral component of the total educational system, offering career-oriented benefits for all students.**
   CTE classes offer educational benefits to students pursuing careers requiring specific technical skills as well as providing a strong foundation for those pursuing a traditional four-year (or more) degree.

3. **Is a critical and integral component of the workforce development system, providing the essential foundation for a thriving economy.**
   Preparation of a well-prepared, qualified workforce requires solid academics, good work ethics, and specific technical skills as well as the ability to communicate, work with others, solve problems, and use information. CTE contributes directly to this preparation by providing a curriculum tied to specific workplace requirements.

4. **Maintains high levels of excellence supported through identification of academic and workplace standards, measurement of performance (accountability), and high expectations for participant success.**
   Career Technical Education is committed to continuous improvement, attention to industry certification, and the development of highly qualified teachers.

5. **Is robust and flexible enough to respond to the needs of the multiple educational environments, customers, and levels of specialization.**
   CTE involves a large and complex delivery system that (1) integrates career exploration, (2) provides effective tools for organizing all curricula, (3) facilitates the teaching and use of technology, (4) is integrated into the total learning experience, (5) enhances the learning of academic subjects, (6) teaches broad occupational skills, (7) includes all aspects of the industry, (8) teaches how to balance family and work responsibilities, (9) provides job-specific training, (10) is offered at multiple levels of the educational continuum, and (11) is delivered through a variety of educational environments.

Table of Contents

Standard 1	*NATURE AND CHARACTERISTICS OF TECHNOLOGY AND ENGINEERING*	
Topic 1.1	**Grades PreK - 2**	
	Student Competencies	
	1.1.1	Compare the natural world and human-made world.
	1.1.2	Explain the tools and techniques that people use to help them do things.
	1.1.3	Demonstrate that creating can be done by anyone.
	1.1.4	Discuss the roles of scientists, engineers, technologists, and others who work with technology.
Topic 1.2	**Grades 3 - 5**	
	Student Competencies	
	1.2.1	Compare how things found in nature differ from things that are human-made, noting differences and similarities in how they are produced and used.
	1.2.2	Describe the unique relationship between science and technology, and how the natural world can contribute to the human-made world to foster innovation.
	1.2.3	Differentiate between the roles of scientists, engineers, technologists, and others in creating and maintaining technological systems.
	1.2.4	Design solutions by safely using tools, materials, and skills.
	1.2.5	Explain how solutions to problems are shaped by economic, political, and cultural forces.
Topic 1.3	**Grades 6 - 8**	
	Student Competencies	
	1.3.1	Develop innovative products and systems that solve problems and extend capabilities based on individual or collective needs and wants.
	1.3.2	Compare and contrast the contributions of science, engineering, mathematics, and technology in the development of technological systems.
	1.3.3	Explain how technology and engineering are closely linked to creativity, which can result in both intended and unintended innovations.
	1.3.4	Apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches.
Topic 1.4	**Grades 9 - 12**	
	Student Competencies	
	1.4.1	Explain how the world around them guides technological development and engineering design.
	1.4.2	Assess how similarities and differences among scientific, mathematical, engineering, and technological knowledge and skills contributed to the design of a product or system.
	1.4.3	Analyze the rate of technological development and predict future diffusion and adoption of new technologies.
	1.4.4	Conduct research to inform intentional inventions and innovations that address specific needs and wants.

	1.4.5	Develop a plan that incorporates knowledge from science, mathematics, and other disciplines to design or improve a technological product of system.

Standard 2		***CORE CONCEPTS OF TECHNOLOGY AND ENGINEERING***
Topic 2.1	**Grades PreK - 2**	
	Student Competencies	
	2.1.1	Illustrate how systems have parts or components that work together to accomplish a goal.
	2.1.2	Safely use tools to complete tasks.
	2.1.3	Explain that materials are selected for use because they possess desirable properties and characteristics.
	2.1.4	Develop a plan in order to complete a task.
	2.1.5	Collaborate effectively as a member of a team.
Topic 2.2	**Grades 3 - 5**	
	Student Competencies	
	2.2.1	Describe how a subsystem is a system that operates as part of another, larger system.
	2.2.2	Illustrate how, when parts of a system are missing, it may not work as planned.
	2.2.3	Identify the resources needed to get a technical job done, such as people, materials, capital, tools, machines, knowledge, energy, and time.
	2.2.4	Describe the properties of different materials
	2.2.5	Demonstrate how tools and machines extend human capabilities, such as holding, lifting, carrying, fastening, separating, and computing.
	2.2.6	Describe requirements of designing or making a product or system.
	2.2.7	Create a new product that improves someone's life.
Topic 2.3	**Grades 6 - 8**	
	Student Competencies	
	2.3.1	Differentiate between inputs, processes, outputs, and feedback in technological systems.
	2.3.2	Illustrate how systems thinking involves considering relationships between every part, as well as how the system interacts with the environment in which it is used.
	2.3.3	Create an open-loop system that has no feedback path and requires human intervention.
	2.3.4	Create a closed-loop system that has a feedback path and requires no human intervention.
	2.3.5	Predict outcomes of a future product or system at the beginning of the design process.
	2.3.6	Compare how different technologies involve different sets of processes.
	2.3.7	Defend decisions related to a design problem.

Topic 2.4	Grades 9 - 12	
	Student Competencies	
	2.4.1	Demonstrate the use of conceptual, graphical, virtual, mathematical, and physical modeling to identify conflicting considerations before the entire system is developed and to aid in design decision making.
	2.4.2	Diagnose a flawed system embedded within a larger technological, social, or environmental system.
	2.4.3	Analyze the stability of a technological system and how it is influenced by all the components in the system, especially those in the feedback loop.
	2.4.4	Select resources that involve tradeoffs between competing values, such as availability, cost, desirability, and waste, while solving problems.
	2.4.5	Cite examples of the criteria and constraints of a product or system and how they affect final design.
	2.4.6	Implement quality control as a planned process to ensure that a product, service, or system meets established criteria.
	2.4.7	Use management processes in planning, organizing, and controlling work.

Standard 3		***INTEGRATION OF KNOWLEDGE, TECHNOLOGIES, AND PRACTICES***
Topic 3.1	**Grades PreK - 2**	
	Student Competencies	
	3.1.1	Apply concepts and skills from technology and engineering activities that reinforce concepts and skills across multiple content areas.
	3.1.2	Draw connections between technology and human experiences.
Topic 3.2	**Grades 3 - 5**	
	Student Competencies	
	3.2.1	Demonstrate how simple technologies are often combined to form more complex systems.
	3.2.2	Explain how various relationships can exist between technology and engineering and other content areas.
Topic 3.3	**Grades 6 - 8**	
	Student Competencies	
	3.3.1	Analyze how different technological systems often interact with economic, environmental, and social systems.
	3.3.2	Apply a product, system, or process developed for one setting to another setting.
	3.3.3	Explain how knowledge gained from other content areas affects the development of technological products and systems.
Topic 3.4	**Grades 9 – 12**	
	Student Competencies	
	3.4.1	Analyze how technology transfer occurs when a user applies an existing innovation developed for one function to a different purpose.
	3.4.2	Evaluate how technology enhances opportunities for new products and services through globalization.
	3.4.3	Connect technological progress to the advancement of other areas of knowledge, and vice versa.

Standard 4	*IMPACT OF TECHNOLOGY*	
Topic 4.1	**Grades PreK - 2**	
	Student Competencies	
	4.1.1	Explain ways that technology helps with everyday tasks.
	4.1.2	Illustrate helpful and harmful effects of technology.
	4.1.3	Compare simple technologies to evaluate their impacts.
	4.1.4	Select ways to reduce, reuse, and recycle resources in daily life.
	4.1.5	Design new technologies that could improve their daily lives.
Topic 4.2	**Grades 3 – 5**	
	Student Competencies	
	4.2.1	Describe the helpful and harmful effects of technology.
	4.2.2	Judge technologies to determine the best one to use to complete a given task or meet a need.
	4.2.3	Classify resources used to create technologies as either renewable or non-renewable.
	4.2.4	Explain why responsible use of technology requires sustainable management of resources.
	4.2.5	Predict how certain aspects of their daily lives would be different without given technologies.
Topic 4.3	**Grades 6 – 8**	
	Student Competencies	
	4.3.1	Explain the ways that technology can have both positive and negative effects at the same time.
	4.3.2	Analyze how the creation and use of technologies consumes renewable and non-renewable resources and creates waste.
	4.3.3	Devise strategies for reducing, reusing, and recycling waste caused from the creation and use of technology.
	4.3.4	Analyze examples of technologies that have changed the way people think, interact, and communicate.
	4.3.5	Hypothesize what alternative outcomes (individual, cultural, and/or environmental) might have resulted had a different technological solution been selected.
Topic 4.4	**Grades 9 - 12**	
	Student Competencies	
	4.4.1	Evaluate ways that technology can impact individuals, society, and the environment.
	4.4.2	Critique whether existing and proposed technologies use resources sustainably.
	4.4.3	Assess a technology that minimizes resource use and resulting waste to achieve a goal.
	4.4.4	Develop a solution to a technological problem that has the least negative environmental and social impact.
	4.4.5	Evaluate how technologies alter human health and capabilities.

Standard 5	***INFLUENCE OF SOCIETY ON TECHNOLOGICAL DEVELOPMENT***	
Topic 5.1	**Grades PreK - 2**	
	Student Competencies	
	5.1.1	Explain the needs and wants of individuals and societies.
	5.1.2	Explore how technologies are developed to meet individual and society needs and wants.
	5.1.3	Investigate the use of technologies in the home and community.
Topic 5.2	**Grades 3 - 5**	
	Student Competencies	
	5.2.1	Determine factors that influence changes in a society's technological systems or infrastructure.
	5.2.2	Explain how technologies are developed or adapted when individual or societal needs and wants change.
Topic 5.3	**Grades 6 - 8**	
	Student Competencies	
	5.3.1	Analyze how an invention or innovation was influenced by its historical context.
	5.3.2	Evaluate trade-offs based on various perspectives as part of a decision process that recognizes the need for careful compromises among competing factors.
Topic 5.4	**Grades 9 – 12**	
	Student Competencies	
	5.4.1	Evaluate a technological innovation that arose from a specific society's unique need or want.
	5.4.2	Evaluate a technological innovation that was met with societal resistance, impacting its development.
	5.4.3	Design an appropriate technology for use in a different culture.

Standard 6	*HISTORY OF TECHNOLOGY*	
Topic 6.1	**Grades PreK - 2**	
	Student Competencies	
	6.1.1	Discuss how the way people live and work has changed throughout history because of technology.
Topic 6.2	**Grades 3 - 5**	
	Student Competencies	
	6.2.1	Create representations of the tools people made, how they cultivated food, made clothing, and built shelters to protect themselves.
Topic 6.3	**Grades 6 - 8**	
	Student Competencies	
	6.3.1	Compare various technologies and how they have contributed to human progress.
	6.3.2	Engage in a research and development process to simulate how inventions and innovations have evolved through systematic tests and refinements.
	6.3.3	Verify how specialization of function has been at the heart of many technological improvements.
Topic 6.4	**Grades 9 – 12**	
	Student Competencies	
	6.4.1	Relate how technological development has been evolutionary, often the result of a series of refinements to basic inventions or technological knowledge.
	6.4.2	Verify that the evolution of civilization has been directly affected by, and has in turn affected, the development and use of tools, materials, and processes.
	6.4.3	Evaluate how technology has been a powerful force in reshaping social, cultural, political, and economic landscapes throughout history.
	6.4.4	Analyze how the Industrial Revolution resulted in the development of mass production, sophisticated transportation, and communication systems, advanced construction practices, and improved education and leisure time.
	6.4.5	Investigate the widespread changes that have resulted from the Information Age, which has placed emphasis on the processing and exchange of information.

Standard 7	***DESIGN IN TECHNOLOGY AND ENGINEERING EDUCATION***	
Topic 7.1	**Grades PreK - 2**	
	Student Competencies	
	7.1.1	Apply design concepts, principles, and processes through play and exploration.
	7.1.2	Demonstrate that designs have requirements.
	7.1.3	Explain that design is a response to wants and needs.
	7.1.4	Discuss that all designs have different characteristics that can be described.
	7.1.5	Illustrate that there are different solutions to a design and that none are perfect.
	7.1.6	Differentiate essential skills of the technology and engineering design process.
	7.1.7	Apply skills necessary for making in design.
Topic 7.2	**Grades 3 - 5**	
	Student Competencies	
	7.2.1	Illustrate that there are multiple approaches to design.
	7.2.2	Apply the technology and engineering design process.
	7.2.3	Evaluate designs based on criteria, constraints, and standards.
	7.2.4	Interpret how good design improves the human condition.
	7.2.5	Apply universal principles and elements of design.
	7.2.6	Evaluate the strengths and weaknesses of existing design solutions, including their own solutions.
	7.2.7	Practice successful design skills.
	7.2.8	Apply tools, techniques, and materials in a safe manner as part of the design process.
Topic 7.3	**Grades 6 – 8**	
	Student Competencies	
	7.3.1	Illustrate the benefits and opportunities associated with different approaches to design.
	7.3.2	Apply the technology and engineering design process.
	7.3.3	Refine design solutions to address criteria and constraints.
	7.3.4	Create solutions to problems by identifying and applying human factors in design.
	7.3.5	Assess design quality based upon established principles and elements of design.
	7.3.6	Evaluate the strengths and weaknesses of different design solutions.
	7.3.7	Improve essential skills necessary to successfully design.
Topic 7.4	**Grades 9 – 12**	
	Student Competencies	
	7.4.1	Determine the best approach by evaluating the purpose of the design.
	7.4.2	Document trade-offs in the technology and engineering design process to produce the optimal design.

	7.4.3	Optimize a design by addressing desired qualities within criteria and constraints.
	7.4.4	Apply principles of human-centered design.
	7.4.5	Illustrate principles, elements, and factors of design.
	7.4.6	Implement the best possible solution to a design.
	7.4.7	Apply a broad range of design skills to their design process.
	7.4.8	Apply a broad range of making skills to their design process.

Standard 8	*APPLYING, MAINTAINING, AND ASSESSING TECHNOLOGICAL PRODUCTS AND SYSTEMS*	
Topic 8.1	**Grades PreK - 2**	
	Student Competencies	
	8.1.1	Analyze how things work.
	8.1.2	Identify and use everyday symbols.
	8.1.3	Describe qualities of everyday products.
Topic 8.2	**Grades 3 – 5**	
	Student Competencies	
	8.2.1	Follow directions to complete a technological task.
	8.2.2	Use appropriate symbols, numbers, and words to communicate key ideas about technological products and systems.
	8.2.3	Identify why a product or system is not working properly.
	8.2.4	Examine information to assess the trade-offs of using a product or system.
Topic 8.3	**Grades 6 - 8**	
	Student Competencies	
	8.3.1	Research information from various sources to use and maintain technological products or systems.
	8.3.2	Use tools, materials, and machines to safely diagnose, adjust, and repair systems.
	8.3.3	Use devices to control technological systems.
	8.3.4	Design methods to gather data about technological systems.
	8.3.5	Interpret the accuracy of information collected.
	8.3.6	Use instruments to gather data on the performance of everyday products.
Topic 8.4	**Grades 9 – 12**	
	Student Competencies	
	8.4.1	Use various approaches to communicate processes and procedures for using, maintaining, and assessing technological products and systems.
	8.4.2	Develop a device or system for the marketplace.
	8.4.3	Apply appropriate methods to diagnose, adjust, and repair systems to ensure precise, safe, and proper functionality.
	8.4.4	Synthesize data and analyze trends to make decisions about technological products, systems, or processes.
	8.4.5	Interpret the results of technology assessment to guide policy development.

