



Minnesota
STATE COLLEGES
& UNIVERSITIES

PROGRAM ADVISORY COMMITTEE HANDBOOK 2010

Minnesota State Colleges and Universities
Office of the Chancellor

Academic and Student Affairs Division

Prepared by Debra Mills, CORD

April 2010

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Contents

Background, Acknowledgements, and Purpose	v
Background: Minnesota Program Advisory Committee Project	v
Acknowledgements	vii
Purpose of the Handbook	viii
Carl D. Perkins Career and Technical Education Act.....	1
Perkins IV	1
The Career Pathways System in Minnesota	5
Minnesota Definitions	5
Introduction: General Purpose and Structure of Advisory Committees	11
Characteristics of Advisory Committees.....	11
Roles of Advisory Committees	12
Structure	13
Governance.....	16
Size of Committee.....	16
Selection of Members.....	17
Committee Officers.....	18
Terms of Office.....	21
Orientation of New Members.....	22
Advisory Committee Program of Work	23
Planning a Program of Work.....	23
Program of Work Priorities.....	24
Communication with Members	31
Meetings	31
Other Communication Strategies	35
Sustainability and Special Considerations	41
What Motivates Advisory Committee Members?.....	41
Recommendations and Feedback.....	41
Member Appreciation.....	42
Connections	42
Evaluation	44
Special Considerations and Issues	46
Bibliography	47
Resources	51

Minnesota Career Pathways and Clusters Framework	53
Minnesota Programs of Study Template Sample	55
Programs of Study Pathway Definitions	60
Sample Constitution and Bylaws	72
Sample Template for Developing a Program of Work.....	77
Sample Advisory Committee Meeting Evaluation Form	78
Advisory Committee Survey	79
Checklist Meetings.....	80
Sample Minutes (Example 1)	81
Sample Minutes (Example 2)	82
Sample Annual Report	84
Sample Letter Confirming Membership	88
Sample Letter of Releasing/replacing a member	89
Sample Letter to Inactive Member.....	90
MnSCU Occupational Programs, March 2009	91
Proposed Amendment to Policy 3.30 College Advisory Program Committees—Second Reading.....	97

Background, Acknowledgements, and Purpose

BACKGROUND: MINNESOTA PROGRAM ADVISORY COMMITTEE PROJECT

Strong partnerships between educational institutions and employers have long been recognized as a pillar in effective technical/occupational education programs. These partnerships ensure community ownership and build local support, commitment, and resources. In recognition of this fact, the Minnesota State Colleges and Universities Office of the Chancellor Division of Academic and Student Affairs embarked on a project in 2004 which was designed to reinvigorate program advisory committees in the state of Minnesota. In 2010, this project was revitalized to incorporate Perkins IV changes which resulted in this handbook and corresponding professional development.

Advisory committees are groups of local employers and community representatives who advise educators on the design, development, operation, evaluation, and revision of career pathways and their corresponding technical/occupational education programs. The workplace knowledge and resources provided by committee members help to ensure that all aspects of the career pathway reflect the needs and current conditions of the workplace and that program graduates are capable of performing in the occupations for which they have trained.

The purpose of the Minnesota Program Advisory Committee Project 2010 was to prepare faculty and administrators at two-year colleges in Minnesota to select, work with, and make optimum use of technical/occupational education program advisory committees. The intent of this handbook is not for policy for colleges but as guidelines.

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The three main project tasks were:

1. To establish a 2010 project working group
2. To revise the 2004 Minnesota Program Advisory Committee Handbook to include Perkins IV requirements, programs of study, information on joint secondary and

postsecondary advisory committees, and new technologies for communication with advisory members

3. To lead and facilitate professional development workshops

The technical assistance of the nonprofit agency CORD was enlisted to execute the project tasks.

Task 1: Establish a 2010 project working group—This group was composed of individuals from two-year colleges and the purpose of the working group was to:

- Review the project’s scope of work.
- Identify characteristics of successful committees already in place.
- Review plans for professional development workshops.

The working group also had the opportunity to discuss how the project could be sustained long-term, and to consider communication strategies that could be used to engage faculty in the project.

Task 2: Revise the 2004 Advisory Committee Handbook—The working group gave recommendations on updating the previous handbook.

Task 3: Lead and facilitate professional development workshops—A major component of the project consists of regional training workshops focusing on the training of secondary and postsecondary CTE educators and administrators covering all 26 Perkins consortia. To accomplish this goal, CORD staff developed content and three (3) regional training workshops were scheduled.

The workshops focused on selecting committee members, facilitating effective meetings, and adopting a systematic process for working with committee members including new communication technologies. The workshops were structured to address the needs of both faculty who were already facilitating advisory committees and faculty who had not previously facilitated advisory committees. Various models for establishing local or regional committees were provided and systems for ongoing electronic communication were established. In addition the workshops emphasized building common (secondary/postsecondary) CTE program advisory committee structures along the lines of programs of study/career pathways.

It was recommended that participants attend their own regional workshop in teams of no more than ten (10) individuals. Suggested titles of individuals making up each team could include, but may not be limited to, the following: CTE high school teachers, principals, counselors, college faculty, college deans, Perkins coordinators, etc.

ACKNOWLEDGEMENTS

Most projects and products are the results of a cumulative effort of various groups of people. This handbook is no exception.

Much gratitude is extended to the following members of the Minnesota State Colleges and Universities Advisory Committee Project Work Group:

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Special thanks to Mark Whitney, Manager of Publication Services, CORD; Ginny Karbowski, MnSCU; Yingfah Thao, MnSCU; and Florence Newton, MnSCU

PURPOSE OF THE HANDBOOK

Change is a constant, and constant change is a given.

The purpose of this handbook is to help committee chairs and members, administrators, and instructors improve the overall quality of career pathways and the technical and occupational education programs within those pathways through the use of advisory committees. This handbook outlines the structure, function, and processes of effective advisory committees and incorporates Perkins IV requirements and uses of new technologies for communications.

Carl D. Perkins Career and Technical Education Act

PERKINS IV

The Carl D. Perkins Career and Technical Education Act of 2006 provides funding for vocational and technical education for school districts and community colleges. This Act, commonly referred to as Perkins IV, focuses on career pathways (programs of study). A true career pathways *system* consists of many components (i.e., all students, all occupations, career counseling, academic coursework, etc.) that are complimentary to career and technical education. While Perkins IV funding is the basis of career pathways system resources, the resources must go beyond Perkins funding for a career pathways system to be truly successful. It will take more than just Perkins funding to create a career pathways system.

Perkins IV is changing the face of career and technical education with these key points:

- *Change in definition to eliminate the focus on sub-baccalaureate careers*—an emphasis on multiple exits and multiple entrances along a program of study
- *Emphasis on preparation for postsecondary education **and** employment*—a systematic approach to career development and career ladders with postsecondary education having a broader definition of training (certificates, associate degrees, industry credentials, etc.)
- *Preparation not on “job” preparation but on “academic and technical” preparation*—knowing that skill sets needed by industry require both academic and technical preparation
- *Increased emphasis on achievement of a degree, certificate, or credential*

All states are required under Perkins IV to develop programs of study that relate to regional economies and focus on high-skill, high-wage, and high-demand occupations.

Programs of study are non-duplicative course sequences (coherent and rigorous) that span secondary and postsecondary institutions (may provide opportunities for dual/concurrent enrollment in a postsecondary program) AND lead to an industry-recognized credential, certificate, or associate or baccalaureate degree.

Perkins IV requires Career and Technical Education (CTE) to have a renewed and strengthened focus on collaborative partnerships and the development and

implementation of programs of academic and technical preparation spanning secondary and postsecondary education.

To promote this heightened expectation of collaboration between secondary and postsecondary CTE, the following *guiding principles* became instrumental in moving CTE forward in Minnesota under the Perkins IV Transition Plan:

1. CTE and academic education must be integrated in a more comprehensive way.
2. College and work readiness skills are one and the same.
3. Each student needs at least some education or advanced training past high school, whether 2-year college, 4-year university, industry certification, or advanced training through work.
4. Federal Perkins funding for CTE is not an entitlement at either the state or local level.
5. All education spending must be connected with student success outcomes.
6. High schools and colleges should continue CTE programs and activities that have worked well.
7. CTE must be strategically placed within the broader vision, mission, and goals for education within the state of Minnesota.

Rather than developing a vision and mission for CTE in Minnesota, these guiding principles acted as the primary drivers for advancing CTE within Minnesota high schools and colleges. In particular, adhering to these guiding principles will be critical at the local level as high schools and colleges begin implementing the key new feature of the Minnesota CTE Plan—a *new consortium structure*—which requires each consortium of high school and college partners to develop a SINGLE LOCAL PLAN, starting July 1, 2008, and all years thereafter. The SINGLE LOCAL PLAN will govern and manage the use of funds for each recognized consortium.

Mandatory uses of basic grant funds emphasizes (Perkins IV):

“...linking career and technical education at the secondary level and career and technical education at the postsecondary level, including by offering the relevant elements of not less than 1 career and technical program of study described in Section 122 (c)(1)(A)...”

Permissive uses of the basic Perkins grant funds emphasizes:

- *Involve parents, businesses, and labor organizations in the design, implementation, and evaluation of career and technical education programs*

- *Local education and business partnerships, including work-related experiences for students, adjunct faculty arrangements for qualified industry professionals, and industry experience for teachers and faculty.*

The following goals are taken from Minnesota's State CTE Plan:

- Implement a Career Pathways/Programs of Study Structure that aligns high schools, community and technical colleges, and university-level programming to support:
 - High-school-to-college transitions for students in career and technical education programs
 - Adult student transitions into high-skill, high-wage, or high-demand occupations
 - Programs and services integral for state and regional economic needs
- Effectively use employer, community, and education partnerships to support career and technical education (From MN State CTE Plan)
- Examine and expand collaborative practices to support CTE programs at the secondary and postsecondary levels to ensure a continuum of service provision

Accomplishing the above CTE goals, as outlined under the Minnesota Five-Year CTE State Plan, will enable Minnesota to lay the foundation for a long-term alignment between high schools and colleges regarding administration, funding, accountability, and, most importantly, the programming of CTE.

The Minnesota Department of Education, the Minnesota State Colleges and Universities Office of the Chancellor, and all new local Perkins IV consortia receiving CTE funds have begun to lay the foundation for a long-term alignment between high schools and colleges (administration, funding, accountability, and programming). Some of the key changes that affect Minnesota's career and technical education under Perkins IV are as follows:

- *Local consortium:* Established formal consortia of secondary and postsecondary partners to receive Perkins funds and jointly administer programs and support services for all secondary and postsecondary CTE students through an annual joint local consortium plan. In Minnesota, 26 CTE consortia have been formed to implement the intent of Perkins IV locally.
- *Programs of study:* Each local consortium must design, develop, and implement programs of study/career pathways that span at least two years of high school and the first two years of postsecondary education to meet a new requirement under

Perkins IV. These programs of study will be implemented by each consortium in an incremental fashion over the five-year span of the Perkins legislation.

In addition to the emphasis on programs of study (career pathways), Perkins IV is also leading us to new approaches in assessing technical skills. The new Perkins act requires measurements for technical skill attainment that are valid and reliable and are based upon industry-recognized standards, where they are available. Minnesota is in the process of identifying and using valid and reliable technical skills assessments and is inventorying districts and two-year higher education institutions as to the use of industry skill standards. It will take several years to identify these assessments and establish reporting procedures. The intent is to establish a system whereby state benchmarks will be identified at the program of study level, and that progress toward these benchmarks will be aggregated.¹

Thus, we now need to use the lens of Perkins IV, and specifically the implementation of career pathways, to view our technical/occupational program advisory committees. *How can we use these committees as a tool for our requirements for Perkins IV and to use them optimally for the benefits of our learners? How will we need to modify and improve our advisory committees to help our local economic development?*

¹ Hans Meeder, *Minnesota CTE Assessment Project Interim Memo on Key Considerations for Developing a Technical Skills Assessment System Prepared by the Meeder Consulting Group, LLC, July 2009*

The Career Pathways System in Minnesota

Minnesota believes that career clusters are a tool for career guidance, a platform to organize sequences of courses around, and a way to improve the quality of CTE. Minnesota has long used the 16 CTE career clusters as a data organizing framework. However, only under its new consortium structure has Minnesota begun exploring the use of career pathways/POS as a structural framework for organizing the coordinated delivery of CTE in high schools and colleges (www.careertech.org).

MINNESOTA DEFINITIONS

The following definitions are taken from <http://www.cte.mnscu.edu>.

Foundation Knowledge and Skills—These include academic and technical literacy skills (i.e., employability, ethics, systems, teamwork, career development, problem solving, critical thinking, information technology application, legal responsibilities, communication, safety, health and environment, social studies, math, science, English, personal finance) and represent the base from which to build work and college readiness.

Career Fields—Career fields are the organizing structure for the 16 career clusters and 81 pathways. The six career fields represent the broadest aggregation of careers. Students are normally exposed to career field exploration in middle school and early high school.

- Agriculture, Food, and Natural Resources
- Arts, Communications, and Information Systems
- Engineering, Manufacturing, and Technology
- Health Science Technology
- Human Services
- Business, Management, and Administration

Career Clusters—Career clusters are groups of occupations and broad industries. They have been grouped into a national classification of 16 clusters which are based upon common knowledge and skills. Career clusters include hundreds of occupations which are grouped into pathways around which educational programs of study can be built.

The 16 career clusters are:

- Agriculture, Food, and Natural Resources
- Architecture and Construction
- Arts, Audio/Video Technology, and Communications
- Business, Management, and Administration
- Education and Training
- Finance
- Government and Public Administration
- Health Science
- Hospitality and Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections, and Security
- Manufacturing
- Marketing
- Science, Technology, Engineering, and Mathematics
- Transportation, Distribution, and Logistics

Career Pathways—Career pathways represent an organization of related occupational areas within a specific career cluster. Each of these pathways has identified essential industry-validated knowledge and skills which provide foundational information for development and revision of programs and programs of study. Once programs of study are developed, learners at various levels (high school, college, or at the workforce training level) will then be able to choose from several individual programs within a program of study in order to attain the specific knowledge, skills, and abilities and pursue a career of their choice.

Minnesota Career Fields, Clusters & Pathways



Minnesota Career Fields, Clusters, and Pathways
(See also the appendix.)

Programs of Study (POS)—Programs of study are the sets of aligned programs and curricula that begin at the high school level and continue through college and university certificate, diploma, and degree programs. The high school and college POS programmatic structure should provide entry and exit points for students to better access programs resulting in certificates, diplomas, and degrees. When developing new certificates, it is essential that high schools work within the CTE Program Approval Requirements with the Minnesota Department of Education, and that colleges work within the Minnesota State Colleges and Universities Academic Program Policy 3.36 and Procedures 3.36. Programs of study must include industry skill certification opportunities where relevant and appropriate. High school required courses will contain Minnesota academic standards, and career and technical courses will incorporate industry standards. Faculty and teachers must be involved in aligning high school and college curricula. They will identify, select, and use or develop valid and reliable assessments that demonstrate technical skill attainment for students at the high school and college levels.

In addition, the Minnesota Career Pathways system should include enhanced learning opportunities for work-based and workplace learning, college preparation, service learning projects, and career and technical student leadership organizations. Early college credit should be designed and implemented in the system.

These include high-school-to-college credit articulation, credit for prior learning, advanced placement, College Level Examination Program (CLEP), international baccalaureate, and Post-secondary Enrollment Options Program (PSEO).

Consortia may choose to work locally, with other consortia, or from a state model to develop one or more regional programs of study.

“Colleges should improve the program advisory committees that are not working effectively.” (Minnesota Office of the Legislative Auditor—Program Evaluation Division MnSCU Occupational Programs, March 2009)

The following points were taken from a report from the Minnesota Office of the Legislative Auditor—Program Evaluation Division MnSCU Occupational Programs, March 2009. (See also the appendix.)

Major findings for advisory committees in this report are as follows:

- MnSCU generally does a good job of understanding economic and workforce conditions, but colleges do not consistently consider market needs for workers when managing their programs.

- Colleges respond to employers and economic conditions by interacting with employers in various ways, such as developing programs that meet professional standards or incorporate needed skills. But in reviewing their programs and proposing to add, change, or close programs, colleges have not consistently assessed market supply and demand for jobs.
- Colleges rely heavily on program advisory committees to identify employer needs, but not all committees work effectively.
- For occupational programs, colleges are required to establish advisory committees. Committees consist of employers, students, and faculty, and their chief duty is offering guidance on program design and operation.
- College presidents we interviewed spoke highly of the committees' value, yet most said not every committee was working up to its potential. Most committee members we surveyed held favorable impressions of the committees, but our survey also identified problems.
- Some committees meet too infrequently, and many colleges have committees that are either too large or too small. Some committees have too few employers or other professionals. Some members said their committees were inactive in undertakings typical of the committees, such as identifying retraining for instructors.
- Colleges should provide better oversight of program advisory committees. They should also improve those that are not fulfilling their potential.

