



CAREER WORKFORCE ACADEMY

STRATEGIC PLAN

MAY 9, 2018

CAREER WORKFORCE ACADEMY

The Career Workforce Academy is a program initiated by the North Dakota State College of Science (NDSCS) and the school districts of Fargo, West Fargo, Northern Cass, Central Cass, Kindred and Moorhead. It is designed to deliver workforce training and education that is more responsive to changing employer and student needs. This plan will expand and enhance our ability to attract, retain and grow businesses and develop opportunities for student success in the workforce.

What Is An Academy?

A career academy is a type of school that can provide K-14 students, incumbent workers* and new Americans a curriculum to prepare them for a successful career through:

- Career path education.
- Curriculum that matches their identified career path.
- Strong partnerships that work together to enhance curriculum with relevant learning for successful outcomes.

Academy Vision Statement

The Academy will build the awareness of multiple career clusters and the skills necessary to be career ready through experiential education, classroom training, student connection to business and industry, and career path counseling. It will present real-time opportunities and real-life experiences by responding and adapting quickly to industry demands and student interest. Success will depend on engaged student interest and on the collaboration of all stakeholders.

*For the purpose of this report, an incumbent worker is defined as a person who was previously employed and is seeking training for a new job or is currently employed and is seeking further training.

ACADEMIES

What Experts Say About Career Academies

“The number of career academies has been expanding rapidly, in part because academies have been found to be effective, and in part because they embody ideas promoted by several major high school reform movements. ... [R]igorous evaluations have found that individual career academies within larger high schools help improve students’ academic performance, prepare them for postsecondary education, and boost earnings after high school.”¹

Career Academies Supported By Research

The number of career academies nationwide has grown dramatically, one reason being a conceptual grounding in strong research and evaluation. In 2008, MDRC, a prominent education policy research organization, released a study entitled, “Career Academies: Long Term Impacts on Labor Market Outcomes, Educational Attainment, and Transitions to Adulthood.”² The researchers employed a random assignment research design in a group of nine high schools across the United States to determine the effect of attending a career academy. Their findings included the following:

- An average increase in earnings of 11 percent. The effect was concentrated among young men; in fact, an increase of 17 percent was seen in this demographic.
- An increase in the percentage of individuals living independently with children and a spouse or partner after leaving secondary education.
- An improvement in attendance, increased academic course taking, and an increased likelihood of graduating on time.
- An increase in the level of interpersonal support students experienced during high school from career academy staff.
- An increase in student participation in career awareness and work-based learning.

Very recent academic literature on career technical education (CTE) continues to highlight the many positive outcomes from CTE offerings. A research report in the April 2018 American Educational Research Journal concludes, “By providing CTE coursework, especially later in a student’s high school career, relevance between coursework and long-term goals is potentially increased, thereby increasing the odds of high school graduation. ... This lends support to the idea of further expansion of CTE coursework in high school.”³

What Students Say About Career Academies

“The academy has taught me a lot of life skills. Before, it was about me coming home just to do homework and now it’s about me working towards something.”¹

“It really helps us figure out our future and what we want to do.”

“The job shadow experience has really given me a better perspective on what I want to achieve in life. [With] the academy you take that extra step to see if it’s really something you might want to do.”¹

¹“Career Academies: A Proven Strategy to Prepare High School Students for College and Careers.” Career Academy Support Network, 2010, University of California, Berkeley, Graduate School of Education.

²“Career Academies: Investing in Students, the Workforce and Career Technical Education,” May 2013, National Association of State Directors of Career Technical Education (NASDCTEc).

³“Linking the Timing of Career and Technical Education Course taking With High School Dropout and College-Going Behavior,” April 2018, American Educational Research Journal, M. Gottfried & J. Plasman, University of California, Santa Barbara.

STRATEGIC PLANNING PROCESS

In order to gain vital information for the development of the Cass-Clay Career Workforce Academy (Academy) strategic plan, a planning committee commissioned Flint Group to take the lead in developing a strategic plan for the Academy. Flint personnel conducted several discovery sessions with Academy stakeholders and reviewed documents from other programs around the United States. During the review of other programs, a wide variety of approaches were found in how strategic plans were developed and in what they included. Each had objectives tied to local needs; there were significant differences in the number of stakeholders, and the size of the region and the number of districts they serve. In other words, no two plans were alike. Despite the differences, a number of best practices were discovered and utilized in this plan.

Discovery Methodology:

- Reviewed documents from prior meetings pertaining to the Academy.
- Conducted and facilitated input sessions including members of the following stakeholder groups around the theme “pathways to success”:
 - K-12 counselors, career advisors and administrators
 - NDSCS faculty
 - Business and industry representatives
Note: Two sessions were held with K-12 group and two with the NDSCS group. Business and industry representatives were interviewed one on one. After these separate sessions, a combined session was held with representatives from all three stakeholder groups.
- Interviewed select directors of other academies across the country.
- Researched and reviewed documents relevant to effective academies in other states.
- Researched best practices at national associations and centers focused on career academies.
- Met with Academy steering committee to review findings and present directional draft of plan and garner further comment and input.
- Considerable time was spent discussing the challenges involving curriculum development and scheduling, two areas that will be the most challenging due to the number of school districts participating in the Academy.

Planning participants

“Students don’t know what they don’t know.”

“We always want more exposure for students to explore careers ... whether it’s diesel, auto or tech careers. We want more people to know what’s available because we want to see if there is interest in our industry.”

“We have craft workers who have a Bachelor of Science or a Bachelor of Fine Arts in the field making \$80,000-85,000 a year, or \$130,000 if they’re an operator; they went to four years of college and they’re not using their degree the way they thought they were going to, but they’re in a career they enjoy. So, if we can eliminate the cost and time of a four-year degree – where people end up in a career that doesn’t require a four-year degree – that would be success.”

KEY DISCUSSION POINTS

Stakeholders identified essential elements that will be prevalent throughout the strategic plan. These elements are vital in understanding stakeholders' needs and maintaining strong partnerships.

- Collaboration – between all stakeholders on each initiative of the plan.
- Communication – ongoing discussion on all aspects of the Academy, including changing perceptions, outcome assessments, stakeholder issues and successes.
- Transparency – full disclosure to all stakeholders.
- Resources – upfront disclosure on resources needed to achieve goals.

