What is Policy and Educational Reform in Career and Technical Education?

Policy generally refers to outlined ways of doing things, which are usually linked to laws. Educational reforms are changes in educational policies, expectations, and implementations. Policy and educational reform includes reforms at the federal, state, and local levels. Examples of federal reform include the passing of the Americans with Disabilities Act (1990), Carl D. Perkins Vocational and Applied Technology Education Act (2018), the Individuals with Disabilities Education Act (2004), the No Child Left Behind Act (NCLB, 2011), and others. Educational reform can include national programs like School-to-Work or state and school level reforms.


Why is Policy and Educational Reform in Career and Technical Education in Transition Planning Important?

Policy and educational reform is relevant to transition planning because it can alter what transition planning looks like and what it should include. Laws like IDEA (2004) and Perkins (2018) are more important to transition planning than other laws and policies. IDEA (2004) requires that transition planning for individuals receiving services should begin no later than age 16, and Perkins (2018) requires the inclusion of individuals with disabilities into CTE classes and programs.
What Does the Literature Say About Policy and Educational Reform in Career and Technical Education in Transition Planning?

The literature describes a multitude of policy, law, and educational reform and how they impact learners with and without disabilities, school demographics, educators, administration, and others. Overall, IDEA (2004), NCLB (2011), and Perkins (2018) were the most discussed policies. Other policies included Goals 2000 (1994), School-to-Work (1994), and various state and local policies and educational reforms.


• Examined the effectiveness of a specific school district’s transition and secondary education programs from 140 randomly selected special education graduates who have been out of school between one and three years.
• Results found vocational education, participation in work study programs, attending a rural school, and having a learning disability were prominent predictors of full-time employment after high school.
• Results indicated participation in general education academics and attending a suburban school were prominent predictors of postsecondary education.
• Implications included having transition coordinators collect and analyze post-school outcome data on students with disabilities.

• Described the School-to-Work Opportunities Act (STWOA) as legislation that would help all students achieve better education and employment outcomes through fundamental restructuring of the vocational education system and increased coordination and collaboration in work-related education and training programs.
• Described work-based learning, school-based learning, and connecting activities as a framework to guide school-to-work programs in meeting the following goals:
  ○ Encourage students to stay in school and meet high standards for academic and occupation education.
○ Make education more meaningful by integrating academic and occupational instruction and providing this instruction in applied community settings
○ Enhance students’ work prospects or secondary education by building relationships with postsecondary educational institutions, employers, community agencies, parents, and students

- Described the school based learning component of STWOA as the core of the educational restructuring and as required to provide career guidance and planning services to all students.
- Described the work-based learning component of STWOA as the “real world” experiences to learn workplace competencies.
- Described the connecting activities component of STWOA as an acknowledgement that connecting schools and workplaces is an active process.
- Stated that the Division on Career Development and Transition supports the values on the above school-to-work concepts and principles as a viable framework for effective programs and services for all students.


- Examined ways to integrate Career and Technical Education (CTE) through whole-school reforms in schools that educate primarily disadvantaged students (i.e. impoverished, English language learners, immigrants, Hispanic, African American etc.).
- Results thus far have indicated that curriculum integration is easier to implement in high schools with interdisciplinary teacher teams (ex. 9th grade team) than in schools without such teams.
- Results thus far have indicated that all participating high schools use computers for various purposes across the school.
- Results thus far have indicated that principals who are effective leaders in school improvement in demanding schools can often be lured away by higher pay in other schools/districts. This has happened at two of the participating high schools in the last two years of the study.
- Recommendations for the next phase of the study include exploring the sustainability of the reform by examining transitions in leadership and efforts in educating new faculty of the reform.
- Implications of the study include being able to provide knowledge and strategy of how to implement CTE reform and how it affects students’ transition from high school.

