

**DRAFT -- SECONDARY CAREER AND TECHNICAL EDUCATION TASK FORCE
PROPOSED RECOMMENDATIONS—July 10, 2015**

Iowa has a long-standing commitment to high-quality career and technical education (CTE) as is evident throughout Iowa. For decades, school districts have operationalized state directives by creating innovative CTE programs and structures to provide college and career guidance and training to Iowa's students. However, many of these initiatives have become disjointed, misaligned, or, in some cases, abandoned. There is, for many reasons, need to expand, align, restructure, and reform CTE in Iowa. Particularly at the secondary level, there is need to move towards a consistent state-wide system that adequately supports innovative high quality secondary CTE programs, where high quality secondary CTE (as discussed and agreed to 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, the proposed recommendations (discussed later in this document) have the following singular goal:

Goal: A comprehensive career pathway system will afford every student the opportunity to explore and pursue career and college learning opportunities through alignment of career guidance practices, secondary and postsecondary 21st century CTE curriculum, and work-based learning experiences.

Research shows that world class CTE curriculum delivered collaboratively through a comprehensive career pathway system better prepares students for rewarding careers aligned with in-demand occupations. This CTE curriculum consists of exploratory and transitory courses taught at the secondary level to appropriately prepare students for 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 today's world of work and career. What makes such world class CTE curriculum works optimally for the student and the teacher is to have thoughtful career guidance coupled with meaningful work-based learning.

Starting in middle school, students must be provided an opportunity to learn about the college and career landscape and explore their interests. Dynamic career guidance from middle school through high school and beyond allows students to evaluate their interests and aptitude, select a pathway based on their evaluation, and continuously modify the path as their interests and college and career goals evolve. Quality work-based learning is infused into the pathway to provide students with real world, hands-on experiences to hone their skills and refine their ambitions.

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

Recommendation 1: *Promote career and college readiness through thoughtful career guidance and purposeful academic and technical planning practices.*

Students need professional guidance in assessing their interests and aptitude and then defining and navigating toward their academic and career goals. Such guidance and planning include students knowing early on about their areas of interest, opportunities to identify and build upon their strengths, and, know their weaknesses and seek out ways for improving themselves through curricular and co-curricular activities. With this knowledge, students, along with their families, begin the process of making informed choices about their postsecondary plans as well as any future career decisions. Nevertheless, it is reported that career counseling is often disjointed at best, non-existent at worst, and typically begins too late in a student's educational career. Also, it is surprising to find that more than half of today's students report receiving little to no assistance with these activities from school personnel.

Recommendation 1 calls for a new vision for career guidance and academic planning which refocuses the process around student success and supports the process through a collaborative framework and sound career guidance standards. This vision is attainable through cooperative efforts by reframing the core curriculum plan (currently the basis for I Have A Plan Iowa (IHAPI)) into a student success plan by adopting a team approach to assist school counselors in delivering comprehensive career guidance that results in a meaningful Student Success Plan. To make this possible, the State Board of Education needs to be granted authority (if it does not have it already) to adopt career guidance standards which reflect and incorporate 21st Century Skills and national best practices.

Recommendation 2: *Provide a high-quality, integrated CTE curriculum comprised of secondary exploratory and transitory coursework to prepare students for higher-level, specialized academic and technical training.*

All too often students emerge from high school and enroll in post-secondary degree programs or technical training programs without having participated in the appropriate basic or advanced CTE courses in high school that relate to their course of study. Students should be encouraged to take business courses in high school if they intend to major in business in college, or take agriculture classes if they intend to major in an agricultural related field as part of a post-secondary training program, etc. The task force believes that the basic ground work of a career in a CTE area must be started at the secondary level through effective career counseling and intentional selection of CTE courses that match a student's interests.

The designed CTE program framework will consist of "exploratory" courses at the middle school level that flow into "transitory" courses (grades 9-10) that provide an academic and technical foundation for "specialized" course work for further education and careers. These secondary courses would then prepare students to take college coursework concurrently or at the postsecondary level. All along this spectrum of CTE course taking, students should be exposed to the value of career and technical student organizations (CTSOs), with efforts made to make CTOSs co-curricular rather than extra-curricular, as they are now.