KEY ELEMENTS

As part of the input sessions, stakeholders identified essential elements that will serve as the cornerstones of the strategic plan. These elements are vital in understanding stakeholders' needs and maintaining strong partnerships. They include the following:

- Collaboration – between all stakeholders on each initiative of the plan.
- Communication – ongoing discussion on all aspects of the Academy, including changing perceptions, outcome assessments, stakeholder issues and successes.
- Transparency – full disclosure to all stakeholders.
- Resources – upfront disclosure on resources needed to achieve goals

During the discovery process a vision statement, value statements and expected outcomes for the Academy were developed. It was also agreed there should be assessment and evaluation standards to determine gain toward desired outcomes.

Academy Value Statements

The Academy concept is:

- A proven model in responding to the needs of industries and students.
- Effective in improving outcomes for students during and after high school.

The Academy will:

- Provide exposure to multiple career paths for all levels of K-14 students.
- Present more opportunities for students to sample and experiment within a variety of careers.
- Create opportunity for those interested in a technical degree.
- Create a path for incumbent workers and new Americans for a new career.
- Provide appropriate facilities and equipment for hands-on career training.
- Focus on the region's workforce and employer needs.

Stakeholders identified 10 critical issues that must be addressed for realizing the vision for the Academy:

1. Changing perceptions
2. Buy-in at all levels
3. Ownership/ governance/decision-making process
4. Curriculum development
5. Synchronized calendars and schedules between all schools
6. Trained instructors/ qualifications for HS staff/teachers
7. Grow too fast/start too small
8. Who's paying for this? Taxpayers' response
9. Transportation
10. Safety

The Academy Will Help Gain Respect For Multiple Career Pathways

- Parents will be informed about diverse careers and be encouraged to start having earlier conversations with their children about career path options.
- We will inspire a change in the mindset of parents currently working in technical and trade careers who in the past might have said to their children, “I don’t want you to do what I do; I don’t want you to work with your hands,” and push them into “white-collar work” and getting a four-year college education.
- Students will want to learn about and develop skills in technical and trade careers and will gain respect for having a career in these high-demand, high-wage fields.
- Counselors, teachers and parents will not just be focused on, “Where are you going to college?” but instead, “What are you interested in going to college for?”

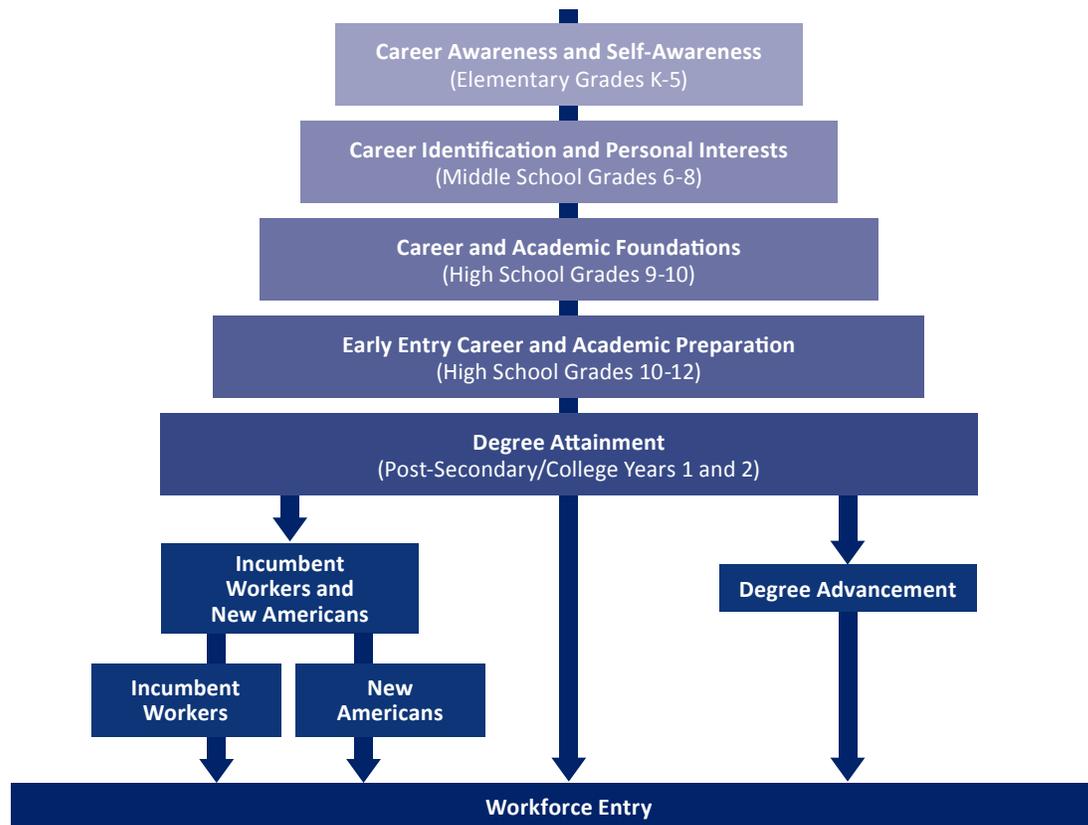
CAREER PATHWAY MODEL

The following graphic illustrates the collaborative career pathway model that guided the initial development of the Academy. In this model, K-12 schools promote comprehensive career awareness in elementary grades, a career exploration component that includes a four-year rolling career path planning that begins in middle school, and applied/hands-on career preparation in high school. Post-secondary schools collaborate with the high schools to facilitate classes focused on preparation for technical and trade careers; college credit is available for high school students taking these classes. Business partners are an integral part of the Academy by working with K-12 schools to provide career awareness and exploration opportunities in the elementary and middle school grades, and work/learning opportunities for high school students. Business and industry are sectors of the community that anticipate seeing trained workers exiting the Academy prepared to either join the workforce or continue their education.



Initial Academy Concept

The idea of an academy began with a plan that has evolved over the past two years. Career awareness, exploration and preparation were initially included and are still included as key elements guiding the framing of the academy concept, as illustrated in the following graphic. These components have been associated with more or less distinct periods of learning: elementary school, middle school and high school/post-secondary, as illustrated in the graphic below. Career awareness and self-awareness in grades kindergarten through five; career identification and personal interests in middle school (grades six through eight); career and academic foundations in grades nine through 10 of high school; early entry career and academic preparation in grades 10 through 12; and attainment of a two-year or associate degree in post-secondary education. Incumbent workers and new Americans would also be given the same opportunity for career preparation/training as Academy high school students.