TECHNOLOGY & ENGINEERING EDUCATION PRACTICES

The technology and engineering practices comprise abilities and disposition that are fundamental to student success. These practices help students engage with the human-designed products, systems and processes we use to satisfy our needs and wants.

TEP-1: Systems Thinking refers to the understanding that technologies contain interconnected components and that these technologies interact with the environments in which they operate and includes the universal systems model.

TEP-2: Creativity is the use of investigation, imagination, innovative thinking and physical skills to accomplish goals.

TEP-3: Making and Doing are at the heart of what make technology & engineering education so different from other fields. Students design, model, build and use technical products and systems.

TEP-4: Critical Thinking involves questioning, logical thinking, reasoning and elaboration in the process of making informed decisions. It also involves analytical thinking; an important component.

TEP-5: Optimism refers to a commitment to finding better solutions to design challenges through experimentation, modeling and adaptation. It reflects a positive view as well as persistence in looking for solutions to technological problems and challenges.

TEP-6: Collaboration refers to having the perspective, knowledge, capabilities and willingness to seek out and include team members when working on design challenges.

TEP-7: Communication in technology and engineering can be either to define problems by gaining an understanding of the wants and needs of the user of technology or as a means of developing and explaining choices made in the design process.

TEP-8: Attention to Ethics is at the core of being a human in society. Attention to ethics means focusing on the impact of technological products, systems and process on others and on the environment. Students should evaluate risks and consider trade-offs in their decision making.

TECHNOLOGY & ENGINEERING EDUCATION CONTEXTS

The technology and engineering contexts are grouped into eight areas that broadly represent the breadth of technological activity. Contexts are vehicles for teaching and applying core disciplinary standards and practices.

TEC-1: Computation, Automation, Artificial Intelligence and Robotics

TEC-2: Material Conversion and Processing

TEC-3: Transportation and Logistics

TEC-4: Energy and Power

TEC-5: Information and Communication

TEC-6: The Built Environment

TEC-7: Medical and Health-Related Technologies

TEC-8: Agricultural and Biological Technologies

Career Ready Practices

1. Lead as a Contributing & Professional Employee

Career-ready individuals understand the role and responsibilities of their position and demonstrate this understanding by regularly contributing to the success of their organization. They are reliable and lead by example through work ethic and professionalism, as defined by the standards set by their workplace. This Career Ready Practice includes understanding and exhibiting the core values of their organization and modeling strong morals, motivation, excellence, and consistency.

2. Communicate Clearly, Effectively, & with Reason

Career-ready individuals are able to communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. This Career Ready Practice includes actively listening to peers and colleagues regardless of level and ensuring that diverse perspectives are heard, considered, and fostered. Regardless of communication method, individuals understand the needs of a specific audience and are able to tailor their message or style to meet these needs. Proficiency in communication helps build strong relationships, facilitates collaboration, and ensures that information is accurately exchanged.

3. Think Critically to Make Sense of Problems & Persevere in Solving Them

Career-ready individuals are able to communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. This Career Ready Practice includes actively listening to peers and colleagues regardless of level and ensuring that diverse perspectives are heard, considered, and fostered. Regardless of communication method, individuals understand the needs of a specific audience and are able to tailor their message or style to meet these needs. Proficiency in communication helps build strong relationships, facilitates collaboration, and ensures that information is accurately exchanged.

4. Collaborate Productively while Using Cultural & Global Competencies

Career-ready individuals are able to work effectively in diverse teams to successfully accomplish a goal in both in-person and virtual environments. This Career Ready Practice includes understanding team dynamics, respecting diverse perspectives, demonstrating empathy, and contributing positively to team outcomes. Effective collaboration leverages the strengths of team members, enhances problem-solving, and leads to innovative solutions by recognizing that each team member has something unique to contribute. Preparing to work in diverse teams ensures readiness for the collaborative nature of modern workplaces and requires recognizing biases and advocating for inclusive practices. Cultivating an inclusive environment not only enhances team dynamics but also drives innovation and reflects positively on organizational culture.

5. Use digital Skills & Technologies to Enhance Productivity & Make Data-informed Decisions

Career-ready individuals are digitally literate—proficient with the digital skills and technology that are regularly used in their evolving workplace. This Career Ready Practice involves using digital tools to enhance productivity, understanding the impact of technology on one's work, and staying updated with technological advancements that may have future impacts for a given industry area. Individuals can use technology and digital tools to analyze and report data, helping to make decisions that are data informed and data driven. Digitally literate individuals are also able to understand digital security and privacy and are able to use social media professionally and responsibly.

6. Remain Resilient in a Changing Workplace & World of Work

Career-ready individuals have the ability to adjust to change and remain resilient in the face of challenges, both within a workplace and throughout their careers. This Career Ready Practice involves maintaining a positive attitude despite challenges and being open to new ideas and feedback. Individuals seek to act in ways that contribute to the betterment of themselves and their teams, families, community, and workplace. Developing adaptability, flexibility, and resilience helps individuals navigate career transitions, embrace new opportunities, and maintain productivity and well-being under pressure. This Career Ready Practice also includes attending to one's own mental well-being and developing an appropriate work-life balance to sustain productivity, reduce stress, and enhance overall quality of life, which directly affects professional performance and satisfaction.

7. Manage Time & Space Effectively

Career-ready individuals are able to effectively manage their time and use organizational skills to prioritize tasks and meet deadlines. This Career Ready Practice includes planning, delegating tasks effectively, and maintaining a well-organized workspace in both physical and virtual environments. Developing these skills leads to increased efficiency, better project outcomes, and a balanced workload.

8. Demonstrate a Creative & Innovative Mindset

Career-ready individuals are able to use innovation and creativity to think outside the box and develop new ideas and solutions. This Career Ready Practice encourages a mindset of continuous improvement and adaptability and fosters a spirit of curiosity, experimentation, and calculated risk-taking. It prepares individuals to improve systems, drive change, create value, and stay competitive in a rapidly evolving workplace.

9. Act as a Good Steward of Organizational & Personal Finances & Resources

Career-ready individuals are financially literate and can demonstrate their ability to make cost effective decisions on behalf of themselves and their workplace. This Career Ready Practice includes managing personal finances, understanding financial documents, and making informed financial decisions. Financial literacy empowers individuals to make sound investments, budget effectively, and contribute to the financial health of their organization.

10. Navigate an Education & Career Path Aligned to Strengths, Work Style, Interests, & Goals

Career-ready individuals are self-aware about their strengths and working style and can understand how to leverage these traits effectively to maximize their careers. They are also aware of their areas for improvement, seeking opportunities for growth and acting on feedback to continuously improve. This Career Ready Practice is essential for setting realistic career goals, pursuing professional development opportunities, reskilling and upskilling to keep skills and knowledge relevant, and achieving personal and professional fulfillment.

11. Consider the Environmental & Social Impacts of Decisions

Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively affect and/or mitigate negative impact on other people, their communities, and the environment. They make decisions with integrity by considering the moral and ethical consequences of their decisions and actively planning for the long-term success of projects, systems,and processes. Developing sustainability and environmental literacy skills prepares individuals to also contribute to a greener future and address global challenges.

12. Apply appropriate academic & technical skills

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be effective and productive employees. They have the technical proficiency to use the language, tools, technologies, and methodologies that are relevant to their specific industry sector. They make connections between abstract concepts and real-world applications, and they make correct determinations about when applying an academic skill is appropriate in a workplace situation. This Career Ready Practice includes staying updated about industry advancements and continuously improving technical skills aligned with the changing needs of their sector.

North Dakota Automated Manufacturing Education

Content Standards

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Bismarck, North Dakota 58501

Standards Development Process

Standards development is a multi-phase process. Existing and/or industry standards are the basis for the North Dakota Program Standards. A team of expert secondary and postsecondary teachers, business and industry representatives, and the state program supervisor draft the standards document. Once the document is finalized, the State Board for Career and Technical Education approves and adopts the standards.

Course Frameworks are also developed by the writing team. A framework includes a brief overview of the course content, topical units of study, and identifies the standards recommended for inclusion within the course. The frameworks are tailored to prepare young people for the opportunities in North Dakota. School Districts will use the frameworks as a guide for developing curriculum that reflects local needs.

This set of standards was reviewed by North Dakota Automated Manufacturing Education teachers, with special thanks to Joseph Ostgarden, Career Impact Academy/Grand Forks; Justin Johnsrud, Bakken Area Skills Center; and Andrew Henjum, Fargo South High

Adapted from National Institute for Metalworking Skills, Inc., Machining Level 1 & Metalforming Level 1 Standards, 2001.

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Vision

A Future-Ready Workforce for North Dakota

Mission

Delivering high-quality Career and Technical Education to empower all students to achieve workforce readiness for lifelong success.

Key Principles of Career and Technical Education

We believe that Career Technical Education:

1. **Draws its curricula, standards, and organizing principles from the workplace.**
   The workplace provides the context, objectives, and organizing constructs for instruction and assessment. The workplace also defines the standards of performance necessary, including those required for academic, technical, and employability skills.

2. **Is a critical and integral component of the total educational system, offering career-oriented benefits for all students.**
   CTE classes offer educational benefits to students pursuing careers requiring specific technical skills as well as providing a strong foundation for those pursuing a traditional four-year (or more) degree.

3. **Is a critical and integral component of the workforce development system, providing the essential foundation for a thriving economy.**
   Preparation of a well-prepared, qualified workforce requires solid academics, good work ethics, and specific technical skills as well as the ability to communicate, work with others, solve problems, and use information. CTE contributes directly to this preparation by providing a curriculum tied to specific workplace requirements.

4. **Maintains high levels of excellence supported through identification of academic and workplace standards, measurement of performance (accountability), and high expectations for participant success.**
   Career Technical Education is committed to continuous improvement, attention to industry certification, and the development of highly qualified teachers.

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   CTE involves a large and complex delivery system that (1) integrates career exploration, (2) provides effective tools for organizing all curricula, (3) facilitates the teaching and use of technology, (4) is integrated into the total learning experience, (5) enhances the learning of academic subjects, (6) teaches broad occupational skills, (7) includes all aspects of the industry, (8) teaches how to balance family and work responsibilities, (9) provides job-specific training, (10) is offered at multiple levels of the educational continuum, and (11) is delivered through a variety of educational environments.

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Standard 1	*JOB PLANNING AND MANAGEMENT*	
Topic 1.1	**Job Process Planning--Develop a process plan for a part requiring milling, drilling, turning, or grinding.**	
	Student Competencies	
	1.1.1	Formulate a set of strategies to manufacture the part, given a print detailing a part requiring milling, drilling, turning, and grinding; verbal instructions; and appropriate references.
	1.1.2	Fill out an operation sheet detailing the process plan and required speeds and feeds.
	1.1.3	Identify all major components and functions of the machine tools (all major hand tools, measuring tools, tools and fixtures, work materials, etc.) and provide the rationale for the speeds and feeds selected.
Topic 1.2	**Read Job Process Plan--Read and understand a process plan for a formed metal part.**	
	Student Competencies	
	1.2.1	Given a process plan, make the appropriate interpretations required of a machine operator.
	1.2.2	Make a verbal presentation explaining each of the process plan requirements and steps, while highlighting the items of primary importance to the machine operator.
Topic 1.3	**Identify and Respond to Warning Signals During Production Operations**	
	Student Competencies	
	1.3.1	Monitor the process, both visually and audibly as required by the process plan and respond to problems as they arise in production.
	1.3.2	Understand the awareness of monitoring responsibilities not specifically stated on the process plan but required of all production jobs.

Standard 2	*JOB EXECUTION*	
Topic 2.1	**Manual Operations: Benchwork--Exemplify the ability and knowledge of activities and devices used at a common workbench.**	
	Student Competencies	
	2.1.1	Explain how to use mildsteel, handheld drill, and hand tap holes.
	2.1.2	Identify use of hand drills, hand taps, tap wrench, files, scrapers, and coated abrasives to deburr parts.
	2.1.3	Describe the use of arbor presses to perform press fits.
	2.1.4	Demonstrate the use of bench vises and hand tools appropriately.
Topic 2.2	**Manual Operations: Layout--Exemplify the ability, knowledge, and activities surrounding a common layout.**	
	Student Competencies	
	2.2.1	Identify the correct application of layout ink to a surface.
	2.2.2	Demonstrate the ability to have lines struck once.
	2.2.3	Demonstrate the importance of intersections that are clean and clear.
	2.2.4	Identify the center of intersections in order to correctly place punch marks.
	2.2.5	Demonstrate and lay out the location of hole centers, radii, and surfaces matching the specifications and within an accuracy of +/- .015, given a surface plate, surface gage, layout height gage, combination set, scriber, layout ink, prick punch, ball peen hammer, process plan, and part print.
Topic 2.3	**Turning Operations: Between Centers Turning--Exemplify the ability, knowledge, and activities concerning turning between centers.**	
	Student Competencies	
	2.3.1	Demonstrate the setup and carry-out between centers turning operations for straight turning.
	2.3.2	Demonstrate correct turning between centers finishing skills to at least 125 Ra microinches.
	2.3.3	Understand and exemplify product with no sharp edges.
	2.3.4	Produce a part matching the process plan and the part print specifications (to at least three diameters within +/-.002, one UNC external thread, one UNF external thread, and require an end-for-end swap) using appropriate trade techniques and speeds and feeds, given raw material, process plan, part print, hand, precision, and cutting tools, as well as access to an appropriate turning machine and its accessories.
Topic 2.4	**Turning Operations: Chucking--Exemplify the ability, knowledge, and activities concerning turning and chucking.**	
	Student Competencies	
	2.4.1	Demonstrate the setup and carry-out of chucking operations for turning.
	2.4.2	Demonstrate correct chucking finishing skills to at least 250 Ra microinches.
	2.4.3	Understand and exemplify product with no sharp edges.