This report suggests that Minnesota is at a crossroad. While the report confirms that Minnesota is doing a good job with advisory committees, there is room for improvement. The purpose of this handbook is to help you improve.

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Introduction: General Purpose and Structure of Advisory Committees

One of the most common characteristics associated with high-quality technical/occupational education programs (within a career pathways system) is their close ties with business, industry, and labor. Career pathways must align with and fulfill employers' needs for competent, high-performing employees who enter the workforce with technology expertise and fundamental job-success skills. Because career pathways must be integral parts of the communities they serve, it is necessary to have close cooperation between education and local employers. Employers have a strong self-interest in helping secondary and postsecondary education improve and in helping students succeed. One of the most effective ways of providing a link between the community and the educational system is through advisory committees. Advisory committees are essential to the successful initiation of career pathways, and they play an important role in guiding, strengthening, and improving existing technical/occupational programs. Business, industry, and labor representatives have a wealth of expertise, personnel, and technologies to offer educational systems.

What is an advisory committee? An advisory committee is a group of employers and employees who advise educators on the design, development, implementation, evaluation, maintenance, and revision of technical/occupational programs within a career pathway. Each advisory committee is made up of individuals with experience and expertise in the occupational field that the program serves.

CHARACTERISTICS OF ADVISORY COMMITTEES

The program advisory committee is established to assist in career pathway or program improvement. An effective committee is one that knows that something positive will occur as a result of its work. The committee must decide what it wants to accomplish and then develop a plan to accomplish it. Key to the success of any advisory committee is commitment—on the part of the committee members as well as participating educational administrators and faculty members. The college can set the tone for this cooperative venture.

ROLES OF ADVISORY COMMITTEES

The advisory committee is basically a tool for educators to “talk to their customers.” Advisory committees provide specifications for current programs and identify emerging occupations and skills needed. An advisory committee’s role is to ensure the quality of program graduates, not by “rubber stamping” what already exists but by offering suggestions for improvements that will help the program grow and expand.

Advisory committees can provide:

- Specifications
- Validation of content
- Assessment of program quality
- Unique education/training experiences
- Credibility
- Assistance in adapting skill standards for local needs

A successful advisory committee plans and carries out a program of work that aligns the career pathway with employers’ needs. The program of work will most likely include these broad areas:

- **Assessment and counsel**—The advisory committee assesses each area of the career pathway and offers suggestions on ways to improve that area. For example, the committee might suggest ways to modify the curriculum, review teaching materials for technical accuracy, provide information on equipment and vendors, and establish safety guidelines. It is especially critical that employers give counsel on the skills needed in the workplace including the essential skills (workplace skills, foundations skills, soft skills, employability skills, etc.).
- **Assistance**—The advisory committee assists the program by helping instructors and administrators secure mentors and internships for students. The committee also assists with placement of graduates.

It is especially critical that employers give counsel on the skills needed in the workplace including the essential skills (workplace skills, foundations skills, soft skills, employability skills, etc.).

- **Promotion and advocacy**—The advisory committee promotes the career pathway in the community. Promotion and advocacy can take forms such as communicating with legislators, arranging publicity, presenting programs to civic groups, and authoring newspaper articles.

STRUCTURE

Each committee can develop its own organizational structure and operating procedures; this handbook provides guidelines for that process. Because each advisory committee is unique, there may be differences among advisory committees in Minnesota. However, with the onset of Perkins IV, a trend of joint secondary and postsecondary advisory committees has taken place across the country. Career pathways require secondary and postsecondary educators to work together to develop programs of study with business and industry.

The Minnesota State Colleges and Universities system passed this amendment to Policy 3.30, Community and Technical College Program Advisory Committees (March 17, 2010):

A college program advisory committee identifies needs and opportunities; describes the current status and dynamic nature of its industry and/or occupation(s); and provides guidance and advice on initial development, accountability, expansion and closure of academic programs or related program clusters at the college or with related programs at high schools, colleges, and/or universities. A college program advisory committee shall include, but is not limited to, employers, students, and faculty.

From Minnesota State Colleges and Universities website

There is often overlap, or a lack of continuity, in the way programs at the secondary and postsecondary levels affect students. In the past, advisory committees were developed to support the work of a specific technical/occupational program at a specific institution (secondary or postsecondary). In a community you would have a cluster of industries and in education, you would have corresponding technical/occupational programs. Usually the technical college or community college would have an advisory committee, and many times the secondary school would also have advisory committees. These separate committees would support a specific program at a specific school (see figure 1).

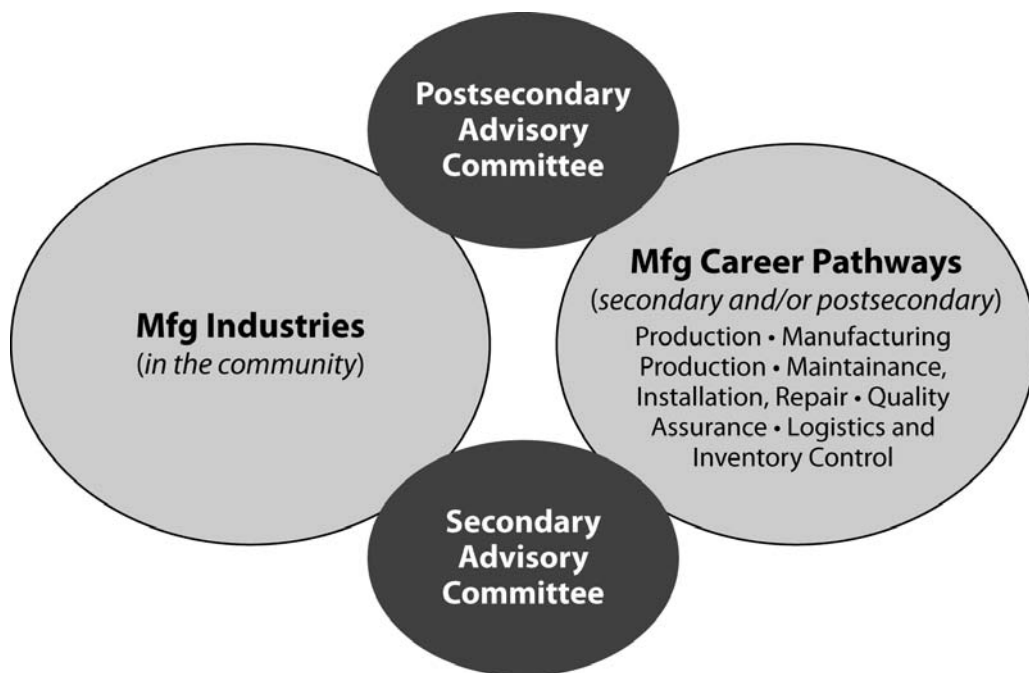


Figure 1. Separate Secondary and Postsecondary Advisory Committees

Traditionally, these programs were developed separately and separate advisory committees were common.

We are now working in a career pathways system. Curriculum at the community college or technical college should not be developed in isolation from secondary schools. A career pathways system that recommends a 9–14+ course sequence should be implemented. Likewise, options should be open for students who want to continue beyond the AAS degree. In a career pathways system, the curriculum is to be developed together and placed over two or more institutions. If we are truly developing a program of study together and laying the framework over (at least) two institutions, it makes sense to have one advisory committee that supports the program of study. Instead of thinking of our program as a separate entity, we need to think of our institution’s “piece” of the curriculum as it expands over different grade levels. Thus, a joint advisory committee (see Figure 2) that brings together secondary educators, postsecondary educators, and industry would be advantageous. Together we can develop the curriculum and improve the career pathway.

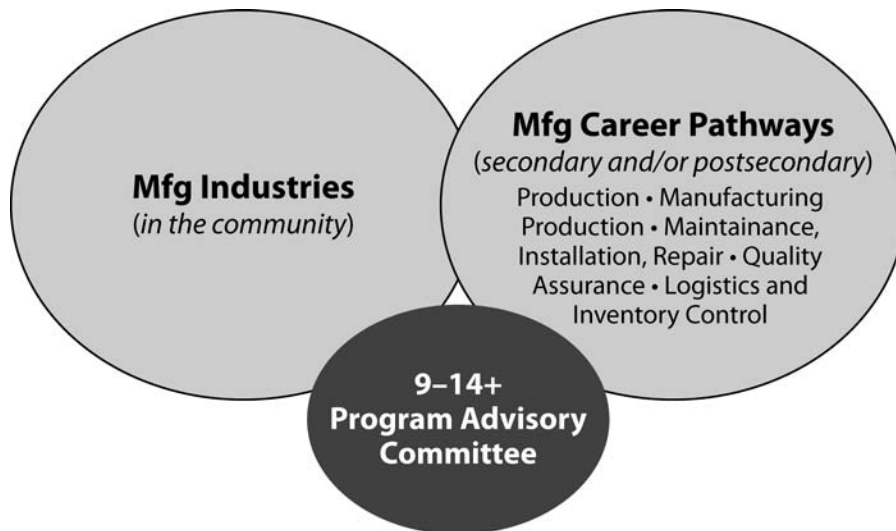


Figure 2. Joint Secondary and Postsecondary Advisory Committee

Many of the employers who serve on your committee may also be helping the secondary education system or university in a similar role. For some locales, a combined advisory committee that serves both secondary and postsecondary makes sense. In some cases a committee might serve more than one postsecondary institution. The question of whether a single advisory committee (*serving the needs of two or more colleges/universities or secondary schools*) is feasible for your program area should be answered by the local community. Many questions will come into play when deciding whether to combine advisory committees:

- Will there be scheduling issues for a combined committee?
- Can a single group meet and address all the issues?
- Is the program so unique that it does not have a counterpart at a different educational level?
- Is the area too large geographically?
- Is there competition among the programs?
- Would a combined committee provide a coordinated approach to meeting the needs of industry?
- Would it broaden the awareness of the program?

Because Minnesota is building and sustaining CTE by the development of a *new consortium structure* that brings together high schools and colleges around a SINGLE LOCAL PLAN,

every effort should be made to overcome any of these barriers. At the very least, informal information sharing between secondary and postsecondary levels is beneficial.

GOVERNANCE

Each advisory committee should develop and approve guidelines for operating procedures, or bylaws. Collectively, bylaws constitute a formal, written description of how the committee operates. At a minimum, they should include:

- Name of the committee
- Purpose
- Membership guidelines
- Officers and corresponding duties
- Meeting guidelines
- Subcommittee details or assignments
- Parliamentary authority or operating procedures
- Amendment procedures

SIZE OF COMMITTEE

The number of members on an advisory committee will vary. Each committee shall be small enough to lend itself to informal discussion and yet large enough to reflect the diversity and needs of the community. The size and composition of an effective advisory committee should be appropriate to meet the educational, economic, social, and cultural obligations of the program and the college. The number of persons appointed to an advisory committee should be determined by the committee's functions, the size of the program, and the size of the community. The "one size fits all" approach doesn't work. At the same time, certain general parameters should be kept in mind. Committees with fewer than five business/industry members may have limited perspective, inadequate information on career fields, and too little diversity. Committees with more than 12–18 business/industry members can become unmanageable. In many cases, a membership of 6–12 business/industry representatives is ideal.

Note: Some funding and/or credentialing agencies may have their own requirements as to the make-up of the advisory committee. Be sure to comply with those requirements to ensure that credentialing and funding are not jeopardized.

SELECTION OF MEMBERS

Advisory committees should consist primarily of employers. Advisory committees are a tool for education to “talk to their customer.” To be effective, committee members should have a clear sense of trends in the field. They should be able to identify skills that will ensure the employability of your program’s graduates, and they should be able to identify jobs that don’t yet exist but are likely to in the near future. This is necessary to keep your program on the cutting edge. When recruiting members, identify committed leaders and seek members who express sincere interest in the program, have the confidence of others in the community, and are dedicated to the occupation and the community.

In the development of a new advisory committee, college personnel should visit business sites to demonstrate their desire to build a true partnership that embraces the needs of employers. Look for members who are knowledgeable about the occupations represented by the program or cluster. Members must have good communication skills; must be able to express their ideas clearly; and must be able to respect, tolerate, and work with ideas expressed by others.

Who should serve?

- Those who know what workers in the field will require in 3–5 years
- Those who value the institution and its students
- Those who want to help

Effective members are business representatives who stay informed about changes in their industries. Does that mean you should recruit chief executive officers (CEOs) or look to representatives of the rank and file? The answer depends partly on where your program stands. On the one hand, establishing a new program or rejuvenating a weak, yet valuable, one may require the combined efforts of individuals who command respect and have a certain amount of clout in the business community. On the other hand, a long-standing program may need periodic infusions of new technology or methods, for which the best sources of information are often the people who work with the technology hands-on. In still

other cases, representatives from the second level of management are best positioned to look ahead and help design a program that will meet future needs.

Even though the majority of committee members should be from business and industry, a broader representation could benefit from understanding the works of an advisory committee. Broad representation will include the viewpoints of segments of the community being served by the program. It is suggested that secondary and postsecondary technical instructors, administrators, counselors, and even general education (academic) faculty could serve as nonvoting, consulting members. Educational representatives should be present to receive advice and answer questions. Former students should *only* be on your advisory committee if they are actively working in the industry.

The committee membership should be diverse enough to represent the concerns of a broad constituency encompassing:

- The general population (which is diverse with respect to gender, physical disability, age, race, and ethnicity)
- All occupational levels within the industry
- Organized labor
- Different company types, sizes, and structures
- Economic development councils or chambers of commerce
- Trade, professional, and civic organizations
- Community-based organizations, workforce development groups, and social service agencies

COMMITTEE OFFICERS

The advisory committee should elect officers from its membership. Suggested officers are a chair, a vice-chair (or co-chair), and a secretary. At the very least, a chair and secretary should be elected. **The chair should be from industry.** The committee chair may appoint subcommittees as necessary to facilitate committee business.

Chair

Leadership at the top is extremely important. The chair's leadership is one of the keys to the committee's success. So, it is imperative that the chair be a person from industry whose

opinions are respected. He/she sets the tone for the committee. The chair will create and maintain a cohesive, effective group and create an environment that is conducive to positive committee action. The two main roles of the chair are to set meeting agendas and conduct meetings.

The chair should possess skills and characteristics such as:

- Experience in the industry cluster or occupation that the program represents.
- Ability to manage meetings, plan and adhere to schedules, involve members in ongoing activities, and reach closure and consensus on issues.
- Excellent oral and written communication as well as willingness to make appearances before the community to present, explain, and justify recommendations.
- Ability to delegate responsibility as well as willingness to accept responsibility for the committee's actions.
- Personality characteristics such as empathy, fairness, tolerance, sound judgment, and attentiveness.

Leadership at the top is extremely important. The chair's leadership is one of the keys to the committee's success. So, it is imperative that the chair be a person from industry whose opinions are respected.

The four main elements to becoming a successful chair are:

- *A clear sense of the committee's purpose*—The main purpose is to strengthen the career pathway that the committee serves. That is the committee's reason for existing. It has no legislative, administrative, or programmatic authority. The committee must work cooperatively with the college and other educational institutions.
- *Ability and willingness to take charge*—The chair must create and maintain a cohesive, effective group.
- *Ability to get results*—The chair must guide the members through discussion, resulting in a program of work that will enable the committee to meet its established goals.
- *Good organization skills*—Good organization starts at the top. The chair should always bear in mind that committee members will only stay involved if he or she sets an example of good organization and uses time efficiently.

It is important to encourage members to be proactive in giving information and advice to the program. The chair should make assignments to members on the basis of their expertise and enthusiasm in relevant areas.

The responsibilities of the chair include:

- Working with the college and the community to plan and carry out the committee's program of work.
- Developing items for the meeting agenda and assisting the secretary in handling details regarding meetings.
- Leading meetings.
- Keeping the group focused and on task.
- Delegating tasks and follow-up work.
- Appointing subcommittees.
- Submitting and following up on recommendations to the college and other educational institutions.

Secretary

The advisory committee secretary oversees the administrative functions of the committee. The secretary could be a representative from business/industry. Staff support from the college should be assigned to assist the secretary. The secretary's responsibilities include:

- Ensuring that minutes are taken at meetings.
- Managing other administrative functions of the committee such as communication issues.
- Ensuring that the committee's work is recorded.

