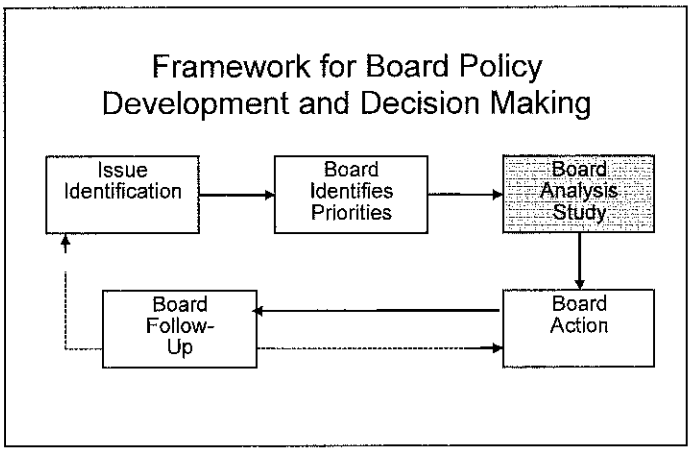
Iowa State Board of Education

Executive Summary

November 18, 2015



Agenda Item: Secondary Career and Technical Education (CTE) Task Force Final Report

Iowa Goal: Goal 2: All PK-12 students will achieve at a high level.
Goal 3: Individuals will pursue postsecondary education in order to drive economic success.

State Board Role/Authority: House File 604 (2013)

Presenter: Pradeep Kotamraju
Chief, Bureau of Career and Technical Education

Mike Bearden, State Board Member

Angela English, State Board Member

Rosie Hussey, State Board Member

Attachments: 1

Recommendation: It is recommended that the State Board hear and discuss this information.

Background: In 2013, House File 604 mandated the establishment of a Secondary CTE Task Force to review existing programming and make recommendations that reduce skill shortages, enhance economic growth, and ensure that all students have access to high-quality, globally competitive CTE programs.

- OVER -

This legislation directed the task force to review and to make recommendations on secondary CTE programs. This review is to consider measures to ensure consistency in CTE program quality statewide. The legislation directs the task force to review provisions of the Iowa Code and related provisions of the Iowa Administrative Code relating to "vocational education" or CTE.

The task force has produced five recommendations that focus on: (1) career guidance; (2) high-quality secondary CTE programming; (3) work-based learning; (4) CTE teacher preparation and professional development; and (5) regional partnerships and regional centers.

Whereas, each recommendation is individually able to stand on its own, when taken together, the five recommendations point secondary CTE in Iowa in a new and innovative direction by ensuring access to high-quality CTE programming for all students across the state.

The task force recommendations were submitted to the General Assembly on November 2, 2015.

Final Report of the Secondary Career and Technical Education Task Force

October 26, 2016

State of Iowa
Department of Education
Grimes State Office Building
400 E. 14th Street
Des Moines, IA 50319-0146

State Board of Education

Charles C. Edwards, Jr., President, Des Moines
Michael L. Knedler, Vice President, Council Bluffs
Brooke Axiotis, Des Moines
Michael Bearden, Gladbrook
Diane Crookham-Johnson, Oskaloosa
Angela English, Dyersville
Rosie Hussey, Clear Lake
Mike May, Spirit Lake
Mary Ellen Miller, Wayne County
Hannah Rens, Student Member, Sioux City

Administration

Ryan M. Wise, Director and Executive Officer
of the State Board of Education

Division of Community Colleges

Jeremy Varner, Administrator

Bureau of Career and Technical Education

Pradeep Kotamraju, Bureau Chief

It is the policy of the Iowa Department of Education not to discriminate on the basis of race, creed, color, sexual orientation, gender identity, national origin, sex, disability, religion, age, political party affiliation, or actual or potential parental, family or marital status in its programs, activities, or employment practices as required by the Iowa Code sections 216.9 and 256.10(2), Titles VI and VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000d and 2000e), the Equal Pay Act of 1973 (29 U.S.C. § 206, et seq.), Title IX (Educational Amendments, 20 U.S.C.§§ 1681 – 1688), Section 504 (Rehabilitation Act of 1973, 29 U.S.C. § 794), and the Americans with Disabilities Act (42 U.S.C. § 12101, et seq.). If you have questions or complaints related to compliance with this policy by the Iowa Department of Education, please contact the legal counsel for the Iowa Department of Education, Grimes State Office Building, 400 E. 14th Street, Des Moines, IA 50319-0146, telephone number: 515-281-5295, or the Director of the Office for Civil Rights, U.S. Department of Education, Citigroup Center, 500 W. Madison Street, Suite 1475, Chicago, IL 60661-4544, telephone number: 312-730-1560, FAX number: 312-730-1576, TDD number: 877-521-2172, email: OCR.Chicago@ed.gov.

Contents

Establishing the Task Force 4
Task Force Members 5
Background 6
Context 6
Outcomes 7
Process 7
Goal 8
Recommendations 11
Recommendation #1: Career Guidance 10
Recommendation #2: High-Quality Secondary CTE Programming 10
Recommendation #3: Work-Based Learning 11
Recommendation #4: CTE Teacher Preparation and Professional Development 12
Recommendation #5: Regional Partnerships and Regional Centers 13
Moving Forward 14
Appendix A: Career Academies 16
Appendix B: High-Quality CTE 17
Appendix C: Career Guidance 18
References 20

Establishing the Secondary Career and Technical Education (CTE) Task Force

The Secondary Career and Technical Education (CTE) Task Force was established as part of House File 604 to make recommendations that–

- Reduce skill shortages, enhance economic growth, and ensures that all students have access to high-quality, globally competitive career and technical education programs by focusing on:
    - rigorous standards;
    - consistency in program quality statewide;
    - alignment with postsecondary programs leading to middle-skill occupations with family-sustaining wages;
    - curricula that align workforce skills with industry-recognized standards where such standards exist;
    - responsiveness to labor market needs; and
    - robust business and industry participation, including participation on advisory committees, and
    - efficient statewide delivery of programming.