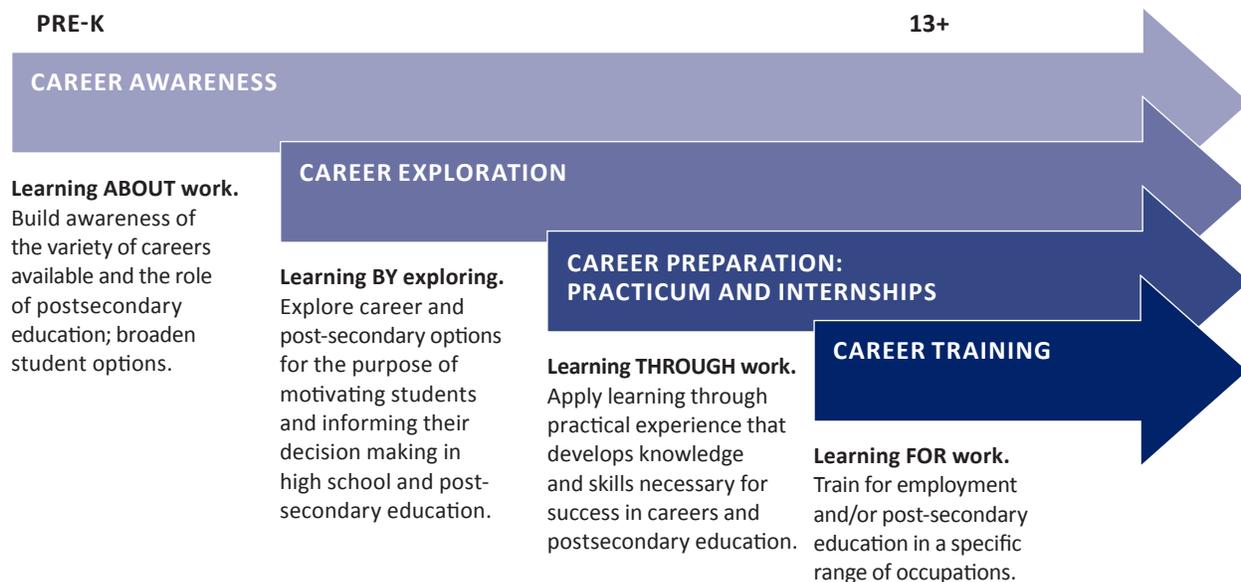


Academy Conceptual Framework

The Academy’s conceptual framework can be depicted with a diagram showing a continuum of career awareness and career exploration taking place throughout the K-12 educational experience. Developed by Linked Learning, the diagram below⁴ illustrates this continuum stretching from kindergarten into adulthood in four areas:

- Career awareness, where “Learning ABOUT work” begins at kindergarten and continues into adulthood. This aspect of the continuum is focused on broadening student career options by building awareness of the variety of careers available and the role of post-secondary education in the learning process.
- Career exploration, where middle school students are given “Learning ABOUT work” opportunities to explore career and post-secondary options. The purpose of career exploration is to motivate students and inform their decision-making through high school and beyond. This exploration component of the Academy will continue at every level of student participation and involvement.
- Career preparation, or “Learning THROUGH work,” begins in high school, where students apply what they are learning through practical experience. This hands-on experience helps them develop the knowledge and skills necessary for them to be successful in careers and post-secondary education. In addition to serving high school students, incumbent workers and new Americans are given the same opportunities in career preparation within the academy setting.
- Career training, where the Academy offers high school and post-secondary students “Learning FOR work” opportunities that might include classroom and non-classroom training, such as apprenticeships, internships and clinical experiences. These opportunities will also be available to incumbent workers and new Americans.

Academy Learning Continuum



⁴“Work-Based Learning in Linked Learning: Definitions, Outcomes, and Quality Criteria, Field Review Draft,” Nov. 2012, Linked Learning, Sacramento, CA.

Conceptual Framework: K-14 Focus

The K-14 aspect of the Academy will be centered on the concept of workplace- or experience-based learning, similar to work-based learning defined by Linked Learning as follows:

“An instructional strategy that is essential in preparing all students for success in postsecondary education and careers ... The primary purposes of work-based learning are to expose students to future options and provide opportunities for skill development and mastery over time. All work-based learning experiences involve interactions with industry or community professionals that are linked to school-based instruction. These learning experiences are intentionally designed to help students extend and deepen classroom work and to make progress toward learning outcomes that are difficult to achieve through classroom or standard project-based learning alone. The term ‘work-based’ does not mean the experience must occur at a workplace or during the standard ‘work day.’”⁵

Conceptual Framework: Incumbent Workers and New Americans Focus

We will follow an experience-based learning concept for K-14 students but will include an additional component focused on incumbent workers and new Americans. This aspect of the Academy will have access to the same instructional opportunities in a true multi-use educational facility.

While incumbent workers and new Americans may not have benefited from career awareness and exploration offered in their elementary and middle school experience, they will be given these opportunities during their career preparation and training offered by the Academy.

Plan Purpose

- Provide clarity for all partners
- Increase alignment among all partners
- Identify and define strategic initiatives and goals to accomplish desired outcomes
- Determine key performance indicators

Focus Areas

- Employer engagement
- Student (motivation, interest, value-added)
- Perceptions of technical and trade careers
- Educational system

Major Benefactors

- Students
- Business and industry

Enablers/Facilitators

- K-12
- Two-year colleges
- Business and industry
- Other secondary educational institutions

⁵“Work-Based Learning in Linked Learning: Definitions, Outcomes, and Quality Criteria, Field Review Draft,” Nov. 2012, Linked Learning, Sacramento, CA.

ACADEMY STRATEGIC PLAN

The strategic planning process was designed to elevate our region in the complementary fields of workforce training and education, hoping to become ever more responsive to changing employer and student needs. This plan will expand and enhance the community's ability to attract, retain, and grow businesses and develop educational opportunities to support student success in the workforce. It will also enhance the region's ability to address the economic and workforce shifts well into the future.