Staff Support

To achieve its purpose in a timely fashion, an advisory committee must have adequate administrative and clerical staffing. Many times this is provided by the college division or department in which the technical/occupational program resides. Staff members assigned to an advisory committee typically record meeting minutes and perform clerical duties as needed. They should possess skills and characteristics such as:

- An understanding of the technical program, occupation, and/or cluster.

- Good listening skills.
- Ability to organize detailed material.
- Good writing skills.
- Ability to work with college, other educational institutions, and employer representatives.

The responsibilities of the advisory committee support staff include:

- Taking minutes at meetings.
- Preparing minutes and having them reviewed by the chair.
- Distributing minutes.
- Mailing agendas, announcements, minutes, and other information to members.
- Making sure the membership roster is current, complete, and accurate.
- Making all facility reservations and all arrangements for refreshments.

Copies of all agendas and past meeting minutes should be on record with the secretary, with the department head, and/or on the advisory committee's or college's website.

TERMS OF OFFICE

Each advisory committee should establish its own criteria and guidelines for member recruitment, selection, appointment, and replacement. Following are guidelines.

- The suggested maximum term for members is three years. It is recommended that members not be appointed to successive terms and that at least a one-year absence be considered before reappointment. A rotational, three-year term of service allows for both continuity and change. One third of the total membership would change each year. New members should be appointed as terms expire.
- The suggested term of office for the chair is one or two years. The term of office should commence on July 1 and terminate on June 30. The chair should be allowed to serve more than one term.

Committee membership should be reviewed and updated yearly to ensure broad-based representation of the industry and to ensure that the work of the committee continues.

ORIENTATION OF NEW MEMBERS

The committee's success will depend to a large extent on how well members understand their roles at the first meeting they attend. New and continuing advisory committee members should be regularly provided with information relative to the committee's purpose, function, structure, and goals as expressed in the committee's work plan.

New-member orientation could include a review of the member guide, the committee's bylaws, and summaries of past accomplishments. Orientation meetings often involve tours of employer facilities and presentations about the program. Discussion of current issues that affect the program should also be included.

Items in your orientation/member guide could include the following:

- Background on the college and other educational institutions involved
 - Admission policies
 - Mission statement and value statements
 - Organizational chart
 - Programs offered
- Career pathway overview
 - Curriculum (scope and sequence)
 - Facilities and equipment
- Roles and responsibilities (both individual and collective)
- Membership and governance issues
- Committee program of work and accomplishments

A master copy of the member/orientation guide should be kept on file and, if possible, should be posted on the web.

Typically, in addition to the member/orientation guide, new members receive various resource materials. These could include college catalogs, class schedules, program brochures, departmental literature, student retention and placement statistics, and local economic development news.

Advisory Committee Program of Work

PLANNING A PROGRAM OF WORK

The primary purpose of advisory committees is to advise educators on the design, development, implementation, evaluation, maintenance, and revision of technical / occupational education programs within a career pathway. Each committee must decide what it wants to accomplish based on the needs of its program and the requirements of business in its community. The committee then develops a plan of work to accomplish its goals.

Following are the main steps in planning a program of work:

- Establish annual priorities
- Plan committee activities
- Develop planning tasks
- Assign responsibilities
- Establish timelines

The primary purpose of advisory committees is to advise educators on the design, development, implementation, evaluation, maintenance, and revision of technical / occupational education programs within a career pathway.

Establish annual priorities—The priorities that a committee undertakes will be based on the current and projected needs of the community and what has been accomplished in the past. Priorities could include curriculum review and revision, staff development, career development and work-based learning activities, marketing and/or advocacy of the program, student activities (*recruitment, mentoring, placement*), or program-specific resource needs.

Plan committee activities—Once the priorities are set, the program of work can become more specific.

Develop planning tasks—These tasks are steps to accomplishing specific activities. The advisory committee should consider time, costs, human resources, and other support needed for each step.

Assign responsibilities—This can be the most important step for accountability and follow-up. Even when the entire committee will work on the project, one or more individuals

should be responsible for getting each task started, keeping it going, and providing progress reports. Be sure each person responsible understands what is to be accomplished.

Establish timelines—In addition to clearly understanding what is to be accomplished, each person assigned to a specific planning task should know when the task is to be completed. Timelines allow the person(s) assigned to a given task to plan for its completion.

PROGRAM OF WORK PRIORITIES

Priorities for the advisory committee's program of work usually fall into one of these categories:

- Curriculum and technical skills assessments
- Staff development
- Career development and work-based learning
- Marketing and advocacy
- Student recruitment, mentoring, and placement
- Program resources
- Evaluation (*of the program and the advisory committee itself*)

Curriculum

Review of curriculum—Advisory committees can identify career pathways and content that are out-of-date or do not meet industry standards. Members should advise on academic, technical, and employability standards that the pathway and its students should meet.

Items to be reviewed include:

- *Program objectives*—Committee members should ask questions such as: Are the program objectives appropriate in light of current workplace trends? If achieved, will they produce graduates who will be able to enter employment at acceptable levels? Does the labor market's demand justify the number of graduates that the program is producing?
- *Structure and length*—After reviewing the structure and mechanics of the pathway, the committee should ask questions such as: Is the lab sufficient? Does the program provide adequate work-based learning activities such as internships and clinicals?

- *Curriculum frameworks and course descriptions*—Does the framework or course sequence satisfy the requirements of business and industry as stated in national standards and as determined through local employer needs assessment within Minnesota? Besides, the technical core standards, are academic and essential skills addressed (i.e., employability, ethics, systems, teamwork, career development, problem solving, critical thinking, information technology application, legal responsibilities, communication, safety, health and environment, social studies, math, science, English, personal finance)?
- *Assessments*—The advisory committee should be involved in the process of validating core indicators of performance. Furthermore, committee members should provide input about systems or industry-recognized assessments designed to collect evidence on students’ pathway competencies, including basic work-readiness skills. Such assessments should help drive decisions on the basis of what is best for each and every student.

Modification of existing programs—Advisory committees help to develop educational objectives. Because they are directly involved with business and industry, committee members can provide a fresh perspective and new insights that program instructors often cannot. Fresh ideas help educational administrators and instructors to align their programs with contemporary expectations. Committee recommendations should be stated in the form of motions that are then voted upon by the committee and recorded in the minutes.

Emerging fields—Advisory committees help to identify new or emerging fields. Because change is a constant in the technological workplace, advisory committees are an indispensable source of up-to-date expertise on new and developing areas. They can identify areas in which new pathways, or changes to existing pathways, are necessary.

New Programs—An important step in developing the labor market analysis for a program application² is the identification of representative job titles for which a proposed program is designed. The advisory committee is in the best position to recommend these titles. Campus staff can use these job titles to identify the best Standard Occupational Title (SOC) by using the OccupationQuick Search in O*Net Online.³

² <http://www.academicaffairs.mnscu.edu/academicprograms/instructions/progdevel-needsassessment.pdf>

³ <http://online.onetcenter.org/>

When traditional labor market data for new or emerging occupations are inadequate or unavailable, the advisory committee can also help document the extent of demand for skilled workers in the region.

Industry credentials—Advisory committees can help programs identify minimum industry standards and credentials for students exiting the pathway.

Safety—Advisory committees may be able to assist pathways with safety concerns, safety training, or safety equipment.

Review, evaluate, and advise on course materials—Advisory committees can be helpful in determining whether texts should be updated or supplemented. It is usually not the advisory committee’s task to select course materials, but committee members are often able to suggest helpful occupation-related guides and catalogs.

Staff Development

Provide in-service activities for instructors—Advisory committees can review instructor professional development plans and make recommendations for their improvement. They can provide instructors with retraining, back-to-industry training, and summer opportunities designed to help instructors upgrade their technical skills, or they can provide in-service activities on current business/industry methods and processes.

Open industry-based training to instructors—Advisory committee members may provide relevant employee training that could be made available to educators.

Support instructors’ memberships or participation in trade associations—By underwriting instructor memberships in industry and trade associations, advisory committees help educators gain access to up-to-date technology and the expertise of working professionals in the field.

Career Development and Work-Based Learning

Advisory committees can review career guidance activities and serve as a placement clearinghouse for the work-based learning component of your program.

Career awareness and career development activities—Advisory committee members are perfect partners for work-based learning experiences for students. Members can arrange

for occupation-related field trips or other career awareness activities such as job shadowing.

Work-based learning activities—The most intense work-based learning activities are internships (or clinicals) and apprenticeship programs. In most cases, these programs are highly structured and involve bridging the curriculum and the workplace so that students can see a connection between their academic studies and their work-based learning. Internships have definite time spans—typically a semester or a year. There is no guaranteed employment at the end; however, many interns have found employment at their internship sites. Apprenticeships take many forms, but all involve both secondary and postsecondary components. Business partners work with educators to define the curriculum. Most youth apprenticeships involve some type of postsecondary tuition compensation, and many involve guaranteed employment upon successful completion.

Part-time jobs—In lieu of a formal work-based learning program, advisory committee members can often place students in part-time jobs related to the career pathway. Students will welcome the opportunity to try out their new skills and make money while still in college.

Marketing and Advocacy

Interpret the career pathway to the community—Acceptance and continued support of a career pathway often hinges on a community's knowledge of career areas and related offerings at the college and secondary system. The advisory committee can heighten public awareness of local labor market needs. For this reason, an advisory committee must initiate and maintain an effective public relations program. Advisory committees can also assist the college in developing or implementing the college's marketing plan.

Serve as an advocate of the career pathway—Members can present the pathway to community groups, lending credibility and stature to the program. Advisory committees can establish procedures for recognizing outstanding students, teachers, and community leaders.

Advisory committees should seek ways to increase coverage of the career pathway in newspaper, radio, television, and other media. In addition, members can help in the promotion of special college events.

Seeking legislative support for the career pathway—Advisory committee members can be education’s most effective spokespersons among political groups. The views of prominent business leaders tend to carry considerable weight with policymakers at local, state, and federal levels. Advisory committees can explain to legislators about the need for the career pathway, provide tours for legislators, and promote legislation that supports career and technical education.

Managing marketing and advocacy involves three main steps:

- Identify an “owner” for marketing activities—This may be a subcommittee or a person to work with the college public relations office.
- Develop a multimedia strategy.
 - Print
 - Digital (Internet-based, audio, video, and CD): student testimonials; employer testimonials
 - Radio and television
 - PowerPoint presentations
- Promote the program and the committee’s work.

Students: Recruitment, Mentoring, and Placement

An advisory committee can play an important role in identifying available jobs, in recruiting and mentoring students in the career pathway, and in placing program completers.

Recruitment—Advisory committees help “sell” the career pathway to students and recruit students into the pathway.

Student outcomes—The advisory committee should review completion rates, placement rates, and (*where required*) state licensing examination outcomes for the pathway.

Placement—Advisory committees can advise on the current and projected demand for program graduates. They are also good candidates for hiring program graduates/completers and can notify instructors of job openings for which students are qualified.

Advisory committee members in the classroom—Members can serve as, or arrange for, guest speakers or substitute teachers in the classroom.

Mentoring—Members may serve as mentors for students and help students in making career choices. E-mentoring, where employers give guidance and support to students via email, has gained a lot of momentum across the nation. E-mentoring allows mentors and mentees to keep in touch by having conversations online. In addition, advisory committees may take on the task of assisting students in developing interviewing skills

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Resources (Equipment, Funding, and Personnel)

Advisory committees can advise the college on program resource needs, including equipment, laboratories, shops, staff qualifications, and specialized educational and training facilities. They can help leverage community resources and broker community partnerships. Many times advisory committee members donate materials, equipment, and services to technical/occupational programs.

Provide advice on new technology—To prepare students for a global workforce, technical/occupational education programs must use up-to-date equipment. Advisory committees should review existing equipment and consider how closely it matches equipment used in industry. Committees can determine what equipment is obsolete, what should be obtained, and whether the program provides sufficient student materials. Advisory committees can make recommendations on the sharing of equipment between secondary and postsecondary institutions.

Facilities—An advisory committee can help to determine whether the physical layout of a shop or laboratory provides the best possible learning environment. At the college level, the emphasis should be on hands-on instruction rather than simulated experiences. Development of manipulative skills requires a great deal of one-on-one time and much repetition. Experience in supervised laboratory settings is a must.

Libraries of visual aids, books, and magazines—Advisory committee members may have access to training videos and related items that can help to give students a clearer idea of what goes on in the workplace.

Evaluation—See *Sustainability section*.

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Communication with Members

Communication with members will occur in both formal and informal settings. Advisory committees should strive to streamline formal face-to-face meetings as much as possible. Business will balk and drop out of the advisory committee if they perceive that you are wasting their time with unproductive meetings. Providing materials for review in advance, either by email, regular mail, or other digital technologies, can ensure that meeting time is reserved for interactive discussions and decision-making. Tours and lectures should not be scheduled during a regular meeting.

Before work can begin, committees must understand that education and the business world have different cultures, each with its own terminology, and that those differences can create barriers to communication. One of the tasks of an advisory committee is to create a common language that both educators and employers can use and understand. This is an ongoing process that takes place via meetings and other means of communication.

MEETINGS

Meeting discussions should focus on the agenda, and every attempt should be made to involve each member. Time should be allowed for open, free discussion on the strengths and weaknesses of the program. The committee chair should be able to draw on the expertise of individual committee members and not let any one member or school official dominate the discussion. Meeting atmosphere should be supportive rather than critical. Meetings should lay the groundwork for creating a productive atmosphere in which time is well spent.

The committee should establish meeting ground rules. These rules could include the following:

- Encourage everyone to participate equally.
- Share ideas freely.
- Provide constructive suggestions rather than negative criticisms.
- Stay on track and on time.
- Be concise.

Frequency of Meetings

The frequency of the committee's meetings will be dictated by the work plan. Most committees meet at least twice a year, in the fall and spring. However, if a committee has an especially intense work plan or the industry sector changes rapidly, it may need to meet monthly. In any case, meetings should NEVER be called simply for the sake of holding a meeting. There should always be a reason for a meeting. Meetings should be scheduled to facilitate timely development, implementation, and evaluation of the committee's work plan.

What time to meet—The best time of the day for advisory committee meetings depends on the calendars of those who must attend, especially business, industry, and labor representatives. Many will prefer either a breakfast meeting or a luncheon meeting. Because of work schedules and commuting time, some may prefer evenings. Meeting times should be convenient for the business/industry members. Regardless of what time a meeting is scheduled, most members will appreciate refreshments.

Where to meet—Meetings can be held at the college, a local restaurant, or the company facilities of an advisory committee member. Technology now allows for electronic meetings where location becomes a non-issue. Regardless, the location should be whatever is most convenient for the majority of the committee's members.

How long to meet—A meeting does not need to be long to be effective. The constant should be quality of content, not time. Most meetings will last one to two hours.

Meeting Agenda

Organized meetings are one of the keys to a successful advisory committee. Establishing a meeting schedule at the beginning of the academic year will allow committee members to plan their calendars accordingly. A reminder (including a proposed agenda) should be sent two weeks prior to the meeting. A second reminder by telephone, email, or other digital technology within one week of the meeting will increase your attendance and allow meeting planners to know who intends to come.

Agenda items could include:

- Roll call
- Approval of previous minutes

- Introduction of guests
- Summarization of unfinished business
- Subcommittee reports
- New business and reports of special interest
- Miscellaneous discussion
- Review of next meeting date and location
- Adjournment

Agenda topics will be dictated by the program of work, but sample agenda topics could include:

- Academic preparation of students
- Labor market trends
- Impacts of federal and state legislation
- Emerging fields and potential new courses and programs
- Curriculum development (academic, technical, and essential skills)
- Instructional development
- Facilities requirements
- Recruitment of students
- Marketing of programs and graduates
- Work performance of graduates
- Program review processes and outcomes
- Equipment
- Staff development for instructors

(As mandated by the Minnesota Open Meeting Law, all advisory committee meetings should be open to the public.)

Effective Meetings

Well-organized meetings add to the advisory committee's effectiveness. Busy committee members are more likely to remain involved when their time is used well. To accomplish this, schedule meetings well in advance and start and end them on time. Distribute the agenda to members prior to the meeting. A meeting should have a stated purpose and a published agenda designed to achieve that purpose. Pace the meeting to ensure that all agenda items are completed in an organized way and on time. If possible, the chair should set a date for the next meeting prior to adjourning.

Effective meetings include the following components:

- The meetings are held at times and locations that are accommodating to the business/industry partners.
- The meetings should begin and end on time.
- The meetings should stay on task and on process.
- The meetings should allow for full and open discussion of issues, including controversial ones.

