A partnership among Keystone College, King’s College, Luzerne County Community College, Marywood University, Misericordia University, Penn State Wilkes-Barre, The Commonwealth Medical College, University of Scranton & Wilkes University

The INSTITUTE for Public Policy & Economic Development at Wilkes University

COMPREHENSIVE CAREER READINESS PROGRAMS IN K-12

Comprehensive Career Readiness programs are a key economic development strategy and need to be part of every child’s education.
# Table of Contents

Introduction ................................................................................................................................. 1  
Comprehensive Career Readiness Programs .............................................................................. 1  
Issues ........................................................................................................................................ 5  
  Low Socioeconomic Status and First Generation College Students ...................................... 5  
  English Language Learners ..................................................................................................... 6  
  At Risk Drop-out Students ...................................................................................................... 6  
  Rural/Long Distance Students .................................................................................................. 6  
Graduation Project ...................................................................................................................... 6  
Recommendations ........................................................................................................................ 7  
Policy Statement .......................................................................................................................... 8  
Endnotes ..................................................................................................................................... 9
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Introduction

A key responsibility of a K-12 education is to prepare students to be successful in careers. As explored by The Institute’s past research in this area, there is an ongoing issue that the education provided in high schools around the country is not always enough to allow graduating students to be fully prepared to access and assess postsecondary education choices, succeed in postsecondary education and their careers. Nearly 60 percent of first-year college students in the U.S. discover that, despite being fully eligible to attend college, they are not ready for postsecondary studies.¹ In response to this, many schools have been directing their attention to redeveloping their curriculum through implementing comprehensive career development education.

In 2014, The Institute’s research focused on the need for students to attend postsecondary education and how K-12 play an integral role in helping to guide and direct students to technical schools, apprentice programs, certificates, community college, or four year colleges/universities. This, however, is not successful without some knowledge of careers and personal skills and interests. Therefore, comprehensive career readiness programs have been shown to positively effect that outcome.

Comprehensive Career Readiness Programs

Comprehensive Career Development Education (CDE) offers students a framework for gaining the knowledge, skills, and experiences necessary to navigate the myriad of options available for postsecondary success.² It is the ongoing process of managing one's life, education, and work. It involves developing the skills and knowledge that enable you to plan and make informed decisions about your education, training, and career choices.³

Recent research suggests that at all educational levels, career development positively influences academic achievement, career preparedness, educational motivation, coping skills, self-esteem, and age-appropriate exploration and career decision-making. The benefits of career development can be linked to each life stage, beginning with the elementary grades and extending throughout a lifetime.⁴ Further, an effective program engages parents, business, community, and postsecondary education in addition to the K-12 educators and students. These stakeholders can be engaged through a variety of collaborative initiatives and with the establishment of the schools K-12 Advisory Council for CDE.

Within the process of CDE, three stages allow students to successfully move through this process. These stages are career awareness, career exploration, and career immersion.

With career awareness, students learn general knowledge about the types of businesses, organizations, and occupations that exist in both the local, regional, and national economy. They learn the educational steps needed to prepare for their desired careers after high school.
Knowledge of potential and current demands for specific job sectors and industries is also discussed in this stage. This stage can start as early as elementary school and can run until high school. This stage of career awareness can happen in the classroom, on field trips, after school, or in summer enrichment programs. This can be done through hands on experiences, research, or reading and writing activities. During this stage, students begin to develop career aspirations, which is a crucial component because it lessens the seemingly daunting task of career development.

In the career exploration stage, students begin to look inward and contemplate what they enjoy doing and what they find appealing as a career. They begin to participate in a variety of classroom and community projects that support career exploration. Examples include career workshops or classes, job shadowing, informational interviews with local professionals, and career-related research projects. The most important theme in this stage is the concept of self-reflection combined with the experiences with influential adults and professionals.

Career immersion is arguably the most beneficial stage, as it allows students to participate directly in career-related activities. These activities can vary from entrepreneurial projects to community-based volunteer work and internships. As long as it is an experience in which students are learning through active participation in a career-related goal. To enhance these experiences for the students, these events are monitored by formal instruction, such as one-on-one coaching. The main component in this stage of CDE is reflection, as the students must recognize their skills, values, and contemplate their short term and long term goals.