Specifically, the strategic plan for the Academy will:

- Ensure education and economic competitiveness.
 - Strengthen business and industry relationships with K-14.
 - Maximize employer engagement in the development of career clusters and relevant programs that will lead to jobs and careers.
 - Enhance education and training at all levels.
 - Provide multiple options for students to move into a career pathway.
 - Provide Choice Ready opportunities for K-12 students to assist students to be workforce ready.*
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IN SUMMARY

The academy concept has a proven track record of effectiveness for introducing students to multiple career paths – matching their skill sets and interests to job opportunities. It has become the best-tested strategy and accepted principles to prepare students for life after high school. Additionally, by including incumbent workers and new Americans, the Academy will benefit the business and industry community by having these groups access the same career preparation and training opportunities as Academy high school students.

*https://www.nd.gov/dpi/uploads/1494/ND_ConsolidatedStatePlan_4302018.pdf

Strategic Plan and Goal Statements

Strategic Initiative 1

Identify and implement an academy governance and management structure to ensure long-term success. Setting the proper structure from the start will be critical. Letting the numerous stakeholders have representation and a voice will be important, but having a defined organizational structure and a strong management team will give clear direction and help avoid conflicts.

Goal 1. Career Workforce Academy facility ownership will require appropriate approvals and will be determined in the future.

Goal 2. Academy will be operated and managed by NDSCS.

Goal 3. Develop leadership model.

Goal 4. Develop model for oversight of strategic initiatives; include assessment and evaluation plan.

Goal 5. Academy will be responsive to stakeholders' needs.

Goal 6. Engage parents.

Strategic Initiative 2

Increase early childhood career awareness. An important finding in recent research on career decision-making is that young people have a limited view of many of the careers not requiring a four-year college degree. A central underpinning of our strategic plan is that young people need to be introduced to a variety of careers and learn about work much earlier in their education. This starts at the elementary level through educational programs and direct exposure and interaction with real jobs.

Goal 1. Create engaged exposure to a variety of careers.

Goal 2. Develop well-rounded career awareness education.

Goal 3. Engage business and industry.

Goal 4. Gain teacher support.

Goal 5. Engage parents of elementary school students.

Strategic Initiative 3

Prepare middle school students for career pathway decisions through exploration. Students will be given the opportunity to explore career options that will motivate them to learn about careers, the skills needed in each field of work and the educational options to fulfill a career path. This level gives students a more active role in selecting a career pathway that matches their interests through interaction.

Goal 1. Identify student strengths and interests.

Goal 2. Begin five-year career path planning.

Goal 3. Engage business and industry.

Goal 4. Gain teacher support.

Goal 5. Engage parents of middle school students.

Strategic Initiative 4

Invest high school students in career path preparation and participation. Career preparation marks a shift in the continuum, moving students into more active experiential programs for career readiness. It includes more interaction with professionals from businesses and the community and is designed to give students supervised, practical hands-on application through the Academy. This will assist students to be workforce ready, as described in the North Dakota Every Student Succeeds Act (ESSA) State Plan.

Goal 1. Match curriculum with skill set.

Goal 2. Provide direct exposure to chosen career(s), i.e., doing, internships, hands-on (Career Ready Practices).

Goal 3. Engage business and industry, i.e., technical assessment/industry credentialing, workplace learning experience, co-curricular activities, 21st century skills, dual-credit courses.

Goal 4. Gain teacher support.

Goal 5. Engage parents of high school students.

Strategic Initiative 5

Create opportunity for incumbent workers and new Americans to enter workforce.

The Academy will provide an additional way to increase the Cass-Clay workforce and help meet the employee recruitment needs of business and industry. The Academy will be active in training and retraining individuals looking to enter the workforce in specific job skill areas. This will not be a separate program, but one that is combined with regular classes.

Goal 1. Determine skill sets and interests.

Goal 2. Assess gaps in learning and skills.

Goal 3. Align training/education to meet employer needs.

Goal 4. Provide training, curriculum, etc.

Strategic Initiative 6

Curriculum development and implementation. Critical to achieving the outcomes of the Academy is alignment of the curriculum to the interests of the students and the skill sets necessary to fulfill the needs of business and industry. Curriculum will be designed around identified cluster groups and must meet state educational and/or certification requirements. It will also need to be fluid and have the ability to adjust to changing skill sets and career shifts.

Goal 1. In collaboration with business and industry, identify clusters and skills required.

Goal 2. Match curriculum with cluster group needs.

Goal 3. Align to North Dakota and Minnesota school standards.

Goal 4. Meet accreditation requirements.

Goal 5. Teacher professional development and certification.

Goal 6. Align with North Dakota and Minnesota CTE objectives.

Goal 7. Create new programs or utilize existing program for expanding curriculum needs.

Goal 8. Identify faculty to teach curriculum.

Goal 9. Determine location of course offerings (what is going to be offered where).

Goal 10. Increase support for dual credit/early college models.

Goal 11. Imbed “soft skills” across curriculum.

Strategic Initiative 7

Align scheduling. Due to the number of school districts, this is one of the most difficult initiatives to administer. Flexibility and willingness to alter current set practices will be needed to accommodate the needs of students and the availability of instructors and classrooms. Many elements will have to be considered at the high school level to achieve success, including transportation, extracurricular activities and maintaining graduation standards. For incumbent workers and new Americans, language and current employment could be obstacles.

Goal 1. Influence policy for more K-12 hands-on training.

Goal 2. Hire scheduling coordinator to facilitate Academy class schedules.

Goal 3. Identify existing class schedules for CTE-related courses at participating high schools and post-secondary institutions.

Goal 4. Align and coordinate schedules of high schools and Academy.

Goal 5. Develop transportation plan for class and extracurricular activities.

Goal 6. Streamline and facilitate process for registration, credits, etc.

Goal 7. Engage parents at all levels.

Strategic Initiative 8

Strengthen connections. A key intention of the Academy is to strengthen the connections between businesses and the education stakeholders, and among districts, two-year colleges and other institutions. Stronger relationships will help develop seamless transitions through the continuum and help align the desired outcomes. They will also help increase the confidence level of all stakeholders.

Goal 1. Build relationships of and assurances for state and local educational systems on value and outcomes of Academy.