Managing group activity and interaction—An effective advisory committee allows sufficient time for attendees to learn and use group processes and skills for problem solving, decision-making, forecasting, and planning. The meeting leader should periodically summarize discussion and point out the connections and contradictions between points made. The leader should always ask clarifying questions. An effective advisory committee knows, understands, and uses appropriate relationship-building exercises.

Collective decision-making should follow parliamentary procedure. Beyond decisions, open and informal discussion must be encouraged. An advisory committee should strive for "consensus-based" decisions. The committee should explore and encourage all points of view in working toward consensus, i.e., a negotiated decision that everyone can "live with."

Advantages of consensus

- Process encourages creative problem solving.
- Process builds trust and commitment.
- Process generates information and clarifies issues.
- Implementation is easy because all parties support the decision.

- Responsibility is decentralized.
- Results in a win-win situation.

Disadvantages of consensus

- Process can be time-consuming.
- Process requires a skilled leader.
- Process can stalemate if conflicts are not resolved effectively.

Meeting Minutes: It's a Process

All advisory committees and subcommittee meetings must have written minutes. Minutes are the official record of the committee's activities. They help members understand the group's progress, concerns, decisions, and actions.

The advisory committee's support staff records minutes. It is not necessary to record all discussions. Minutes generally include a listing of those who attended the meeting (*name, occupation, and organization*); a summary of each issue that was discussed; and any decisions, assignments, or recommendations that were made.

Written minutes should be submitted to the committee chair for review and signature. The minutes should be sent out in a timely fashion (1–2 weeks) after the meeting. In addition, previous minutes may be sent with the notice for the upcoming meeting.

A record of all past meeting minutes and a membership roster should be kept at the college or on the college's website. Good documentation of committee meetings can be used to support grant applications.

OTHER COMMUNICATION STRATEGIES

Advisory committees should create communication channels that help to maintain close employer-educator relationships that go beyond those established through formal meetings. Goals, needs, visions, objectives, and outcomes must be constantly communicated to the committee and to the community at-large. Following are suggestions for ways to communicate with committee members.

Impact documents—These are one-page snapshots that keep the committee updated on current events. These informal documents capture significant outcomes in a compact format (typically one page) that can be readily shared through e-mail or posted on a

website. Think of impact documents as an internal press release for your advisory committee members. Impact documents can update members on new activities, processes, and/or results.

Periodic highlights—These are one-page summaries of major activities and accomplishments during a specific time period. The time period could be a month or a semester. The person who writes the highlights should be careful in distinguishing between confirmed results and anticipated or projected results.

Annual report—An annual report should be a part of every advisory committee’s communication plan. The report does not need to be lengthy. In fact, it can be an expanded version of the periodic highlights. The person(s) responsible for preparing the report should make every effort to streamline reporting to the committee, as time is always an issue. Information from the periodic highlights can be used as the basis for the annual report. The report should include significant program and committee accomplishments and general student outcome data (*how many students are in the pathway, how many graduated, etc.*). The annual reports will reflect input from—and will be of interest to—educators, business leaders, and the community.

Newsletters—Impact documents such as periodic highlights and annual reports can be distributed in the form of newsletters. Assembly and layout of the newsletters could be assigned as student projects.

Using effective communication strategies (in addition to meetings) is essential to the success of your committee. The ability of the committee to make decisions *during* meetings will depend to a large extent on how well the members communicate *between* meetings.

Using technology for communication—Technology continues to advance at exponential rates and is changing the face of how we communicate. Technology could be the linchpin for your communication efforts with committee members outside of regular face-to-face meetings. Most people conduct meetings as the prime way to communicate because a face-to-face meeting is comfortable for them, but that method may not be the best for using the committee’s time wisely. As with all technology, we need to consider the digital attitude concept. There is the acceptance curve of people’s understanding and willingness to

Technology continues to advance at exponential rates and is changing the face of how we communicate. Technology could be the linchpin for your communication efforts with committee members outside of regular face-to-face meetings.

understand technology, undertake it, and do it. Technology use requires a good bit of time and effort, but the rewards are many. Certainly, it has become much more “user-friendly” with social media applications. The motivations or incentives of people and technology are something to consider as well. A person’s need to learn and use technology is of paramount importance as an inducement to use it. While most younger people are culturally adept digital learners and multitaskers, that is not the norm for the rest of the general population.

Another consideration is to look at technology use from the perspective of individuals versus organizations. For those who do not want to learn to accept and use technology as individuals personally, you may be fortunate enough to have resources such as an IT department at your organization that can do it for you. However, even then you are doing so at your peril in the long run, as the concept of collaboration is changing the landscape for employees of the 21st century. Technological collaboration is the currency of communication today and tomorrow. New technologies will allow groups of individuals to work together. Texting and web tools such as wikis, media sharing sites, and online social networks like Facebook, Twitter, and LinkedIn have so changed everything that collaboration by businesses and global organizations are redefining the skills required of their employees. Mobile technology using smartphones, like the iPhone and Blackberries, have allowed us to be even more productive with virtual applications removed from the desktop.

Web 2.0 (the participatory Web) will have an overall profound impact on how we communicate. Wikis (interactive, collaborative web pages) can track issues or tasks in a common document visible by committee members in different geographic locations. These technologies can support collaborative learning and the development of 21st-century skills.

For organizations, but especially for individuals, social media provide a means for people to be better connected in a meaningful way. Yes, there is some trivial use of it, but overall it leaves out “the middleman” layer of filtering by organizations. Consequently, it is direct communication, which makes it more personal. Moreover, it can be a powerful medium for social good, as with disasters like Hurricane Katrina and the recent Haiti earthquake.

Matching the right technological tool to use with what you need to communicate is critical to the success of your communication with your committee. Using a PowerPoint presentation for a two-person get together can be overkill, just as using a flipchart for a 500-person presentation can be underwhelming. Learning what type of technology to use for the situation will make your communication to the committee effective and respectful

of everyone’s time. In addition, communication tools will be changing over the next few years as young people join the workforce and demand the technology.

To ensure success for your members, provide or steer them to meaningful educational and training opportunities in whatever technology tools and applications you decide to use and emphasize the importance of obtaining extensive hands-on experiences. There is a growing trend toward the use of e-learning or online learning opportunities, as well as blended learning, which is a combination of face-to-face and online learning.

Listed below are some categories and descriptions of some connective technologies that you might consider using in communicating with your advisory committee:

Category	Description	Examples
Blogs	A blog is an on-line journal that you share with other people. People can post entries and others can read, write, or edit this journal. You can develop a blog for your existing website or there are several sites that offer free blog hosting. Twitter is a social networking and microblogging service that enables its users to send and read messages known as tweets (only 140 characters).	www.blogger.com www.livejournal.com www.wordpress.com www.twitter.com
Collaborating and file sharing (documents, spreadsheets, presentations, etc.)	Allows you to create and share your work online. Applications include documents, spreadsheets and presentations. You can upload from and save to your desktop, edit anytime and from anywhere, and choose who can access your documents. The best part is that files are stored securely online.	www.google.com www.dropio.com
Groups and listservs/e-mail	The Internet provides a fast and efficient medium for communication between committee members and for committee management. Groups allow groups of people have discussions about common interests. Groups can discuss, upload, and share files.	www.groups.google.com www.groups.yahoo.com www.gmail.com www.yahoo.com www.hotmail.com
Meeting schedulers and invitations	A meeting schedule is an online productivity tool that allows you to arrange and schedule meetings (and other events). Usually the tool sends out invitations to participants proposing times; summarizes their responses; updates you on the results; sends confirmations; and sends optional reminders prior to meetings.	www.doodle.com www.evite.com www.meetingwizard.com
Online surveys, polls, and registrations	You can create and publish customized surveys in a short amount of time. You send out invitations to the survey via email and the participants can go online to take the survey. Services allow you to collect, sort, and analyze the responds. This would be an excellent tool to survey your business partners on hiring trends, skills need, or just about anything related to information that you need from them.	www.surveygizmo.com www.surveymonkey.com www.google.com (Google Docs and Forms)

Category	Description	Examples
Podcasting	Podcast is a buzzword to describe downloading audio or video files from the Internet to a portable device (iPod or MP3 player). You might wish to video a meeting or a workshop so that others who could not attend can see it in a podcast form.	www.mypodcast.com
RSS news feeds	RSS stands for Really Simple Syndication. It's an easy way for you to keep up with news and information that's important to you, and helps you avoid the conventional methods of browsing or searching for information on websites. Now the content you want can be delivered directly to you without cluttering your inbox with e-mail messages. This content is called a "feed." (http://www.usa.gov/Topics/Reference_Shelf/Libraries/RSS_Library/What_Is_RSS.shtml)	www.feedforall.com
Social networks	A social network site is an online community of people who have a common interest. Your advisory committee could build a profile (who, what, where, why) and then share files, have a discussion, and even have subgroups (subcommittees). There are several social network sites, but Facebook was the most popular as this publication goes to press. LinkedIn is the largest business-oriented network site. Twitter is growing in popularity and is more public, text-based, more real-time and has a live photo streaming.	www.facebook.com www.twitter.com www.ning.com www.its.mnscu.edu/web/mn-space/index.html (For MnSCU employees only)
Teleconference	Teleconference is a telephone between participants in two or more locations. Teleconferences are similar to telephone calls, but they can expand discussion to more than two people. This works well for small subcommittee meetings.	www.instantconference.com
Text messaging	Texting is the common term for sending a brief text message over cell phones. This would be a great way to remind someone of a meeting on the day of the meeting.	Individual cell phone plans
Video sharing/ video blogging	Allows you to post and download videos.	www.youtube.com

Category	Description	Examples
Web conferencing or video-conferencing and VOIP	<p>Web conferencing tools allow you to meet online rather than in a conference room. It's easy and a cost-effective way to organize and attend online meetings. In a web conference, each participant sits at his or her own computer and is connected to other participants via the internet. This can be either a downloaded application on each of the attendees' computers or a web-based application where the attendees access the meeting by clicking on a link distributed by e-mail (meeting invitation) to enter the conference.</p> <p>A webinar is a neologism to describe a specific type of web conference. It is typically one-way, from the speaker to the audience with limited audience interaction, such as in a webcast. A webinar can be collaborative and include polling and question-and-answer sessions to allow full participation between the audience and the presenter.</p> <p>VOIP technology allows you to make telephone calls over the Internet (converts voice signals into data streams that are sent over the Internet and converted back to audio by the recipient's computer).</p>	<p>www.icom.com www.webex.com www.skype.com www.gotomeeting.com</p>
Web site	<p>If the program has a link on the college website, the committee should be able to make good use of it. Websites provide convenient environments for integrating reports, agendas, and meeting minutes. The website can serve as a communication hub for the entire program. Ideally, it would provide at least two links:</p> <p>Public access link—This link would lead the viewer to information that is of interest to the public, such as general information on the program and the activities of the committee.</p> <p>“Committee members only” link—This link would provide a connection point for committee and subcommittee members. This is the equivalent of the “back office” area reserved (by password protection) exclusively for authorized personnel.</p>	<p>www.efoliominnesota.com www.google.com (Google Sites) www.yola.com *Check with your college/University/business</p>
Wikis	<p>A wiki is basically a website that allows everyone who registers to add and change content. The most common wiki application is Wikipedia, an online encyclopedia. Wikis are easy to use as all you need is a computer, a web browser, and an Internet connection—no software, no website skills—to begin having very interactive communications with many people simultaneously.</p>	<p>www.wikispaces.com www.wikspot.org</p>

Sustainability and Special Considerations

Establishing an advisory committee is only the first step. To be effective, the committee must become and remain active. Setting and reaching goals and objectives enhance the effectiveness of an advisory committee.

The biggest sustainability factor for any committee is empowerment. The committee cannot bring about real change unless it is empowered to do so. You empower your committee by carrying out the following tasks:

The biggest sustainability factor for any committee is empowerment.

- Selecting well-informed, highly motivated members
- Choosing effective governance structure and personnel
- Delegation of responsibilities as appropriate

WHAT MOTIVATES ADVISORY COMMITTEE MEMBERS?

Faculty members and administrators can elevate the motivation of the committee members by:

- Showing awareness that the committee members are their students' future employers.
- Listening to committee members (especially regarding workforce needs).
- Responding to the committee members' suggestions.
- Respecting the committee members' time commitment.

RECOMMENDATIONS AND FEEDBACK

The end product of all advisory committee activities is a set of recommendations for continuous improvement of the program. Many advisory committees write a formal recommendation letter that is signed by the committee chair on behalf of the entire committee. Feedback on the recommendations is the most important motivational tool for advisory committees. Members want to do the "right thing" and are encouraged when they see tangible results from their recommendations.

MEMBER APPRECIATION

Rewards and recognition are especially important to advisory committees because members are not paid for their efforts. The best types of rewards or recognition are those that increase member satisfaction. A simple “thank you” can be a reward. *One of the best rewards is to ask for advice and respond to it.*

Rewards encourage attendance and involvement. Recognition activities also attract the attention and interest of other qualified people who may eventually serve on the committee. Recognition activities also bring public attention and goodwill to the college because they demonstrate that the college appreciates the efforts of the committee’s members. Rewards should not be given indiscriminately but should reflect real contributions to the committee’s success.

Following are ways to recognize your committee members:

- Write a letter of appreciation to a committee member’s employer.
- Highlight the members’ work at committee meetings.
- Invite members to visit programs to see how their recommendations are being implemented.
- Highlight member appointments and accomplishments in press releases.
- Invite members to attend special technical/occupational education events.
- Display members’ names on a bulletin board or plaque at the college.
- Include members’ names in program literature distributed to the public.
- Ask the college president to send each member a letter of appreciation.
- Give each member a framed certificate of appreciation.

It should be a goal of the college and the advisory committee itself to acknowledge the committee’s successes loudly and clearly. Credit should be given to the advisory committee whenever possible. Connections should be made between program successes and recommendations of the committee members.

CONNECTIONS

Typically, technical/occupational education programs within a pathway must be coordinated with other federal or state initiatives to avoid unnecessary duplication of

programs and services. Advisory committees must be made aware of initiatives or legislation that will affect the program, and there may be a need to coordinate or make connections with other activities. Adopting a “systems” viewpoint will benefit the program and leverage resources.

Connection to collegewide advisory committee—An effective advisory committee functions as an essential component of the college’s structure and plan for continuous improvement. The college may have a general advisory committee that helps with overall operations and policies. Advisory committees should adopt a college systems viewpoint, and every effort should be made to connect program advisory committees to collegewide advisory committees.

Connection to economic development—Advisory committees are aware of the impact of their work in their communities and what it means to the economic vitality and survival of those communities. Advisory committees should team up with local economic development councils and/or chambers of commerce to identify current and future solutions to workforce development issues and to find ways to target local, state, and federal resources. Local economic development entities frequently conduct labor-force surveys, which can be invaluable to advisory committees.

Connection to secondary system: Career pathways—There is often overlap, or a lack of continuity, in the way programs at the secondary and community/technical college levels affect students. Postsecondary technical/occupational programs are impacted by the skill levels (technical and academic) of students emerging from secondary programs. An integrated system is needed to ensure successful student transitions from the secondary programs into the community/technical college. A career pathways approach that recommends a 9–14 course sequence is an effective way to connect the two levels. The course sequence must satisfy curriculum requirements for graduation from high school *and* requirements established by the community/technical college (without remediation). *A joint secondary and postsecondary advisory committee is recommended.*

University connections—Advisory committee members may find themselves wanting two levels of workers, one that requires an associate of applied science degree and another that goes beyond. It may be useful to connect with the university system so that programs can be articulated or a capstone program at the university level can be developed. The more options that can be developed for students, the stronger the workforce will be.

Workforce development clusters—Clusters are usually larger than just one industry. Clusters represent groups of employers who come together as a unified voice to stimulate awareness of and interest in related occupations. These organized groups of local businesses stimulate community awareness of and interest in career pathway opportunities available within a given locale. These groups facilitate partnerships with the K-16 education systems and assist in the immediate and ongoing development and revision of curriculum.

EVALUATION

Advisory committees should promote a culture of continuous improvement and focus on outcomes. Committee leadership must ensure that the members recognize that continuous improvement depends on regular evaluation. There are two broad areas of evaluation for an advisory committee:

- Career Pathway and, specifically, technical/occupational program
- Advisory committee performance

Career Pathways review—The ultimate measure of the effectiveness of the pathway is its ability to place highly qualified graduates into the workforce. Follow-up of students is a time-consuming task, but it is necessary to understand student outcomes. Members can provide insight into the strengths and weaknesses of pathway graduates.