- Examined perceptions of secondary principals and high school CTE teachers of how the NCLB act impacted CTE programs.
- Results included that most principals agreed or strongly agreed CTE courses help prepare students to take standardized tests that assess English Language Arts and mathematics, and that CTE can play a role in helping achieve state goals related to academic standards and graduation. However, many principals disagreed or strongly disagreed that NCLB had a positive impact on the image of CTE in their schools and how CTE courses are taught at their schools.
- Results indicated that most CTE teachers agreed or strongly agreed that CTE courses help prepare students to take standardized tests that assess English Language Arts and mathematics, and that CTE can help their school meet the goals of “all students will reach high standards, at a minimum of attaining proficiency or better in reading and mathematics” and “all students will graduate from high school.” However, CTE teachers disagreed or strongly disagreed that NCLB had a positive impact on CTE, NCLB had a positive impact on the image of CTE at their school, and NCLB has a positive impact on how CTE courses are taught at their school.
- Results indicated that the only area in which CTE teachers and principals had statistically significant difference was, “NCLB has had a positive impact on CTE enrollment at your school.” Principals agreed, while CTE teachers disagreed with the statement.
- Recommendations include replicating the study in other areas to generalize results and to determine the extent to which reading, English language arts, and math are integrated in CTE classes.
- Implications include ensuring that CTE instructional methods are recognized under NCLB’s effective teaching methods.


- Described national policy guidelines regarding the evaluation of vocational education as consisting of an annual evaluation report of vocational education including how money was spent for each local education agency (LEA) and the need for a state education agency (SEA) to oversee these vocational programs.
- Described the state policy responses to the above national policy guidelines as including on-site evaluations and follow-up studies (questionnaires).
- Described local evaluations as not mandated by the national policy guidelines, but rather exist due to state policy.
- Recommend the following to improve vocational education evaluation:
Federal agencies should not address local program quality, but evaluate issues of equity in vocational education
State education agencies should encourage the development of district and/or regional vocational education program evaluators
Reauthorization legislation should include national level education initiatives

- Describes similarities, difference, and thoughts about the efficacy of different elements of the statewide systems change initiative as a policy mechanism for promoting educational reform.
- Recommendations included replicating this descriptive study after the school-to-work initiative and Goals 2000 initiatives are completed to examine all possible similarities and differences.

- Examined program components and services on employment success and postsecondary education success of former students with disabilities. They also examined community living experiences characterized by former students in terms of the activities in which they are engaged and with whom they spend their free time.
- Examined the effects of transition planning on student completion of school, post-school status, and preparation for adult life and activities.
- Results indicated 47% of participants were working at a paid, competitive job and 19% were seeking work. There was also a higher level of employment for participants who had a paid or unpaid work experience or occupational education in high school.
- Results indicated that 40% of participants graduated with a high school diploma, and only 17% of that 40% were attending postsecondary programs (vocational, technical, or college programs). Those attending college reported that they wished to have taken more computer, math, and business/typing classes while in high school. Only 46% of those attending college reported using academic support services, while 68% indicated that they were aware of those services.
- Results indicated that 79% of participants were living at home, but 41% indicated that they would move out to live independently if it were financially possible.
- The largest amount of free time was spent with family, but students were more...
likely to spend time with high school friends if they were educated in integrated settings.

- Results indicated that those 76% of participants who answered the transition question reported that they felt transition services were helpful in the adjustment process after leaving school. Those that said transition planning was useful were more likely to have attained a high school diploma, be enrolled in college, have a job, or participate in a day program.
- Recommendations include repeating this study, but breaking down results by disability category to see what affects certain disabilities have on these factors.
- Implications for practice include improving post-school outcomes for students with disabilities by expanding employment services and related occupation education options and creating meaningful transition programs.


- Examined the format of the transition services page of the IEP when related to conducting planning of transition services for students ages 15-22.
- Results found that no students’ IEP transition pages had an allocated space for the student and family to write a future vision statement; however, 40% of the IEPs had a separate attached document outlining the student and family future vision statement.
- Results found that 99% of students’ IEP transition pages provided space for the IEP team to write and expand on adult outcomes; however, only 88% of plans addressed post-school outcomes and 62% identified action steps for all desired outcomes.
- Results found that over 60% of students’ IEP transition pages addressed three of the seven activities outlined IDEA’s definition of transitional services (i.e., postsecondary education, vocational training, and independent living) while less than 50% of addressed the other four (i.e., Integrated employment, continuing/adult education, adult services, and community participation).
- Results indicated that Louisiana’s IEP teams address the requirements of transition planning defined by IDEA, but are less likely to address the state’s 11 suggested target areas for transition services.
- Recommendations included needs for the state to require IEPs to address post-school areas and activities, especially in areas such as student’s health and medical needs, recreation, transportation, financial planning. As well as measurement of the relationship between student aspirations and its appearance within the transition plan.