Goal 2. Become true partners with business and industry in mission and vision of Academy by sector-based engagement and development efforts in order to identify with and respond to workforce challenges and needs.

Goal 3. Participate in local economic development planning, workforce activities and initiatives to understand and communicate role of Academy and build trust.

Goal 4. Better understand and identify the roles of K-12 districts, adult education, CTE, NDSCS and other contributing entities as a way to build stronger relationships.

Goal 5. Engage with students at appropriate level, allowing them to be a “partner” in the development of programs.

Goal 6. Engage parents, allowing them to be a “partner” in giving feedback to the Academy.

Strategic Initiative 9

Educate stakeholders, partners, influencers and community of the value of the Academy. Creating an atmosphere of support for our role in developing careers in technical and trade careers will be an important objective for us. This includes changing perceptions apparent at multiple levels; parents, students, and even counselors and teachers themselves have been found to promote the four-year degree as the “ideal” career choice, discounting a two-year degree mostly due to lack of awareness of its benefits. To realize desired Academy outcomes, intentional efforts will be developed and implemented to change inaccurate or limited perceptions of technical and trade careers. In addition, education of policy makers will help in changing and developing policy that allows the Academy build successful programs.

Goal 1. Review current perceptions and raise awareness of career opportunities.

Goal 2. Change policies and regulations that are roadblocks in developing a smooth path for students to receive necessary education from career awareness through training and degree and/or certificate achievement.

Goal 3. Develop and implement comprehensive communications plan to build awareness of Academy and influence perceptions of technical and trade degrees.

Goal 4. Identify and engage community and state partners, organizations, and networks in support of Academy.

Strategic Initiatives and Action Steps

Strategic Initiative 1

Identify and implement an academy governance and management structure to ensure longterm success. Setting the proper structure from the start will be critical. Letting the numerous stakeholders have representation and a voice will be important, but having a defined organizational structure and a strong management team will give clear direction and help avoid conflicts.

Goal 1. Career Workforce Academy facility ownership will require appropriate approvals and will be determined in the future.

- 1.1 The intent of ownership will be a private non-profit that has full responsibility for deferred maintenance.
- 1.2 Funding for the facility will consist of participation from stakeholders.

Goal 2. Academy will be operated and managed by NDSCS.

- 2.1 A fiscal agent will be appointed to oversee financial aspects of Academy operations.
- 2.2 NDSCS will reach out to other institutions for input and advisement on all aspects of operations.
- 2.3 Operational funding will come from revenue generated by the Academy.
 - Student and user fees.
 - Participation in operational funding from other educational entities may come through different sources and in different forms (fees, equipment, personnel).

Goal 3. Develop leadership model.

- 3.1 Appoint Academy leadership team under NDSCS (dean, program director, financial manager, etc.) to implement strategic plan.
 - Seek input and approval from SBHE, North Dakota Department for Career and Technical Education and local school districts.
- 3.2 Create an advisory board made up of K-12, two-year colleges, and business and industry representatives from workforce partner program to help guide the Academy.

Goal 4. Develop model for oversight of strategic initiatives; include assessment and evaluation plan.

- 4.1 Implement coordinator position to oversee the interaction among the Academy program models at all levels including K-12 and post-secondary.
 - Initiate proper training; set goals and timeline.
- 4.2 Develop plan for continual review and update of plan, allowing to address improvements, new initiatives and needs as they change.
 - Set up yearly strategic planning review.
 - Utilize advisory board for feedback and input.

Goal 5. Academy will be responsive to stakeholders' needs.

- 5.1 Implement evaluation system of intended Academy outcomes.
- 5.2 Conduct annual community review.
- 5.3 Conduct student exit reviews.

Goal 6. Engage parents.

- 6.1 Provide regular opportunities for Academy personnel to meet with parents.

Strategic Initiative 2

Increase early childhood career awareness.

An important finding in recent research on career decision-making is that young people have a limited view of many of the careers not requiring a four-year college degree. A central underpinning of our strategic plan is that young people need to be introduced to a variety of careers and learn about work much earlier in their education. This starts at the elementary level through educational programs and direct exposure and interaction with real jobs.



All elementary students will receive a well-rounded career awareness education, through hands-on activity, in which they will be exposed to the different career clusters and be able to identify personal careers of interest while demonstrating a mindset of curiosity and reasoning.

Goal 1. Create engaged exposure to a variety of careers.

- 1.1 Appoint and train career awareness coordinator.
- 1.2 Introduce Academy concepts at teacher meetings.
- 1.3 Academy career awareness coordinator and staff facilitate professional development for teachers.

Goal 2. Develop well-rounded career awareness education.

- 2.1 Organize K-8 task force of teachers/administrators to develop program components for career awareness education.
 - Identify the most effective models and strategies for early career exposure and align funding.
 - Develop materials to illustrate career attributes, i.e., videos, demonstrations, class projects, hands-on activities.
- 2.2 Influence policy shifts to allow time for career education.

Goal 3. Engage business and industry.

- 3.1 Form advisory committee to include employers and teachers.
 - Prioritize opportunities for students to hear from industry, i.e., career fairs, speaker engagements, visit parents at work, workplace tours.

Goal 4. Gain teacher support.

- 4.1 Academy has regular engagement with teachers/school administrators.
- 4.2 Assess student awareness of career options.
- 4.3 Assess teacher support.
- 4.4 Teachers will have credentials required to offer professional certifications.

Goal 5. Engage parents of elementary school students.

- 5.1 Provide regular opportunities for Academy personnel to meet with parents.

Strategic Initiative 3

Prepare middle school students for career pathway decisions through exploration.

Students will be given the opportunity to explore career options that will motivate them to learn about careers, the skills needed in each field of work and the educational options to fulfill a career path. This level gives students a more active role in selecting a career pathway that matches their interests through interaction.



All middle school students will be given the opportunity to identify their strengths and skills and explore real life work experiences through planned project-based learning from industry speakers, demonstrations and field trips that culminate in the understanding of connecting classroom education with the job skills necessary to pursue real life careers.

Goal 1. Identify student strengths and interests.

- 1.1 Use testing and other academic assessments to determine strengths.
- 1.2 Relate skills and interests to careers.

Goal 2. Begin five-year career path planning.