	2.4.4	Given raw material, process plan, part print, hand, precision, and cutting tools, as well as access to an appropriate turning machine and its accessories, produce a part matching the process plan and the print specifications (to at least three diameters within +/-.005", two bores within +/-.005", one UNC external thread, and at least two chuckings or other workholding setup) using appropriate trade techniques and speeds and feeds.
Topic 2.5	**Milling: Square Up a Block--Set up and perform squaring up the six surfaces of a block.**	
	Student Competencies	
	2.5.1	Understand and replicate a part that requires squaring up from its raw state matching the process plan and the part print specifications to within +/-.002 and .002 over 4.5" squareness.
Topic 2.6	**Vertical Milling--Exemplify the ability, knowledge, and activities concerning a vertical milling machine.**	
	Student Competencies	
	2.6.1	Define the setup and operation of vertical milling machines.
	2.6.2	Perform routine milling activities, including the location of hole centers within +/- .005.
	2.6.3	Demonstrate correct finishing skills to at least 125 Ra microinches.
	2.6.4	Understand and exemplify product with no sharp edges.
Topic 2.7	**Surface Grinding--Exemplify the ability, knowledge, and activities concerning a surface grinder.**	
	Student Competencies	
	2.7.1	Demonstrate the application of ring test grinding wheels, perform visual safety inspection, and mount and dress a grinding wheel in preparation for surface grinding.
	2.7.2	Given a selection of wheels in various conditions, determine which are suitable for use, mount one on the spindle, and dress it in preparations for surface grinding.
	2.7.3	Demonstrate the setup and operation of manual surface grinders with an 8" and smaller diameter wheel.
	2.7.4	Perform routine surface grinding, location of surfaces, and squaring of surfaces.
	2.7.5	Define and perform wheel dressing.
	2.7.6	Demonstrate correct surface grinding skills to at least 32 Ra microinches or better.
	2.7.7	Understand and exemplify product with no sharp edges.
Topic 2.8	**Drill Press--Exemplify the ability, knowledge, and activities concerning a drill press.**	
	Student Competencies	
	2.8.1	Demonstrate the correct setup and operation of a drill press.
	2.8.2	Perform routine drill press operations.
	2.8.3	Demonstrate correct finishing skills using a drill press to at least 250 Ra microinches.
	2.8.4	Understand and exemplify product with no sharp edges.
	2.8.5	Identify and demonstrate the importance of countersinking the mouths of holes.
Topic 2.9	**CNC Milling--Exemplify the ability, knowledge, and activities concerning a CNC mill or machining center.**	
	Student Competencies	
	2.9.1	Understand the setup, programming, and operation of a CNC mill or machining center and the manufacturing of a part within tolerance.
	2.9.2	Demonstrate the ability to work from a process sheet and part print.

	2.9.3	Understand the x, y, z Cartesian coordinate system.
	2.9.4	Create a correctly formatted tool setup sheet.
	2.9.5	Understand fundamental machine processing, feeds and speed, and select simple parts.
	2.9.6	Demonstrate the ability to match the requirements of the part print to at least 63 Ra microinches using a machining center.
Topic 2.10	**CNC Turning--Exemplify the ability, knowledge, and activities concerning a CNC lathe or turning machine.**	
	Student Competencies	
	2.10.1	Understand the setup, programming, and operation of a CNC lathe or turning center and the manufacturing of a part within tolerance.
	2.10.2	Demonstrate the ability to work from a process sheet.
	2.10.3	Understand the x, y, z Cartesian coordinate system.
	2.10.4	Create a correctly formatted tool setup sheet.
	2.10.5	Understand fundamental machine processing, feeds and speed, and select simple parts.
	2.10.6	Demonstrate the ability to match the requirements of the part print using a turning center.

Standard 3	*QUALITY CONTROL AND INSPECTION*	
Topic 3.1	**Part Inspection--Develop an inspection plan and inspect simple parts using precision tools and techniques, while preparing reports on the compliance of the parts.**	
	Student Competencies	
	3.1.1	Identify and select the required measuring instruments and conduct the required inspection procedure(s).
	3.1.2	Complete required written inspection report and make a decision to accept or reject component parts.
	3.1.3	Provide brief verbal explanation of inspection procedures, results, and decisions.
Topic 3.2	**Process Control—Understand the steps and meaning of a plan, data, charts, graphs, and warning conditions given when producing a product.**	
	Student Competencies	
	3.2.1	Demonstrate how to follow a sampling plan.
	3.2.2	Given the necessary job process sheets for a part, verbal instructions, and the necessary charts and inspection tools, inspect parts according to the sampling plan, collecting the data required for the process control chart.
	3.2.3	Working with the supplied control and warning limits, place the data, produce new data as needed, graph the data, and take the “Stop or Go” actions as indicated by the results of producing the process control chart.
	3.2.4	Provide brief verbal explanation regarding the decisions taken in controlling the process.

Standard 4	*PROCESS ADJUSTMENT AND IMPROVEMENT*	
Topic 4.1	**Process Adjustment: Single Part Production--Analyze the performance of a single-part production process.**	
	Student Competencies	
	4.1.1	Demonstrate formulation of process adjustments or improvements where appropriate.
	4.1.2	Understand how to notify supervision of the proposed adjustment and/or improvement where appropriate.
	4.1.3	Demonstrate implementation of the strategies for process adjustment and/or improvement where authorized.
	4.1.4	Explain the corrective actions and the reasoning used to perform the diagnosis.
Topic 4.2	**Participation in Process Improvement--Analyze the performance of a production process, within a process team.**	
	Student Competencies	
	4.2.1	Demonstrate formulation of process adjustments or improvements where appropriate.
	4.2.2	Understand how to notify supervision of the proposed adjustment and/or improvement where appropriate.
	4.2.3	Demonstrate implementation of the strategies for process adjustment and/or improvement where authorized.
	4.2.4	Carry out the cause and effort analysis by participating in the development of a fishbone diagram with the team.
	4.2.5	Explain the fishbone diagram, the corrective actions, and the reasoning connecting the fishbone root cause analysis to the remedial actions taken.

Standard 5	*GENERAL MAINTENANCE*	
Topic 5.1	**General Housekeeping and Maintenance--Keep the duty station clean and safe for work.**	
	Student Competencies	
	5.1.1	Maintain the cleanliness of the general work area.
	5.1.2	Keep the tools, workbenches, and manual equipment clean, maintained, and safe for work.
	5.1.3	Clean, maintain, and respond appropriately to safety hazards on all benchwork tools and conventional and CNC machine tools.
Topic 5.2	**Preventive Maintenance, Machine Tools--Inspect and assess the general condition of an assigned machine tool.**	
	Student Competencies	
	5.2.1	Understand the importance on making routine adjustments as necessary to assigned machine tool.
	5.2.2	Understand and report problems to supervision which are beyond the scope of authority.
	5.2.3	Demonstrate awareness to carry out daily, weekly, and/ or monthly routine upkeep chores cited on checklists for a given machine tool.

Topic 5.3	**Tooling Maintenance—Understand methods used to inspect and assess the condition of tooling, refurbish tooling where appropriate, and refer tooling for repair or regrind where appropriate.**	
	Student Competencies	
	5.3.1	Understand and diagnose the tooling, given samples of turning, milling, and drilling tooling (both insert as well as conventional) in various conditions.
	5.3.2	Demonstrate the correct steps to put the tooling back in service.
	5.3.3	Demonstrate the offhand regrinding of a turning tool and the correct rotation and replacement of inserts in an insert style milling cutter body between the diameter of .125" and 1.000".
	5.3.4	Demonstrate the ability to recognize when a cutter should be referred to a tool and cutter grinder.
Topic 5.4	**Adjust Lubrication System, Coolants, Fill and Refill the Lube System--Fill and refill lubrication and coolant reservoirs as necessary with appropriate lubricants and fluids.**	
	Student Competencies	
	5.4.1	Fill the lubrication reservoirs as required by the machine and tooling specifications.
	5.4.2	Adjust flow rates for the delivery of lubes and coolants.
	5.4.3	Understand the importance of mixing lubricants to specific ratios.
	5.4.4	Perform associated housekeeping and spill-containment responsibilities.

Standard 6	***INDUSTRIAL SAFETY AND ENVIRONMENTAL PROTECTION***	
Topic 6.1	**Machine Operations and Material Handling—Understand the importance of OSHA and safety requirements.**	
	Student Competencies	
	6.1.1	Carry out assigned responsibilities while adhering to safe practices in accordance with OSHA requirements and guidelines.
	6.1.2	Demonstrate safe workplace practices in material handling, machine operations, handling of tooling, handling and application of coolants, cutting fluids and lubricants.
	6.1.3	Explain the actions taken, both orally and in written form, which directly or indirectly bear upon safe practice in the execution of duties.

Topic 6.2	**Hazardous Materials Handling and Storage--Handle and store hazardous materials as assigned while adhering to safe practices in accordance with OSHA and EPA requirements and guidelines.**	
	Student Competencies	
	6.2.1	Demonstrate safe workplace practices in the identification, handling, and storage of hazardous materials in compliance with OSHA and EPA requirements and guidelines.
	6.2.2	Understand how to document safety activities as required by OSHA and EPA.
Topic 6.3	**Identify and Demonstrate Usage of Machine Safety Equipment and Procedures.**	
	Student Competencies	
	6.3.1	Identify and explain the usage of machine guarding and safety equipment such as light curtains, etc.
	6.3.2	Know and demonstrate lock-out and tag-out procedures.

Standard 7	***ENGINEERING DRAWINGS AND MEASUREMENT***	
Topic 7.1	**Interpret blueprints and symbols detailed therein.**	
	Student Competencies	
	7.1.1	Interpret orthographic blueprints.
	7.1.2	Interpret GDT orthographic prints.
	7.1.3	Identify the common symbols, the use of datum references and tolerances used in GD&T.
Topic 7.2	**Interprets measuring instruments accurately.**	
	Student Competencies	
	7.2.1	Recognize and applies basic measuring instruments such as rules, protractors, and basic transfer tools such as simple inside and outside calipers.
	7.2.2	Recognize and applies precision measuring instruments such as micrometers, vernier, dial, and electronic calipers, dial indicators, precision transfer tools such as telescoping gages and adjustable parallels.
	7.2.3	Recognize and applies appropriately precision tools and instruments for surface plate work such as precision angle plates and tool blocks, precision transfer gages, and precision height gages.
	7.2.4	Demonstrate ability to convert all measurements to metrics.

Standard 8	*METALWORKING THEORY*	
Topic 8.1	**Understand and demonstrate ability in theories, tooling, fluids, and properties of metalwork.**	
	Student Competencies	
	8.1.1	Understand and can explain the ideas of heat, shock, friction, zone of distortion, cutting interface, machinability, cutter presentation, cutter geometry, and chip-holding capacity as they relate to machining applications.
	8.1.2	Recognize a wide variety of cutting tools, tool holding devices, and work holding devices, understanding the appropriate application of these cutters and devices.
	8.1.3	Recognize common materials and their principal properties relevant to machining tasks.
	8.1.4	Recognize differences between ferrous and non-ferrous, magnetic, and ductile materials, understanding the changes which heat-treat impart to materials.
	8.1.5	Recognize the common classes of machine tools, understands the function of the major subsystems of the machine tools, selects and applies a given machine tool appropriately.
	8.1.6	Recognize, select, and apply appropriate coolants and coolant delivery systems.

Career Ready Practices

1. Lead as a Contributing & Professional Employee

Career-ready individuals understand the role and responsibilities of their position and demonstrate this understanding by regularly contributing to the success of their organization. They are reliable and lead by example through work ethic and professionalism, as defined by the standards set by their workplace. This Career Ready Practice includes understanding and exhibiting the core values of their organization and modeling strong morals, motivation, excellence, and consistency.

2. Communicate Clearly, Effectively, & with Reason

Career-ready individuals are able to communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. This Career Ready Practice includes actively listening to peers and colleagues regardless of level and ensuring that diverse perspectives are heard, considered, and fostered. Regardless of communication method, individuals understand the needs of a specific audience and are able to tailor their message or style to meet these needs. Proficiency in communication helps build strong relationships, facilitates collaboration, and ensures that information is accurately exchanged.

3. Think Critically to Make Sense of Problems & Persevere in Solving Them

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4. Collaborate Productively while Using Cultural & Global Competencies

Career-ready individuals are able to work effectively in diverse teams to successfully accomplish a goal in both in-person and virtual environments. This Career Ready Practice includes understanding team dynamics, respecting diverse perspectives, demonstrating empathy, and contributing positively to team outcomes. Effective collaboration leverages the strengths of team members, enhances problem-solving, and leads to innovative solutions by recognizing that each team member has something unique to contribute. Preparing to work in diverse teams ensures readiness for the collaborative nature of modern workplaces and requires recognizing biases and advocating for inclusive practices. Cultivating an inclusive environment not only enhances team dynamics but also drives innovation and reflects positively on organizational culture.

5. Use digital Skills & Technologies to Enhance Productivity & Make Data-informed Decisions

Career-ready individuals are digitally literate—proficient with the digital skills and technology that are regularly used in their evolving workplace. This Career Ready Practice involves using digital tools to enhance productivity, understanding the impact of technology on one's work, and staying updated with technological advancements that may have future impacts for a given industry area. Individuals can use technology and digital tools to analyze and report data, helping to make decisions that are data informed and data driven. Digitally literate individuals are also able to understand digital security and privacy and are able to use social media professionally and responsibly.

6. Remain Resilient in a Changing Workplace & World of Work

Career-ready individuals have the ability to adjust to change and remain resilient in the face of challenges, both within a workplace and throughout their careers. This Career Ready Practice involves maintaining a positive attitude despite challenges and being open to new ideas and feedback. Individuals seek to act in ways that contribute to the betterment of themselves and their teams, families, community, and workplace. Developing adaptability, flexibility, and resilience helps individuals navigate career transitions, embrace new opportunities, and maintain productivity and well-being under pressure. This Career Ready Practice also includes attending to one's own mental well-being and developing an appropriate work-life balance to sustain productivity, reduce stress, and enhance overall quality of life, which directly affects professional performance and satisfaction.

7. Manage Time & Space Effectively

Career-ready individuals are able to effectively manage their time and use organizational skills to prioritize tasks and meet deadlines. This Career Ready Practice includes planning, delegating tasks effectively, and maintaining a well-organized workspace in both physical and virtual environments. Developing these skills leads to increased efficiency, better project outcomes, and a balanced workload.

8. Demonstrate a Creative & Innovative Mindset

Career-ready individuals are able to use innovation and creativity to think outside the box and develop new ideas and solutions. This Career Ready Practice encourages a mindset of continuous improvement and adaptability and fosters a spirit of curiosity, experimentation, and calculated risk-taking. It prepares individuals to improve systems, drive change, create value, and stay competitive in a rapidly evolving workplace.

9. Act as a Good Steward of Organizational & Personal Finances & Resources

Career-ready individuals are financially literate and can demonstrate their ability to make cost effective decisions on behalf of themselves and their workplace. This Career Ready Practice includes managing personal finances, understanding financial documents, and making informed financial decisions. Financial literacy empowers individuals to make sound investments, budget effectively, and contribute to the financial health of their organization.

10. Navigate an Education & Career Path Aligned to Strengths, Work Style, Interests, & Goals

Career-ready individuals are self-aware about their strengths and working style and can understand how to leverage these traits effectively to maximize their careers. They are also aware of their areas for improvement, seeking opportunities for growth and acting on feedback to continuously improve. This Career Ready Practice is essential for setting realistic career goals, pursuing professional development opportunities, reskilling and upskilling to keep skills and knowledge relevant, and achieving personal and professional fulfillment.

11. Consider the Environmental & Social Impacts of Decisions

Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively affect and/or mitigate negative impact on other people, their communities, and the environment. They make decisions with integrity by considering the moral and ethical consequences of their decisions and actively planning for the long-term success of projects, systems,and processes. Developing sustainability and environmental literacy skills prepares individuals to also contribute to a greener future and address global challenges.

12. Apply appropriate academic & technical skills

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be effective and productive employees. They have the technical proficiency to use the language, tools, technologies, and methodologies that are relevant to their specific industry sector. They make connections between abstract concepts and real-world applications, and they make correct determinations about when applying an academic skill is appropriate in a workplace situation. This Career Ready Practice includes staying updated about industry advancements and continuously improving technical skills aligned with the changing needs of their sector.