● Describes the doctoral program in Transition Services at Kent State University which uses an Individualized Leadership Career Plan.

● Describes the three program competency areas as skills needed to implement transition, instilling transition principles into practice through personal preparation, and foundational and advanced competencies needed to identify and conduct valid research and develop innovative demonstration projects.

● Describes the Individual Leadership Career Plan as a tool that identifies student strengths and needs from their transition background and addresses students future goals, as well as provides individual personnel development based on career principles and transition leadership needs.

● Recommend that Individualized Leadership Career Plans be used with more Transition Services doctoral students to increase success.


● Described the career education movement as having the following forces of change:
  ○ Evolving the structure of education
  ○ Key Litigation
  ○ Congressional commitment and response
  ○ Shifts in educational and political philosophy

● Described the following laws and their effects on the educational system:
  ○ Brown vs. Board of Education of Topeka
  ○ The Pennsylvania Association for Retarded Children (PARD) Decision
  ○ Mills vs. Board of Education of District of Columbia
  ○ Individuals with Disabilities Education Act
  ○ Americans with Disabilities Act of 1990
  ○ Carl D. Perkins Vocational and Applied Technology Education Act
  ○ Improving America’s Schools Act of 1994
  ○ Job Training Reform Act
  ○ School-to-Work Opportunities Act
  ○ Goals 2000

● Described the Contract with America Agenda as having the following policy goals:
  ○ To reform welfare to emphasize finding jobs rather than education and training, with more restrictive limits
To return the responsibility for job training and children and youth programs back to individual states and require them to create their own standards and requirements
○ Consolidate social programs into block grants
○ Place more emphasis on funding for early intervention and prevention
○ Reduce federal oversight by the Department of Education's Goals 2000 program and eliminate the National Education Standards and Improvement Council

Discussed the importance of continuing the reform for the education of students with disabilities, and the important roles that Congress plays within educational reforms. They also note that laws regarding educational reform are not passed lightly, but rather are based on scientific basis.


Describes transition services from the 1960s through the 1990s as having the following legislations and noted that by the end of the 1980s all US states had some form of mandated school-to-work transition services that partnered with community agencies:
○ 1965 Manpower Development and Training Act
○ 1973 Comprehensive Employment and Training Act
○ 1977 Youth Employment Demonstration Act
○ 1983 & 1990 Individuals with Disabilities Education Act (IDEA)

Described that in the 1990s three factors increased the implementation of transition services. These factors were:
○ The passage of the Americans with Disabilities Act, which eliminated the ability for workplace discrimination against individuals with disabilities
○ The need for more workers in the economy
○ The recognition that transition services affect the achievement of postsecondary success for all youth

Described the Goals 2000: Educate America Act of 1993 as having to meet the following goals by the year 2000:
○ All children in America will start school ready to learn
○ Meet a minimum high school graduation rate of 90%
○ All students will leave grades 4, 8, and 12 after demonstrating competency of their topics, and schools shall ensure that students learn to use their minds
○ U.S. students will be the first in the world for math and science achievement
Every adult in America will be literate and possess knowledge that enables them to compete in the global economy and exercise the rights and responsibilities of citizenship

Every school in the U.S. will be free of drugs, violence, and unauthorized possession of alcohol and firearms and will offer a disciplined environment conducive to learning

The nation’s educators will have access to professional development

Every school will promote partnerships that will increase parental involvement and participation in the social, emotional, and academic growth of their children

Described the School-to-Work Opportunities Act as the integration of school-based and work-based learning, the integration of academic and educational learning, and the linking of secondary and postsecondary education.

Described the following laws and how they impacted and affected transition services:

○ National Service Trust Act of 1994
○ Job Training Reform Act of 1993
○ Individuals with Disabilities Education Act, Reauthorization of 1990
○ Carl D. Perkins Vocational and Applied Technology Education Act
○ Rehabilitation Act of 1973

Describe ten future transition issues that will need to be addressed in the 1995 reauthorization of IDEA.