In summary, the three stages of CDE—career awareness, exploration, and immersion—result in a progression of knowledge and experiences for students. This helps resolve the ongoing issue that education provided in high schools around the country is simply not enough to allow graduating students to be fully prepared in secondary education and their careers.

Throughout CDE many goals and outcomes should be measured to ensure the development of students in the program. The best way to measure this development for students is for them to meet key performance indicators (KPI), such as academic-technical, workplace readiness, and personal/social development.

One crucial area for students to focus on is academic-technical developmental skills. Students must develop and demonstrate such skills in order to succeed in post-graduation life. Development of these skills can be seen through various aspects. The following are some examples of the many ways that these skills can be measured to ensure progress:

- Demonstrating higher order thinking skills (e.g., project management, leadership, problem solving)
- Demonstrating competence in technical and technological skills such as blueprint reading, and computer software management
- Demonstrating the ability to locate and use information resources for research
• Demonstrating communication and literacy skills (reading, writing, listening, and speaking) for self-advocacy and presentation.
• Mathematical life skills for time and money management
• Organizational skills for career and life management
• Critical thinking skills to use and evaluate information (e.g., evaluating credit card offers)
• Technical literacy for career and life management (e.g., online banking, managing FAFSA online)
• Knowledge of how educational and workplace demands relate to economic and societal needs and functions (e.g., outsourcing, medical research)
• Skills in researching and evaluating economic and societal information for career planning and career management
• Knowledge of the benefits of education for career and life management
• Knowledge of the benefits of education for personal and professional satisfaction
• Skills in maximizing educational and workplace achievement for employability, work satisfaction, and optimal earning potential

Another key area to focus on for students throughout CDE is *Workplace Readiness Development*. Learners will develop knowledge in the planning and decision-making process, have an exploratory attitude, workplace knowledge, an awareness of conditions that affect career decision-making and workplace success, and knowledge of all aspects of an industry. The following are examples of how progress on these skills can be measured:

• Demonstrating a planning process with a future orientation
• Engaging in the complexities of decision making
• Evaluating career plans in relation to aptitudes, values, and interests
• Skills in establishing and modifying career management tools (e.g., resume, portfolio)
• Navigating career transitions and options.
• Skills and attitudes for developing and maintaining the identity of a learner for life
• Knowledge of how and where to access career and labor market information
• Skills to both utilize and evaluate career information, resources, and experts in career planning
• Knowledge of performance assessments measure learning and productivity
• Knowledge of the concepts of career pathway development, labor market demand and job retention
• Knowledge of risks and rewards of various careers
• Knowledge and skills necessary for employment, retention and advancement
• Knowledge of the transferability of skills and its value
• Knowledge of the interrelationship of life roles
• Skills in managing competing life roles at home, school, work, and in the community
• Knowledge of the impact of cultural stereotyping and gender-based roles in relation to career decisions and occupational success
• Knowledge of the structures, dynamics and opportunities within industries and organizations
• Knowledge of industries’ role in local, national, and global arenas
• Skills to locate, understand, evaluate, and use safety information

The final area that students must learn in CDE is personal/social development. Students should be able to adequately promote identity formation, personal responsibility, and self-direction. Students should also have the emotional intelligence or habits of mind to work and relate effectively with others, manage personal and environmental variables, and promote respect for diversity. While these habits cannot be measured in traditional (quantitative) ways, the following are examples of how these attributes manifest themselves in the real world:

• Developing and maintaining a clear and positive self-concept (with an increasingly more differentiated and affirmative view of oneself)
• Demonstrating personal responsibility and perseverance
• Applying metacognitive skills (thinks about one’s own thinking)
• Interacting positively with others at home, school, work, and in the community
• Skills in problem-solving and conflict resolution at home, at school, at work, and in the community
• Respecting individual differences.
• Knowledge of how positive behaviors and attitudes contribute to educational achievement and workplace success
• Knowledge and skills in maintaining personal and psychological well-being (e.g., locating information, services, support; stress management skills)
• Knowledge and skills for evaluating and responding to social and economic influences at home, school, work, and in the community (e.g., postsecondary planning based on financial need; exploring transportation options for summer employment)
• Knowledge and skills that promote participation, positive behavior and regard within diverse groups
• Knowledge and skills for communicating and working positively in diverse settings (e.g., speaking a second language; seeking balanced representation on group projects)