Data that may be of interest to the advisory committee includes:

- Transitions from secondary to the community/technical college within the particular career pathway
- Student academic performance (GPA, remediation rates, etc.)
- Retention rates
- Program completion rates
- Workforce placement rates

In addition, advisory committees can help set priorities for budgetary expenditures within a technical/occupational program. When resources are limited, members can help administrators make the best possible use of available resources.

Advisory committee performance—The effectiveness of the committee is determined mainly by determining whether the objectives set out in the program of work have been

met. Members of an effective advisory committee should regularly evaluate their performances and use the information for continuous improvement. The goal of this evaluation (internal performance audit or review) is to help the committee evaluate its overall effectiveness. The evaluation can help the committee determine:

- Whether the program is accomplishing its goals.
- The extent to which the program of work has strengthened the career pathway.
- What recommendations should be, or have been, acted upon, and what the implications of those recommendations are.
- The future direction and program of work for the committee.

Each year the advisory committee should review the past year of work, focusing on both accomplishments and challenges. That review will position the committee to chart its course for the upcoming year.

Questions to be addressed in an evaluation or internal performance audit—Assessment of the program of work should involve addressing the following questions:

- Were priorities and objectives clearly established?
- Did the activities of the committee help to meet the established priorities or objectives?
- Was the scope of the program of work realistic?
- Were planning tasks for each activity clearly defined?
- Were individual responsibilities clearly described?
- Were timelines for each planning task clearly established?
- What outcome has resulted from the program of work?

In addition to assessing the program of work, advisory committees should make sure the management of their committees is not a barrier to success. The two key components of any successful advisory committee are effective people and processes. Factors to assess include meeting frequency, meeting attendance, meeting time and location, each member's length of service, the diversity of the committee, committee guidelines or bylaws, meeting agendas, communication with members, public recognition of members, and recommendations made.

SPECIAL CONSIDERATIONS AND ISSUES

Rural Areas

Rural areas must deal with special considerations and challenges. Rural areas often lack large employers that can provide committee members. However, one should keep in mind that small businesses provide the majority of all jobs in the United States, and in many communities small businesses are the only employers. Employees in small businesses typically wear many hats and are spread very thin, leaving little time for committee involvement. At the same time, representation of small businesses on advisory committees can offer certain advantages, such as personalized attention and more varied experiences for students and/or instructors at the worksite. Committees can look for ways to expand and enhance the involvement of small businesses by having them leverage their connections with subcontractors, suppliers, and other business contacts.

Statewide Committees

Your program or career pathway may already be advised by a statewide committee, or the pathway may be unique in some way that calls for a statewide committee. One example in Minnesota is the Healthcare Education Industry Partnership.

Healthcare Education Industry Partnership—The Healthcare Education Industry Partnership is a program of Minnesota State Colleges and Universities. Since it started in 1998, the partnership has worked to address critical healthcare workforce issues in Minnesota through the collaboration of higher education, the healthcare industry, professional and trade associations, and state agencies. Some of the partnership’s strategic goals involve areas such as leadership, policy, workforce planning, capacity in nursing and allied health, flexibility and change in healthcare programs, immigrants, refugees and underrepresented populations, K-12 partnerships, and curriculum. For more information, contact www.heip.org or the project director:

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Resources

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Minnesota Career Fields, Clusters & Pathways Chart Explanation

FOUNDATION KNOWLEDGE AND SKILLS

Foundation Knowledge and Skills, located in the centermost circle of the Minnesota Career Fields, Clusters & Pathways chart, represent the base from which to build work and college readiness.

See Reverse Side



Minnesota
STATE COLLEGES
& UNIVERSITIES

The Minnesota State Colleges and Universities system and the Minnesota Department of Education are Equal Opportunity employers and educators.

CAREER FIELDS

Career Fields, which are identified in the segmented ring around Foundation Knowledge and Skills, are the organizing structure for the 16 career clusters and 81 pathways. The fields represent the broadest aggregation of careers. Students are normally exposed to career field exploration in middle school and early high school. Career fields have been identified as:

- ~ Agriculture, Food, & Natural Resources
- ~ Arts, Communications, & Information Systems
- ~ Engineering, Manufacturing, & Technology
- ~ Health Science Technology
- ~ Human Services
- ~ Business, Management, & Administration

CAREER CLUSTERS

Career Clusters, which are identified in the bold, colored bullets (■), represent a grouping of occupations and broad industries into a national classification of 16 clusters that are based upon common knowledge and skills. Career clusters include hundreds of occupations that may be grouped into pathways around which educational programs of study can be built.

- ~ Agriculture, Food, and Natural Resources
- ~ Hospitality and Tourism
- ~ Architecture and Construction
- ~ Human Services
- ~ Arts, Audio/Video Technology and Communications
- ~ Information Technology
- ~ Business, Management, and Administration
- ~ Law, Public Safety, Corrections, and Security
- ~ Education and Training
- ~ Manufacturing
- ~ Finance
- ~ Marketing
- ~ Government and Public Administration
- ~ Science, Technology, Engineering, and Mathematics
- ~ Health Science
- ~ Transportation, Distribution, Logistics

CAREER PATHWAYS

Career Pathways, which are identified by the symbol (>) under each cluster heading, represent an organization of related occupational areas within a specific career cluster. Each of these pathways has identified knowledge and skills validated by industry from which programs and programs of study are developed.

Minnesota Programs of Study

The Minnesota Career Fields, Clusters & Pathways chart, on the reverse side, graphically depicts the organizing framework of the foundation knowledge and skills, career fields, career clusters, and career pathways that Minnesota will use for developing programs of study in career and technical education. Once developed, learners at various levels (high school, collegiate, or workforce training level) will then be able to choose from several individual programs within a program of study in order to attain the specific knowledge, skills and abilities needed to pursue a career of their choice.

Programs of study are sets of aligned programs and curricula that begin at the high school level and continue through college and university certificate, diploma and degree programs. The following are some of the key elements that underlie the definition:

- ~ Competency based curricula tied to industry expectations and skill standards;
- ~ Sequential course offerings that provide strategic entry and exit points as needed throughout a lifetime - this leads to manageable "stepping stones" of skill building, high school graduation and postsecondary education completion;

- ~ Flexible course and program formats convenient for learner segments;
- ~ Course portability for seamless progression;
- ~ Multiple entry and exit points to support continuing education, returning adults, and dislocated workers;
- ~ Connections between high school and postsecondary education, skill progression, and career opportunities that align academic credentials with job advancement in high-skill, high-wage or high-demand occupations.

February, 2010

Minnesota Career Fields, Clusters & Pathways



MINNESOTA PROGRAMS OF STUDY TEMPLATE SAMPLE

Great River Consortium	
Career Field: Engineering, Manufacturing, & Technology	Career Cluster: Manufacturing
Career Pathway: Maintenance, Installation, and Repair	
People who maintain, install, and repair machines, tools and equipment.	
The selection of a program of study is a cooperative effort involving students, parents, teachers, and counselors. Learners should explore career fields and pathways that blend with their interests and abilities.	

Districts & High Schools			
District #	District Name	High School #	High School Name
738	Holdingford Public School District	2	Holdingford High School

High School Courses				
Subject	9th Grade	10th Grade	11th Grade	12th Grade
Language Arts	LA 9	LA 10	LA 11	Composition 1 & 2 (ACC) LA 12 or
Math	Pre-algebra or Geometry 9 Algebra 1 or	Algebra 1 or Geometry or Adv Alg 2	Prob & Stats Trig or College Trig (GEC) College Prob. & Stats (ACC) Algebra 2 or Geometry or	
Science	Physical Science 9	Biology	Science 11 or Earth Science 8	
Social Studies	Social 9	Social 10	U.S. History 1 & 2 (GEC) Social 11 or	Macroeconomics (GEC) College Government or (ACC) Social 12 or
Other Requirements	Phy Ed 9	Phy Ed 10 Health 10		1 Art credit required before graduation
Career and Technical Electives for College Credit		Intro to Welding (ACC)	Intro to Welding (ACC)	Intro to Welding (ACC)

Career and Technical Electives		Adv Welding, Drafting 1 & 2	Adv Welding, Drafting 1 & 2	Adv Welding, Drafting 1 & 2
Other Suggested Electives			Chemistry	Physics, Analysis
College Credit Options Legend:	<p>* = Recommended Classes</p> <p>ACC = Articulated College Credit is available to high school sophomores, juniors, and seniors. ACC is taught on the high school campus by high school teachers.</p> <p>GEC = General Education Concurrent are transcribed college credit available to high school juniors or seniors. GEC is college/university (academic) courses, usually, taught on the high school campus by a high school teacher.</p> <p>Please meet with your counselor or career advisor before registering for these courses. If you meet the criteria you may be able to earn college credit, gain industry-accepted certification, save time, money, and participate in more challenging coursework. There are specific qualifiers, rules, and regulations to be considered before committing to any of these options.</p>			

Great River Consortium	
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High School Enhanced Learning		
Work Based Learning	Work Experience	
Service Learning		
College Preparation		
Student Organizations	Future Farmers of America	

College/University Programs			
2 Year College(s)	Program	University(ies)	Related Program(s)
St. Cloud Technical College	Welding Fabrication - Machine Tool Technology - Mechanical Design Technology - Electronics - Heating, Air Conditioning, and Refrigeration Technology	St. Cloud State University	BS Technology Management, BS Mechanical Engineering, BS Manufacturing Engineering

College/University Enhanced Learning		
Work Based Learning		
Service Learning		
College Preparation		
Student Organizations	Skills USA	Behind the Mask Welding Contest, High School Welding Contest, Battle Bots, American Design Drafting Association, Student Governance, MN Electrical Student Assoc., Star Camp Mentor

Short Term Training Certification Options (College)		

Occupation Sampling Related to this POS			
Apprenticeship	College	University Bachelor	University Master
	Appliance Installer and Repairers	Industrial Engineer	Industrial Engineer
	Electric Motor Repairer	Mechanical Engineer	
	Heating and Cooling System Mechanics		
	Industrial Electronics Repairer		
	Welders and Solderers		

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Notes & Favorites				
Course Planning Guide				
	9th Grade	10th Grade	11th Grade	12th Grade
Language Arts				
Math				
Science				
Social Studies				
Other Required Courses				
Career & Technical				
Other Electives				

Great River Consortium	
Career Field: Engineering, Manufacturing, & Technology	Career Cluster: Manufacturing
Career Pathway: Maintenance, Installation, and Repair	
People who maintain, install, and repair machines, tools and equipment.	
The selection of a program of study is a cooperative effort involving students, parents, teachers, and counselors. Learners should explore career fields and pathways that blend with their interests and abilities.	

Notes & Favorites:

PROGRAMS OF STUDY PATHWAY DEFINITIONS

Agriculture, Food and Natural Resources Cluster	
Food Products and Processing Systems	People who work in the Food Products and Processing pathway discover new food sources, analyze food content and develop ways to process, preserve, package or store food according to industry and government regulations. They create new food products to meet consumer needs and inspect food-processing areas to ensure that sanitation, safety, quality and waste management standards are met.
Plant SYSTEMS	People who work in the Plant Systems pathway study plants and their growth. This helps producers of food, feed and fiber crops continue to feed a growing population while conserving natural resources and maintaining the environment. Individuals in this pathway also develop ways to improve the nutritional value of crops and the quality of seeds. They use genetic engineering to develop crops resistant to pests and drought.
Animal Systems	People who work in the Animal Systems pathway work to develop better, more efficient ways of producing and processing meat, poultry, eggs and dairy products. They study genetics, nutrition, reproduction, growth and development of domesticated farm animals. Some individuals inspect and grade livestock food products, purchase livestock or work in technical sales or marketing. Others advise agricultural producers on how to upgrade animal housing facilities properly, lower mortality rates, handle waste matter or increase production of animal products, such as milk or eggs. Animal care workers train, feed, water, groom, bathe and exercise animals. They also clean, disinfect and repair their cages.
Power, Structural and Technical Systems	People who work in the Power, Structural and Technical Systems pathway apply knowledge of engineering, hydraulics, pneumatics, electronics, power, structures, and controls to the field of agriculture. They design agricultural structures as well as machinery and equipment. They develop ways to conserve soil and water and to improve the processing of agricultural products.
Natural Resources Systems	People who work in the Natural Resources Systems pathway perform a variety of tasks from helping to develop, maintain, and manage the forest and natural environment to catching and trapping various types of marine life for human consumption, animal feed, bait and other uses. Forest and rangelands supply wood products, livestock forage, minerals and water; serve as sites for recreational activities; and provide habitats for wildlife. Conservation scientists and foresters manage, develop, use and help protect these and other natural resources.
Environmental Service Systems	People who work in the Environmental Service Systems pathway are involved in water and air pollution control, recycling, waste disposal and public health issues. Environmental engineers and technicians conduct hazardous-waste management studies, evaluate the significance of the hazard, offer analysis on treatment and containment, and develop regulations to prevent mishaps. They design municipal sewage and industrial wastewater systems. They analyze scientific data, research environmental projects and perform quality control checks.

Agribusiness Systems	<p>Agribusiness is the coordination of all activities that contribute to the production, processing, marketing, distribution, financing and development of agricultural commodities and resources. This includes food, fiber, wood products, natural resources, horticulture, and other plant and animal products and services.</p> <p>Agribusiness is a high-tech industry that uses satellite systems, computer databases and spreadsheets, biotechnology and many other innovations to increase efficiency and profitability.</p>
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Architecture and Construction Cluster	
Design/Pre-construction	<p>People with careers in design/pre-construction create our future! They turn a concept into a set of plans. Their plans guide other construction professionals as they continue the building process.</p>
Construction	<p>Employees in construction literally build our future! These are the people who build and remodel houses, apartments, industrial buildings, warehouses, office buildings, churches, schools and recreational facilities. This pathway also includes the builders of highways, streets, bridges, tunnels and airports as well as power plants, chemical plants, refineries and mills.</p>
Maintenance/Operations	<p>Employees with careers in maintenance/operations keep our future intact! These are the people who unload, inspect, and move new equipment into position. They determine the optimal placement of machines in a plant, assemble machinery, install machinery, repair machinery and perform preventive maintenance. They detect, diagnose and correct minor problems on machinery. They keep the structure of an establishment in good repair. They maintain the smooth operation of refineries, power plants, chemical plants and mills.</p>

Arts, Audio/Video Technology and Communications Cluster	
Audio/Video Technology and Film	<p>Broadly, individuals that work in the AV communications industry manufacture, sell, rent, design, install, integrate, operate and repair the equipment of audiovisual communications. They are involved in the presentation of sound, video and data to groups in such venues as corporate boardrooms, hotels, convention centers, classrooms, theme parks, stadiums and museums. The major activity sectors in the AV communications industry are distributive service firms (AV dealers, rental companies, consultants, designers, and related firms), manufacturers of AV presentations and communications products and large end-users.</p>
Printing Technology	<p>The printing process has three stages—prepress, press and binding or post-press. Prepress workers prepare material for printing presses. They perform a variety of tasks involved with transforming text and pictures into finished pages and making printing plates of the pages. Desktop publishing poses new challenges for the printing industry. The printing industry is rapidly moving toward complete “digital imaging,” by which customers’ material received digitally is converted directly into printing plates. Other innovations in prepress work are digital color page makeup systems, electronic page layout systems and off-press color proofing systems. Printing press operators prepare, operate and maintain the printing presses in a pressroom. In most shops, press operators also perform preventive maintenance. Computers allow press operators to perform many of their tasks electronically. With this equipment, press operators monitor the printing process on a control panel or computer monitor, which allows them to adjust the press electronically.</p>

Arts, Audio/Video Technology and Communications Cluster	
Visual Arts	Visual artists create art to communicate ideas, thoughts or feelings. They use a variety of methods—painting, sculpting or illustrating—and an assortment of materials, including oils, watercolors, acrylics, pastels, pencils, pen and ink, photography, plaster, clay and computers. Their works may be realistic, stylized or abstract and may depict objects, people, nature or events. Visual artists are generally categorized in two groups. Fine artists create art to satisfy their own need for self-expression. Illustrators and graphic designers, on the other hand, put their artistic skills at the service of commercial clients, such as major corporations; retail stores; and advertising, design and publishing firms.
Performing Arts	A variety of businesses and groups involved in theatrical and musical performances are included in this pathway. Theatrical production companies, for example, coordinate all aspects of producing a play or theater event. Agents represent actors and assist them in finding jobs. Costume design management companies design costumes. Lighting and stage crews handle the technical aspects of productions. Also in this segment are dance studios, schools and halls, which provide places for professional and amateur dancers to practice, perform and learn. Performers of live musical entertainment include musical artists, dance bands, orchestras, jazz musicians and various modern bands. Orchestras range from major professional orchestras with million-dollar budgets to community orchestras often with part-time schedules.
Journalism and Broadcasting	News analysts, reporters and correspondents gather information, prepare stories and make broadcasts that inform us about local, state, national and international events; present points of view on current issues; and report on the actions of public officials, corporate executives, special interest groups and others who exercise power. Broadcast and sound technicians install, test, repair, set up and operate the electronic equipment used to record and transmit radio and television programs, cable programs and motion pictures. Chief engineers, broadcast field supervisors and transmission engineers supervise the technicians who operate and maintain broadcasting equipment.
Telecommunications	Telecommunications specialists focus on the interaction between computer and communications equipment. Telecommunications equipment is computerized and can communicate a variety of information, including data, graphics and video. The workers who set up and maintain this sophisticated equipment are telecommunications equipment technicians, installers and repairers.