The legislation directed the task force to review and make recommendations on secondary CTE programs. This review was to consider measures to ensure consistency in career and technical education program quality statewide. The task force was also explicitly asked to review the definition of "career academy" and to review and recommend core components of career academies and regional centers.

Task Force Members

- Karrie Abbott, Vice President of Community Impact, United Way of the Quad Cities Area, Davenport
- Mary Bontrager, Executive Vice President, Workforce Development/Education, Greater Des Moines Partnership, Des Moines
- Matt Bruinekool, Educational Consultant, Master Builders of Iowa, Des Moines
- Josh Byrnes, State Representative, Osage*
- Mark Chelgren, State Senator, Ottumwa*
- Nicole Crain, Vice President, Government Relations, Iowa Association of Business and Industry, Des Moines
- Greg Dufoe, Superintendent, Adel-Desoto-Minburn Community School District, Adel
- Chris Duree, Chancellor, Iowa Valley Community College District, Marshalltown
- Murray Fenn, Consultant, Green Hills Area Education Agency, Council Bluffs
- Scott Fortune, Iowa Association of School Boards, Des Moines
- Jerry Kearns, State Representative, Keokuk*
- Gail Kotval, Iowa Innovation Council Program Manager, Iowa Economic Development Authority, Des Moines*
- Dana Lampe, President, Iowa Association of Career and Technical Education, Marion
- D.T. Magee, Executive Director, Iowa Board of Educational Examiners, Des Moines*
- Randy Mead, Executive Dean of Program Development, Des Moines Area Community College, Ankeny
- Kathy Nacos-Burds, Vice President of Academic Affairs, Northeast Community College, Calmar
- Julie Rosin, Assistant Director, Central Campus, Des Moines
- Vicky Rossander, Executive Board Member, Iowa State Educational Association, Des Moines
- Ken Sagar, President, Iowa Federation of Labor, AFL-CIO, Des Moines
- Brian Schoenjahn, State Senator, Arlington*
- Elliott Smith, Executive Director, Iowa Business Council, Des Moines
- Lisa Stange, Family and Consumer Sciences Educational Studies (FCEDS) Program Coordinator, Iowa State University, Ames
- Jeremy Varner, Administrator, Division of Community Colleges, Iowa Department of Education*
- Ed Wallace, Deputy Director, Iowa Workforce Development, Des Moines*
- Jeff Weld, Executive Director, Governor's Science, Technology, Engineering and Mathematics (STEM) Advisory Council, Des Moines*

Lead: Pradeep Kotamraju, Bureau Chief, Career and Technical Education, Division of Community Colleges, Iowa Department of Education

Facilitator: David Bunting, Independent Education Consultant, Cedar Rapids

*Ex-Officio/Non-Voting Member

Background

The Secondary Career and Technical Education (CTE) Task Force was established by House File 604 in 2013 to make recommendations to revitalize secondary CTE and to ensure all students have access to high-quality, globally competitive programs. The task force was also explicitly asked to review the definition of "career academy" and to review and recommend core components of career academies and regional centers.

As required by the legislation, the task force will submit its final report to the General Assembly no later than November 1, 2015. The report includes the five recommendations outlined in detail below. In addition, the final report will also be submitted to the Governor and the State Board of Education. The 25-member group includes broad representation from public schools, business and industry, community colleges, community stakeholders, organized labor, state agencies, and legislators.

Context

- The global economy is increasingly driven by knowledge and innovation. Technological change and globalization are changing the state's economy and the jobs being created today require a higher skill level than in the past. In some sectors, there are education and skill gaps which result in essential positions being left vacant, hampering economic growth. At the same time, those remaining unskilled workers face economic insecurity.

- CTE ensures that students are not only college-ready, but also career-ready. It engages students by contextualizing academic subjects and providing real-world, hands-on experiences within industry career clusters, including a variety of science, technology, engineering, and mathematics (STEM) disciplines (e.g., information technology, advanced manufacturing, health sciences, and engineering). CTE is central to the preparation of middle-skilled workers and to sharpening the state's competitive edge; however, Iowa is not currently maximizing opportunities to deliver world-class opportunities.

- Iowa has a rich tradition of delivering CTE through comprehensive high schools rather than regional centers. With rural-to-urban migration continuing and two-thirds of Iowa counties experiencing population decline, many districts are projected to have lower enrollment and be sapped of their capacity to deliver robust programs which are often capital-intensive.

- Many schools struggle to find qualified instructors in high-demand fields or to afford expensive equipment necessary for high-quality programs. They are often not sufficiently nimble to adapt to changing employer demand and often struggle to develop deep partnerships with employers due to their location within larger labor-shed areas.

- Student career and academic planning experiences are often inadequate and many lack access to work-based learning.

- While there are exceptional CTE opportunities provided to some students, many high school CTE programs are antiquated and misaligned with labor market needs. The current policy framework is archaic and, in some ways, outmoded.