Describes the slow, but effective process of including individuals with disabilities into vocational and career education which came to a head with the inclusion of students with disabilities in the Vocational Education Act of 1963 and its amendments in 1968.

Describes limitations of career and vocational education for students with disabilities due to the lack of the inclusion of living and life skills.

Discusses that before the creation of the Individuals with Disabilities Education Act (IDEA) of 1975, there was a lot of criticism towards programs for children with disabilities. However, after the inaction on IDEA schools had guidelines and rules to follow regarding the education of students with disabilities.

Described that the addition of IDEA muddied the waters of career education for students with disabilities since it was not a part of IDEA.


Describes the four primary areas of the No Child Left Behind Act (NCLB) as having highly trained teachers, state accountability, research, and parental choice.
● Describes research as schools and teachers needing to use research-based approaches and instructional strategies when teaching academics.
● Describes parental choice as an opportunity for parents to transfer their children from low-performing schools to high-performing schools at the cost of the low-performing school.
● Describes NCLB as requiring students with disabilities to participate in high-stakes testing alongside their nondisabled peers which can lower performance rates on the tests and therefore lessen the amount of financial support provided to schools.
● Describes the implications of NCLB as creating achievement and financial gaps between schools that are high achieving and schools that are struggling.
● Describes the effects of NCLB on CTE as negative because many students who are in CTE do not perform well on high-stakes testing because it is not directly related to their CTE academics, and therefore CTE schools and programs can lose funding because they are not appropriately performing on NCLB outcomes.
● Recommends CTE educators push and involve themselves in amending the current NCLB outcomes to help make them more achievable for CTE institutions.


● Described the range of career and technical education (CTE) from 1990-2005 and the various characteristics of CTE participants including sex, race/ethnicity, and prior academic achievement.
● Results indicated that the majority of high schools and undergraduate postsecondary institutions offered CTE (88% and 90%).
● Results indicated that trends in student participation in CTE at the secondary level are not significant; however, student participation in CTE at the postsecondary level has significantly increased.
● Results indicated that business, health care, computer science, and marketing programs were the most common CTE programs in secondary and postsecondary institutions.
● Results indicated that secondary and postsecondary students enrolled in CTE were more likely to be economically disadvantaged, and that more male students were enrolled in secondary CTE and more female students were enrolled in postsecondary CTE.

• Examined recommendations and suggestions from seven stakeholder groups from all 50 states to evaluate and identify future needs for CTE.
• Results indicated that the following topics were identified as the most listed and discussed major needs for the field of CTE:
  ○ Improve the image of CTE
  ○ Exemplary Practices
  ○ Partnerships
  ○ Teaching-learning (integration and relevance)
  ○ Clearinghouse
  ○ Instructors/Administrators
  ○ Professional development
  ○ Technology distance education
  ○ Assessment
  ○ Implications of the Workforce Investment Act of 1998
  ○ Skill shortages/ basic skills
  ○ Multiple problems of constituents
• Recommendations for future research include delving deeper into each of these major needs of CTE for more information.
• Implications for practice included the need for those involved in CTE to use this report as a guide to help better carryout CTE.

• Describes the purpose of the article as to identify and describe new directions in career and technical education (CTE) for the 21st century.
• Describe the following as the four forces for reform in high school CTE: the new economy; public expectations for students; new research on student learning, motivation, effective teaching; and a need for reform of American high schools.
• Describes public survey data as having the following conclusions: the public wants career education and work skills included into the curriculum and that parents expect their children to go to college.
• Describes effective public high schools as having dual goals of providing individuals with a solid education and providing communities with educated citizens.
• Describe the following as important for CTE reform to meet the above forces: high school majors, contextual teaching, work-based learning, authentic assessment, career academics, and tech prep.

● Describes the purpose of the work as intended to inform the further development of the national strategy of Australia by strengthening its focus on evaluation.

● Describes evaluations as not necessarily improving the quality of education and training, but rather rates and determines the appropriateness of the quality of education and training.