To move towards an integrated CTE program framework, the current six service areas need to be updated and reorganized to reflect the present day world of education and work. These service areas should be linked with, and eventually transition to, a career clusters and career pathways system. The intent is to add flexibility and greater choice into the now existing offer and teach requirements (CTE programs must be offered and taught in four of six service areas) 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 structure. Such options may include a requirement that all high school students (grades 9-12) take at least three consecutive courses in a high-quality, integrated CTE curriculum in order to graduate. Also, measures could be considered which require districts provide greater access to co-curricular CTSO opportunities.

Recommendation 3: *Afford students the opportunity to access a spectrum of high-quality work-based learning experiences through a coherent delivery system which streamlines and leverages existing initiatives.*

As it stands, the work-based learning delivery system in Iowa works far below its potential. Multiple state agencies, local education and workforce organizations, and the United States Department of Labor have a portion of this delivery system, but operate independently of one another with very little co-ordination. While there have been attempts to rationalize and streamline the entire process, there is now a greater need to put in place a coordinated effort to optimize the work-based learning delivery system in Iowa. Business and industry not only need more workers but these workers need to enter the workforce with the right combination of academic, technical, and employability skills. Moreover, a thorough understanding of the workplace, prior to entering it, becomes a prerequisite for individuals to progress along their chosen career pathways. A coordinated, well-developed work-based learning delivery system is necessary for Iowa's businesses and industry.

Iowa has made progress in moving towards such a coordinated, well-developed work-based learning delivery system through the legislatively funded Intermediary Networks. Operating out of each of Iowa's 15 community colleges, these intermediary networks connect school districts with business and industry in multiple ways. The basic purpose of these networks is to provide high school students a variety of experiences with regard to how business and industry work through programs that include tours, job shadowing (most common); rotations, mentoring, entrepreneurship (less common); service learning, internships/co-ops, apprenticeships (rare). There is need to move towards the upper end of the work-based learning spectrum, and for that additional resources are required. At the same time, the state as a whole needs to address issues, such as transportation and insurance, as well as ensuring that all school districts in Iowa are afforded the opportunity to access high quality work-based learning, to gain maximum resource efficiency.

Recommendation 4: *Expand the pool of qualified career and technical instructors by incenting and promoting the teaching profession in these areas, expand opportunities to obtain academic and technical training in licensure areas, and examine 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 areas in numerous CTE areas including family and consumer science, industrial technology, and agricultural education. Iowa school districts and CTE instructors are well aware of these shortages and have begun discussions about how to recruit, prepare, and support new CTE teachers. Included in those discussions are suggestions for promoting the teaching profession within CTE courses, mentoring of new CTE teachers by master CTE teachers (current or retired), clearly defining the Board of Educational Examiners (BoEE) CTE teaching authorization areas, loan forgiveness, differentiated compensation, and investigating how core content instructors can add CTE endorsements and CTE authorized teachers can add even more core content endorsements.

To be licensed to teach in Iowa, graduates of a teacher preparatory program must pass both the content and pedagogy portions of the PRAXIS II exam, thereby limiting the pool of qualified teachers from outside Iowa, even though they might possess appropriate teacher licensing credentials from their home state. Further, for those wanting to teach but are not graduates of teacher preparatory program, CTE authorization in a particular area requires 6,000 hours of recent and relevant work experience and typically requires three to five years to complete coursework.

Moreover, a teacher licensed in a content area (e.g., science) who does not possess CTE authorization or a CTE endorsement cannot teach a science-related course that is classified as a CTE course. All of these requirements tend to limit those interested in pursuing a teaching career in CTE, and for those who do, they are limited in what they can teach. Revising the current teaching requirements in Iowa, where individuals (those teaching now and those interested in becoming CTE teachers) can more easily add the CTE teaching endorsements is a step in the right direction and is one way to expand the CTE teaching funnel. Therefore, the current CTE teacher shortage has numerous causes, but Iowa statute should not be one of them in a state that is committed to providing quality CTE programs to all students.