Business Management and Administration Cluster	
General Management	General Management focuses on careers that plan, organize, direct, and evaluate all or part of a business organization through the allocation and use of financial, human, and material resources.
Business Information Management	Business Information Management is an umbrella term covering those careers that provide a bridge between business processes/initiatives and IT. Employees in this area help to align business and IT goals.
Human Resources Management	Human Resources Management focuses on the staffing activities that involve planning, recruitment, selection, orientation, training, performance appraisal, compensation, and safety of employees.

Business Management and Administration Cluster	
Operations Management	Operations Management focuses on planning, organizing, coordinating, and controlling the resources needed to produce/provide a business's goods and/or services. Examples of activities in Operations Management are quality control, scheduling, procurement, and warehousing.
Administrative Support	Administrative Support facilitate business operations through a variety of administrative and clerical duties including information and communication management, data processing and collection, and project tracking.

Education and Training Cluster	
Administration and Administrative Support	Smooth operation of any education or training institution requires competent administration. Administrators provide direction, leadership and day-to-day management of educational activities in schools, preschools, daycare centers, colleges, universities, businesses and industries, correctional institutions, museums, and job training and community service organizations.
Professional Support Services	The Professional Support Services pathway represents a variety of highly specialized occupations that are critical to our education and training systems. Counselors, psychologists, social workers, speech-language pathologists and audiologists assist people with personal and family needs, mental health assistance, educational goals and career decision making.
Teaching and Training	In addition to being knowledgeable in their subject, teachers and trainers must have the ability to communicate, inspire trust and confidence, motivate learners, as well as understand their educational and emotional needs. Teachers must be able to recognize and respond to individual differences in diverse learners and employ different teaching/training methods that will result in higher learner achievement.

Finance Cluster	
Securities and Investments	The securities and investments industry consists of brokerage firms, investment banks, and stock exchanges, all of which support the flow of funds from investors to companies and institutions. Related services include financial planning, asset management, hedge fund management, and custody services.
Business Finance	The business finance function in a company is to manage policy and strategy for (and the implementation of) capital structure, budgeting, acquisition and investment, financial modeling and planning, funding, dividends, and taxation.
Accounting	Accounting encompasses careers that record, classify, summarize, analyze, and communicate a business's financial information/business transactions for use in management decision-making. Accounting includes such activities as bookkeeping, systems design, analysis, and interpretation of accounting information.
Insurance	The insurance industry, which exists to protect individuals and businesses from financial losses, delivers services that transfer risk from an individual or business to an insurance company.

Finance Cluster	
Banking Services	Primarily concerned with accepting deposits, lending funds, and extending credit, banking services include cash management, short-term investments, mortgages and other loans, credit cards, and bill payment. Banking services are delivered via a number of different institutions, from commercial banks (the largest group) and other traditional means (savings and loans associations, credit unions, and local banks) to newer ventures through insurance companies, brokerage houses, and the internet.

Government and Public Administration Cluster	
Governance	People who work in the Governance pathway include the officials elected or appointed to government positions responsible for making and executing public policy. This pathway includes the President and members of Congress, governors and state legislators, and local elected officials such as councilpersons or commissioners. Also included are the staff members that support them. Careers in this pathway often require working with constituents or interest groups with conflicting goals. Leadership, consensus building and conflict resolution are important skills for success.
National Security	Maintaining a strong national security encompasses such diverse activities as running a hospital, commanding a tank, programming computers, operating a nuclear reactor, or repairing and maintaining a helicopter. The military provides training and work experience in these fields and many others for more than 2.5 million people who serve in the active Army, Navy, Marine Corps, Air Force, and Coast Guard, their Reserve components, and the Air and Army National Guard.
Foreign Service	People who work in the Foreign Service pathway serve in embassies, consulates and other diplomatic missions and in Washington, D.C. Job responsibilities range from day-to-day operations of a U.S. embassy to analyzing political and economic events or helping American citizens abroad.
Planning	people who work in the Planning pathway develop long- and short-term land use plans to provide for growth and revitalization of urban, suburban and rural communities, while helping local officials make decisions concerning social, economic and environmental issues. Planners promote the best use of a community's land and resources for residential, commercial, institutional and recreational purposes.
Revenue and Taxation	People who work in the Revenue and Taxation pathway ensure that governments obtain revenues from businesses and citizens by collecting tax dollars, reviewing tax returns, conducting audits, monitoring taxes payable and collecting overdue tax dollars.
Regulation	People who work in the Regulation pathway will typically possess a body of technical knowledge about an industry, the environment or technology. This—coupled with a knowledge of related laws, rules and regulatory systems—permit regulators to protect our health, safety and environment as well as ensure the integrity of our financial, transportation and public utility industries. The work may include physical inspections, audits, investigations and the reports, citations, hearings and courtroom trials required to enforce a myriad of regulatory requirements.

Government and Public Administration Cluster	
Public Management and Administration	Government agencies and public corporations and trusts have specific and rigorous standards for the stewardship of public resources. Public management careers will require technical skills related to budgeting, personnel management, procurement or other activities, and specific knowledge of the regulations and other policies that govern public management.

Health Science Cluster	
Therapeutic Services	Careers in the Therapeutic Services pathway are focused primarily on changing the health status of the patient over time. Health professionals in this pathway work directly with patients; they may provide care, treatment, counseling and health education information.
Diagnostic Services	Careers in the Diagnostic Services pathway use tests and evaluations that aid in the detection, diagnosis and treatment of diseases, injuries or other physical conditions.
Health Informatics	Careers in the Health Informatics pathway include many different levels of health care related employment. This pathway includes health care administrators who manage health care agencies as well as those individuals who are responsible for managing all of the patient data and information, financial information, and computer applications related to health care processes and procedures.
Support Services	Careers in the Support Services pathway provide a therapeutic environment for the delivery of health care. Support Services offers a full range of career opportunities from entry level to management, including technical and professional careers.
Biotechnology Research and Development	Careers in the Biotechnology Research and Development pathway involve bioscience research and development as it applies to human health. These scientists may study diseases to discover new treatments or invent medical devices used to directly assist patients or to improve the accuracy of diagnostic tests.

Hospitality and Tourism Cluster	
Restaurants and Food and Beverage Services	Employees working in the Restaurants and Food and Beverage Services pathway perform a variety of tasks to maintain operations and promote guest services in eating and drinking establishments.
Lodging	Employees working in the Lodging pathway perform tasks related to the operation of lodging facilities and the care of guests who use these facilities, either through direct guest contact or the provision of background services that enhance the guest experience.
Travel and Tourism	Employees in the Travel and Tourism pathway focus on the development, research, packaging, promotion and delivery of a traveler's experiences. There is a broad range of jobs in this pathway. Employees may be involved in developing a heritage area for the enjoyment and education of visitors, creating guide books, planning trips and events, managing a customer's travel plans or overseeing a huge urban convention center.

Hospitality and Tourism Cluster	
Recreation, Amusements and Attractions	Employees looking for exciting and diverse work situations are best suited for the Recreation, Amusements and Attractions pathway. The work is often demanding but never boring. Good customer service skills are essential for success. Employees must also understand what makes each operation unique. Technical skills are location-specific, and training is handled on the job.

Human Services Cluster	
Early Childhood Development and Services	People with careers in early childhood development and services nurture and teach children. They provide services in childcare centers, nursery schools, preschools, public schools, private households, family childcare homes, and before- and after-school programs.
Counseling and Mental Health Services	People working in counseling and mental health services assist people with personal, family, educational, mental health, and career decisions and problems. Mental health care may be provided in hospitals, clinics, schools or private settings.
Family and Community Services	Employees with careers in family and community services help the homeless, housebound, and infirm cope with circumstances of daily living; counsel troubled and emotionally disturbed individuals; train or retrain the unemployed or underemployed; care for the elderly and the physically and mentally disabled; help the needy obtain financial assistance; and solicit contributions for various social services organizations.
Personal Care Services	People with careers in personal care services assist individuals with their personal appearance, including shampooing, cutting, coloring and styling hair; giving manicures, pedicures, and scalp and facial treatments; providing makeup analysis; cleaning and styling wigs and hairpieces; and providing personal fitness training. Also, within personal care services, funeral directors and attendants make funeral arrangements for grieving families.
Consumer Services	People with careers in consumer services assist individuals with decisions and problems relating to finance, real estate, insurance and consumer goods.

Information Technology Cluster	
Network Systems	Careers in Network Systems involve network analysis, planning and implementation, including design, installation, maintenance and management of network systems. Successful establishment and maintenance of information technology infrastructure is critical to the success of almost every 21st century organization. People with expertise in Network Systems are in high demand for a variety of positions in organizations of all sizes and types, doing work such as creating and maintaining the infrastructure in medical facilities that enables multiple doctors to view the same patient's X-rays in real-time to determine the diagnosis and the best treatment.

Information Technology Cluster	
Information Support and Services	Careers in Information Support and Services involve IT deployment, including implementing computer systems and software, providing technical assistance and managing information systems. Successful IT deployment — implementation of computer systems and software, provision of technical assistance, creation of technical documentation and management of information systems — is critical to the success of most 21st century organizations. People with expertise in Information Support and Services are in high demand for a variety of positions in organizations of all sizes and types, doing work such as integrating multiple databases at a global investment company, enabling employees to share information between the New York, Paris and Hong Kong offices and improving service to customers.
Web and Digital Communications	Careers in Web and Digital Communications involve creating, designing and producing interactive multimedia products and services, including development of digitally-generated or computer-enhanced media used in business, training, entertainment, communications and marketing. Organizations of all types and sizes use digital media (the World Wide Web, CD-ROM, DVD) to communicate with existing and potential customers, to track transactions, and to collaborate with colleagues. Web and digital communications experts can find employment opportunities in organizations of all sizes and types, doing work such as creating e-business auction Web sites that allow people around the world to buy and sell items in real-time.
Programming and Software Development	Careers in Programming and Software Development involve the design, development, implementation and maintenance of computer systems and software, requiring knowledge of computer operating systems, programming languages and software development. People with expertise in programming and software development work with cutting-edge technologies to develop tomorrow's products for use by businesses and consumers. While many of the career opportunities in this area are in software companies, large organizations of other types—such as Financial Services and Business—also offer many opportunities. People with expertise in programming and software development are in high demand, doing work such as creating the software that launches and runs NASA space shuttles.

Law, Public Safety, Corrections and Security Cluster	
Correction Services	Workers in the Correction Services pathway are responsible for overseeing individuals who have been arrested and are awaiting trial or who have been convicted of a crime and sentenced to serve time in a jail, reformatory, or penitentiary. While the primary mission of corrections is protection of the public, many in this field are involved with the treatment, education and reintegration of offenders.
Emergency and Fire Management Services	Every year, fires and other emergencies take thousands of lives and destroy property worth billions of dollars. Firefighters and emergency services workers help protect the public against these dangers by rapidly responding to a variety of emergencies. They are frequently the first emergency personnel at the scene of a traffic accident or medical emergency and may be called upon to put out a fire, treat injuries or perform other vital functions.

Law, Public Safety, Corrections and Security Cluster	
Security and Protective Services	Security personnel often work in public buildings such as museums or art galleries to protect paintings and exhibits by inspecting people and packages entering and leaving the building. In factories, laboratories, government buildings, data processing centers, and military bases, security officers protect information, products, computer codes, and defense secrets and check the credentials of people and vehicles entering and leaving the premises.
Law Enforcement Services	People depend on police officers and detectives to protect their lives and property. Law enforcement officers have duties that range from controlling traffic to preventing and investigating crimes. They maintain order; enforce laws and ordinances; issue traffic summonses; investigate accidents; present evidence in court; serve legal documents for the court system; and apprehend, arrest and process prisoners.
Legal Services	The legal system affects nearly every aspect of our society, from buying a home to crossing the street. Workers in the Legal Services pathway form the backbone of this vital system, linking it to society in myriad ways. For this reason, they hold positions of great responsibility and are obligated to adhere to a strict code of ethics.

Manufacturing Cluster	
Production	People with careers in production work on the shop floor making parts or assembling them. They work with machines, making or assembling electronic parts, constructing or assembling modular housing, performing welding jobs, or printing various materials.
Manufacturing Production Process Development	Employees in Manufacturing Production Process Development are responsible for product design and design of the manufacturing process. They work with customers to ensure the manufacturing process produces a product that meets or exceeds customer expectations. They also monitor the manufacturing process and the materials used to manufacture the product.
Maintenance, Installation and Repair	People with careers in Maintenance, Installation and Repair perform preventive maintenance procedures on machines, tools and equipment. These are performed routinely and on a regular basis. They also troubleshoot and repair electrical, electronic and mechanical systems. This will include mechanical repair as well as using computer-based inventory control systems, retrieving information histories on each machine from computer records, and recording repair activities on the system to keep accurate records of repairs performed on each machine.
Quality Assurance	Quality Assurance employees assure that standards and procedures are adhered to and that delivered products or services meet performance requirements. They may have responsibility for monitoring and maintaining the quality of parts and manufacturing processes. This could include identifying the raw product to ensure it meets specifications, as well as measuring or otherwise testing products and parts to ensure they meet required customer specifications.
Logistics and Inventory Control	People with careers in Logistics and Inventory Control work with an inventory of raw materials and finished parts. They move raw materials to the production line, unload trucks with raw materials, wrap pallets of finished products for shipment, and communicate with traffic managers.

Manufacturing Cluster	
Health, Safety and Environmental Assurance	Employees in Health, Safety and Environmental Assurance ensure that the equipment is being used safely in the workplace; plan for safety in new production processes; conduct health, safety and/or environmental incident and hazard investigations; conduct preventive health, safety and/or environmental incident and hazard inspections; and implement health, safety and/or environmental programs, projects, policies or procedures. They may train workers in health, safety and/or environmental issues and provide event documentation.

Marketing Cluster	
Marketing Management	People with careers in marketing management formulate policies and direct the operations of businesses and corporations, nonprofit institutions and other organizations. In small firms, the owner or chief executive officer may assume all advertising, promotions, marketing, sales and public relations responsibilities. In large firms, which may offer numerous products and services nationally or even worldwide, an executive vice president directs overall advertising, promotions, marketing, sales and public relations policies.
Professional Sales	Employees in professional sales are involved in the transfer of goods and services in the economy, both to businesses and to individual consumers.
Merchandising	Employees in buying and merchandising positions get the product into the hands of the customer. This process includes forecasting, planning, buying, displaying, selling and providing customer service.
Marketing Communications	Marketing communications employees plan, coordinate and implement marketing strategies, advertising, promotion and public relations activities. Because of the importance and high visibility of their jobs, these individuals often are prime candidates for advancement.
Marketing Research	Employees in marketing research are concerned with understanding people and organizations. They collect and analyze many different types of information to design new products, to predict future sales and to position their own company's strategies against those of its competitors.

Science, Technology, Engineering and Mathematics Cluster	
Engineering and Technology	For a future in the Engineering and Technology pathway, students should study and apply principles from advanced mathematics, life sciences, physical science, earth and space science, and technology. In addition, future engineers and technologists should learn certain processes in mathematics, science and technology. In Grades 9-12, all future engineers and technologists should study mathematics each year, learning important mathematical concepts and processes defined by the National Council of Teachers of Mathematics in Principles and Standards for School Mathematics. With such knowledge and skills, students will be able to demonstrate the following competencies: 1.) Apply mathematics, science and technology concepts to solve problems quantitatively in engineering projects involving design, development or production in various technologies; and 2.) Recognize the core concepts of technology and their relationships with engineering, science and math, and other subjects. All future engineers and technologists should learn important science concepts and processes with an understanding of physics, chemistry and biology as a minimal set. These concepts and processes are defined by the National Research Council in the National Science Education Standards and by the American Association for the Advancement of Science in Benchmarks for Science Literacy. Additionally, learners should become proficient in the areas of technology defined by the Standards for Technological Literacy.
Science and Mathematics	Those who choose careers in the Science and Mathematics pathway apply essential mathematics and science content and skills in a real world context. Science and mathematics occupations include those in physical, environmental and human endeavors. Career possibilities range from teachers of science and mathematics to lab technicians to NASA astronauts. Preparation for such occupations require the following: 1) Understanding the process and applying the skills necessary to engage in discovery; 2) Recognizing the need to obtain a broad education in science and mathematics and share (communicate) this knowledge with the world; and 3) Understanding the role of gathering, creating, processing and sharing data in science and mathematics.