● Describes the evaluation processes in Australia as follows:
  ○ Levels of activity
    ■ National: Quantitative okay, qualitative needs work
    ■ State/Territory: High in a few states, low everywhere else
    ■ Local: Highly variable
  ○ Capacity to Evaluate
    ■ National: Adequate
    ■ State/Territory: High in a few states, low everywhere else
    ■ Local: Generally low, some pockets of high skill
  ○ Critique
    ■ National: Little
    ■ State/Territory: Absent
    ■ Local: Generally low, some pockets of high skill

● Recommends the following additional outcomes to help achieve appropriate and useful evaluation through the National Research and Evaluation Strategy for CTE:
  ○ A useful level of evaluative activities
  ○ A capacity to evaluate
  ○ An informed and robust critique


● Describes the Carl D Perkins Vocational Act of 1984 as requiring students with disabilities in the CTE setting to receive vocational assessments, special services, career development, and transition counseling; although it does not provide a specific process (i.e. individual services) in which to do so.

● Describes the stages in the process of evaluating vocational assessment impact as:
  ○ Impact on program content decisions
  ○ Impact on educational decision-making process
  ○ Presentation format of vocational assessment results

● Recommends that schools pay special attention to using vocational assessment data from students with disabilities and the building of programs and services for individuals with disabilities within CTE.

- Describes vocational guidance programs as programs that guide students into appropriate vocations or careers based upon student characteristics and traits and the demands of different occupations.
- Describes vocational evaluation as a type of vocational guidance program for individuals with disabilities.
- Describes vocational evaluation as having an experiential component which provides individuals with disabilities to participate in physical learning and decision-making.
- Describes vocational evaluation as a newer discipline that does not have as much support as mature disciplines; however, some support exists especially when considering the technology component of vocational evaluation.
- Describes the population served as those with disabilities that learn better through “physical learning,” meaning they learn better by doing rather than applying learned theory and reasoning.
- Describes that physical learning is connected to right hemisphere learning and that there has been an increase in those right hemisphere learning due to the popularity of television and other audio-visual devices.
- Recommends that public schools begin to incorporate vocational evaluation as a vocational program for students with disabilities and students who have strong right hemisphere learning.


- Examined the effects of the Local Employers Survey Project on middle and high school students with emotional and behavioral disorders who were taught in an alternative school setting.
- Results found that after the survey project students were able to connect skills learned, or to be learned, in school to skills required for local jobs.
- Findings indicated students learned about effective communication, self-evaluation, and active listening throughout this project.
- Findings indicated that students wanted to submit job applications to local businesses after many of the interviews.
- Implications for practice included changing negative outcomes for students with emotional and behavioral disorders by connecting them with the community in projects like the Local Employers Survey Project.

- Describes how specific data-based information regarding a student’s present levels of prevocational and vocational performance is needed to create an appropriate IEP (individualized education plan) and create IEP goals and objectives.
- Describes how the IEP team can use existing data from the IEP to evaluate the student’s present levels of vocational performance.
- Describes that the following should be evaluated to help with appropriate vocational placement:
  - Sensory power
  - Thinking power
  - Movement power
  - Learning style
  - Work-related behaviors
  - Description of the student’s vocational interests
- Discusses that if information regarding the above can not be found in the current IEP, interviews and testing can be done to help collect all necessary information.
- Describes the purpose of collecting all this information as being used to create an appropriate vocational program for the student with a disability and instructional methods for the program.


- Describes studies examining employment and postsecondary educational outcomes for students with disabilities transitioning out of secondary schools and studies of education practices that resulted in high-quality outcomes.
- Describes the National Center for Educational Outcomes (NCEO) outcomes for students with disabilities within the following themes:
  - Literacy
  - Independence
  - Citizenship
  - Behavior
  - Mental Health
  - Basic Academic Skills
  - Critical Thinking
- Describes data from the literature review regarding post school outcomes of individuals with disabilities as poor.
- Describe the framework of programs and services that provide effective outcomes for students with disabilities in the following clusters and components:
  - Program Administration
- Administrative Leadership and Support
- Sufficient Financial Support
- Formative Program Evaluation
- Summative Program Evaluation
  - Curriculum and Instruction
    - Individualized Curriculum Modifications
    - Integration of Vocational and Academic Curricula
    - Appropriate Instructional Settings
    - Cooperative Learning Experiences
  - Comprehensive Support Services
    - Career Guidance and Counseling
    - Instructional Support Services (i.e. aids and resources)
    - Assessment of Individual Career Interests and Abilities
  - Formalized Articulation and Communication
    - Family/Parental Involvement and Support
    - Early Notification of Vocational Opportunities
    - Vocation and Regular Educators’ Involvement in Individualized Planning
    - Formal Transition Plan
    - Intra- and Inter-Agency Collaboration
  - Occupational Experience, Placement, and Follow-Up
    - Work Experience Opportunities
    - Job Placement Services
    - Follow-Up

- Recommendations include examining why school work experiences and functional curricula positively affect post-school outcomes of students with disabilities.