North Dakota Building Trades Education

Content Standards

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Bismarck, North Dakota 58501

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Adapted from the NCCER Core Curriculum 6th Edition, 2021, and the NCCER Construction Technology Curriculum Course Planning Tools, http://www.nccer.org/.

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Standard 1	*INTRODUCTION TO BUILDING TRADES*	
Topic 1.1	**Describe the construction industry.**	
	Student Competencies	
	1.1.1	Define construction and summarize the current and future outlook for jobs.
	1.1.2	Identify some of construction's more prominent contributions in history.
Topic 1.2	**Explain the benefits of a construction career.**	
	Student Competencies	
	1.2.1	Recognize and describe how construction careers make a difference in the community.
	1.2.2	Describe the financial and professional benefits of pursuing a construction career.
Topic 1.3	**Describe the typical career path for craft professionals.**	
	Student Competencies	
	1.3.1	Describe industry sectors and the progression path for construction careers.
	1.3.2	Identify different construction careers and the types of skills they require.
Topic 1.4	**Identify ways to pursue a career in the construction industry.**	
	Student Competencies	
	1.4.1	Explain the benefits of career and technical education programs.
	1.4.2	Describe the advantages of craft training programs and their relationship with apprenticeships.
	1.4.3	Summarize the path to a construction career through community colleges and universities.

Standard 2	*BASIC SAFETY*	
Topic 2.1	**Explain the benefits of safety, the cost of workplace incidents, and ways to reduce related hazards.**	
	Student Competencies	
	2.1.1	Describe the types of workplace incidents along with physical and monetary impacts.
	2.1.2	Summarize the causes and consequences of common incidents.
	2.1.3	Explain how to recognize, evaluate, and control workplace hazards.
Topic 2.2	**Describe common fall hazards and methods to prevent them.**	
	Student Competencies	
	2.2.1	Summarize the most common types of construction fall hazards.
	2.2.2	Describe components of effective fall arrest systems and how they prevent or halt falls.
	2.2.3	Explain how to use ladders and stairs safely.
	2.2.4	Identify key steps to ensuring scaffolds are assembled and used safely.
Topic 2.3	**Recognize and avoid struck-by and caught-in-between hazards.**	
	Student Competencies	
	2.3.1	Describe struck-by hazards and how to avoid them.
	2.3.2	Describe common caught-in/caught-between hazards and steps that can prevent them.
Topic 2.4	**Identify common electrical hazards and how to avoid them.**	
	Student Competencies	
	2.4.1	Summarize basic job-site electrical safety guidelines.
	2.4.2	Explain the importance of disabling equipment as well as basic lockout/tagout procedures.
Topic 2.5	**Associate personal protective equipment (PPE) with the hazards they reduce or eliminate.**	
	Student Competencies	
	2.5.1	Explain how PPE is used to protect craftworkers from different types of injuries.
	2.5.2	Explain how respirators protect craft workers from respiratory dangers.
Topic 2.6	**Describe safety practices used with other common job-site hazards.**	
	Student Competencies	
	2.6.1	List other types of hazards craftworkers may encounter.
	2.6.2	Describe common environmental hazards and how craft workers should respond to them.
	2.6.3	Summarize hazards associated with hot work.
	2.6.4	Identify fire hazards and describe basic fire fighting procedures.
	2.6.5	Name different types of confined spaces and how to avoid related hazards.

Standard 3	*INTRODUCTION TO CONSTRUCTION MATH*	
Topic 3.1	**Identify whole numbers and solve basic arithmetic problems with them.**	
	Student Competencies	
	3.1.1	List the key qualities of whole numbers and summarize their place values.
	3.1.2	Add and subtract whole numbers.
	3.1.3	Multiply and divide whole numbers.
Topic 3.2	**Name fraction types and calculate with fractions.**	
	Student Competencies	
	3.2.1	Define equivalent fractions and calculate their lowest common denominators.
	3.2.2	Define improper fractions and convert them into mixed numbers.
	3.2.3	Add and subtract fractions.
	3.2.4	Multiply and divide fractions.
Topic 3.3	**Identify decimal numbers and calculate with them.**	
	Student Competencies	
	3.3.1	List the key qualities of decimal numbers and summarize their place values.
	3.3.2	Add, subtract, multiply, and divide decimal numbers.
	3.3.3	Convert between decimals, fractions, and percentages.
Topic 3.4	**Name the common length-measuring tools and use them to measure lengths accurately.**	
	Student Competencies	
	3.4.1	Describe English and metric rulers, using them correctly to measure lengths.
	3.4.2	Describe English and metric measuring tapes, using them correctly to measure lengths.
Topic 3.5	**Name common length, weight, volume, and temperature units in both the inch-pound and metric systems and convert them into other comparable units.**	
	Student Competencies	
	3.5.1	List and convert between common inch-pound and metric length units.
	3.5.2	List and convert between common inch-pound and metric weight units.
	3.5.3	List and convert between common inch-pound and metric volume units.
	3.5.4	List and convert between common inch-pound and metric temperature units.
Topic 3.6	**Classify angles and geometric shapes, as well as calculating their areas or volumes.**	
	Student Competencies	
	3.6.1	List each angle type.
	3.6.2	Name common geometric shapes and summarize their qualities.
	3.6.3	Calculate the area of two-dimensional shapes.
	3.6.4	Calculate the volume of three-dimensional shapes.

Standard 4	*INTRODUCTION TO HAND TOOLS*	
Topic 4.1	**Name common hand tools and state how to use them.**	
	Student Competencies	
	4.1.1	Identify various hammers and demolition tools and explain how to use them.
	4.1.2	Describe chisels and punches and how they are used.
	4.1.3	Match screwdrivers to the appropriate hardware.
	4.1.4	Differentiate between non-adjustable, adjustable, and socket wrenches.
	4.1.5	Describe various types of pliers and explain how they are used.
Topic 4.2	**Identify common measurement and layout tools and describe how to use them.**	
	Student Competencies	
	4.2.1	Explain how to use a variety of measuring tools.
	4.2.2	Define various types of levels and layout tools and indicate how they are used.
Topic 4.3	**Identify and describe other hand tools common to shops and jobsites.**	
	Student Competencies	
	4.3.1	Differentiate between various handsaws and their designated applications.
	4.3.2	Identify common clamp designs.
	4.3.3	Explain how different files and utility knives are used with various materials.
	4.3.4	Describe shovels and picks and the tasks for which each one is best suited.

Standard 5	*INTRODUCTION TO POWER TOOLS*	
Topic 5.1	**Identify and explain how to use various types of power drills and impact wrenches.**	
	Student Competencies	
	5.1.1	Summarize basic power tool safety guidelines.
	5.1.2	Identify common power drills and bits and explain how to use them.
	5.1.3	Describe the difference between hammer drills and impact drivers.
	5.1.4	Identify pneumatic drills and impact wrenches and explain how to use them.
Topic 5.2	**Identify and explain how to use various types of power saws.**	
	Student Competencies	
	5.2.1	Explain how to use a circular saw and identify different types of blades.
	5.2.2	Differentiate between jigsaws and reciprocating saws and explain how to use them.
	5.2.3	Explain how to use a portable band saw.
	5.2.4	Describe the difference between miter saws and cutoff saws.
	5.2.5	Explain how to use table saws and describe the types of jobs for which they are best suited.
Topic 5.3	**Describe the types of jobs best suited to grinders and oscillating multi-tools.**	
	Student Competencies	
	5.3.1	Explain how to use various types of grinders.
	5.3.2	Identify grinder accessories and the jobs for which they are used.
	5.3.3	List the type of jobs that can be performed using an oscillating multi-tool.
Topic 5.4	**Identify and explain how to use miscellaneous power tools.**	
	Student Competencies	
	5.4.1	Discuss the hazards of using power nailers.
	5.4.2	Describe jobs that can be performed with hydraulic jacks.

Standard 6	***INTRODUCTION TO CONSTRUCTION DRAWINGS***	
Topic 6.1	**Describe components and features used in construction drawings and identify how the drawings are different.**	
	Student Competencies	
	6.1.1	Summarize the purpose of the six basic construction drawing components.
	6.1.2	List and explain the significance of various drawing elements, such as lines of construction, symbols, and grid lines.
	6.1.3	Explain how dimensions relate to various drawing scales.
	6.1.4	Demonstrate how to use engineer's and architect's scales.
	6.1.5	Identify the six types of construction drawings.

Standard 7	***INTRODUCTION TO BASIC RIGGING***	
Topic 7.1	**Identify and describe various types of rigging slings, hardware, and equipment.**	
	Student Competencies	
	7.1.1	Identify and describe various types of slings.
	7.1.2	Describe how to inspect various types of slings.
	7.1.3	Identify and describe how to inspect common rigging hardware.
	7.1.4	Identify and describe various types of hoists.
	7.1.5	Identify and describe basic rigging hitches and the related Emergency Stop hand signal.

Standard 8	*BASIC COMMUNICATION SKILLS*	
Topic 8.1	**Describe the communication, listening, and speaking processes and their relationship to job performance.**	
	Student Competencies	
	8.1.1	Describe the communication process and the importance of listening and speaking skills.
	8.1.2	Describe the listening process and identify good listening skills.
	8.1.3	Describe the speaking process and identify good speaking skills.
Topic 8.2	**Describe good reading and writing skills and their relationship to job performance.**	
	Student Competencies	
	8.2.1	Describe the importance of good reading and writing skills.
	8.2.2	Describe job-related reading requirements and identify good reading skills.
	8.2.3	Describe job-related writing requirements and identify good writing skills.

Standard 9	*BASIC EMPLOYABILITY SKILLS*	
Topic 9.1	**Describe the opportunities in the construction businesses and how to enter the construction workforce.**	
	Student Competencies	
	9.1.1	Describe the construction business and the opportunities offered by the trades.
	9.1.2	Explain how workers can enter the construction workforce.
Topic 9.2	**Explain the importance of critical thinking and how to solve problems.**	
	Student Competencies	
	9.2.1	Describe critical thinking and barriers to solving problems.
	9.2.2	Describe how to solve problems using critical thinking.
	9.2.3	Describe problems related to planning and scheduling.
Topic 9.3	**Explain the importance of social skills and identify ways good social skills are applied in the construction trade.**	
	Student Competencies	
	9.3.1	Identify good personal and social skills.
	9.3.2	Explain how to resolve conflicts with co-workers and supervisors.
	9.3.3	Explain how to give and receive constructive criticism.
	9.3.4	Identify and describe various social issues of concern in the workplace.
	9.3.5	Describe how to work in a team environment and how to be an effective leader.

Standard 10	*INTRODUCTION TO MATERIAL HANDLING*	
Topic 10.1	**Identify the basic concepts of material handling and common safety precautions.**	
	Student Competencies	
	10.1.1	Describe the basic concepts of material handling and manual lifting.
	10.1.2	Identify common material handling safety precautions.
	10.1.3	Identify and describe how to tie knots commonly used in material handling.
Topic 10.2	**Identify various types of material handling equipment and describe how they are used.**	
	Student Competencies	
	10.2.1	Identify non-motorized material handling equipment and describe how they are used.
	10.2.2	Identify motorized material handling equipment and describe how they are used.

Standard 11	*INTRODUCTION TO MASONRY*	
Topic 11.1	**Describe and explain the historic and current methods and procedures used in the masonry trade.**	
	Student Competencies	
	11.1.1	Discuss the history of masonry.
	11.1.2	Describe modern masonry materials and methods.
	11.1.3	Explain career ladders and advancement possibilities in masonry work.
	11.1.4	Describe the skills, attitudes, and abilities needed to work as a mason.
	11.1.5	State the safety precautions that must be practiced at a work site, including the following: Safety practices, Fall-protection procedures, Forklift-safety operations.
	11.1.6	Perform the following basic bricklaying procedures: Mixing of mortar, Laying a mortar bed, Laying bricks.
	11.1.7	Put on eye protection, respiratory protection, and a safety harness.
	11.1.8	Use the correct procedures for fueling and starting a gasoline-powered tool.

Standard 12	*FLOOR SYSTEMS*	
Topic 12.1	**Identify, lay out, and construct residential flooring systems to include materials and general platform framing methods.**	
	Student Competencies	
	12.1.1	Identify the different types of framing systems.
	12.1.2	Read and interpret drawings and specifications to determine floor system requirements.
	12.1.3	Identify floor and sill framing and support members.
	12.1.4	Name the methods used to fasten sills to the foundation.
	12.1.5	Given specific floor load and span data, select the proper girder/beam size from a list of available girders/beams.
	12.1.6	List and recognize different types of floor joists.
	12.1.7	Given specific floor load and span data, select the proper joist size from a list of available joists.
	12.1.8	List and recognize different types of bridging.
	12.1.9	List and recognize different types of flooring materials.
	12.1.10	Explain the purposes of subflooring and underlayment.
	12.1.11	Match selected fasteners used in floor framing to their correct uses.
	12.1.12	Estimate the amount of material needed to frame a floor assembly.
	12.1.13	Demonstrate the ability to: Lay out and construct a floor assembly, Install bridging, Install joists for a cantilever floor, Install a subfloor using butt-joint plywood/OSB panels, Install a single floor system using tongue-and-groove plywood/OSB panels.

Standard 13	*WALL & CEILING FRAMING*	
Topic 13.1	**Identify, describe, and assemble correct wall and ceiling framing systems.**	
	Student Competencies	
	13.1.1	Identify the components of a wall and ceiling layout.
	13.1.2	Describe the procedure for laying out a wood frame wall, including plates, corner posts, door and window openings, partition Ts, bracing, and firestops.
	13.1.3	Describe the correct procedure for assembling and erecting an exterior wall.
	13.1.4	Identify the common materials and methods used for installing sheathing on walls.
	13.1.5	Lay out, assemble, erect, and brace exterior walls for a frame building.
	13.1.6	Describe wall framing techniques used in masonry construction.
	13.1.7	Explain the use of metal studs in wall framing.
	13.1.8	Describe the correct procedure for laying out ceiling joists.
	13.1.9	Cut and install ceiling joists on a wood frame building.
	13.1.10	Estimate the materials required to frame walls and ceilings.
Topic 13.2	**Describe and identify thermal and moisture installation and protection.**	
	Student Competencies	
	13.2.1	Describe the safety and health hazards when working with insulation.
	13.2.2	Describe the various types of insulation and their characteristics.
	13.2.3	Describe the various installation methods for insulation.
	13.2.4	Identify the requirements for moisture control, waterproofing, and ventilation, and describe the related installation methods.
	13.2.5	Describe the estimating procedure for thermal and moisture projects.