- Iowa is a national leader in providing college credit courses to high school students; however, these opportunities are not evenly distributed. While students in some schools have access to a broad array of "dual credit" courses, students in other schools may have very few opportunities leaving them at a competitive disadvantage.

Dual credit courses reduce time-to-degree, reduce cost to students and parents, reduce student debt, increase the matriculation rate for first generation college students, help students understand college expectations, and broaden the opportunities beyond what could be offered by a high school alone.

Outcomes

While the task force is in the final stages of its work, with a report due the Iowa Legislature in November 2015, the department hopes CTE reform efforts will result in the following:

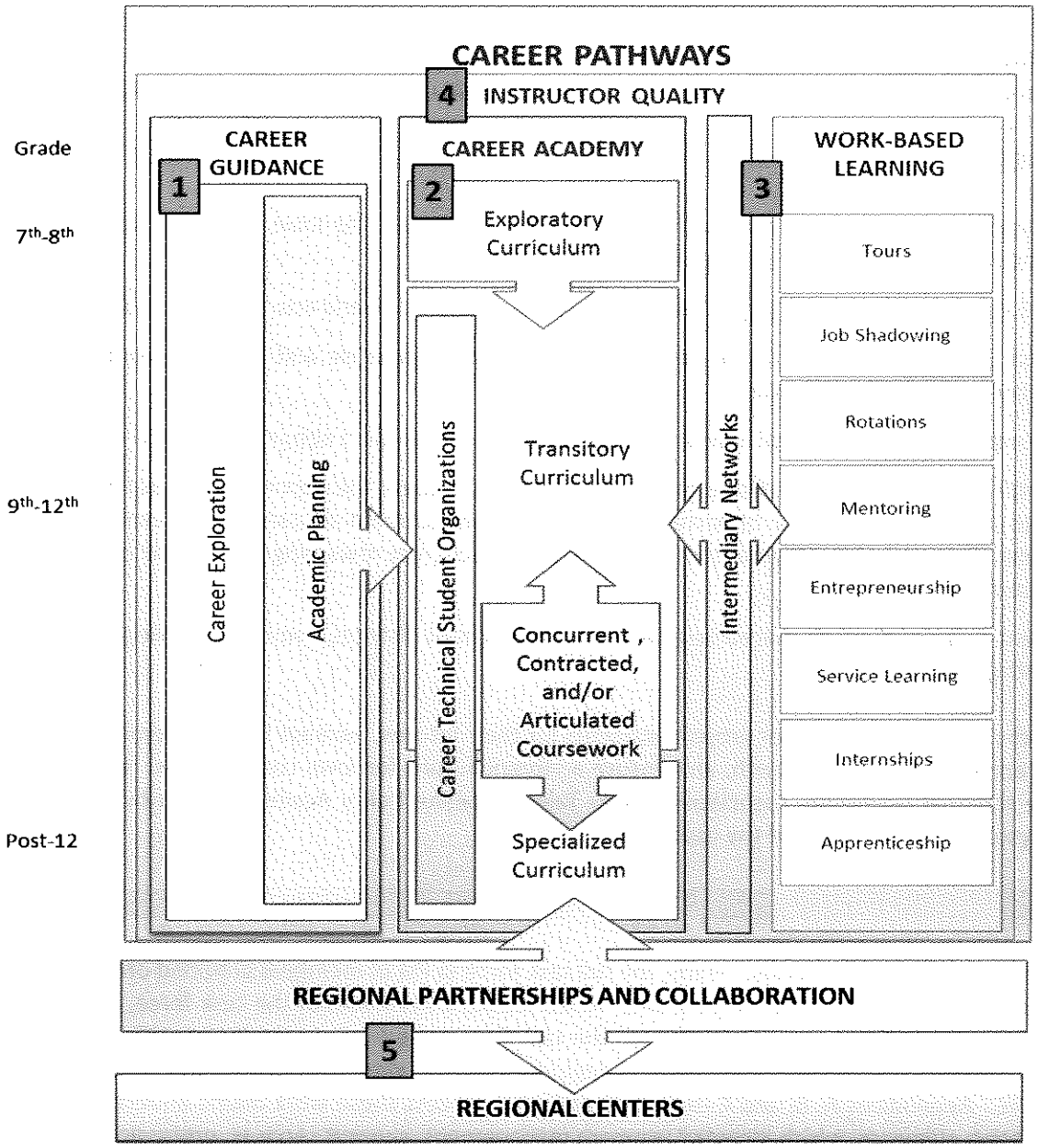
- An education system better aligned with employer/economic demand and with more consistent quality.
- Robust, globally competitive CTE curricula that integrate academic and technical content and lead to industry-recognized credentials.
- More equitable distribution of concurrent enrollment ("dual credit") opportunities.
- A comprehensive career pathway system affording every student the opportunity to explore and to pursue college and career learning opportunities through enhancement of career guidance and work-based learning. Removal of the stigma from CTE so students recognize rewarding middle-skill careers that do not require a four-year degree.
- Efficient delivery through shared programs between school districts, community colleges, local business, and other stakeholders.

Ultimately, the objective is to better prepare students for their futures, increase family incomes, meet employer demand to enhance economic growth, and ensure a vibrant future for Iowa communities. CTE reform efforts support the National Governors Association (NGA) Talent Pipeline Policy Academy effort by helping align the education system with the needs of the economy.