- Describes the barriers affecting employment of individuals with learning disabilities as: reluctance to disclose their disability, limited knowledge of employment opportunities and the skill level required of specific jobs, and a limited understanding of their disability and associated functional/vocational limitations.
- Describes Title 1 of the Americans with Disabilities Act (ADA: employment) as mandating equal-opportunity employment, meaning that employers must prevent discrimination by avoiding the following prohibited activities:
  - failing to hire an individual who is “otherwise hirable” due to the presence of a disability
  - making pre-employment inquiries about the existence of a disability
○ failing to provide reasonable accommodations to the known limitations associated with the disability
○ using qualification standards or employment tests that may discriminate against individuals with disabilities

● Describes how ADA will help close the employment gap between individuals with learning disabilities and their nondisabled peers.
● Recommends that schools and vocational programs teach students with disabilities about their employment rights through ADA and other relevant laws, so that students have the ability to advocate for themselves.


● Describes current literature in terms of the 5-step improvement process in order to identify theories, evidence, and root or indirect causes of practices that can improve performance on Perkins III core indicators.
● Describes solutions and implementations based on literature reviews to improve performance on Perkins III core indicators.
● Recommendations include for states, districts, schools, and teachers to use the practices laid out within the document in help increase their Perkins III core indicators.


● Described a model that combines support components into a single comprehensive program supporting the training of students with disabilities into vocational education.
● Described the Vocation Education to Work model as a system of communication and support between vocational and special educators which has the following components:
  ○ Active Recruitment
  ○ Guided Placement
  ○ Continuing Support
  ○ Job Placement Follow-up
● Examined the model implementation over four years and conducted a summative field test of student participation in vocational education in the district high schools and in comparison high schools, within the third year.
● Results indicated that in regards to the employment of students with disabilities, students in the model site were more likely to be employed and on average worked more hours per week.
• Results indicated that in regards to vocational education course enrollment the percent of students with disabilities enrolled in vocational education increased.

• Implications for practice include: informing students, parents, and school staff about vocational education opportunities; aiding student’s entry into vocational education; supporting students as they complete vocational education courses; and ensuring students’ entry into the workforce.


• Describes the following legislation as having an impact on vocational education for students with disabilities:
  ○ Individuals with Disabilities Education Act (1986)
  ○ Carl D Perkins Vocational Education Act
  ○ The Rehabilitation Act of 1973
  ○ The Fair Labor Standards Act
  ○ Social Security Act
  ○ Tax Reform Act of 1986

• Describes models for transition as having the following common components: functional school curricula, integrated school services, interagency cooperation, cooperative planning, staff development, community-based instruction, parental involvement, employment and support services.

• Describe a set of guidelines that should be used to help local education agencies develop and design transition programs and list the following as representatives from the field to help with the development and designing of the transition program: special education, vocational education, vocational rehabilitation, guidance, administration, support services, community, human services, parents, and other related agencies.

• Describes that a key factor in transition program implementation is the professional development and personal preparation of the individuals involved.

• Describes issues when implementing transition programs as falling into one of three categories: education issues, intersector issues, and quality of life issues.

• Describes the importance of program evaluation after the implementation of the transition program and provides a 20 step evaluation process.


• Describes the results of the early implementation of a mandated career-focused school reform policy in the state of South Carolina.
- Describes state policy implementation as increasing the amount of career-planning activities and guidance that students receive, affecting students’ research of career and college options, and improving perceptions.
- Describes the altered role of school counselors as an increase in the time spent on one-on-one career-based counseling.
- Describes the policy implementation as requiring a greater effort towards engaging parents in the course-taking and career-planning activities of their children.
- Recommends that data be recorded and studied as implementation continues.