Transportation, Distribution and Logistics	
Facility and Mobile Equipment Maintenance	Careers in the Facility and Mobile Equipment Maintenance pathway include the maintenance, repair, and servicing of vehicles and transportation facilities, as well as the refueling of mobile equipment. All transportation relies on equipment which must function as designed, whenever needed. The people in this pathway keep the equipment and machinery running while looking for more efficient, safe, and cost-effective ways to do so.
Health, Safety and Environmental Management	Careers in the Health, Safety and Environmental Management pathway involve assessing and managing risks associated with safety and environmental issues. The well-being of people and our environment is more important and challenging today than ever before in history. The people employed in this important pathway research, plan and carry out activities to make our environment safer and cleaner.

Transportation, Distribution and Logistics	
Logistics Planning and Management Services	Careers in the Logistics Planning and Management Services pathway involve the planning, management and control of the physical distribution of materials, products, and people. Often, more than one mode of transportation is used as distribution efforts can be complex, even national or global. These people are responsible for the plans which will ensure that cargo arrives at the right location, on time, and in the safest, most economical manner.
Sales and Service	Careers in the Sales and Service pathway involve the marketing and selling of transportation services to new customers as well as the management of existing customer relationships and customer service. Transportation businesses move passengers and freight to meet customer needs and demands. Successful businesses need skilled employees to provide excellent customer service.
Transportation Operations	Careers in the Transportation Operations pathway are really on the move! These are the people that drive or pilot the vehicles that transport people and freight. Equally important to this pathway are the support people who ensure that any cargo transport is safe, secure, and on time.
Transportation Systems/Infrastructure Planning, Management and Regulation	Careers in the Transportation Systems/Infrastructure Planning, Management and Regulation pathway deal with all aspects of the design and operation of our public transportation systems – road, air, sea and rail. These functions are primarily the responsibility of people who are employed by federal, state and local transportation agencies. Many businesses work to assist these agencies in their efforts.
Warehousing and Distribution Center Operations	Careers in Warehousing and Distribution Center Operations focus on the operation of transportation and distribution facilities including ports, terminals, warehouses, and other types of facilities. All cargo needs to be tracked, sorted, labeled, and loaded accurately and safely. Timing is also important, since many loads must adhere to a schedule in order to satisfy the needs of the customer.

SAMPLE CONSTITUTION AND BYLAWS

(adapted from A Guide to the Operation of Career and Technical Education Advisory Committees, published by Education Services, Colorado Community College System, July 2008)

CONSTITUTION

(Career Pathway)

ARTICLE I—NAME AND PURPOSE

This Committee shall be known as the (Career Pathway) Advisory Committee.

The Advisory Committee shall provide leadership in and promote the development of the (Career Pathway) as it relates to and meets the needs of the students, the community, and the public. The Committee shall advise educators in and the administration on matters related to the program area.

ARTICLE II—MEMBERSHIP

Number of Members

A simple majority of the members will be representative of business and industry.

In addition, representatives could include a representatives from the educational community and other stakeholders.

Appointments and Terms

Each appointment of a program advisory committee member shall be for three years, except when the appointment is to fill an unexpired term. At least two-thirds of the members shall be retained each year with one-third of the membership being appointed each year. An outgoing member may be reappointed by a majority vote of membership present. An individual will automatically lose membership on the Committee if he/she fails to attend three successive meetings without presentation, in advance, to the chairperson of the committee, a valid reason for his/her absence.

Advisory Committee members may submit names of potential members for the committee. Final recommendations are made by the teacher(s) with the approval

of the appropriate administrator. The appointments are made by the governing board.

The term of a new Committee member shall begin on September 1st.

Ex Officio Members

Ex Officio members shall be:

1. Appropriate administrators
2. Appropriate program coordinators or supervisors
3. Teachers in the program area

BYLAWS

SECTION A—OFFICERS AND THEIR DUTIES

The officers shall be: a chairperson, a vice-chairperson and a secretary.

The officers shall be elected annually by a majority vote of the Committee members at the last meeting during the school year and shall be from business/industry. Officers may be re-elected to the same office. The **chairperson** shall be elected from among those members who have served at least one year. The chairperson's duties shall:

- be a representative from business or industry, elected by the committee members
- be sensitive to the views of the members
- be able to listen critically
- be reasonable
- exercise good judgment and fairness
- be able to work closely with the teacher
- spend more time than other members on the affairs of the committee
- be well informed
- to preside at the meetings of the Committee
- to serve as a chairperson of the Program Advisory Committee
- to appoint special committees as the need arise, which may include persons other than committee members

- to meet with the teacher or program director to prepare an agenda prior to a forthcoming meeting
- arrange for special presentations
- prepare reports

Recommended responsibilities include:

- establish meeting dates and calling meetings to order
- plan the meeting agenda
- encourage a relaxed atmosphere conducive to productive discussion
- plan committee activities and providing sufficient background information when needed
- maintain personal contacts with members and school personnel
- approve all announcements, notices, and other information sent to committee members
- preside over all meetings, leading discussions, and bring closure on key points of discussion

The **vice-chairperson** shall be elected from among those members who have served at least one year. The vice-chairperson's duties shall:

- the vice chair may be elected to serve as the next chairperson following a set time as vice chairperson
- work closely with the chairperson on all tasks
- serve as the leader for many of the committee's activities
- perform specific tasks assigned by the chairperson

The **secretary/recorder** shall:

- act as the communication liaison between the school and the community
- maintain a close working relationship with members of the committee
- also may assist the chairperson in setting the tone of the committee activities

The responsibilities of the secretary/recorder are:

- keep records of the attendance of members at meetings

- keep a record of discussion and recommendations
- maintain a permanent record file of Advisory Committee activities
- distribute minutes of Committee meetings and copies of other Committee documents to committee members, educators, and others who may be concerned. He/she shall have the assistance of the college's staff and the use of the college facilities in performing these functions.
- send copies of minutes and reminders to the chief administrative officer
- arrange for meeting space
- notify members and guests of meeting time/location
- prepare and mail information to committee members and others associated with the program
- prepare and forward necessary correspondence
- provide statistical information about the school and prepare progress reports
- accompany the committee chairperson to visit school personnel and explain committee actions.

SECTION B—MEETINGS

At least two regular meetings of the Committee shall be held during the school year. Written or electronic notice of each regular meeting will be sent to members. Special meetings of the Committee may be called by the chairperson as needed throughout the year. The time of advance notice shall be appropriate in terms of the reason for the urgency of the meeting.

SECTION C—RECOMMENDATIONS AND REPORTS

Any formal resolutions or recommendations from the Committee shall be in written form. They shall include the number of Committee members present and voting, and the number favoring the resolution or recommendation. All resolutions and recommendations shall be presented to the program coordinator or division chairperson, who shall then present them to the administration, who shall present them to the governing board if necessary.

SECTION D—EVALUATING COMMITTEE EFFECTIVENESS

The Program Advisory Committee will evaluate effectiveness at the final meeting of each school year. Goals and objectives will be formulated at the first regular meeting of the school year, utilizing implications from the spring evaluation.

SECTION E—BYLAWS CHANGES

These bylaws may be amended or added to by two-thirds vote of active members at any regular or special meeting if at least ten days written notice has been given.

SAMPLE TEMPLATE FOR DEVELOPING A PROGRAM OF WORK

Advisory Committee Name			
Objectives	Activities	Timeline	Subcommittee or person responsible

SAMPLE ADVISORY COMMITTEE MEETING EVALUATION FORM

(Source: National Automotive Technicians Education Foundation, <http://www.natef.org/>)

Below is a guide for rating the effectiveness of the advisory committee meeting. Circle the number that best describes your feelings about each statement.

	Excellent (1) to Poor (5)				
1. I clearly understood the agenda and knew what we were trying to accomplish.	1	2	3	4	5
2. The agenda was well planned and organized and was received in advance of the meeting.	1	2	3	4	5
3. This was an important and productive meeting.	1	2	3	4	5
4. I feel the members of this committee understand their role and assignment.	1	2	3	4	5
5. Members had a chance to speak and made a contribution to items under consideration.	1	2	3	4	5
6. The meeting was well organized.	1	2	3	4	5
7. I felt that the advisory committee's opinions and feelings were understood and accepted by the college.	1	2	3	4	5
8. I feel satisfied with the activities and accomplishments of the advisory committee.	1	2	3	4	5
9. I feel my time and efforts are well spent in serving as a member of this advisory committee.	1	2	3	4	5

ADVISORY COMMITTEE SURVEY

Adapted from *Advisory Committee Survey 2009–2010*, Iowa Valley Community College District (ECC, MCC, and Grinnell)

Committee:

Name:

Organization and Position:

Please rate this program on the following:

(with 1 being the lowest, 5 being the highest and NA for not applicable).

	1	2	3	4	5	N/A
The program prepares students for workplace needs						
The advisory committee has adequate opportunity to discuss curriculum changes						
This program is effectively marketed and publicized within the community and industry						
The curriculum is up-to-date with industry standards and provides students with necessary skills						
Advisory committee members are kept up-to-date on program activities						
Job opportunities currently exist for students completing this program.						
Advisory committee meetings are effective in addressing important issues and trends in the industry.						
The advisory committee has members representing all aspects of the industry.						
Equipment in this program is current and representative of industry						
The gender and ethnic composition of the advisory board is representative of the industry in this region						

Comments:

CHECKLIST MEETINGS

	√	Person Responsible	Deadline
Meeting time and place scheduled			
“Mark the Date” notice sent out Technology used: _____			
Agenda developed			
Agenda distributed before meeting Technology used: _____			
Reminder notice sent Technology used: _____			
Room set up			
Refreshments ordered			
Electronic recording of meeting for distribution to non-attending members Technology used:			
Missed you at the meeting notice sent Technology used:			
Meeting notes sent out Technology used:			

SAMPLE MINUTES (EXAMPLE 1)

(Adapted from Nebraska Department of Education, Nebraska Career and Technical Education)

ADVISORY COMMITTEE MINUTES

Date _____

MINUTES

Members present—(List)

Members absent—(List)

Other present—(List)

Call to order—Committee Chair Beverly Smith called the meeting to order at 12 noon and expressed appreciation for attendance and participation. She stressed the importance of the committee’s continuing support and assistance. Dr. Jane Doe, College President, greeted the committee. Her greeting further assured the committee of its importance to the educational goals and program vitality.

Minutes—Minutes of the last meeting were approved as submitted.

Unfinished business—No unfinished business was brought before the committee.

New business—Ms. Smith asked the committee to make suggestions concerning “What are the new requirements of entry-level employees?” Ben Read indicated that a computer or data processing background would be helpful for employees. Eva Johnson further emphasized the need for computer training. She indicated that a job applicant with computer knowledge has an advantage. It was the consensus of the committee that expanded computer training should be added to the technical/occupational program as soon as possible. The chair was asked to appoint a subcommittee to investigate several kinds of computers and software for possible purchase. It was agreed that the subcommittee would report to the committee at the next meeting.

Adjournment—The meeting was adjourned at 1:05 p.m.

_____, Secretary

SAMPLE MINUTES (EXAMPLE 2)

(Adapted from Massachusetts Career/Vocational Education Advisory Committee Guide 2008)

GRAPHIC COMMUNICATIONS PROGRAM ADVISORY COMMITTEE MEETING

Attendance (names and school/public two-year college or business/industry affiliation):

- I. Review shop and classroom facilities and equipment
More workstations are needed. Fire extinguishers have expired.
- II. MCAS/Placement/Graduation/Nontraditional by Gender Data Review
More females should be able to access cooperative education
- III. National Program Standards approval due to expire next year
- IV. Review Program of Study
Additional alignment work with the Vocational Technical Education Frameworks must be done.
Career/Vocational Safety and Health Plan for this program must be updated.
- V. Student Enrollment/Placement
The program has seen a 30 percent increase in enrollment over the past three years. Industry wants more graduates. With more workstations, we could boost public relations to attract more students.
- VI. Articulation
Articulation agreements are not current

VII. Employment Outlook

High, especially for grads who obtain an associate degree

VIII. New Business

Increase monitoring at cooperative education sites.

IX. Recommendations

Invite one or more representatives of computer companies to join this committee to advise on trends. Invite industry representatives to speak to students in exploratory classes about

SAMPLE ANNUAL REPORT

(Adapted from Lane Community College)

ADVISORY COMMITTEE ANNUAL REPORT

1. Name of advisory committee:

Name of program:

Committee chair [*community member*]:

Committee coordinator [*LCC member*]:

2. Name of division at educational institutions:

Division chair:

3. Number of regular advisory committee meetings held:

Date of 1st meeting and number attending:

Date of 2nd meeting and number attending:

Date of 3rd meeting and number attending:

Number of special advisory committee meetings held:

Date and purpose:

Date and purpose:

4. Current program fact sheet from Fiscal Year

Staffing—number of contracted faculty positions:

Staffing—number of part-time faculty positions:

Funding—general fund (program) budget: [\$\$\$]

Student fees: [\$\$\$]

Grant funds: [\$\$\$ *in grants*]

Has your program received Carl Perkins grants or any other grants in the last few years? If yes, describe the funds used and how they benefited the program.

Additional comments/explanations:

5. Program enrollment trends

	FY	FY	FY	FY
Program headcount				
Number of minority students				
Percent of minority students				
Number of females/number of males				
Percent of females/percent of males				
Number of graduates				
Placement rates for program graduates				
Number of students participating in cooperative education				
<u>Core students</u> : Students with a program major AND completed six or more required core credits in the program				
Number of core students making satisfactory progress				
Percent of core students making satisfactory progress				

Additional comments/explanations:

What is your program’s student capacity and how is it determined?

Is your program currently at full student capacity? If so, how many students are on a waiting list?

Have you made program modifications to admit more students?

What adaptations have you made in your program to meet the needs of students with disabilities?

What adaptations have you made in your program to achieve gender balance?

6. Labor market information

What are the future employment opportunities for students in your program?

How does your committee determine your program’s effectiveness in meeting business and industry needs?

7. Curriculum

List any curricular changes/improvements during last year and describe briefly.

How was the advisory committee involved?

What curriculum barriers inhibit students from achieving their goals?

(Example: scheduling requirements)

8. Program planning and design

What are the goals of your advisory committee for next year?

What progress did you make toward your goals from last year?

Describe how faculty and advisory committee members worked together to accomplish/identify the items listed above.

Do you and your advisory committee have additional comments regarding equipment, facilities, staffing, funding, etc.?

9. Please list additional comments as appropriate.

10. Signatures of the committee chair, committee coordinator, and the division chair

Other issues that may need to be reviewed:

- What is the student and employer demand for the skills learned through your program, and what happens to students who participate in the program?
- What is your strategy for keeping your program “state of the art,” and what staff development do you and your staff need to meet future program skill needs?

- How would you rate the exit math, writing, speaking skills, and/or other competencies for technical programs of students who complete your program?
- Is there an articulation or secondary program?

Other topics that the committee may wish to explore during an annual review:

- Program marketing activities and public relations
- Needs for equipment, supplies, and staff
- Cooperative relationships between the college and industry
- Ways to support professional technical education, which may be called for by local and state college officials, boards, and legislative groups
- Program advisory committee goals, accomplishments, and barriers to success
- Industry and employment trends in the field

SAMPLE LETTER CONFIRMING MEMBERSHIP

Dear _____:

I am pleased to inform you that [*advisory committee name*] has accepted your membership for the next school year.

As a member of the [*advisory committee name*] you will have a direct impact on the [*name of career pathway*] and the skills needed in the workforce. Our committee usually meets 2-3 times per year and you will be notified by [*name technology or software that you will be using*]. I have enclosed last year's annual report for your reference and also a copy of this year's work plan. In addition, I have also enclosed information on the career pathway and the institutions involved.

Your experience and expertise will help us provide the skills needed and contribute to the economic health of our region. I appreciate the time and effort that you will contribute to this effort.