While the current licensure/endorsement silos restrict horizontal and vertical advancement within CTE, the lack of high-quality, hands-on professional development opportunities restrict an instructor from updating and enhancing their teaching skills. Moreover, with many school districts having single teachers within a specific CTE area, there is need to build a coordinated network system for providing mentoring services within and across CTE areas. In general, there is need to provide a system of coordinated professional development focusing exclusively on CTE.

Lastly, teacher preparation programs should expand the capacity for pre-service and in-service training in career counseling. Not only would this prepare the future instructor for the technical aspects of teaching in his or her field, but would equip them to be a critical contributing resource to the students as they prepare and revise their Student Success Plan. In addition, a key element for retaining CTE teachers is the provision of mentoring services all across the State, through networked and organized professional development.

Recommendation 5: *Provide for increased and equitable access to high-quality CTE through support of a statewide system of regional centers.*

High quality CTE for high school student does exist in Iowa, but is unevenly and sporadically available throughout the State. When it does exist, high quality CTE has all the elements that are being suggested in the preceding recommendations: a vibrant career guidance system; a structured curriculum that connects exploratory, transitory, and specialized coursework; and a meaningful work-based learning experiences, all part of a comprehensive career pathway system. In Iowa, often such a place is referred to as a career academy. Where they exist in Iowa, such center-based career academies, are organized differently depending on existing relationships between education sectors (secondary and postsecondary), as well as their connections to business and industry in the local region. However, an important point to note is that such centers are not available to all students, and having more of such centers would go a long way towards improving access to high quality secondary CTE throughout Iowa, with the intention of efficiently delivering through shared programs between school districts and community colleges high quality secondary CTE.

The establishment of regional centers should be seen as a long-term development process that begins with setting up 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 regional centers to operate optimally, there must be an accessible teaching cadre that has the relevant pedagogical training along with real world knowledge about the present-day world of work (Recommendation 4).

Recommendation 6a: *Provide the State Board of Education the Planning Authority, where it is necessary and needed, to establish rules and regulations, including the use of new and repurposed resources, in order to put into place a statewide system of high quality CTE.*

Recommendation 6b: *Organize regional planning authorities that would have the responsibility for managing the regional centers, including decisions regarding career guidance, curricular structures, and work-based learning experiences, all leading to students learning within, and across career pathways that reflect in-demand occupations and student interest.*

Much of Iowa Code and Rule still works for secondary CTE. But increasingly it is working less for small and medium sized more rural school districts, who are struggling to meet the requirements for thoughtful career guidance, robust CTE curricula, and meaningful work-based learning experiences. Compounding these struggles is the inability of such school districts to attract and retain qualified CTE instructors, thereby making it even more difficult to meet requirements under Iowa Code and Rule. Moreover, the existing uniform state policy with regard CTE is creating inefficiencies when it comes to the regional implementation of CTE at the secondary level. This is all the more true when resources at the district level are meager, and trying something innovative is often risky and never long-lasting.

Therefore, granting the State Board of Education, planning authority, where it does not now exist, is the first step towards setting in place a policy structure in Code and Rule that enables the implementation of the above recommendations, with ultimate goal of reorganizing secondary CTE so that it works best for all Iowa students, teachers, and workers interested in pursuing sustainable CTE careers.

As indicated, secondary CTE needs to be organized differently. Presently, there exists a vacuum at the regional level when it comes to planning for secondary CTE. Often such planning devolves to those outside of secondary CTE, because the resources lie there, leaving those within to have little influence. The result is a perpetuation of CTE programming of limited size, scope, and quality. To redress these limitations, the recommendation proposes to vest planning authority regionally, conducting strategic planning, program delivery, managing stakeholder relationships, and seek out additional resources. While there do exist other entities that focus on delivering CTE programs locally and regionally (i.e., advisory committees, sector boards, area education agencies, to name a few), there is need to focus primarily on secondary CTE for now. While it is possible, and even recommended to fold this planning authority into current regional policy structures, there is need to give separate planning authority for organizing secondary CTE, as described under the preceding recommendations.

Thus, with State Board and Regional Planning Authority, through these recommendations, the proposed CTE reform efforts should result in: 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 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; and, efficient delivery through shared programs between school districts and community colleges. 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.