Standard 14	*INTRODUCTION TO ROOFING*	
Topic 14.1	**Describe, identify, and complete basic roofing installation.**	
	Student Competencies	
	14.1.1	Understand the terms associated with roof framing.
	14.1.2	Identify the roof framing members used in gable and hip roofs.
	14.1.3	Identify the methods used to calculate the length of a rafter.
	14.1.4	Identify the various types of trusses used in roof framing.
	14.1.5	Use a rafter framing square, speed square, and calculator in laying out a roof.
	14.1.6	Identify various types of sheathing used in roof construction.
	14.1.7	Frame a gable roof with vent openings.
	14.1.8	Frame a roof opening.
	14.1.9	Erect a gable roof using trusses.
	14.1.10	Estimate the materials used in framing and sheathing a roof.
Topic 14.2	**Explain and install basic roofing applications.**	
	Student Competencies	
	14.2.1	Identify the materials and methods used in roofing.
	14.2.2	Explain the safety requirements for roof jobs.
	14.2.3	Install fiberglass shingles on gable and hip roofs.
	14.2.4	Close up a valley using fiberglass shingles.
	14.2.5	Explain how to make various roof projections watertight when using fiberglass shingles.
	14.2.6	Complete the proper cuts and install the main and hip ridge caps using fiberglass shingles.
	14.2.7	Lay out, cut, and install a cricket or saddle.
	14.2.8	Demonstrate the techniques for installing other selected types of roofing materials.

Standard 15	*EXTERIOR & INTERIOR FINISHING*	
Topic 15.1	**Describe and install various types and applications of exterior finishing.**	
	Student Competencies	
	15.1.1	Describe the purpose of wall insulation and flashing.
	15.1.2	Install selected common cornices.
	15.1.3	Demonstrate lap and panel siding estimating methods.
	15.1.4	Describe the types and applications of common wood siding.
	15.1.5	Describe fiber-cement siding and its uses.
	15.1.6	Describe the types and styles of vinyl and metal siding.
	15.1.7	Describe the types and applications of stucco and masonry veneer finishes.
	15.1.8	Describe the types and applications of special exterior finish systems.
	15.1.9	Install three types of siding commonly used in your area.
Topic 15.2	**Describe and install various types and applications of interior finishing.**	
	Student Competencies	
	15.2.1	Identify components of a drywall assembly.
	15.2.2	Describe the installation of drywall.
	15.2.3	Contrast rated assemblies to nonrated assemblies.
	15.2.4	Identify how to calculate a quantity takeoff for proper drywall installation.
	15.2.5	Identify differences between the six levels of finish established by industry standards.
	15.2.6	Identify the different materials for proper drywall finishing.
	15.2.7	Identify the proper tools used in drywall finishing.
	15.2.8	Describe proper drywall finishing procedures.
	15.2.9	Explain how to estimate the proper amount of drywall finishing materials.
	15.2.10	Describe the safety hazards related to working with window, door, floor, and ceiling trim.
	15.2.11	Identify the different types of standard moldings and materials.
	15.2.12	Explain how to install different types of molding.
	15.2.13	Explain how to estimate window, door, floor, and ceiling trim.
Topic 15.3	**Identify, interpret plans for, and build basic stair units.**	
	Student Competencies	
	15.3.1	Identify the various types of stairs.
	15.3.2	Identify the various parts of stairs.
	15.3.3	Identify the materials used in the construction of stairs.
	15.3.4	Interpret construction drawings of stairs.
	15.3.5	Calculate the total rise, number and size of risers, and number and size of treads required for a stairway.
	15.3.6	Lay out and cut stringers, risers, and treads.

	15.3.7	Build a small stair unit with a temporary handrail.
Topic 15.4	**Explain and identify basic cabinet installation.**	
	Student Competencies	
	15.4.1	Describe the safety hazards when installing cabinets.
	15.4.2	Identify the different types of cabinets.
	15.4.3	Identify cabinet components and hardware and describe their purpose.
	15.4.4	Explain how to lay out and install a basic set of cabinets.

Standard 16	***INTRODUCTION TO RESIDENTIAL ELECTRICAL SYSTEMS***	
Topic 16.1	**Develop and recognize correct electrical safety procedures and techniques.**	
	Student Competencies	
	16.1.1	Recognize safe working practices in the construction environment.
	16.1.2	Explain the purpose of OSHA and how it promotes safety on the job.
	16.1.3	Identify electrical hazards and how to avoid or minimize them in the workplace.
	16.1.4	Explain electrical safety issues concerning lockout/tagout procedures, confined space entry, respiratory protection, and fall protection systems.
	16.1.5	Develop a task plan and a hazard assessment for a given task and select the appropriate PPE and work methods to safely perform the task.
Topic 16.2	**Calculate and explain residential electrical services.**	
	Student Competencies	
	16.2.1	Explain the role of the *National Electrical Code*® in residential wiring and describe how to determine electric service requirements for dwellings.
	16.2.2	Explain the grounding requirements of a residential electric service.
	16.2.3	Calculate and select service-entrance equipment.
	16.2.4	Select the proper wiring methods for various types of residences.
	16.2.5	Compute branch circuit loads and explain their installation requirements.
	16.2.6	Explain the types and purposes of equipment grounding conductors.
	16.2.7	Explain the purpose of ground fault circuit interrupters and tell where they must be installed.
	16.2.8	Size outlet boxes and select the proper type for different wiring methods.
	16.2.9	Describe rules for installing electric space heating and HVAC equipment.
	16.2.10	Describe the installation rules for electrical systems around swimming pools, spas, and hot tubs.
	16.2.11	Explain how wiring devices are selected and installed.
	16.2.12	Describe the installation and control of lighting fixtures.

Standard 17	*INTRODUCTION TO RESIDENTIAL HVAC SYSTEMS*	
Topic 17.1	**Explain and Identify types of residential heating, ventilation, and air conditioning systems.**	
	Student Competencies	
	17.1.1	Explain the basic principles of heating, ventilation, and air conditioning.
	17.1.2	Identify career opportunities available for people in the HVAC trade.
	17.1.3	Explain the purpose and objectives of an apprenticeship training program.
	17.1.4	Describe how certified apprentice training can start in high school.
	17.1.5	Describe what the *Clean Air Act* means to the HVAC trade.
	17.1.6	Describe types of regulatory codes encountered in the HVAC trade.
	17.1.7	Identify the types of schedules/drawings used in the HVAC trade.

Standard 18	*INTRODUCTION TO RESIDENTIAL PLUMBING SYSTEMS*	
Topic 18.1	**Identify and explain drain, waste, and vent (DWV) systems.**	
	Student Competencies	
	18.1.1	Explain how waste moves from a fixture through the drain system to the environment.
	18.1.2	Identify the major components of a drainage system and describe their functions.
	18.1.3	Identify the different types of traps and their components, explain the importance of traps, and identify the ways that traps can lose their seals.
	18.1.4	Identify the various types of drain, waste, and vent (DWV) fittings and describe their applications.
	18.1.5	Identify significant code and health issues, violations, and consequences related to DWV systems.
Topic 18.2	**Explain and identify plastic pipe and fittings.**	
	Student Competencies	
	18.2.1	Identify types of materials and schedules of plastic piping.
	18.2.2	Identify proper and improper applications of plastic piping.
	18.2.3	Identify types of fittings and valves used with plastic piping.

	18.2.4	Identify and determine the kinds of hangers and supports needed for plastic piping.
	18.2.5	Identify the various techniques used in hanging and supporting plastic piping.
	18.2.6	Properly measure, cut, and join plastic piping.
	18.2.7	Explain proper procedures for the handling, storage, and protection of plastic pipes.
Topic 18.3	**Identify and install copper pipe and fittings.**	
	Student Competencies	
	18.3.1	Identify the types of materials and schedules used with copper piping.
	18.3.2	Identify the material properties, storage, and handling requirements of copper piping.
	18.3.3	Identify the types of fittings and valves used with copper piping.
	18.3.4	Identify the techniques used in hanging and supporting copper piping.
	18.3.5	Properly measure, ream, cut, and join copper piping.
	18.3.6	Identify the hazards and safety precautions associated with copper piping.

Career Ready Practices

1. Lead as a Contributing & Professional Employee

Career-ready individuals understand the role and responsibilities of their position and demonstrate this understanding by regularly contributing to the success of their organization. They are reliable and lead by example through work ethic and professionalism, as defined by the standards set by their workplace. This Career Ready Practice includes understanding and exhibiting the core values of their organization and modeling strong morals, motivation, excellence, and consistency.

2. Communicate Clearly, Effectively, & with Reason

Career-ready individuals are able to communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. This Career Ready Practice includes actively listening to peers and colleagues regardless of level and ensuring that diverse perspectives are heard, considered, and fostered. Regardless of communication method, individuals understand the needs of a specific audience and are able to tailor their message or style to meet these needs. Proficiency in communication helps build strong relationships, facilitates collaboration, and ensures that information is accurately exchanged.

3. Think Critically to Make Sense of Problems & Persevere in Solving Them

Career-ready individuals are able to communicate thoughts, ideas, and action plans with clarity, whether using written, verbal, and/or visual methods. This Career Ready Practice includes actively listening to peers and colleagues regardless of level and ensuring that diverse perspectives are heard, considered, and fostered. Regardless of communication method, individuals understand the needs of a specific audience and are able to tailor their message or style to meet these needs. Proficiency in communication helps build strong relationships, facilitates collaboration, and ensures that information is accurately exchanged.

4. Collaborate Productively while Using Cultural & Global Competencies

Career-ready individuals are able to work effectively in diverse teams to successfully accomplish a goal in both in-person and virtual environments. This Career Ready Practice includes understanding team dynamics, respecting diverse perspectives, demonstrating empathy, and contributing positively to team outcomes. Effective collaboration leverages the strengths of team members, enhances problem-solving, and leads to innovative solutions by recognizing that each team member has something unique to contribute. Preparing to work in diverse teams ensures readiness for the collaborative nature of modern workplaces and requires recognizing biases and advocating for inclusive practices. Cultivating an inclusive environment not only enhances team dynamics but also drives innovation and reflects positively on organizational culture.

5. Use digital Skills & Technologies to Enhance Productivity & Make Data-informed Decisions

Career-ready individuals are digitally literate—proficient with the digital skills and technology that are regularly used in their evolving workplace. This Career Ready Practice involves using digital tools to enhance productivity, understanding the impact of technology on one's work, and staying updated with technological advancements that may have future impacts for a given industry area. Individuals can use technology and digital tools to analyze and report data, helping to make decisions that are data informed and data driven. Digitally literate individuals are also able to understand digital security and privacy and are able to use social media professionally and responsibly.

6. Remain Resilient in a Changing Workplace & World of Work

Career-ready individuals have the ability to adjust to change and remain resilient in the face of challenges, both within a workplace and throughout their careers. This Career Ready Practice involves maintaining a positive attitude despite challenges and being open to new ideas and feedback. Individuals seek to act in ways that contribute to the betterment of themselves and their teams, families, community, and workplace. Developing adaptability, flexibility, and resilience helps individuals navigate career transitions, embrace new opportunities, and maintain productivity and well-being under pressure. This Career Ready Practice also includes attending to one's own mental well-being and developing an appropriate work-life balance to sustain productivity, reduce stress, and enhance overall quality of life, which directly affects professional performance and satisfaction.

7. Manage Time & Space Effectively

Career-ready individuals are able to effectively manage their time and use organizational skills to prioritize tasks and meet deadlines. This Career Ready Practice includes planning, delegating tasks effectively, and maintaining a well-organized workspace in both physical and virtual environments. Developing these skills leads to increased efficiency, better project outcomes, and a balanced workload.

8. Demonstrate a Creative & Innovative Mindset

Career-ready individuals are able to use innovation and creativity to think outside the box and develop new ideas and solutions. This Career Ready Practice encourages a mindset of continuous improvement and adaptability and fosters a spirit of curiosity, experimentation, and calculated risk-taking. It prepares individuals to improve systems, drive change, create value, and stay competitive in a rapidly evolving workplace.

9. Act as a Good Steward of Organizational & Personal Finances & Resources

Career-ready individuals are financially literate and can demonstrate their ability to make cost effective decisions on behalf of themselves and their workplace. This Career Ready Practice includes managing personal finances, understanding financial documents, and making informed financial decisions. Financial literacy empowers individuals to make sound investments, budget effectively, and contribute to the financial health of their organization.

10. Navigate an Education & Career Path Aligned to Strengths, Work Style, Interests, & Goals

Career-ready individuals are self-aware about their strengths and working style and can understand how to leverage these traits effectively to maximize their careers. They are also aware of their areas for improvement, seeking opportunities for growth and acting on feedback to continuously improve. This Career Ready Practice is essential for setting realistic career goals, pursuing professional development opportunities, reskilling and upskilling to keep skills and knowledge relevant, and achieving personal and professional fulfillment.

11. Consider the Environmental & Social Impacts of Decisions

Career-ready individuals understand the interrelated nature of their actions and regularly make decisions that positively affect and/or mitigate negative impact on other people, their communities, and the environment. They make decisions with integrity by considering the moral and ethical consequences of their decisions and actively planning for the long-term success of projects, systems,and processes. Developing sustainability and environmental literacy skills prepares individuals to also contribute to a greener future and address global challenges.

12. Apply appropriate academic & technical skills

Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be effective and productive employees. They have the technical proficiency to use the language, tools, technologies, and methodologies that are relevant to their specific industry sector. They make connections between abstract concepts and real-world applications, and they make correct determinations about when applying an academic skill is appropriate in a workplace situation. This Career Ready Practice includes staying updated about industry advancements and continuously improving technical skills aligned with the changing needs of their sector.

Agenda Item 2)h)

Department of Career and Technical Education Staff Salary Increase Recommendation

Below is the Director's Recommendation for Staff Salary Increases.

As part of the annual performance evaluation process, salary adjustments are recommended based on employee performance ratings and contributions to the agency.

The salary increase structure approved for FY2027:

- **2.50%** increase for employees with evaluation scores **up to 2.49**.
- **2.80%–3.00%** increase for employees with evaluation scores **from 2.50 to 3.49**.
- **3.25%** increase for employees with evaluation scores **of 3.50 and higher**.

It was decided to report the increases in ranges, to protect the privacy of the staff. Only 15 staff were eligible for merit increases. The ineligible staff include those that applied for and were approved for the Voluntary Separation Incentive Program and new staff that are on probation. We also cannot count the current vacant positions.

The overall average salary increase is 3.0%, reflecting the agency's commitment to recognizing employee performance while maintaining fiscal responsibility and compliance with OMB salary increase guidelines.

2026 Classified State Employee Salary Increases

Guidelines for Classified Employee Salary Increases – July 1, 2026

The following guidelines are provided in accordance with legislative intent:

- Compensation adjustments for 2026 are to average 3% each year for eligible employees.
- Increases for eligible state employees are to be based on documented performance and are not to be the same percentage increase for each employee. Recommended performance-based increase guidelines are as follows:

Legislative General Performance (LGP) increase guidelines, effective July 1, 2026 (paid August 2026)			
Performance Level	Developing	Achieves	Excels
Definition	Additional growth needed; inconsistent in achieving goals, competencies and expectations; additional coaching, instruction needed.	Job well done, performs in accordance with expectations achieved performance goals and competencies.	Consistently delivers high impact outcomes; exceeds performance expectations and competencies routinely; produces outstanding results all the time.
Increase %	0-2%	2-4%	3-5%

Agencies using a different rating scale should determine similar guidelines.

- Employees may not be granted an increase that results in a salary above the maximum of their respective salary range.
- In addition to performance, each employee's relative pay level should be considered when determining increase amounts.
- An employee whose overall documented performance level does not meet standards is not eligible for a salary increase. An employee with a "Developing" performance level may be granted a guideline increase if their documented performance confirms strong growth in newly assigned responsibilities.
- Increases for employees working less than a full-time schedule should be prorated accordingly.
- Probationary employees are not entitled to the general increase but may be given all or a portion of the increase in July (paid August) or upon completion of probation at the discretion of the appointing authority.