Process

The task force operated at two levels. Firstly, the full task force (a list of members provided on pages 5-6) met at regular intervals; at the same time, work teams, which included members of the task force, as well as subject matter experts, met in the time period between the task force meetings. Secondly, specific work teams were formed that focused on career academies and regional centers, career guidance, and defining high-quality secondary CTE. Appendices A, B, and C describe briefly the process these work teams undertook to create the recommendation elements, which included program management, support services, professional development, and metrics that were then submitted to the full task force. With the recommendations now final, an internal Department of Education work team is reviewing current policy and procedure within Iowa Code and rule, and proposing changes to align the recommendations with Iowa Code and rule.

The full task force took the recommendation elements that emerged from the different work teams, and produced a set of five policy recommendations, where each individually was able to stand on its own; but the set of recommendations, when taken together, pointed secondary CTE in Iowa in a new and innovative direction (see figure below). The overall intent of the task force's recommendations is to secure secondary, postsecondary, and industry collaboration to create high-quality comprehensive career pathways for students that align career guidance, 21st century CTE and academic curriculum, and work-based learning experiences that empower students to be successful learners and practitioners. Where it does not already exist, the task force will seek authority for the State Board of Education to create and to adopt policies to implement the following recommendations.



Goal

Iowa has a long-standing commitment to high-quality career and technical education (CTE). However, there is, for many reasons, a need to expand, align, restructure, and reform CTE in Iowa. Particularly at the secondary level, there is a need to move towards a consistent statewide system that adequately supports innovative, high-quality secondary CTE programs, where high-quality secondary CTE (as envisioned by the task force) can be defined as follows:

> ***A high-quality CTE program is defined as a structured curriculum that includes academic and technical courses within specific career pathways leading to students graduating from high school career and college ready. Such high quality CTE programs prepare high school graduates for education and training leading to a postsecondary certificate, diploma, degree, or industry-recognized credential tied to high demand career opportunities.***

With the above definition of high-quality CTE in hand, and recognizing that high-quality CTE is a school-wide and community-wide responsibility, the proposed recommendations presented in this document have the following singular goal:

Goal: ***A comprehensive career pathway system will afford every student the opportunity to fully explore and pursue career and college opportunities.***

It is the position of this task force that a comprehensive career pathway system is the best approach for preparing students for college and careers aligned with in-demand occupations. The task force defines career pathway as a system which affords all students an opportunity to identify, to establish, and to explore career and college goals through the alignment of career guidance and academic planning practices, secondary and postsecondary 21st century CTE and academic programming, and work-based learning experiences. These career pathways should be aligned with demand-side requirements, including sector strategy information, driven by Iowa's employers. The task force is encouraged that other efforts at promoting talent development that are currently underway in the state of Iowa, like the National Governors Association (NGA) Talent Pipeline grant work and implementation of the Workforce Innovation and Opportunity Act (WIOA), are also embracing career pathways and sector strategies as an integral part of a workforce development, economic development, and education policy within Iowa.

Starting in middle school, students must be provided meaningful opportunities to learn about the career and college landscape, to explore their interests, and to identify connections between the two. In middle school, thoughtful career guidance allows students to self-reflect and evaluate, with assistance from counselors, teachers, parents, and guardians, about how their interests and aptitudes connect to the world of work. In high school, the primary purpose of thoughtful career guidance is to translate a student's self-reflection and evaluation of interests and aptitudes into the selection of a pathway that combines particular sets of academic and technical programming to match the student's career and college goals. More specifically, in the early grades of high school (9th and 10th), a student's interests and aptitudes are likely to change, career and college goals will evolve, pathway selection will continue to modify. By the time the student enters 11th grade, a student's interests, aptitudes, career and college goals, and pathway selection, all have to become firmer, if that student is to maximize fully the opportunities for further education and work beyond high school.

The nexus between a students' initial exploration of careers and achieving their career and college goals lies in high-quality 21st century CTE programming. The task force's vision for 21st century CTE programming consists of exploratory and transitory courses taught at the secondary level which appropriately prepares students for specialized postsecondary coursework offered concurrently and at the college level. All courses must be sequenced and delivered so students can make seamless transitions into programs that prepare them for the world of work and career. Quality work-based learning must be infused into the pathway to provide students with real-world, hands-on experiences which hone their skills and refine their ambitions.

It is the intent of the task force's recommendations to secure secondary, postsecondary, and industry collaboration to create high-quality comprehensive career pathways for students that align career guidance, integrate 21st century CTE and academic curriculum, and provide work-based learning experiences that empower students to be successful learners and practitioners. Where it does not already exist, the task force will seek authority for the State Board of Education to create and adopt policies to implement the following recommendations.

Recommendations

It is the intent of the following recommendations to secure secondary, postsecondary, and industry collaboration to create high-quality comprehensive career pathways for students that align career guidance, 21st century CTE and academic programming, and work-based learning experiences that empower students to be successful learners and practitioners.

Recommendation #1: Career Guidance

Promote career and college readiness through thoughtful career guidance and purposeful academic and technical planning practices.

Students need professional guidance in assessing their interests, recognizing aptitudes, and defining and navigating toward their career and college goals. Such guidance and planning includes providing students with opportunities to identify their strengths and weaknesses and their areas of interest.

Additionally, guidance and planning includes curricular and co-curricular activities to help students improve their skills and knowledge related to their areas of interest. With this knowledge, students and their families begin the process of making informed choices about successfully completing high school, their future postsecondary plans, and career decisions.