Sincerely,

Committee Chair, Advisory Committee

SAMPLE LETTER OF RELEASING/REPLACING A MEMBER

(adapted from *Massachusetts Career/Vocational Education Advisory Committee Guide*, 2008)

Dear _____:

On behalf of [*advisory committee name*], I would like to take this opportunity to express my sincere appreciation to you for your faithful participation in our advisory committee activities during the past year. Your contributions were invaluable, and resulted in numerous program and curriculum improvements. [*List several examples.*]

The students and faculty who benefited directly from these improvements also wish to express their thanks to you, and encourage your continued support and service.

At this time, I am in the process of organizing the committee for the coming year. I encourage you to remain by nominating an advisory committee member to take your place and to continue to share with us your thoughts and expertise.

Sincerely,

Chairperson, Advisory Committee

SAMPLE LETTER TO INACTIVE MEMBER

(Adapted from Massachusetts Career and Technical Education Curriculum Resource Center, 2003)

Dear _____:

On behalf of [*advisory committee name*], I would like to take this opportunity to express my sincere appreciation to you for serving as a member of our advisory committee.

The [*career pathway*] has benefited greatly from the work of the committee. I realize, however, that our members are very busy, with many competing demands on their time, and I am grateful for your interest and involvement over the past _____ year(s).

Please let us know if you are interested in continuing your work as an active member of the [*advisory committee name*] advisory committee.

Thank you.

Sincerely,

Chairperson, Advisory Committee

MNSCU OCCUPATIONAL PROGRAMS, MARCH 2009

Minnesota Office of the Legislative Auditor Program Evaluation Division

Major Findings

- The Minnesota State Colleges and Universities (MnSCU) system generally does a good job of assessing economic conditions and workforce needs, but two-year colleges do not consistently consider market needs for workers when managing existing programs.
- MnSCU colleges use various approaches to identify the skills and workers that employers need, but not all are uniformly effective.
- Not all colleges have statements of mission, vision, and purpose that express the importance of meeting employers' needs.
- In reviewing programs, several colleges conducted only a limited analysis of job prospects for graduates.
- MnSCU's 2007-2008 cap on electrician program enrollment was based on a documented surplus of workers, but it lacked sufficient consideration of local economic conditions.
- MnSCU's surveys of graduates regarding jobs have limitations, and little else is done to understand whether graduates find relevant jobs. Some colleges had job placement rates for graduates from all programs, including occupational programs, that fell below MnSCU standards.
- MnSCU has no centralized oversight of colleges' information on career exploration and job opportunities, and variation has led to gaps in information on job prospects for students.

Generally, MnSCU colleges respond well to economic conditions and workforce needs, but they should also more routinely assess job prospects for their occupational program graduates.

Key Recommendations

- All colleges' statements of mission, vision, and purpose should reflect priorities in state law and board directives, and the Office of the Chancellor should monitor the statements.
- When reviewing occupational programs, all colleges should assess how well the supply of graduates and workers matches the demand for employees.
- MnSCU should explore improvements to how it assesses graduates' success at finding jobs related to their programs.
- When reassessing its enrollment cap on electrician programs, MnSCU should take local economic conditions into greater account.
- Colleges should improve program advisory committees that are not fulfilling their potential.
- MnSCU's Board should by policy require colleges to ensure that information on careers and job opportunities is getting to students who need it.

Report Summary

Occupational programs prepare postsecondary students for skilled occupations, such as carpentry and law enforcement. With 75 percent of the state's occupational program awards conferred to students in the Minnesota State Colleges and Universities (MnSCU) system, MnSCU is the largest educator of this type in Minnesota. MnSCU's 30 technical colleges, community colleges, and combined colleges, which are located on 45 campuses around the state, offer the programs.

A 15-member Board of Trustees, appointed by the Governor with Senate consent, governs MnSCU. Trustees appoint a chancellor who is chief executive officer for the system, and they select college presidents. For fiscal year 2008, operating expenses for the MnSCU system amounted to \$1.6 billion. Most revenues come from state appropriations and tuition.

As part of its strategic plan, MnSCU's Board of Trustees has set a direction of providing programs and services that enhance state and regional economic competitiveness. To identify economic needs, colleges take a variety of steps. For instance, college representatives serve as members of business alliances, such as for health care or energy needs.

Colleges should improve the program advisory committees that are not working effectively.

MnSCU generally does a good job of understanding economic and workforce conditions, but colleges do not consistently consider market needs for workers when managing their programs.

Colleges respond to employers and economic conditions by interacting with employers in various ways, such as developing programs that meet professional standards or incorporate needed skills. But in reviewing their programs and proposing to add, change, or close programs, colleges have not consistently assessed market supply and demand for jobs.

Colleges rely heavily on program advisory committees to identify employer needs, but not all committees work effectively.

For occupational programs, colleges are required to establish advisory committees. Committees consist of employers, students, and faculty, and their chief duty is offering guidance on program design and operation.

College presidents we interviewed spoke highly of the committees' value, yet most said not every committee was working up to its potential. Most committee members we surveyed held favorable impressions of the committees, but our survey also identified problems.

Some committees meet too infrequently, and many colleges have committees that are either too large or too small. Some committees have too few employers or other professionals. Some members said their committees were inactive in undertakings typical of the committees, such as identifying retraining for instructors.

Colleges should provide better oversight of program advisory committees. They should also improve those that are not fulfilling their potential.

Some colleges' mission statements and strategic planning documents do not address employer needs.

Board policies and other sources say it is important for colleges to express their missions with consultation from employers. Three colleges, though, have mission and vision statements that do not reflect the importance of meeting employer needs. Three other colleges have high-level planning documents with vague or indirect references to employer needs. All MnSCU college mission, vision, and purpose statements and strategic planning documents should reflect priorities in state law and board directives. The Office of the

Chancellor should report on the alignment of system and college missions and consider how well college missions address economic needs.

Five colleges' policies for reviewing programs do not address employer input, and the reviews do not consistently measure job demand.

Board policy requires colleges to conduct program reviews as a way to plan for and improve their programs. Program review policies for five colleges make little mention of input from advisory committees or other professional viewpoints, although input is required.

Student enrollment and program costs, more than job prospects for graduates, drive colleges' decisions on closing programs.

Most of a sample of program reviews had only a limited assessment of employment prospects for enrolled students, and colleges' use of job forecasts was inconsistent. Student enrollment and program costs, more than job prospects, drive program closures.

When reviewing programs, all MnSCU colleges should assess supply and demand for workers, and college policies should require it. To help, the Office of the Chancellor should analyze employment sectors likely to see more workers than jobs.

MnSCU based its statewide enrollment cap for electrician programs on a documented surplus of workers but lacked sufficient consideration of local economic conditions.

Following complaints about an oversupply of electricians, the Office of the Chancellor capped enrollment in electrician programs in 2007 and 2008. Some parts of the state, however, have not had the same depth of job losses as the Twin Cities region. Certain college presidents said employers in their regions continued as of fall 2008 to seek electrician program graduates. When MnSCU reassesses the caps, it should take local economic conditions into greater account.

MnSCU surveys of graduates' job placements are a potentially useful source of information on occupational programs, but the data have limitations.

Within a year of graduation, colleges contact graduates on their job status. For graduates of college programs overall in 2004-2006, nine colleges had lower-than-expected rates of related employment. For graduates of all programs in 2006, the rates ranged from 63 percent at Pine Technical College to 99 percent at Lake Superior College.

For some occupational programs, the value of related employment rates is limited because rates are based on a small number of graduates. In the survey of graduates from 2007, 54 percent of the programs had six or fewer graduates. Further, at some colleges, information on job placements for most graduates came from sources other than the student, such as faculty. Colleges do little else to supplement the data. MnSCU should explore improvements to assessing graduates' success at finding relevant jobs.

Changes in some MnSCU occupational programs matched trends in statewide employment, but colleges' flexibility is limited.

As a share of all MnSCU programs from 2001 to 2008, programs on health care support services increased 17 percent. Similarly, as a share of all employment, jobs in health care support increased 18 percent, and jobs for health care practitioners increased 14 percent. Concurrently, MnSCU's manufacturing programs declined as a share of all programs, as did manufacturing/ production jobs as a share of statewide employment.

Colleges face limitations in trying to meet economic and workforce needs. Several college presidents said they cannot open a new program unless they close an existing one. Program start-ups frequently require major equipment purchases, constraining flexibility.

Colleges have actively managed their occupational programs, but they rely heavily on the Office of the Chancellor to document effects on job markets.

MnSCU's Board of Trustees should by policy require colleges to ensure that information on career exploration and job opportunities is getting to the occupational program students who need it.

Between 2001 and 2008, MnSCU colleges made more than 9,600 proposals to add, change, or close programs. A sample of proposals for new programs showed that colleges were responsive to employers. Colleges consulted employers to develop curriculum and identify skills to be taught.

In 2007, the Office of the Chancellor strengthened requirements for approving new programs, in part to require quantifying job prospects. In past proposals, colleges frequently provided minimal or no information to quantify employer demand for workers. Largely because of work by the Office of the Chancellor, proposals for new programs receive extensive reviews of job prospects.

MnSCU has no centralized oversight of information from colleges on career exploration and job opportunities, and there are gaps in student information on job prospects and related topics.

MnSCU's Board of Trustees has not adopted policies governing information on career exploration and job opportunities. Colleges take steps to inform students about job prospects, but student leaders we surveyed and some college representatives we interviewed said not enough is being done about getting information to all students who may need it.

Information on careers and job opportunities is available, but few colleges require students to use it. Faculty often provide job information, but their involvement varies by program and may leave some students uninformed. MnSCU's Board of Trustees should by policy require colleges to ensure that career and job information is getting to students who need it. All colleges need ways to systematically inform students about job prospects.

Summary of Agency Response

In a letter dated March 6, 2009, MnSCU Board of Trustees Chair David Olson and Chancellor James McCormick said MnSCU concurs with OLA's recommendations. They said they intend to strengthen their "ties to employers and improve the information provided to students on job prospects." They described plans to address each of the report's recommendations, including steps to require analyzing workforce demands when colleges review their academic programs. They will also develop policies and work with the colleges to ensure that occupational students receive the information they need on career exploration and job prospects.

More Information

The Program Evaluation Division was directed to conduct this study by the Legislative Audit Commission in March 2008. For a copy of the full report, entitled "MnSCU Occupational Programs," 79 pp., published in February 2009, please call 651/296-4708; e-mail Legislative.Auditor@state.mn.us; write to Office of the Legislative Auditor, Room 140, 658 Cedar St., St. Paul, MN 55155; or go to the web page featuring the report. Staff who worked on this project were Jody Hauer (evaluation manager) and Valerie Bombach.

For more information, contact Jody Hauer, evaluation manager.

**PROPOSED AMENDMENT TO POLICY 3.30 COLLEGE ADVISORY PROGRAM
COMMITTEES—SECOND READING**

**MINNESOTA STATE COLLEGES AND UNIVERSITIES
BOARD OF TRUSTEES**

Agenda Item Summary Sheet

Committee: Academic and Student Affairs **Date of Meeting:** March 17, 2010

Agenda Item: Proposed Amendment to Board Policy 3.30, College Program Advisory Committees

- Proposed Policy Change Approvals Required by Policy Other Approvals Monitoring
- Information

Cite policy requirement, or explain why item is on the Board agenda:

Amendments to Board policy require approval of the Board (second reading).

Scheduled Presenter(s):

Linda L. Baer, Senior Vice Chancellor for Academic and Student Affairs
Mike López, Associate Vice Chancellor for Student Affairs

Outline of Key Points/Policy Issues:

The Community and Technical College Program Advisory Committees policy has been rewritten and is presented to the Board of Trustees for approval. The proposed policy, in part, responds to a study of occupational programs conducted by the Office of the Legislative Auditor published in 2009.

Background Information:

The proposed policy is a first reading to amend policy 3.30 College Program Advisory Committees. Development of the proposed policy followed standard policy revision processes.

After approval of the amended policy by the Board of Trustees, procedure 3.30.1, Community and Technical College Program Advisory Committees will be submitted to the Chancellor for approval.

**BOARD OF TRUSTEES
MINNESOTA STATE COLLEGES AND UNIVERSITIES**

Second Reading

BOARD ACTION
PROPOSED AMENDMENT TO BOARD POLICY 3.30, COLLEGE ADVISORY PROGRAM COMMITTEES

1 The Office of the Chancellor is submitting a proposed amendment to Policy 3.30 College
2 Program Advisory Committees. New policy language is proposed to replace the current College
3 Program Advisory Committees policy. The current policy does not have a related system
4 procedure.
5

6 **BACKGROUND**

7 The proposed policy amendment and a related proposed system procedure respond to the 2009
8 Office of the Legislative Auditor’s report titled MnSCU Occupational Programs and its
9 recommendation that: “Colleges should provide better oversight of program advisory committees
10 and take steps to improve those that are not fulfilling their potential.” The proposed policy and
11 the new procedure retain and build upon important elements of current policy language. The
12 proposed policy focuses on colleges’ responsibilities to adopt and implement policy and
13 procedure for the establishment, management and operation of college program advisory
14 committees. The proposed policy and procedure reflect the importance of maintaining a strong
15 relationship between academic programs that prepare individuals for initial or continued
16 employment and the businesses or industries they serve. Following final Board approval of the
17 policy amendment, the system procedure will be submitted to the Chancellor for approval.
18

19 **CONSULTATION**

20 Consultation for the policy and procedure is planned or has occurred as follows:

- 21 • Reviewed by Academic and Student Affairs Policy Council – 04/16/09, 09/17/09, 11/20/09
- 22 • Reviewed at Academic and Student Affairs Leadership Council – 01/05/10
- 23 • Mailed out for review and comment – 10/12/09
- 24 • Reviewed at Minnesota State College Faculty (MSCF) Meet and Confer – 02/25/10

25 **RECOMMENDED COMMITTEE ACTION**

26 The Academic and Student Affairs Committee recommends that the Board of Trustees adopt the
27 following motion:
28

29 **RECOMMENDED MOTION**

The Board of Trustees approves the proposed amendment to Policy 3.30 College Advisory
Program Committees.

Date presented to the Board: March 17, 2010

**BOARD OF TRUSTEES
MINNESOTA STATE COLLEGES AND UNIVERSITIES**

Second Reading

BOARD POLICY	3.30
Chapter 3. Educational Policies	
Section 30. College Program Advisory Committees	

1 **3.30 Community and Technical College Program Advisory Committees**
2

3 ~~Program advisory committees are designed to provide guidance and advice on program design,~~
4 ~~operation, accountability and closure. Each college shall establish an advisory committee~~
5 ~~consisting of employers, students, and faculty for approved programs or related program clusters~~
6 ~~that are publicized by the college as preparation for entry into employment. Program advisory~~
7 ~~committees may be established to serve related programs at multiple institutions, which may~~
8 ~~include high schools, colleges, and/or universities. Each college shall develop and implement a~~
9 ~~policy to guide establishment and operation of program advisory committees.~~

10
11 **Part 1. Purpose and Applicability.** This policy establishes standards, processes and conditions
12 that enable consistent creation and operation of college program advisory committees; it applies
13 to credit-based academic programs determined by a college to be preparation for initial or
14 continued employment.

15
16 **Part 2. Definitions.** The following definitions apply to this policy and its procedure.

17
18 **College.** College means a community college, technical college, or community and
19 technical college.

20
21 **College program advisory committee.** A college program advisory committee
22 identifies needs and opportunities; describes the current status and dynamic nature of its
23 industry and/or occupation(s); and provides guidance and advice on initial development,
24 accountability, expansion and closure of academic programs or related program clusters
25 at the college or with related programs at high schools, colleges, and/or universities. A
26 college program advisory committee shall include, but is not limited to, employers,
27 students, and faculty.

28
29 **Part 3. College Program Advisory Committee Policy and Procedure.** Each college shall
30 adopt and implement a policy and procedure to establish, manage and operate college program
31 advisory committees.

32
33 Credit-based academic programs determined by a college to be preparation for initial or
34 continued employment shall have an advisory committee. One advisory committee may serve
35 more than one program provided that committee members possess requisite knowledge and skills
36 relevant to the programs.

37
38 **Part 4. Oversight and Accountability.** The chancellor shall adopt a system procedure to
39 implement Policy 3.30 Community and Technical College Program Advisory Committees.

- 1 The chancellor shall assess compliance with this policy, post this information on the Web, and
- 2 consider such findings in presidential evaluations.

Date of Implementation: 06/14/05,

Date of Adoption: 06/14/05,

Date and Subject of Revision:

POLICY CONTENT FORMAT:

Single underlining represents proposed new language.

~~Strikeouts~~ represent existing language proposed to be eliminated.

Words not underlined represent existing language that is proposed to remain in policy.