Agenda Item 2)i)

Approval of Revised State Director's Job Description

During the State Director's Evaluation process, Chair Meehl and I reviewed the current State Director's Job Description and have the following edit recommendations:

Page 2, 4)a)

Current language - Ensure that verification and reimbursement process for individuals and schools reflect Board policy

Revised language - Ensure that verification and funding distribution process for individuals and schools reflect Board policy

We are recommending replacing the word reimbursement with funding distribution, to reflect the new funding policy, in which we no longer provide funding based on program cost.

Page 2, 4)e)

Current language - Review and present recommendations to Board concerning new program applications

Revised language - Review and approve new program applications

We are recommending replacing present recommendations to Board concerning with approve, to reflect the authority the Board has provided the State Director to approve programs, based on approved Board policy.

I recommend approval of these revisions.

NORTH DAKOTA DEPARTMENT OF CAREER AND TECHNICAL EDUCATION

JOB DESCRIPTION

POSITION: State Director/Executive Officer

SUMMARY OF WORK: Provides innovative leadership and management of the Department of Career and Technical Education including the administration, planning and budgeting for the agency.

The state director is responsible to the State Board for Career and Technical Education. Supports and implements board policy, state statutes, and federal statutes in the establishment and continuation of quality career and technical education programming.

This position coordinates all state board activities prepares agenda and related information for board meetings; coordinates budget preparation and presentation; serves as liaison with the state legislature and federal congress; maintains liaison with state and federal agencies, private organizations, secondary schools, area centers, and postsecondary institutions; and oversees agency personnel.

Performs other duties directed by the state board. Travel is required.

DUTIES AND TASKS:

Position's Purpose:
Work encompasses all aspects of administering a state agency including but not limited to: Executive Officer for State Board for Career and Technical Education, interpret and implement board policy and state and federal law, planning and coordination of agency strategic plan, supervision of agency staff, fiscal management and budgeting of state and federal funds, oversight of career and technical education programs and advocating statewide and nationally.

1. Executive Officer for State Board for Career and Technical Education
    a) Administer Board, State, and Federal Policy. Recommend updates to Board Policy.
    b) Work with Chairman and the Board to prepare meeting agendas
    c) Research and assemble all relevant materials and reports for distribution to the Board
    d) Represent the Board on committees and official activities
    e) Responsible for hiring and overseeing the supervision and evaluation of all staff
    f) Prepare biennium and fiscal year agency budgets for Board approval - state and federal - agency operations and grants
    g) Update Board on progress toward established goals in an established calendar of reports
    h) Provide Board education on a consistent and established schedule
2. Interpret and Implement Board Policy, State and Federal Law
    a) Oversee completion of Consolidated Annual Report (CAR) - accountability and performance report
    b) Oversee development of Perkins 5-year state plan (upon reauthorization of federal law)
    c) Use data available from all sources on which to make decisions based on student outcomes
3. Planning and Coordination
    a) Lead change by seeking out the latest/best practices in CTE
    b) Conduct long and short-range planning for all aspects of the agency aligned to ND's PK12 strategic vision
    c) Respond to rapidly changing and emerging technologies
    d) Gather input and provide guidance through quarterly statewide meetings with CTE administrators
    e) Partner with other agencies and the private sector on common goals
    f) Plan for the systematic updating of program area standards, ensuring alignment with local, national and industry standards
    g) Assess, maintain, and promote a system of professional development for staff, CTE instructors, and administrators
    h) Work with postsecondary institutions to plan and coordinate CTE initiatives
    i) Be an active member on appointed and statutory boards
4. Fiscal Management
    a) Ensure that verification and funding distribution process for individuals and schools reflect Board policy
    b) Recommend district and area center funding levels based on funding available for Board approval

c) Ensure the overall reimbursement claim process reflects Board policy
d) Establish fiscal reporting timelines and budget preparation for state and federal funds
e) Review and approve new program applications
f) Monitor state and federal funds
g) Meet and follow all state and federal audit requirements
h) Ensure procurement procedures are followed
i) Implement procedures to administer competitive grants

5. Advocate for Career and Technical Education

a) Assist in the establishment and maintenance of quality CTE programming
b) Participate/present at appropriate state and national meetings, conferences and workshops
c) Engage CTE stakeholders throughout the year
d) Collaborate with Governor's office, legislature, K12 and higher education partners and business and industry to advocate for CTE

MINIMUM QUALIFICATIONS:

- Bachelor's degree
- Executive experience

PREFERRED QUALIFICATIONS:

- Master's degree
- Three years of teaching in an accredited secondary or postsecondary program preferably in the field of career and technical education
- Educational administration experience

TO: ND CTE Board Members
FROM: Sonia Meehl, Board Chairman
DATE: June 11, 2026
RE: Director Sick Summative Evaluation

The pages that follow are related to Director Sick's Annual Summative Evaluation:

Summative Evaluation Scores and Comments - Compilation of board member and director ratings and comments.

2025-26 Director Evaluation Data Outcomes – This is a summary of our Outcome Goals, Director Guardrails, and Progress Measures for both. In the column "Met or 2/3 Met" a "Y" highlighted in green indicates a goal or guardrail that was met; a "N" highlighted in red indicates a goal or guardrail that was not met. During our 2026 retreat, we agreed that we would weight goals heavier than guardrails, so that weighting factor has been added. Director Sick has presented this data to us throughout the year and will summarize it during our meeting. The weighted data summary score is 72.2%.

2025-26 Job Description Evaluation and Overall Rating – All nine board members rated Director Sick in each of the five sections of the job description. Numerical scores were assigned to ratings as follows: ***Developing=1, Achieves=2, Excels=3.*** These ratings align with those used in CTE Department staff performance evaluations. Director Sick scored 101 out of a possible 135 points on the job description evaluation for a score of 74.81%. Director Sick also self-evaluated; his self-evaluation was not included in the calculations.

The board has agreed to weight the Data Outcomes as 60% and the Job Description as 40% of the Combined Performance Rating. Applying these weights to the two scores results in a weighted score of 73.3%.

The board agreed to Overall Performance Level Criteria ratings of Developing=50% or less; Achieves=50.1%-85.0%; and Excels=85% or higher. The overall score of 73.3 results in an overall rating of Achieves.

Director Sick and I reviewed and discussed the comments and overall evaluation together on Thursday, May 28. We noted areas of consensus and areas where board member and director self-evaluations were not aligned. Director Sick will reach out to board members if he has questions about their ratings or comments. Neither Director Sick nor any board member assigned a rating of "Developing" in any category. Of note, five board members rated Director Sick "Excels" in the area of Advocate for CTE.

Thank you to Lorie Ruff for her technical assistance in creating and implementing this evaluation tool.

DIRECTOR DATA OUTCOMES EVALUATION- 2026

BOARD OUTCOME GOALS and DIRECTOR GOAL PROGRESS MEASURES	2026 TARGET	2026 ACTUAL	MET or 2/3 MET
Goal 1-The percentage of students identified as concentrators (grades 10-12) in Career and Technical Education as measured by the Consolidated Annual Report, will increase from 28.5% in January 2024 (2022-2023 school year) to 40% in January 2028 (2026-2027) school year)	33%	38%	Y
1.1- The percentage of students in rural schools identified as a concentrator will increase from 40% in 2023 to 50% in 2028 as measured by the Consolidated Annual Report.	29%	28%	
1.2- The percentage of minority students identified as a concentrator will increase from 14% in 2023 to 24% in 2028 as measured by the Consolidated Annual Report.	18%	14.50%	
1.3- The percentage of special population students identified as a concentrator will increase from 25% in 2023 to 35% in 2028 as measured by the Consolidated Annual Report.	19%	21.40%	
Goal 2 The percentage of students who graduate Workforce Ready will increase from 88% in the 2022-2023 school year to 93% in the 2027-2028 school year as measured by the North Dakota Choice Ready report.	90%	95.00%	Y
2.1 The percentage of students completing Career Ready Practices will increase from 24% in September 2023 to 29% in September 2028 as measured by the North Dakota Choice Ready Report.	35%	48.91%	
2.2 The percentage of concentrators completing a work-based learning experience will increase from 35% in September 2023 to 57% in September 2028 as measured by the North Dakota Choice Ready Report.	45%	62.90%	
2.3 The percentage of students achieving a technical assessment/industry credential will increase from 26% in September 2023 to 31% in September 2028 as measured by the North Dakota Choice Ready Report.	35%	29.10%	
Goal 3-The percentage of high school students that enroll in a CTE course will increase from 75.5% in 2024 to 87% in 2029 as measured by the Consolidated Annual Report.	78%	77%	N
3.1- The percentage of high school students whose school of residence offers less than three CTE programs that enroll in a CTE Center course will increase from 21% in 2025 to 26% in 2030 as measured by the CTE Center Membership Report.	N/A	N/A	
3.2- The percentage of high school students whose school of residence is less than 20 miles from CTE Center site that enrolls in a CTE Center course will increase from 19% in 2025 to 24% in 2030 as measured by the CTE Center Membership Report.	N/A	N/A	
3.3- The percentage high school students whose school of residence is more than 20 miles from a CTE Center site that enroll in a CTE Center Course will increase from 31% in 2025 to 36% in 2030 as measured by the CTE Center Membership Report.	N/A	N/A	

BOARD GUARDRAILS FOR THE DIRECTOR and DIRECTOR GUARDRAIL PROGRESS MEASURES

Guardrail 1-The Director will not allow inequitable access to quality programs within the State of North Dakota to go unreported to the board.

Guardrail Progress Measure 1 The State Board of Career and Technical Education will receive an equitable access to quality program report utilizing the Opportunity Gap Analysis from zero in May 2024 to two in May 2026.

Baseline	2026 TARGET	2026 ACTUAL	MET Y or N
0	1	1	Y

Guardrail 2-The Director will not allow the Department to operate without systems to ensure high-quality instructors.

Guardrail Progress Measure 2.1-The percent of qualified CTE educators will grow from 86% in May 2024 to 91% in May 2027.

Baseline	2025 TARGET (prior year data)	2025 ACTUAL (prior year data)	MET Y or N
86.90%	87%	84.60%	N

Guardrail Progress Measure 2.2-The number of CTE Educators that attend professional development that aligns with NDCTE's vision and goals will increase from 1192 in 2024 to1300 in 2027

Baseline	2025 TARGET (prior year data)	2025 ACTUAL (prior year data)	MET Y or N
1192	1200	1362	Y

3.4- The percentage of high school students that enroll in a course at a CTE Center will increase from 21% in 2025 to 26% in 2030 as measured by the CTE Center Membership Report.	N/A	N/A	
3.5- The percentage of high school students that enroll in a CTE course at their school of residence will increase from 65% in 2025 to 70% in 2030 as measured by the Consolidated Annual Report.	N/A	N/A	

Data Summary Score Calculation	Targets Met	Weighting Factor	Total Score
Goals Met or 2/3 Met	2	4	8
Guardrail Progress Measures Met	5	1	5
Total Possible Score (Weighted)	18		13
Data Summary Score	Goes to Summative Evaluation==>		72.2%

DATA EVALUATION NOTES:

Goals are met if EITHER the Goal OR 2/3 of the sub-goals are met.

Guardrails are either MET or NOT MET.

Total possible score for Goal achievement is twice the total possible score for Guardrail achievement.

Guardrail 3-The Director will not allow the Department to operate without systems in place to encourage public/private partnerships.

Guard 3.1- The number of individuals that are trained as WBL Coordinators will increase from 41 in May 2024 to 98 in May 2027.

Baseline	2026 TARGET	2026 ACTUAL	MET Y or N
41	85	123	Y

Guardrail 3.2- The number of individuals employed as WBL Coordinators will increase from 13 in May 2024 to 35 in May 2027.

Baseline	2026 TARGET	2026 ACTUAL	MET Y or N
13	20	20	Y

Guardrail 3.3 The number of public/private partnerships, generated by the Department will increase from 907 in May 2024 to 950 in May 2027.

Baseline	2025 TARGET (prior year data)	2025 ACTUAL (prior year data)	MET Y or N
907	910	1045	Y

ND CTE Director Summative Evaluation															
	6/22/2026														
Developing=1 Achieves=2 Excels=3	Director's Self-Rating (Not Included in Calculation)	Bachmeier	Bertagnolli	Engstrom	Forness	Johnson	McHugh	Meehl	Nelson	Rohr		Total Points awarded by Board	Total Board points possible	Board Score by percent	Performance Level by Board
Section 1: Executive Officer for State Board	2	2	3	2	2	3	2	2	2	2		20	27	74.07%	Achieves
Section 2: Interpet and Implement Board Policy, State and Federal Law	2	2	3	2	3	2	2	2	2	2		20	27	74.07%	Achieves
Section 3: Planning and Coordination	2	2	3	2	2	2	2	2	2	2		19	27	70.37%	Achieves
Section 4: Fiscal Management	2	2	3	2	2	2	2	2	2	2		19	27	70.37%	Achieves
Section 5: Advocate for CTE	2	2	3	3	3	3	2	2	3	2		23	27	85.19%	Excels
Total performance by Individual	10	10	15	11	12	12	10	10	11	10		Total Board Points Awarded	Total Board points possible	Final Board Score by percent	Overall Performance Level Assigned by Board
Total points possible by Individual	15	15	15	15	15	15	15	15	15	15		101	135	74.81%	Achieves
Individual Score by Percent	66.67%	66.67%	100.00%	73.33%	80.00%	80.00%	66.67%	66.67%	73.33%	66.67%		Performance Level Criteria			
Performance Level by Individual	Achieves	Achieves	Excels	Achieves	Achieves	Achieves	Achieves	Achieves	Achieves	Achieves		Developing=50% or less; Achieves=50.1-85.0%; Excels>85.0%			
Combined Performance Rating	Data Summary Score (60%)	72.2%	Job Description Summary Score (40%)	74.8%	Weighted Combined Score	73.3%	Final Performance Level Assigned	Achieves							
Reviewed and approved by the State Board; acknowledged by Board Chair and Director.															
			Board Chair												
			Director												

Question 1 - Executes State Director/Executive Officer duties for State Board for CTE

Strong Performance	Areas of Growth	Rating
Levi Bachmeier		
Works with Chairperson and Board to prepare meeting agendas. Researches and assembles all relevant materials and reports for distribution to the Board.	Prepares biennium and fiscal year agency budgets prioritizing the Board's outcome goals for Board approval - state and federal - agency operations and grants.	**Achieves**
Patrick Bertagnolli		
Administers Board, State and Federal Policy. Recommends updates to Board Policy. Represents the Board on committees and official activities.	Updates the Board utilizing progress monitoring reports progress toward established goals aligned to the adopted Board monitoring calendar.	**Excels**
Appreciate the information gathered/available at board meetings. Great representation with various committees and official activities.	Understanding that some goals are still in development.	
Lyndsi Engstrom		
Administers Board, State and Federal Policy. Recommends updates to Board Policy. Represents the Board on committees and official activities.		**Achieves**
	Director Sick has made clear progress in strengthening monitoring reports, with improved organization and alignment to established goals and guardrails. To further increase effectiveness, reports could evolve beyond status updates to more clearly highlight trends, implications, and recommended actions. Enhancing the connection between data and decision points will better equip the Board to fulfill our governance role and make informed, timely decisions aligned with the monitoring calendar as a natural progression in our collaborative work.	