- 2.1 Determine strategies for preparing students for college and career assessments.
- 2.2 Offer career exploration fair, field trips, videos, and speakers.

Goal 3. Engage business and industry.

- 3.1 Work with businesses to develop and keep program current.
- 3.2 Promote to other businesses and industries that might be interested.
- 3.3 Form advisory committee to include employers and teachers.

Goal 4. Gain teacher support.

- 4.1 Academy will have regular engagement with teachers/ school administrators.
- 4.2 Assess student awareness of career options.
- 4.3 Assess teacher support.
- 4.4 Teachers have individual learning plans by grade level.
- 4.5 Need teacher assessment training (are there standards to follow?).
- 4.6 Teachers will have the required professional certifications.

Goal 5. Engage parents of middle school students.

- 5.1 Provide regular opportunities for Academy personnel to meet with parents.

Strategic Initiative 4

Invest high school students in career path preparation and participation.

Career preparation marks a shift in the continuum, moving students into more active experiential programs for career readiness. It includes more interaction with professionals from businesses and the community and is designed to give students supervised, practical hands-on application through the Academy.



All high school students will be personally invested in their career path and be able to make informed educational decisions through job shadows, internships with hands-on experience and counseling to be college and/or career ready.

Goal 1. Match curriculum with skill set.

- 1.1 Review and follow individual learning plans that were put into place.
- 1.2 Students meet with school counselor to discuss progress plan towards graduation.
- 1.3 Ninth graders participate in freshman Academy transition course.
- 1.4 Introduce Academy summer classes.

Goal 2. Provide direct exposure to chosen career(s), i.e., doing, hands-on, internships, etc.

- 2.1 Organize high school task force of teachers/administrators/counselors to develop curriculum components.
- 2.2 Offer career fairs, field trips, speakers to explore and discuss career options.
- 2.3 Look at options for internships, apprenticeships, job shadowing, mentorships.

Goal 3. Engage business and industry.

- 3.1 Continue meetings with business and industry to get their buy-in and make sure it is relevant to what their needs are.
- 3.2 Form advisory committee to include employers and teachers.

Goal 4. Gain teacher support.

- 4.1 Continue workshops and guidelines for teachers.
- 4.2 Teachers will have the required professional certifications.
- 4.3 Organize teacher round tables for learning and training.

Goal 5. Engage parents of high school students.

- 5.1 Provide regular opportunities for Academy personnel to meet with parents.

Strategic Initiative 5

Create opportunity for incumbent workers and new Americans to enter workforce.

The Academy will provide an additional way to increase the workforce in Cass and Clay counties and help meet the employee recruitment needs of business and industry. The Academy will be active in training and retraining individuals looking to enter the workforce in specific job skill areas. This will not be a separate program, but one that is combined with regular classes.

Goal 1. Determine skill sets and interests.

- 1.1** Assess skill sets by testing.
- 1.2** Assess interests by exploring options.

Goal 2. Assess gaps in learning and skills.

- 2.1** Assess student learning needs prior to attending classes.
- 2.2** Assess additional training needs at the end of classes.

Goal 3. Align training/education to meet employer needs.

- 3.1** Create plan.

Goal 4. Provide training, curriculum, etc.

Strategic Initiative 6

Curriculum development and implementation.

Critical to achieving the outcomes of the Academy is alignment of the curriculum to the interests of the students and the skill sets necessary to fulfill the needs of business and industry. Curriculum will be designed around identified cluster groups and must meet state educational and/or certification requirements. It will also need to be fluid and have the ability to adjust to changing skill sets and career shifts.

Goal 1. In collaboration with business and industry, identify clusters and skills required.

- 1.1 Confirm initial clusters.
 - Manufacturing and STEM
 - Information technology
 - Health science pathway
 - Architecture and construction
 - Ag and transportation
 - Business and hospitality
- 1.2 Set up a curriculum team from all three stakeholder groups.
 - Align curriculum to defined employer-based, student interest and career pathways.
 - Develop curriculum to attain clear pathway to graduation and/or industry third-party credentials.
- 1.3 Utilize employer-driven work-based learning to assure on-the-job competencies.
- 1.4 Understand employer skill needs and gaps to ensure proper development.
 - Conduct study to determine employer needs.
 - Identify how work-based learning may differ among industries and adjust accordingly.
 - Research current knowledge about existing industry-adopted examples to support ongoing conversation with employers.
- 1.5 Document best practices of employer-driven models.
 - Seek curriculum sharing from other programs.
- 1.6 Reduce duplication among training providers.
 - Encourage collaboration between colleges and other training providers.

Goal 2. Match curriculum with cluster group needs.

- 2.1 Review existing curriculum.
 - Determine areas where curriculum is insufficient.
- 2.2 Incorporate best practices into curriculum development efforts.
- 2.3 Identify skills deemed essential for employment by cluster.
 - Develop effective practices.
 - Provide plan for implementation of training.
 - Create a rubric to measure performance outcomes.
 - Engage student employees to assess level of effective training.

Goal 3. Align to North Dakota and Minnesota school standards.

- 3.1** Curriculum team will lead this effort, assigning tasks to groups at the three academic levels, i.e., K-6, middle school, high school.
- Work with North Dakota Department of Career and Technical Education.
 - Work with North Dakota Department of Public Instruction.
 - Work with Minnesota Department of Education.

Goal 4. Meet accreditation requirements.

- 4.1** Identify accrediting bodies for appropriate discipline, including K-12 and post-secondary.
- 4.2** Establish protocol and procedures to ensure accreditation is being monitored.

Goal 5. Teacher professional development and certification.

- 5.1** Meet credentials for professional certificates.
- 5.2** Assessment training.
- 5.3** Guidelines or workshops for working with businesses.

Goal 6. Align with North Dakota and Minnesota CTE objectives.

- 6.1** High school curriculum team will lead effort to assure CTE objectives are aligned with Academy curriculum.
- Work with North Dakota Department of Career and Technical Education.
 - Work with Minnesota Department of Education's CTE unit.

Goal 7. Create new programs or utilize existing program for expanding curriculum needs.

- 7.1** Determine what the ongoing and expanding needs are.
- 7.2** Determine if there is enough student interest to continue to expand curriculum.

Goal 8. Identify faculty to teach curriculum.