The task force calls for a new vision for career guidance. First, the core curriculum plan outlined in Iowa Code section 279.61, must be re-framed as a process rooted in student success rather than compliance. Such a process has meaningful career exploration and academic planning practices which afford students an opportunity to identify and intentionally select coursework linked directly to their career and college goals.

Students will not realize the true benefit of the new vision for career guidance if it continues to be done in isolation. Career guidance must be engrained into every aspect of the student's educational experience and viewed as a responsibility of all members of the education, and broader, community – including counselors, teachers (including CTE teachers), postsecondary student services and academic advisors, representatives of work-based learning providers, and others. The task force believes it is crucial to preserve the important and central role of the school counselor in the career guidance process, but recognizes that a team approach to delivering career guidance, one which leverages the expertise of numerous education and community stakeholders, will create a more holistic and meaningful experience for students.

Lastly, the State Board of Education must be granted explicit rulemaking authority to adopt and implement the new vision for career guidance by updating the career guidance standards in Iowa Code section 279.61. These career guidance standards should enable students to seamlessly meet their career and education goals. At the same time, these updated career guidance standards should permit school districts to be thoughtful about how career guidance works best for them at the local level. These updated career guidance standards will include, at a minimum, addressing students' individualized academic and career planning, criteria for approval of career information and decision-making systems, and student usage of the state-approved systems.

Recommendation #2: High-Quality Secondary CTE Programming

Provide high-quality, integrated CTE programming comprised of secondary exploratory and transitory coursework to prepare students for higher-level, specialized academic and technical training.

All too often, students enroll in advanced coursework without an appropriate academic and technical foundation. Such students tend to lack the necessary knowledge and skills to satisfy the rigorous expectations of advanced, specialized coursework and risk enrolling in coursework without purpose. The task force believes secondary CTE must be strengthened into a system which encourages career exploration, yet allows students to develop strong foundational skills through stackable, sequential technical and academic coursework.

The framework advanced by the task force leverages and expands on the career academy model, which going forward will encompass three levels of coursework – exploratory, transitory, and specialized. Exploratory coursework begins in grades seven and eight. This coursework will introduce students to the world of work and 21st century skills such as employability skills, financial literacy, and more. Exploratory coursework in grades seven and eight will support and inform the development of their Student Success Plan.

Transitory coursework begins in the ninth grade and will focus on providing students with an academic and technical foundation in areas related to their career and college goals. Transitory coursework will continue to support career exploration, but also allow students to develop a deeper understanding of, and hone skills and knowledge related to, specific career fields. Accordingly, a crucial aspect of transitory coursework is the ability for students to transition both vertically (i.e., into more specialized, advanced coursework) or horizontally (i.e., into another career field).

Regardless of the route, transitory coursework will appropriately prepare students to enroll in and successfully complete specialized coursework. Specialized coursework will develop in students advanced knowledge and skills applicable to a specific career field. This coursework may be offered by the school district, either in-house or in partnership with a community college. All along this spectrum of CTE courses, students should be exposed to the value of career and technical student organizations (CTSOs), with efforts made to make CTSOs co-curricular rather than extra-curricular.

To move toward this integrated CTE program framework, the current six service areas must be updated and reorganized to reflect the present-day world of education and work. The task force supports an approach which revises the six CTE service areas to reflect the national Career Clusters® framework. The intent is to add flexibility and greater choice into the existing offer-and-teach requirements so that districts may offer CTE curricula which reflects in-demand occupations and student interest.

The task force believes a more thoughtful, purposeful delivery structure will serve to increase student interest and participation in CTE programming. However, additional options may be considered to increase the relevance and prominence of CTE within the broader school and community structure. Also, measures could be considered which require districts to provide greater access to co-curricular CTSO opportunities.

Recommendation #3: Work-Based Learning

Afford students the opportunity to access a spectrum of high-quality work-based learning experiences through a coherent delivery system that streamlines and leverages existing initiatives.

Iowa has demonstrated a commitment to developing a coordinated work-based learning delivery system through the legislatively-funded work-based learning intermediary networks. By working directly with each school district in a designated region, the intermediary networks serve as a conduit through which students and instructors connect with business and industry to access work-based learning opportunities such as on-site tours, job shadows, internships, and more.

Though significant progress in expanding access through intermediary networks has been realized, additional resources are required if these opportunities are to be within reach of all students and instructors. These additional resources would permit greater collaboration between secondary, postsecondary, community, and business partners, and explicitly calls for expanding capacity by including four-year public and private institutions of higher education and the Science, Technology, Engineering, and Mathematics (STEM) Regional Networks. Currently, greater collaboration and expanding capacity is a task that is being made difficult with the present allocation of resources. In addition, the intermediary networks would be better positioned to strategically address barriers such as transportation and insurance to ensure that all students and teachers within each region are afforded the opportunity to access high-quality, work-based learning.

Therefore, as it stands, the work-based learning delivery system in Iowa works far below its potential. In addition to the intermediary networks, multiple state agencies, local education and workforce organizations, area employers, economic development officials, and the United States Department of Labor have responsibility for a portion of this delivery system, but operate independently of one another with suboptimal coordination. Several attempts to rationalize and streamline the entire process have produced few results. To ensure optimal and efficient use of state resources, an increase in-state investment in the intermediary networks must prompt action that moves the state toward a cohesive work-based learning delivery system.