Strong Performance	Areas of Growth	Rating
Morgan Forness		
Works with Chairperson and Board to prepare meeting agendas. Researches and assembles all relevant materials and reports for distribution to the Board.	Prepares biennium and fiscal year agency budgets prioritizing the Board's outcome goals for Board approval - state and federal - agency operations and grants.	**Achieves**
Lisa Johnson		
Represents the Board on committees and official activities. Responsible for hiring and overseeing the supervision and evaluation of all staff.	Administers Board, State and Federal Policy. Recommends updates to Board Policy. Provides the Board with educational opportunities and workshops consistent with the Board's role.	**Excels**
Strong in most--these two seem fairly important from my perspective.	I'm not certain these are a top priority, just areas we haven't talked about much. The Director seems fairly involved in the other categories on the above list.	
Mike McHugh		
Responsible for hiring and overseeing the supervision and evaluation of all staff. Prepares biennium and fiscal year agency budgets prioritizing the Board's outcome goals for Board approval - state and federal - agency operations and grants.		**Achieves**

Strong Performance	Areas of Growth	Rating
Sonia Meehl		
Works with Chairperson and Board to prepare meeting agendas. Responsible for hiring and overseeing the supervision and evaluation of all staff.	Researches and assembles all relevant materials and reports for distribution to the Board. Updates the Board utilizing progress monitoring reports progress toward established goals aligned to the adopted Board monitoring calendar.	**Achieves**
Our meeting agenda planning process has come a long way and feels more efficient than a year ago. Seems to be a lot of staff turnover. I appreciate willingness NOT to hire when applicants are thought not to meet our needs. Hiring wrong can lead to more challenges than delayed hiring of a better applicant. I appreciated learning that the director was responsive to the needs of the ag ed department in restructuring an open position to better meet their needs.	I find the content and format of the Director's monthly report, responses to questions, and monitoring reports to be showing improvement. Continued efforts for clarity and conciseness in both written and verbal presentation will help streamline preparation time for board members and overall meeting time. Consideration should be given to whether the data is presented in the most understandable way, not just continuing to present in the same way if there is a way to improve, recognizing the challenge that "most understandable" may not be the same for all!	
Eric Nelson		
Prepares biennium and fiscal yr agency budgets prioritizing Board outcome goals for Board approval agency operations and grants. Updates the Board utilizing progress monitoring reports progress toward goals aligned to the adopted monitoring calendar.	Provides the Board with educational opportunities and workshops consistent with the Board's role.	**Achieves**
Jason Rohr		
Prepares biennium and fiscal yr agency budgets prioritizing Board outcome goals for Board approval agency operations and grants. Updates the Board utilizing progress monitoring reports progress toward goals aligned to the adopted monitoring calendar.	Provides the Board with educational opportunities and workshops consistent with the Board's role.	**Achieves**

Strong Performance	Areas of Growth	Rating
Wayde Sick		
Administers Board, State and Federal Policy. Recommends updates to Board Policy. Represents the Board on committees and official activities.	Updates the Board utilizing progress monitoring reports progress toward established goals aligned to the adopted Board monitoring calendar. Provides the Board with educational opportunities and workshops consistent with the Board's role.	**Achieves**
I believe we have reviewed and updated all Board policies within the last fiscal year.	Monitoring reports continues to be a work in progress. I feel I need to do a better job seeking out education opportunities for the Board, moving into the next fiscal year.	

Question 2 - Interpret and Implement Board Policy, State and Federal Law

Strong Performance	Areas of Growth	Rating
Levi Bachmeier		
Oversee completion and analysis of the Consolidated Annual Report (CAR) for accountability and improved performance report. Oversees the development and implementation compliance of Perkins 5-year state plan (upon reauthorization of federal law).	Uses data available from all sources on which to make decisions based to support the Board's outcome goals.	**Achieves**
Patrick Bertagnolli		
Oversee completion and analysis of the Consolidated Annual Report (CAR) for accountability and improved performance report. Submitted on time and accurately utilizing available data.	Uses data available from all sources on which to make decisions based to support the Board's outcome goals. Understand that it can be a barrier to find accurate data sources but seeing progress.	**Excels**
Lyndsi Engstrom		
Oversee completion and analysis of the Consolidated Annual Report (CAR) for accountability and improved performance report. Oversees the development and implementation compliance of Perkins 5-year state plan (upon reauthorization of federal law). Oversight of the Consolidated Annual Report (CAR) appears to be a job description indicator where Director Sick has effectively empowered the Assistant Director. It also appears that compliance with Perkins is a strength.	Oversees the development and implementation compliance of Perkins 5-year state plan (upon reauthorization of federal law). Uses data available from all sources on which to make decisions based to support the Board's outcome goals. Key data sources for each Board goal and Director guardrail have been identified and aligned creating a strong foundation for data-informed decision-making. To further advance this work, synthesizing data across sources to uncover patterns, connections, and root causes related to outputs/outcomes may strengthen the ability to draw meaningful conclusions, prioritize responsive actions, and ensure decisions are grounded in a comprehensive understanding of impact. I continue to wonder about strategies to leverage Perkins as an input to enhancing outputs/outcomes.	**Achieves**

Strong Performance	Areas of Growth	Rating
Morgan Forness		
Oversee completion and analysis of the Consolidated Annual Report (CAR) for accountability and improved performance report. Uses data available from all sources on which to make decisions based to support the Board's outcome goals.		**Excels**
Lisa Johnson		
Oversee completion and analysis of the Consolidated Annual Report (CAR) for accountability and improved performance report.	Uses data available from all sources on which to make decisions based to support the Board's outcome goals.	**Achieves**
Mike McHugh		
Oversee completion and analysis of the Consolidated Annual Report (CAR) for accountability and improved performance report. Oversees the development and implementation compliance of Perkins 5-year state plan (upon reauthorization of federal law).		**Achieves**

Strong Performance	Areas of Growth	Rating
Sonia Meehl		
Oversee completion and analysis of the Consolidated Annual Report (CAR) for accountability and improved performance report.	Uses data available from all sources on which to make decisions based to support the Board's outcome goals.	**Achieves**
CAR completed timely. The new presentation format was refreshing.	Reviewing packets and notes from board meetings throughout the year, I found repeated references to lack of, inconsistent, or unreliable data. Director has and should continue to strive to improve data sources, which will hopefully become easier as Infinite Campus is implemented and school and CTE center personnel become proficient at using it.	
Eric Nelson		
Oversee completion and analysis of the Consolidated Annual Report (CAR) for accountability and improved performance report. Oversees the development and implementation compliance of Perkins 5-year state plan (upon reauthorization of federal law).	Uses data available from all sources on which to make decisions based to support the Board's outcome goals. I think as a group we are growing on data sources and how tomake decisions on our goals. The data sources themselvesmake this difficult.	**Achieves**
Jason Rohr		
Uses data available from all sources on which to make decisions based to support the Board's outcome goals.		**Achieves**

Strong Performance	Areas of Growth	Rating
Wayde Sick		
Oversee completion and analysis of the Consolidated Annual Report (CAR) for accountability and improved performance report.	Uses data available from all sources on which to make decisions based to support the Board's outcome goals.	**Achieves**
The CAR was completed in a timely manner, even though we had staff turnover in vital positions.	This is an area of improvement to act on, as we receive more accurate data and base all decisions on that data.	

Question 3 - Planning and Coordination

Strong Performance	Areas of Growth	Rating
Levi Bachmeier		
Develops 5-year targets and annual targets for all progress measures aligned to Board goals reflective of ND's PK12 Strategic Vision for CTE. Partners with other agencies and the private sector on common goals.	Responds to rapidly changing and emerging technologies reflective of workforce needs and course availability.	**Achieves**
Patrick Bertagnolli		
Gathers input and assesses guidance available through quarterly statewide meetings with CTE administrators. Assesses, maintains and promotes a system of professional development for staff, CTE instructors and administrators. The team seems to be well informed and fully engaged. Professional development is very visible across ND, again with great support and engagement.	Works with postsecondary institutions to plan and coordinate CTE initiatives. Always opportunity to expand program studies for K-12 and post-secondary. Excited by the show of support from the NDUS Commissioner.	**Excels**
Lyndsi Engstrom		
Leads change by seeking out the latest/best practices in CTE. Develops 5-year targets and annual targets for all progress measures aligned to Board goals reflective of ND's PK12 Strategic Vision for CTE. The milestone of establishing five-year targets for goals and goal progress measures has been achieved. Continual review and potential revision of initially determined targets based on increased access to relevant data to inform decision-making may further enhance targets.	Assesses, maintains and promotes a system of professional development for staff, CTE instructors and administrators. CTE Department provided professional development, inclusive of, but not limited to the annual Professional Development Conference, has historically been well attended. Aligning the professional development provided with best-practices intended to advance the Board's goals and progress measures and the Director's guardrails and guardrail progress measures is a natural next step in supporting the Board's shift to outcomes-focused governance while responsively supporting the needs of the field.	**Achieves**

Strong Performance	Areas of Growth	Rating
Morgan Forness		
Leads change by seeking out the latest/best practices in CTE. Develops 5-year targets and annual targets for all progress measures aligned to Board goals reflective of ND's PK12 Strategic Vision for CTE.	Partners with other agencies and the private sector on common goals.	**Achieves**
Lisa Johnson		
Leads change by seeking out the latest/best practices in CTE. Partners with other agencies and the private sector on common goals. The Director is particularly encouraging of inter-agency partnerships.	Responds to rapidly changing and emerging technologies reflective of workforce needs and course availability. Works with postsecondary institutions to plan and coordinate CTE initiatives. Would like to develop more educational pathways with postsecondary institutions.	**Achieves**
Mike McHugh		
Assesses, maintains and promotes a system of professional development for staff, CTE instructors and administrators. Is an active member of appointed and statutory boards.	Develops 5-year targets and annual targets for all progress measures aligned to Board goals reflective of ND's PK12 Strategic Vision for CTE. Responds to rapidly changing and emerging technologies reflective of workforce needs and course availability.	**Achieves**

Strong Performance	Areas of Growth	Rating
Sonia Meehl		
Develops 5-year targets and annual targets for all progress measures aligned to Board goals reflective of ND's PK12 Strategic Vision for CTE.	Leads change by seeking out the latest/best practices in CTE. Is an active member of appointed and statutory boards.	**Achieves**
I'm encouraged that we have new Goal Progress Measures related to CTE enrollment equity. Time will tell if we can gather accurate data and make the adjustments needed to identify and correct inequity in access or enrollment.	Perhaps less an area of growth, but more a matter of Director and board awareness, it would be interesting to see a list of all "appointed and statutory boards" the Director currently serves on, in addition to any other voluntary roles he holds. Hopefully all of these positions are valuable in carrying out the mission of the department, but all take time and energy, both of which are limited commodities. Certainly these positions can help the Director "Lead change..." Monthly director reports include reference to many of these responsibilities. Can we also hear more about specific accomplishments made by these boards, how they relate to our goals, and how our department is collaborating to move forward the work of these boards and organizations?	
Eric Nelson		
Develops 5-year targets and annual targets for all progress measures aligned to Board goals reflective of ND's PK12 Strategic Vision for CTE. Gathers input and assess guidance available through quarterly statewide meetings with CTE administrators.	Works with postsecondary institutions to plan and coordinateCTE initiatives.	**Achieves**
Jason Rohr		
Develops 5-year targets and annual targets for all progress measures aligned to Board goals reflective of ND's PK12 Strategic Vision for CTE. Plans and implements the systematic updates of program area standards, ensuring alignment with standards.	Partners with other agencies and the private sector on common goals. Works with postsecondary institutions to plan and coordinate CTE initiatives.	**Achieves**

Strong Performance	Areas of Growth	Rating
Wayde Sick		
Gathers input and assesses guidance available through quarterly statewide meetings with CTE administrators. Assesses, maintains and promotes a system of professional development for staff, CTE instructors and administrators.	Works with postsecondary institutions to plan and coordinate CTE initiatives.	**Achieves**
I believe I have a strong relationship with the Directors and value their input. The Department is constantly considering and delivering various PD opportunities, to assist our CTE Educators.	Aligning our CTE HS programs of study with our post-secondary programs is an area the State needs to strengthen.	

Question 4 - Demonstrates Fiscal Management

Strong Performance	Areas of Growth	Rating
Levi Bachmeier		
Recommends and provides rationale for district and area center funding levels based on funding available and prioritizes Board goals for Board approval. Establishes and makes available fiscal reporting timelines and budget preparation for state and fed		**Achieves**
Patrick Bertagnolli		
Ensures that verification and reimbursement processes for individuals and schools reflect Board policy. Recommends and provides rationale for district and area center funding levels based on funding available and prioritizes Board goals for Board appro Seeing impact as finalization with funding policy is in process of being implemented.	Establishes and makes available fiscal reporting timelines and budget preparation for state and federal funds. With new funding policy - deadlines will need to be reassessed.	**Excels**

Strong Performance	Areas of Growth	Rating
Lyndsi Engstrom		
Reviews and presents recommendations to the Board concerning new program applications. Meets and follows all state and federal audit requirements.	Recommends and provides rationale for district and area center funding levels based on funding available and prioritizes Board goals for Board approval.	**Achieves**
Indicators associated with Fiscal Management that are related to execution of established procedures in place, including reporting timelines; budget preparation; monitoring of funds; and ensuring procurement and audit requirements are upheld appear to be strengths.	The Director demonstrates a solid understanding of available funding and has taken substantial steps to support the Board in aligning budget allocation with Board goals. After multiple years of close collaboration with Director Sick, the Board has approved a revised funding policy parting ways with our former antiquated funding policy and establishing a more modern framework emphasizing outputs/outcomes. This milestone is only the beginning.The next phase of this work should focus on refining and strengthening the policy through ongoing review and continuous improvement. Additionally, consistently translating the policy into clear, actionable funding recommendations—with a well-defined rationale tied to Board priorities, expected outcomes, and measurable impact on student success—will strengthen the connection between resource allocation and results. Clearly articulating trade-offs and maintaining a focus on long-term sustainability will further position the Board to make strategic, transparent decisions that maximize the impact of available funding.Equally important will be establishing a process to evaluate the impact of these changes over time. Regularly reviewing how revised funding allocations influence program quality, access, and student outcomes will ensure the new policy is achieving its intended goals and allow for timely evidence-based adjustments.	
Morgan Forness		
Ensures that verification and reimbursement processes for individuals and schools reflect Board policy. Monitors state and federal funds.	Establishes and makes available fiscal reporting timelines and budget preparation for state and federal funds.	**Achieves**

Strong Performance	Areas of Growth	Rating
Lisa Johnson		
Establishes and makes available fiscal reporting timelines and budget preparation for state and federal funds.		**Achieves**
This amount of familiarity with this section.	This amount of familiarity with this section. Will be more attentive to these aspects in the future as a Board member.	
Mike McHugh		
Monitors state and federal funds. Meets and follows all state and federal audit requirements.	Implements procedures to administer competitive grants.	**Achieves**
Sonia Meehl		
Ensures that verification and reimbursement processes for individuals and schools reflect Board policy. Monitors state and federal funds.	Recommends and provides rationale for district and area center funding levels based on funding available and prioritizes Board goals for Board approval.	**Achieves**
Several of these, I don't think I would become aware of unless someone complained about them. I have not heard of any issues with reimbursement or procurement. Seems to have a good handle on monitoring state and federal funds.	Secondary program funding is perhaps the most important tool we have to accomplish our goals. As we move into the first year of implementation of our revised policy, Board, Director, and Staff must all remain focused on our goals of Enrollment, Concentrators, and Choice Ready graduation and monitor whether the are effectively allocating funds to achieve these goals.	