These are specific goals and outcomes of CDE, however, the overall success of it will be measured by the number of students enrolled in postsecondary education, gainfully employed fulltime, or actively seeking employment (defined as submitting a resume or attending interviews) within six months of graduation. The outcomes for CDE should be an increased rate of students in postsecondary education or a work-force setting, especially in underrepresented groups such as minority students and low socioeconomic status.
Research conducted in the state of Missouri suggests the effectiveness of a comprehensive career development plan. It has resulted in an overall positive trend in elementary school, middle school, and high school. Students (22,964) in 236 small, medium, and large high schools in Missouri reported they had earned higher grades, their education better prepared them for the future, and their schools had a more positive climate.\(^8\)

There has also been studies suggesting increased earnings for young men who have participated in career academies. Career academies are a time-tested model for improving academic achievement readying students for both college and careers, and engaging the world outside of school in the work of redesigning them. In this particular study 1,458 young students were surveyed. The study produced positive and sustained impacts on a range of labor market outcomes among the young men in the study sample. Students who have participated in a CDE program earned an average of $212 more per month over a 48 month period – an 18 percent increase over the non-CDE group’s average earnings of a total of $1,161 per month. These findings are noteworthy in light of the declining labor market prospects for young men in recent years, particularly among young men with limited postsecondary education. In other words, CDE was likely to have helped these individuals obtain better-paying jobs and jobs that afforded them the opportunity to work more hours.\(^9\) However, in light of the positive outcome for men, there was no significant impact on the women in the study. The Career Academies also produced substantial increases in employment and earnings for students who were at high or medium risk of dropping out of high school.

One of the main goals of CDE is to inspire potential high school dropouts to graduate and high school graduates to matriculate. Many career paths require at least some postsecondary education or training to excel, even those where a high school diploma would have been sufficient in the past, such as manufacturing. Nationwide, the median annual earnings are considerably higher among those with postsecondary degrees than those with just a high school diploma.\(^{10}\)

**Issues**

The goal of integrating CDE to best suit the needs of Pennsylvanian high school students is not without its challenges. It is important to acknowledge that each high school will have different needs based on its demographics and location. Additionally, it is important to anticipate and implement career education around these issues rather than minimize or remove career education from the curriculum. As such, there are several issues that the policy will seek to address.

**Low Socioeconomic Status and First Generation College Students**

Students in a low socioeconomic setting and students with parents/guardians who did not attend college face similar challenges in preparation for pursuing postsecondary education or entering a career following the completion of secondary education. In both situations, students
typically lack the support network to help them prepare for postsecondary education, face extraneous stressors, or believe postsecondary education is too expensive.

**English Language Learners**
First generation students and students with English as a second language face similar challenges in preparation for pursuing postsecondary education or entering a career following the completion of high school. Students in these situations often face challenges resulting from language barriers which may include decreased comprehension, miscommunication, and a lack of engagement in the educational setting due to a decreased belief in their own abilities.

**At Risk Drop-out Students**
In the past, students at risk of dropping out represent a significant portion of the target demographic for career and technical education because engaging at-risk students in work with applicable schools had a positive increase in their completion of high school. However, in order to meet the proposed goals of the U.S. Department of Education’s *Investing in America’s Future: A Blueprint for Transforming Career and Technical Education*, it is important to structure career education in a way that is suitable for students intending to enter the job market as well as postsecondary education.

**Rural/Long Distance Students**
One third of all public schools are located in rural areas. CDE can be impacted by inaccessible opportunities and financial considerations unique to rural and remote locations. For example, job shadowing or other events could be challenged due to lack of availability and affordability of transportation.

**Graduation Project**
The high school (cumulative) project will be phased out as a state mandate in 2017, and made optional at the behest of the school. At the time of this writing, there is little reliable empirical evidence attesting to the success or failure of high school projects in term of preparing students for postsecondary education or for fostering an increase in the students’ perceived value of the diploma. No direct correlation between the completion of the project and an increase in “soft” skills or non-cognitive attributes (i.e. leadership, communication, negotiation skills, conflict management, etc.) could be found in research, but this is perhaps due more to the anecdotal nature of the evidence than a lack of correlation.