Recommendation #4: CTE Teacher Preparation and Professional Development

Address the shortage of qualified career and technical instructors by expanding opportunities to obtain academic and technical training in licensure areas and examining preservice preparation and licensure practices to remove barriers for horizontal and vertical career advancement for individuals within the profession.

There continues to be critical shortage of quality teachers in numerous CTE areas. Iowa school districts and CTE instructors are well aware of these shortages and have begun discussions about how to recruit, prepare, and support individuals who wish to teach in a CTE subject area.

Individuals who enter the teaching profession by way of a teacher preparation program must meet common licensure and endorsement requirements, where the endorsement an individual holds determines the subject area(s) in which they may teach. It is certainly possible for a teacher to hold endorsements in multiple subject areas, though doing so requires the completion of additional coursework per endorsement. While ensuring quality, this high standard serves as a barrier to the accumulation of additional endorsements, ultimately limiting the subject areas in which otherwise highly-qualified individuals may teach.

In addressing the teacher shortage issue, the task force recognizes the importance of not just finding individuals to fill these vacant teaching positions, but ensuring that highly-qualified, knowledgeable individuals fill these vacant positions. To that end, the task force requests the Board of Educational Examiners review the endorsement process with the goal of facilitating the attainment of additional endorsements which affords existing instructors the opportunity to teach across subject areas.

The task force recognizes that the quality of a program is directly related to the quality of the teacher. Many teachers possess ample foundational skills in their discipline, but lack advanced concepts and skills which qualify them to teach higher-level courses. Much of this stems from a lack of high-quality professional development opportunities geared toward updating and enhancing the instructional and technical skills of CTE teachers. There is a strong need to build a coordinated system for providing mentoring and professional development services within, across, and specific to CTE. Such a system would be of particular value to CTE teachers from smaller districts or CTE programs.

Lastly, teacher preparation programs, for both academic and technical teachers, should expand the capacity for pre-service and in-service training in career counseling. Such training would not only inform teachers of the career aspects of their subject area, but equip them to be a critical contributing resource to students as they explore their career and college goals and prepare their Student Success Plan.

Recommendation #5: Regional Partnerships and Regional Centers

Through collaboration and regional partnerships, provide for increased and equitable access to high-quality CTE through a statewide system of regional centers.

It is abundantly clear that the majority of high-quality CTE programs across the state feature a common, crucial component – collaboration. From the Des Moines Central Campus to Kirkwood Community College's Jones County Regional Center, what is crucial to their success is the strong partnerships which form the foundation of their programs. Indeed, Kirkwood's Jones County Regional Center would not have experienced the high degree of success if not for the strong partnership with area school districts. Similarly, crucial aspects to the success of the Des Moines Central Campus is district-wide collaboration and the partnership with Des Moines Area Community College and business and industry partners.

The task force recognizes that achieving equitable access to high-quality CTE programming for all students will require a stronger, consistent commitment to collaboration and regional partnerships on the part of all education stakeholders across the state. That said, the end goal of collaboration and regional partnerships is not to remove CTE from secondary schools. To the contrary, this task force recognizes the need to preserve the important role of secondary CTE programs and teachers. What will be accomplished through collaboration and regional planning is a commitment among secondary, postsecondary, community, and business partners to the sharing of capital, resources, and talent, with the goal of establishing and providing students with consistent access to high-quality CTE programs. Once formally organized, regional partnerships will be well-positioned to assume a more active and prominent role in the planning and delivery of CTE programming within their region.

"Place" matters when delivering high-quality advanced CTE coursework. In other words, maximizing the impact of collaboration and regional planning requires a "place" that is able to deliver high-quality advanced CTE coursework by internalizing the high capital costs, to cohesively offer structured programming, and garner the necessary scarce teacher and other professional talent so that all students in Iowa are able to consistently access high-quality advanced CTE coursework all across Iowa. Therefore, the task force envisions that, as a natural outgrowth of these regional partnerships, a statewide system of regional centers, a centralized hub where students are afforded an opportunity to access high-quality, advanced CTE coursework. Examining the current secondary and postsecondary landscape through the lens of this broad definition, one can see that many areas have already adopted the regional center approach. Where they exist, regional centers have proven to be an effective means of delivering high-quality advanced CTE programs to high school students, especially in rural communities.

Historically, regional centers in Iowa were usually established and owned by a community college. However, in establishing a statewide system of regional centers, the task force believes it is important to take into consideration the resources and efforts already underway by both secondary school districts and postsecondary institutions and ensure those efforts are folded into this proposed system. This means that a broader understanding of regional center ownership and location must be adopted, thereby supporting strong, thoughtful CTE programming that feeds the regional centers. Such factors are exactly why regional centers must be a product of regional collaboration and partnerships. Secondary, postsecondary, community, and business partners must collectively agree to arrangements which take into consideration the unique circumstances of their institutions and communities.

The establishment of a regionalized CTE infrastructure and regional centers should be seen as a long-term development process that begins with establishing the integrated CTE curriculum based on career pathways (Recommendation 2), with thoughtful career guidance being put in place alongside (Recommendation 1), as well as providing meaningful work-based learning experiences that gives practicality to the integrated curriculum (Recommendation 3). Clearly, for the regional center to operate optimally, there must be a continuous pool of well-qualified high school students interested in the specialized CTE training offered at the regional centers.

In order to develop these well-qualified CTE students, there must be present in the high school, a CTE teaching cadre that has the relevant pedagogical training along with real-world knowledge about the present-day world of work (Recommendation 4).