Strong Performance	Areas of Growth	Rating
Eric Nelson		
Establishes and makes available fiscal reporting timelines and budget preparation for state and federal funds. Monitors state and federal funds.	I would be curious to learn more about any competitive grant initiatives.	**Achieves**
Jason Rohr		
Recommends and provides rationale for district and area center funding levels based on funding available and prioritizes Board goals for Board approval. Monitors state and federal funds	Reviews and presents recommendations to the Board concerning new program applications.	**Achieves**
Wayde Sick		
Ensures that verification and reimbursement processes for individuals and schools reflect Board policy. Recommends and provides rationale for district and area center funding levels based on funding available and prioritizes Board goals for Board appro The adoption of the revised funding policy and the baseline funding levels was a massive undertaking and positive step.	Establishes and makes available fiscal reporting timelines and budget preparation for state and federal funds. With the passing of the funding policy, the next step is to establish fiscal timelines. We have been flexible of the past few years due to the change in policy. This will need to tighten up moving forward.	**Achieves**

Question 5 - Advocate for Career and Technology Education

Strong Performance	Areas of Growth	Rating
Levi Bachmeier		
Assists in the establishment and maintenance of quality CTE programming. Collaborates with Governor's office, Legislature, K12 and Higher Education partners and business/industry to advocate for CTE.		**Achieves**
Patrick Bertagnolli		
Participates/presents at appropriate state and national meetings, conferences and workshops. Collaborates with Governor's office, Legislature, K12 and Higher Education partners and business/industry to advocate for CTE.	Engages CTE stakeholders throughout the year.	**Excels**
Great collaboration. I'm very proud of NDCTE. Great representation and awareness about opportunities for students via CTE momentum.	This is very important. I know the Director has communicated a desire to travel the state in person to visit CTE centers/teams, meet with employers, and other key stakeholders. I would like to see the board prioritize this to make it achievable to accomplish this. The "Go Look" for a director level is critical and it would go a long way with communities across the state and the amazing leaders who represent the frontline of CTE.	
Lyndsi Engstrom		
Assists in the establishment and maintenance of quality CTE programming. Participates/presents at appropriate state and national meetings, conferences and workshops.	Collaborates with Governor's office, Legislature, K12 and Higher Education partners and business/industry to advocate for CTE.	**Excels**
Director Sick frequently reports representing NDCTE at state and national meetings, conferences, and workshops as indicated within his monthly report to the Board. Establishing and maintaining quality CTE programming appears to be a strength as evidenced by Vision Visit plan and procedures.	Evidence of collaboration with the Governor’s office, legislators, K-12 and higher ed partners, as well as business and industry partners exists. However, further enhancing these partnerships will only benefit stakeholders.	

Strong Performance	Areas of Growth	Rating
Morgan Forness		
Assists in the establishment and maintenance of quality CTE programming. Collaborates with Governor's office, Legislature, K12 and Higher Education partners and business/industry to advocate for CTE.	Participates/presents at appropriate state and national meetings, conferences and workshops.	**Excels**
Lisa Johnson		
Collaborates with Governor's office, Legislature, K12 and Higher Education partners and business/industry to advocate for CTE.	Assists in the establishment and maintenance of quality CTE programming. Acknowledge creation of opportunities for students to engage in work based learning. Growth area would be extending educational pathways into postsecondary credentials or industry certifications.	**Excels**
Mike McHugh		
Participates/presents at appropriate state and national meetings, conferences and workshops. Collaborates with Governor's office, Legislature, K12 and Higher Education partners and business/industry to advocate for CTE.		**Achieves**

Strong Performance	Areas of Growth	Rating
Sonia Meehl		
Collaborates with Governor's office, Legislature, K12 and Higher Education partners and business/industry to advocate for CTE.	Assists in the establishment and maintenance of quality CTE programming.	**Achieves**
Director seems to be well-connected with governor's office, legislature, and higher education. Continue to maintain and develop these relationships.	Establishment and maintenance of quality CTE programming is of the highest priority. Lack of qualified teachers is a barrier to growth that we must strive to overcome in innovative ways. Having a new assistant director leading the Vision Visits provides an opportunity to take a fresh look at that process and potentially provide new ideas to stretch our resources further.	
Eric Nelson		
Participates/presents at appropriate state and national meetings, conferences and workshops. Collaborates with Governor's office, Legislature, K12 and Higher Education partners and business/industry to advocate for CTE.		**Excels**
Jason Rohr		
Assists in the establishment and maintenance of quality CTE programming. Collaborates with Governor's office, Legislature, K12 and Higher Education partners and business/industry to advocate for CTE.	Engages CTE stakeholders throughout the year.	**Achieves**

Strong Performance	Areas of Growth	Rating
Wayde Sick		
Participates/presents at appropriate state and national meetings, conferences and workshops. Collaborates with Governor's office, Legislature, K12 and Higher Education partners and business/industry to advocate for CTE.	Engages CTE stakeholders throughout the year.	**Achieves**
I feel the stakeholder engagement I do is strong.	I need to improve my engagement with all CTE stakeholders throughout the entire year and look for stakeholders I have not engaged enough.	

TO: ND CTE Board Members
FROM: Sonia Meehl, Board Chairman
DATE: June 11, 2026
RE: Director Sick Salary Recommendation

According to NDCC 12-20.1-03, one of the powers and duties of the state board of career and technical education is to fix the compensation of such officers and assistants as may be necessary to administer the work of the department. The legislature has ordered that agency salary increases for eligible employees must be an average of 3%.

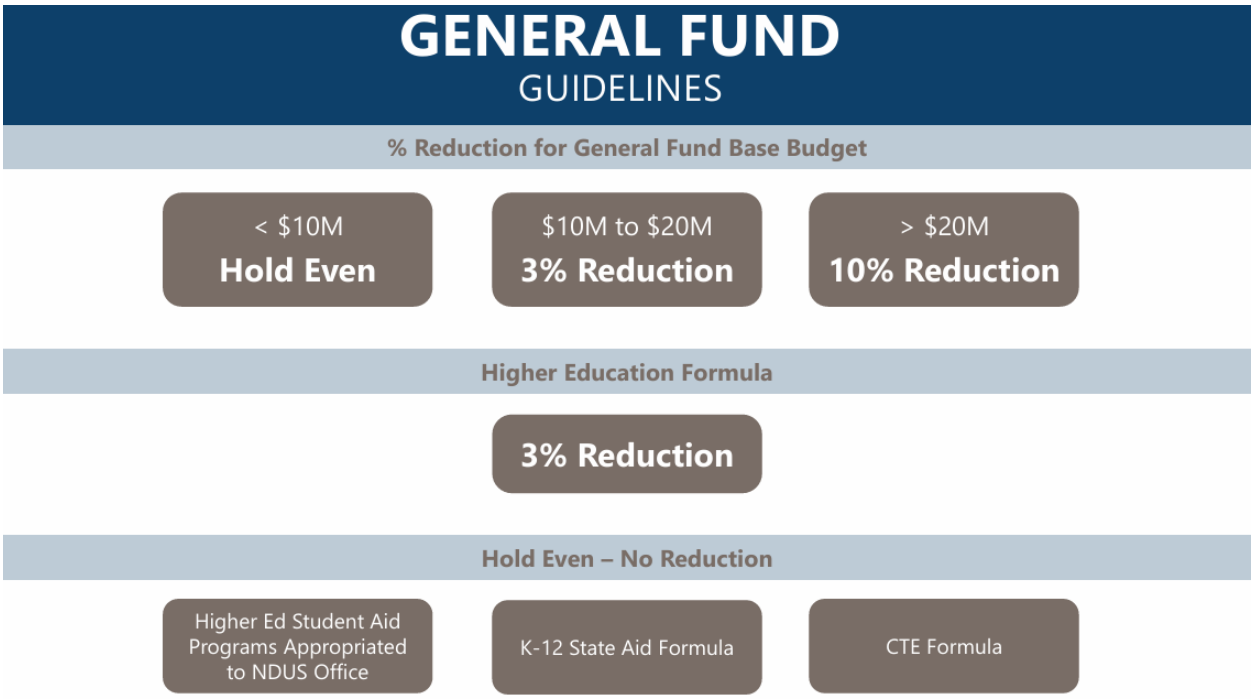
Director Sick has recommended increases for eligible department employees which average 3%, ranging from 2.5% to 3.25%. Employees that were rated “Achieves” were recommended for increases from 2.5% to 3.0%.

If the board approves the director’s evaluation rating as Achieves, I recommend a salary increase of 3% for Director Sick. This raise will be consistent with the percentage increase for other employees with a rating of Achieves and will maintain the required overall salary increase of 3% for the department.

Strategic Question – Discuss 2027-29 Budget Request

It has been asked for me to discuss the Department's 2027-29 Budget Request. Although this is a work in progress, this is the update I can provide now. Our Budget is to be submitted to OMB by July 15th. The Department has asked for extensions in the past, but our goal is to submit by the deadline.

In April, the Governor provided his Budget guidelines. Agencies are to submit reduced budgets, based on the size of their general fund budget.



Since the CTE Formula is to be held even, after subtracting one-time expenditures, the Department falls below the $10M threshold, therefore are to be held even. Smaller agencies are still being asked to plan for 3% contingency reduction.

Below is the 2025-27 Department Budget.

	Base Level	Adjustments or Enhancements	Appropriation
Salaries and wages	$5,118,145	$720,245	$5,838,390
New and vacant FTE pool	0	126,203	126,203
Operating expenses	3,046,350	1,699,261	4,745,611
Grants	11,507,349	2,500,000	14,007,349
Grants - secondary	41,537,780	10,500,000	52,037,780
Marketplace for kids	300,000	100,000	400,000
Science, technology, engineering, and mathematics initiative	100,000	0	100,000
Adult farm management	1,706,138	(1,706,138)	0
Workforce training	2,500,000	750,000	3,250,000
Total all funds	$65,815,762	$14,689,571	$80,505,333
Less other funds	14,500,485	3,927,524	18,428,009
Total general fund	$51,315,277	$10,762,047	$62,077,324
Full-time equivalent positions	23.50	0.00	23.50

All items in the Budget are considered a part of our base budget, except the following:

Operating Expenses:

- $1,000,000 – Virtual Reality Career Exploration – One-time funding
- $300,000 – Moving Expenses – One-time funding

Ommiting those items and the Grants – secondary, the 3% contingency General Fund reduction the Department needs to plan for is $293,697. The Department can only reduce from the following lines:

- Salaries and Wages
- Operating
- Marketplace for Kids
- STEM Initiative
- Workforce Training

The Department is still determining the best route to take, to plan for the contingency reduction.

The Department is still able to submit decision packages, that may be considered. The Department has been told the Governor feels CTE should continue to grow. The following are ideas that are currently being flushing out and building budgets.

1) Cost to Continue – The Department will again ask for dollars, to support the increase of costs for programs. The intent is to request funds, to address the tiering of programs and program expansions.
    a. A 2% and 2% increase would total roughly $1,000,000
    b. A 3% and 3% increase is approximately $1,500,000

2) New Programs – The Department has asked the CTE Directors to report their projected new programs for the 2027-29 Biennium. With this, a budget can be projected. We can also prepare the narrative of what types of programs will not be available without continued support. I am currently estimating a $2,000,000 new program request but will have a more accurate number once I have the data from the Directors.
3) Capital Projects – The Department are currently exploring a budget for additional capital projects. Currently, the only region that has made an ask is the Turtle Mountain Area CTE Center. I am estimating a $10,000,000 request for one-time funds.
4) CTE Center Equipment Grant – The Directors have requested the Department to submit a one-time budget request for large equipment grants. We currently do not have a budget line large enough to support a large equipment purchase. An example would be a semi for a CDL program. This was just brought to our attention as an idea during the June CTE Directors meeting. The maximum request for this would be $5,000,000.
5) Operating Expenses – The Department plans to request a modest increase, to address our increased rent costs, due to our unexpected relocation. The request will total $50,000.
6) Bussing – The Directors also brought up concerns with bussing costs to CTE Centers. The Department is currently uncertain what an ask would look like and needs to visit with DPI to better understand their bus route reimbursement funding.

TIME USE TRACKER	ND CTE BOARD	TIME PERIOD:	May-26	DATE:	5/18/26

Framework Pillars	Student Outcome Minutes	Adult Behavior Minutes	The board tracks its time spent during public authorized meetings	Other Topic Minutes
1. Adopting Student Outcome Goals 2. Adopting Student Outcome Goals 3. Adopted Guardrails			← Minutes setting and adopting both student outcome goals and goal progress measures	
			← Minutes setting and adopting superintendent and board guardrails, and a theory of action	
4. Adopted Monitoring Calendar for Student Outcome Goals and Superintendent/ Board Guardrails, and Board Self-Evaluation	13		← Minutes receiving, discussing, and voting on Student Outcome Goal Monitoring Reports according to the board adopted Monitoring Calendar	
		16	← Minutes receiving, discussing, and voting on Guardrail Monitoring Reports according to the board adopted Monitoring Calendar	
			← Minutes performing board self-evaluations using the Be Legendary Board Leadership Framework Instrument, developing and creating Director evaluation, community engagement, and/or Board Guidelines according to Be Legendary practices.	
5. Structuring for Success	Minutes discussing and/or taking action on other agenda items (including consent agenda items and reports), Non-Be Legendary Committee meetings, Board Workshops, and/or non-statutorily required Board Hearings →			40
6. Active Teamwork and Advocacy			← Minutes hosting two-way communication meetings on student outcome goals, guardrails, theories of action and/or progress toward student outcome goals	
			← Minutes recognizing the accomplishments of students and staff regarding progress on student outcome goals	
Non-calculated time	Minutes fulfilling statutorily required public hearings, forums, and comments →			
	Notes:			27
TOTALS	13	16	69	40

Use For Student Outcome and Adult Behavior Minutes Percentage Calculation:	29	÷	69	× 100 =	42.03	% Student Outcome and Adult Behavior Minutes
Use For Student Outcome Minutes Percentage Calculation 3. Monitoring Student Outcome	13	÷	69	× 100 =	18.84	% Student Outcome Minutes

Board Members Present- 6. Active Teamwork and Advocacy	Board Absent	% Attendance
8	1	88.89

Count of 'Other' Agenda Items
6

Goals Discussed 3. Monitoring Student Outcome Goals	Goals on Target	% on Target
		#DIV/0!

Consent Items 5. Structuring for Success	Consent Items Removed	% Remaining on Consent Agenda
3	1	66.67

GPMs Discussed 3. Monitoring Goals Progress Measures	GPMs on Target	% on Target
1	1	100.00

Board Members that Responded in Alignment with the Agenda Building Calendar 5. Structuring for Success	Board Members that Did Not Respond in Alignment with the Agenda Building Calendar	% Timely Response
4	5	44.44