- 8.1** Identify the teacher persona that is needed for these positions.
- 8.2** Identify teachers that match the persona.

Goal 9. Determine location of course offerings (what is going to be offered where).

- 9.1** Set up committee to develop matrix on existing course offerings.
- Work with curriculum team to develop policy on distribution of courses.
 - Establish procedure to regularly review course distribution.

Goal 10. Increase support for dual credit/early college models.

10.1 Set up committee to review and monitor dual credit/early college models.

10.2 Coordinate with post-secondary institutions and governing bodies.

- Suggest policy changes as needed at K-12 and post-secondary level.
- Oversee various registration procedures.

Goal 11. Imbed “soft skills” across curriculum.

11.1 Set up committee to determine what “soft skills” are needed and feasible.

- Review best practices and academic literature.

11.2 Determine processes to implement the introduction of soft skills into curriculum.

- Monitor process in which soft skills are incorporated across curriculum.

Strategic Initiative 7

Align scheduling.

Due to the number of school districts, this is one of the most difficult initiatives to administer. Flexibility and willingness to alter current set practices will be needed to accommodate the needs of students and the availability of instructors and classrooms. Many elements will have to be considered at the high school level to achieve success, including transportation, extracurricular activities and maintaining graduation standards. For incumbent workers and new Americans, language and current employment could be obstacles.

Goal 1. Influence policy for more K-12 hands-on training.

- 1.1** Hold ongoing meetings with top leadership of the Academy, participating school districts and participating post-secondary institutions.
- 1.2** Involve all Academy-related advisory groups, curriculum committees and other groups.
- 1.3** Hold period public meetings conveying the work and goals of the Academy.

Goal 2. Hire scheduling coordinator to facilitate Academy class schedules.

- 2.1** Establish scheduling committee with representation from all participating high schools and post-secondary institutions.
- 2.2** Scheduling coordinator will maintain regular contact and interaction with classroom schedulers at all participating high schools and post-secondary institutions.
- 2.3** Scheduling coordinator will identify data sources and how to access and use data needed to develop Academy schedule.

Goal 3. Identify existing class schedules for CTE-related courses at participating high schools and post-secondary institutions.

- 3.1** Academy class scheduler will develop process and data system in collaboration with school schedulers.
- 3.2** Academy class scheduler in cooperation with scheduling committee and curriculum committees will develop a process to prioritize CTE-related courses.

Goal 4. Align and coordinate schedules of high schools and Academy.

- 4.1** Using data acquired by Academy scheduler, the scheduler and scheduling committee will develop prototype of Academy schedule that works with class schedules at high schools and post-secondary institutions.
- 4.2** Academy director and Academy scheduler will prepare/aggregate/disseminate prototype of Academy schedule and relevant data in advance of meeting focused on scheduling.
- 4.3** Curriculum committee chairs, school schedulers and school leaders (or their representatives) will meet to review prototype of Academy schedule that works with class schedules at high schools and post-secondary institutions.
- 4.4** Academy scheduler will revise/amend Academy schedule based on input from meeting.

Goal 5. Develop transportation plan for class and extracurricular activities.

- 5.1** Academy director will assign transportation planning and oversight to staff with responsibility as Academy transportation coordinator.
- 5.2** Transportation coordinator will establish transportation committee including school district staff responsible for transportation/busing.
- 5.3** Transportation coordinator, with input from transportation committee, will develop plan to transport Academy students to and from schools.

Goal 6. Streamline and facilitate process for registration, credits, etc.

- 6.1** An Academy registration task force will be established to facilitate registration procedures among participating schools and post-secondary institutions.

Goal 7. Engage parents at all levels.

- 7.1** Provide regular opportunities for Academy personnel to meet with parents.
- 7.2** Hold annual public forums on Academy scheduling, registration and transportation.

Strategic Initiative 8

Strengthen connections.

A key intention of the Academy is to strengthen the connections between businesses and the education stakeholders, and among districts, two-year colleges and other institutions. Stronger relationships will help develop seamless transitions through the continuum and help align the desired outcomes. They will also help increase the confidence level of all stakeholders.

Goal 1. Build relationships of and assurances for state and local educational systems on value and outcomes of Academy.

- 1.1** Develop training for counselors at all levels to participate together to build relationships and assure consistent content messaging.
- 1.2** Ensure ongoing and consistent communications.
 - Share data across all systems.
- 1.3** Establish and approve priorities as they impact each educational partner.

Goal 2. Become true partners with business and industry in mission and vision of Academy by sector-based engagement and development efforts in order to identify with and respond to workforce challenges and needs.

- 2.1** Hire Academy business partner coach (works with the businesses and teachers to ensure needs are being met).
- 2.2** Engage business in the design and delivery of training programs.
 - Utilize industry subject matter experts.
 - Assure the ability to meet their needs in development of curriculum and instruction.
- 2.3** Develop outreach program.
 - Conduct meetings for businesses and education stakeholders to keep communication open.
 - Establish business and industry advisory group, including workforce organizations, i.e., chamber, GFMEDC, VPP, to assess business needs.
 - Document engagement concerns, solutions.
 - Be responsive and adaptive to the changing needs of employers.

Goal 3. Participate in local economic development planning, workforce activities and initiatives to understand and communicate role of Academy and build trust.

- 3.1** Adopt joint goals that will incentivize partner collaboration.
 - Identify responsibilities so educational systems have clear objective.

Goal 4. Better understand and identify the roles of K-12 districts, adult education, CTE, NDSCS and other contributing entities as a way to build stronger relationships.

Goal 5. Engage with students at appropriate level, allowing them to be a “partner” in the development of programs.

- 5.1 Assess students’ perceptions of the Academy and where it can be improved.
- 5.2 Find out what the student needs are and if there is an interest in the proposed curriculum.

Goal 6. Engage parents, allowing them to be a “partner” in giving feedback to the Academy.

- 6.1 Provide regular opportunities for Academy personnel to meet with parents.
- 6.2 Hold open house at Academy for parents.

Strategic Initiative 9

Educate stakeholders, partners, influencers and community of the value of the Academy.