The majority of students who reported feeling satisfied with their high school project were students that completed a community-service oriented project or something directly related to their careers. While there will always be students who choose to do the most minimum amount of work in order to graduate, research suggests that the high school project can be an effective learning tool if restructured to have state-wide and measurable requirements following the completion of the project or school year. High schools will still retain the ability to make the
high school project optional, but there will be greater consistency amongst students in schools while still allowing students to choose a topic of interest to learn real-world or career skills. If the high school project is used to further a career option, it may be used to fulfill career education requirements for the period of time through which the student is engaged in the project. After five years of data collection, the high school project should then be reevaluated.

**Recommendations**

In order to compete on national and international levels, the Commonwealth of Pennsylvania needs to take a proactive approach towards career and postsecondary education by making CDE a requirement in public high schools statewide. Comprehensive career readiness programs are necessary to 1. ready prepare students for postsecondary education; 2. help students become efficient and competitive workers, and 3. to decrease the rate of high school drop outs. Comprehensive career education should exist not as a separate academic track but integrated across the intended and taught curriculum.

In order to achieve these goals, collaboration among the state, school districts, and individual schools is necessary to achieve a CDE curriculum that best serves Pennsylvania’s students. Engaging parents, businesses, community organizations, and postsecondary education providers through collaborative initiatives and as part of a CDE K-12 Advisory Council is critical.

Career education should be introduced in elementary school and the modes of awareness, exploration, and immersion can be met in a variety of ways. Regardless of the methods, students should have completed an average of 360 hours by the time of graduation. Early programs in awareness are critical so that the student can choose the appropriate coursework in high school.

Incorporating CDE within existing academic and work standards provides for a comprehensive approach to learning. College and career readiness programs are separate and distinct concepts, however there are common skillsets. CDE will allow students to graduate high school with greater degrees of readiness for both postsecondary education and careers if the programming is incorporated into existing Career Education and Work academic standards. Connecting both fosters a more complete understanding of practical applications of academic materials and a more thorough understanding of the education, skills, and characteristics needed for various occupations. Thus, enhancing a student’s learning experience and providing more clarity with regard to postsecondary options and career interests.

According to the Pennsylvania School Code in Chapter 339 – Guidance

§339.31. Plan.

“There shall be a written plan on file, approved by the local board of school directors, for the development and implementation of a comprehensive, sequential program of guidance services...
for kindergarten through 12th grade. The plan must include procedures to provide for guidance services to AVTSs.”

“Additionally a comprehensive program of student services is required as part of Pennsylvania School Code in Chapter 12 – Services to Students. §12.41 Student Services – (2)(c)(3) Provide career information and assessments so that students and parents or guardians might become aware of the world of work and of a variety of career options available to individual students.”

In addition, Chapter 4 – Academic Standards and Assessment references the Academic Standards, including Career Education and Work, which address the importance of career planning for all students related to labor market projections and workforce needs. Specifically, Chapter 4 states, “(5) Career education and work. Understanding career options in relationship to individual interests, aptitudes and skills including the relationship between changes in society, technology, government, and economy and their effect on individuals and careers. Development of knowledge and skill in job-seeking and job-retention skills and, for students completing vocational-technical programs, the skills to succeed in the occupation for which they are prepared.”

Much emphasis in Chapter 339 is for students in CTC programs; however, Chapter 4 opens the door for comprehensive career readiness programming. Current law states that every school district must have developed a K-12 school counseling plan in the career domain for all students. However, less than half of the Pennsylvania school districts have documented plans on file with the Pennsylvania Department of Education. Further, Chapter 339 does not mandate specific programs or initiatives, nor does it identify specific benchmarks, outcomes or quality standards. This shortcoming will reduce compliance and the overall impact of career education. It is important that programs have statewide consistency as opposed to pockets of excellence. Successful implementation requires strong internal project management and a team approach that will ensures that there is systemic impact.

**Policy Statement**
Implementing CDE would strengthen curricula currently being used and allow students to develop a framework for gaining the knowledge, skills, and experiences necessary to navigate the myriad of options available for postsecondary success. Regarding the Chapter 339 mandate in place, it should be more effectively enforced. Further, consistent comprehensive career readiness programs that include individualized career plans, coordination with academic standards, business, higher education partnerships, and detailed guidelines with quality standards should be mandated for all Pennsylvania schools.
Endnotes

10 (February 10th, 2014) Rising Earnings Disparity Between Young Adults with And Without a College Degree, http://www.pewsocialtrends.org/2014/02/11/the-rising-cost-of-not-going-to-college/sdt-higher-education-02-11-2014-0-03/