Moving Forward

The ultimate goal supported by these recommendations is to establish a comprehensive career pathway system to afford every student in Iowa the opportunity to explore and pursue career and college learning opportunities, including vibrant career guidance and relevant work-based learning. Statewide consistency and a commitment to quality will remove the stigma from CTE and help students pursue rewarding middle-skill careers that require at least a post-secondary education. By efficiently delivering these opportunities through shared programs between school districts, community colleges, employers, and other stakeholders, Iowa will better prepare its students for rewarding futures with increased family incomes and career enhancement, and at the same time, Iowa will be able to meet employer demands to enhance economic growth and ensure a vibrant future for Iowa communities - big and small.

Appendix A: An Updated Definition of a Career Academy

The legislature requested the task force to explicitly update the definition of a career academy and a regional center. A work team of task force members and key informants (listed below) took up the charge of updating the definition of a career academy. Several of the work team members were either currently involved in, or were involved in the early development of, career academies in Iowa. The work team met several times during spring 2014.

The work team began by reviewing the different forms by which career academies organized themselves. They then took up existing language within Iowa Code (originally written in 2004), and refined the language to reflect present day education and economic reality. A preliminary definition of a career academy, based on this refinement, was proposed by the work team and submitted to the full task force for consideration. After much deliberation, the task force settled on the following definition:

> *"Career academy"* means a career or occupation oriented program of study which includes a minimum of two years of secondary education with a postsecondary education program and is approved by the Iowa Department of Education. A career academy program of study shall be designed to meet industry standards and to prepare students for success in postsecondary education and the workforce. The career academy program of study shall integrate academic coursework, include work-based learning, and utilize the individual career and academic planning process.
>
> The career academy shall allow for an opportunity to continue onto an associate degree and, if applicable, a postsecondary baccalaureate degree program. The career academy program of study shall incorporate district-to-community college sharing or concurrent enrollment programs as currently defined in Iowa Code. The district-to-community college sharing or concurrent enrollment program component of a career academy shall be delivered through a collaborative arrangement between a single school district, or multiple school districts organized into a regional partnership, and a community college. The career academy shall utilize partnerships outlined in in an advisory capacity to inform the selection and design of the career academy and establishment of industry standards.

It should be noted that the above definition form the basis for developing regional partnerships and regional centers as outlined under Recommendation #5: Regional Partnerships and Regional Centers.

Work Team Members

- Dave Bunting, Independent Consultant, Cedar Rapids Iowa, CTE Task Force Facilitator
- Josh Byrnes, State Representative, Osage*
- Scott Fortune, Iowa Association of School Boards, Des Moines*
- Pradeep Kotamraju, Iowa Department of Education, Task Force Lead
- Kathy Nacos-Burds, Vice President of Academic Affairs, Northeast Community College, Calmar*
- Murray Fenn, Consultant, Green Hills Area Education Agency, Council Bluffs*
- Todd Prusha, Dean of Distance Learning/Secondary Programs, Kirkwood Community College
- Eric St Clair, Education Program Consultant, Iowa Department of Education

* Task Force Member

Appendix B: Defining High-Quality CTE

The task force requested that a work team be formed to develop a definition of high-quality CTE that could be used as the basis for developing the recommendations. The work team deliberated about the structure of the curriculum (what should be included), discussion that centered on career and college readiness, what should postsecondary education encompass, and the economics and workforce needs within Iowa. In essence, the work team sought to define high-quality in terms of the linkages between CTE and student success. The work team settled on a preliminary definition which was further refined into the definition that has provided in the body of this document (page 9), and repeated here:

> ***A high-quality CTE program is defined as a structured curriculum that includes academic and technical courses within specific career pathways leading to students graduating from high school career- and college-ready. Such high-quality CTE programs prepare high school graduates for education and training leading to a postsecondary certificate, diploma, degree, or industry-recognized credential tied to high demand career opportunities.***

Work Team Members

- Dave Bunting, Independent Consultant, Cedar Rapids Iowa, CTE Task Force Facilitator
- Chris Duree, Chancellor, Iowa Valley Community College District, Marshalltown*
- Pradeep Kotamraju, Iowa Department of Education, Task Force Lead
- Dana Lampe, President, Iowa Association of Career and Technical Education, Marion*
- Julie Rosin, Assistant Director, Central Campus, Des Moines*
- Eric St Clair, Education Program Consultant, Iowa Department of Education
- Jeremy Varner, Administrator, Division of Community Colleges, Iowa Department of Education*

* Task Force Member

Appendix C: Career Guidance

In 2008, Iowa Code section 279.61, passed requiring students to complete a career and educational planning process called the 8th Grade Plan. The state-designated career information system used by Iowa school districts, I Have A Plan Iowa, was the centralized tool used to meet the mandate created by Iowa Code section 279.61 from academic year 2009 through 2016. Appropriations for the tool to meet the mandate will expire in academic year 2016. House File 604, established in 2013, presented the opportunity to review career guidance in Iowa and to make recommendations to the legislature on high-quality career guidance moving forward. A work team was formed and given the charge by the CTE task force to rethink holistically about how career guidance should look like in Iowa with secondary career and technical education at its core.

The career guidance work team was a team comprised of Iowa professionals with specific college, career, and career system tool expertise, including professional school counselors, postsecondary academic advisors, and counselor preparation faculty. The team was established in order provide feedback and recommendations to the larger, voting member CTE task force. Team members discussed many a variety of issues including:

- challenges of graduating "college and career ready" secondary and postsecondary students,
- the importance of including all stakeholders (students, parents, business and industry, local chamber, school professionals) in college and career planning, and;
- leveraging expertise of CTE instructors and the vital role they play in career guidance.