Creating an atmosphere of support for our role in developing careers in technical and trade careers will be an important objective for us. This includes changing perceptions apparent at multiple levels; parents, students, and even counselors and teachers themselves have been found to promote the four-year degree as the “ideal” career choice, discounting a two-year degree mostly due to lack of awareness of its benefits. To realize desired Academy outcomes, intentional efforts will be developed and implemented to change inaccurate or limited perceptions of technical and trade careers. In addition, education of policy makers will help in changing and developing policy that allows the Academy build successful programs.

Goal 1. Review current perceptions and raise awareness of career opportunities

- 1.1** Conduct an assessment of the current understanding and perspectives to develop a baseline of knowledge gaps and misconceptions.
 - Utilize current research where available.
 - Parents’, students’ and counselors’ current perceptions are key to determining needed messaging.
- 1.2** Build factual background on advantages of expanding perceptions of career options and the success of the Academy approach.

Goal 2. Change policies and regulations that are roadblocks in developing a smooth path for students to receive necessary education from career awareness through training and degree and/or certificate achievement.

- 2.1** Develop comprehensive policy document on policies that impact the Academy, i.e., dual credits, scheduling for awareness education, scheduling for Academy attendance.
 - Build case and messaging for updating policies.
- 2.2** Understand regulations that hinder the system’s ability to move forward quickly to meet community and business partners’ needs.
- 2.3** Partner with key partners to advocate for necessary changes.

Goal 3. Develop and implement comprehensive communications plan to build awareness of Academy and influence perceptions of technical and trade degrees.

- 3.1** Identify target audiences and build database by category.
- 3.2** Develop key messages and construct message matrix by key audience categories.
 - Review all stakeholders’ messaging and speak as one voice.
- 3.3** Determine best vehicles for delivering messages.
- 3.4** Develop materials to promote Academy.
 - Materials will be audience-based.
 - Demonstrate ROI for business, community.

Goal 4. Identify and engage community and state partners, organizations, and networks in support of Academy.

- 4.1** Encourage and secure local government support.
- 4.2** Utilize existing support from work force advocates to help tell the Academy story, i.e., local and state chamber, GFMEDC, Department of Commerce, Valley Prosperity Partnership.
 - Arm them with key messaging and materials.
- 4.3** Make ambassadors of community-based organizations that are not part of the educational system but are educational in nature, i.e., DECA, FFA, Boy/Girl Scouts.
 - Engage their leadership in delivering a broader perspective on career exposure through exploration activities.

EVALUATING PROGRESS

An important part of any venture is the evaluation of all the strategic initiatives. This will help determine progress, what is working and what can be improved. The first step in any evaluation is to set goals and determine what key performance indicators (KPIs) will be most important in moving forward. A number of areas were discussed and many of them will be used in multiple strategic areas. The following KPIs have been identified as valuable in determining the success of the Academy.

- Results of existing standardized assessment measurements that have components related to Academy goals.
- Classroom time (hours) devoted to career awareness, exploration and preparation in K-12 settings.
- The number and quality of engagements between schools and business/industry.
- The number of high school students taking Academy coursework.
- The number of teachers participating in Academy class offerings.
- High school retention and graduation rates.
- High school graduates going on to two- and four-year colleges.
- High school graduates obtaining jobs in technical and trade careers right out of high school.
- The number of incumbent workers and new Americans in the trade and technology area through the Academy.
- Employment statistics from Cass and Clay Counties.
- Satisfaction ratings from students, school teachers, college faculty, administrators, parents and employers (ratings would be on a variety of relevant topics).
- Perception of two-year degrees among stakeholders.
- Perceived value of Academy among stakeholders.
- External academic accreditation reviews for both K-12 schools and post-secondary institutions.
- The findings from regular, ongoing program evaluation of Academy.

Advisory groups/committees

An important inclusion in the Cass-Clay Career Workforce Academy Strategic Plan is the notion of participation and transparency. This is based on the idea that an organization that involves actors, administrators and stakeholders from many diverse areas will function at an optimal level if the voices of the various groups can be represented in decision-making and allocation of effort and resources. This representation of participant views is demonstrated by the numerous advisory groups and committees described in the Academy Strategic Plan. Below, the various groups and committees identified in the Strategic Plan are enumerated with their membership noted.

Academy Steering Committee

Academy Leadership Team under NDSCS

Advisory board from K-12, two-year colleges, businesses and industry representatives

K-8 task force of teachers/administrators

Advisory committee of employers and teachers for K-8

Advisory committee of employers and teachers for middle school

High school task force of teachers/administrators/counselors for curriculum

Advisory committee of employers and teachers for high school

Curriculum team from all three stakeholder groups for overall K-12

Committee to develop matrix on existing course offerings

Committee to review and monitor dual credit/early college models

Committee to determine what “soft skills” are needed

Scheduling committee with representation from all participating high schools and post-secondary institutions

Transportation committee including school district staff responsible for transportation/busing

Registration task force

References and contributors

In the development of the Cass-Clay Workforce Academy Strategic Plan, background research included reviewing relevant topical information found in academic literature and at the websites of professional associations, think tanks, universities and K-12 schools/academies. Additional information was also acquired by communicating directly with individuals knowledgeable about academies in various parts of the country. Multiple telephone interviews were also conducted with business and industry leaders in the Cass-Clay community to gain further understanding of the local dimension and interest in the Academy.

Below are those organizations included in the research conducted in the production of the Academy Strategic Plan:

Bismarck Career Academy, Bismarck, ND
 CTE Academy, Sioux Falls, SD
 Linked Learning, Sacramento, CA
 The Academies of Nashville, Nashville, TN
 National Career Academy Coalition (NCAC), Nashville, TN
 North Dakota Department of Public Instruction
 Career Academy Support Network (CASN), Berkeley, CA
 Advance CTE, Silver Springs, MD
 Association for Career & Technical Education (ACTE), Alexandria, VA
 Career and Technical Education, Lake County Schools, FL
 Illinois Community College Board, Springfield, IL
 Metro Career Academy, Oklahoma City, OK

Business leaders representing the following:

FM Area Foundation
 First International Bank
 WCCO Belting
 Cardinal IG
 Intercept Corp
 Cass County Electric
 General Equipment
 Industrial Builders
 Matrix Properties
 McNeilus Steel
 Xcel Energy
 Midco

K-12 Participants in the Strategy Planning Input Groups

NDSCS Participants in the Strategy Planning Input Groups