Team members presented their experiences with the current state centralized career system, the pros and cons of a state-prescribed curriculum and tool, and proposed ways the full task force could implement high-quality career guidance for future secondary and postsecondary Iowa graduates. Central themes that emerged from team meetings were the importance of:

1. transitioning from a state-managed, centralized career task-list in grades 8-12 to a meaningful and developmentally appropriate career awareness, exploration, and decision and planning process that is student-centered;
2. preserving the role of the professional school counselor as the qualified professional to drive high-quality college and career readiness implementation at the local level; and
3. understanding that high-quality career guidance is a holistic process ingrained at every level of education and requires a team and community approach.

The recommendation the work team made to the full task force was that career guidance in Iowa should become a decentralized, student-focused, process meant to encourage meaningful career exploration within a broader framework of an integrated CTE programming. In essence, career guidance should be an ongoing dialogue that begins in the middle school about evolving career decisions that leads the student on to a career pathway beyond high school.

Work Team Members

- Nancy Ankeny-Hunt, Education Program Consultant, Iowa Department of Education
- Matt Bruinekool, Educational Consultant, Master Builders of Iowa, Des Moines*
- Dave Bunting, Independent Consultant, Cedar Rapids Iowa, CTE Task Force Facilitator
- Amanda DeWulf, Counselor, Maquoketa High School, Maquoketa
- Meredith Dohmen, Student Supports Coordinator, Des Moines Public Schools, Des Moines
- Murray Fenn, Consultant, Green Hills Area Education Agency, Council Bluffs*
- John Fitzgerald, Counselor, Marshalltown High School, Marshalltown

- Connie Gardelen, Director of High School Relations/Student Success Specialist, Iowa Valley Community College District, Marshalltown
- Pradeep Kotamraju, Iowa Department of Education, Task Force Lead
- Jan Kuhl, Education Program Consultant, Iowa Department of Education
- Rachel McGuire, North Iowa Community College, Mason City
- Kathy Nacos-Burds, Vice President of Academic Affairs, Northeast Community College, Calmar*
- Julie Ntem, Project Manager, Iowa College Student Aid Commission
- Rachel Scott, Division Administrator, Iowa College Student Aid Commission
- Shanlyn Seivert, Policy Advisor, Iowa Department of Education
- Lisa Stange, FCEDS Program Coordinator, Iowa State University, Ames*
- Eric St Clair, Education Program Consultant, Iowa Department of Education
- Jeremy Varner, Administrator – Division of Community Colleges, Iowa Department of Education*
- Amy Vybiral, Education Program Consultant, Iowa Department of Education
- Phil Wise, Policy Advisor, Iowa Department of Education

* Task Force Member

References

Aliaga, O., Kotamraju, P. and Stone, James R. III. (2014, Spring). "Understanding Participation in Secondary Career and Technical Education in the 21st Century: Implications for Policy and Practice." High School Journal. Chappell Hill, NC.

Battelle Technology Partnership Practice (2014, December). *Iowa's Re-Envisioned Economic Development Roadmap*. Executive Summary. http://www.iowaeconomicdevelopment.com/userdocs/documents/ieda/2014BattelleReportSummary.pdf

Holzer, H., Linn, D., and Monthey, W. (2013, October). *The Promise of High Quality Career and Technical Education: Improving Outcomes for Students, Firms, and the Economy.* http://careertechnj.org/wp-content/uploads/2013/11/Georgetown.BR_.CB-CTE-report-11.2013.pdf

Iowa Workforce Development (2012, October). Iowa Career, Industry, and Population Report. Des Moines IA.

National Association of State Directors of Career and Technical Education (2013, May). Career Academies: Investing in Students, the Workforce, and Career and Technical Education. Silver Springs, MD. http://careertech.org/sites/default/files/CareerAcademies-InvestinStudents-May2013.pdf

National Association of State Directors of Career and Technical Education (2012). Introduction to the Common Career Technical Core. Silver Springs, MD. http://careertech.org/sites/default/files/CCTC_Standards_Formatted_2014.pdf

National Association of State Directors of Career and Technical Education (2013, May). Career Academies: Investing in Students, the Workforce, and Career and Technical Education. Silver Springs, MD. http://careertech.org/sites/default/files/CareerAcademies-InvestinStudents-May2013.pdf

National Association of State Directors of Career and Technical Education (2012). Introduction to the Common Career Technical Core. Silver Springs, MD. http://careertech.org/sites/default/files/CCTC_Standards_Formatted_2014.pdf

National Governors' Association (2014). America Works: The Benefit of a more educated workforce to individuals and the economy, http://www.nga.org/files/live/sites/NGA/files/pdf/2014/1402-Moodys-AmericaWorks_35f.pdf

Symonds, William C., Schwartz, Robert B., and Ferguson, R. (2001, February). *Pathways to Prosperity: Meeting the Challenge of Preparing Young Americans for the 21st Century*. Report Issued by the Pathways to Prosperity Project. Harvard Graduate School of Education.

Visher, Mary G. and Stern, David. (2015, April), *New Pathways to Careers and College Examples, Evidence, and Prospects*. MDRC. Oakland CA. http://www.mdrc.org/sites/default/files/New_Pathways.pdf