Tech Prep in Illinois

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Changing the Face of Education

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Description

Tech Prep is a strategy to engage students in rigorous high school programs that connect to postsecondary courses of study and lead to meaningful careers. It was initiated in 1990-91 with strong federal and state support, and was designed to reform the U.S. educational system to better meet the needs of both students and employers in the rapidly changing economy.

According to the Illinois State Board of Education, "Tech Prep is a program of study, which begins in high school, continues at a postsecondary institution, and culminates in an associate of applied science degree, two-year certificate, or two-year apprenticeship in one of the Career Interest Areas, and leads to related meaningful employment. A Tech Prep program is developed by a regional consortium consisting of representatives of secondary and postsecondary schools and of the private sector. It may also articulate from a community college to a four-year baccalaureate degree."[1]

Beginnings

Tech Prep grew out of a widespread interest in re-thinking aspects of the education system to meet our society's emerging needs. New technologically oriented workplaces required a better-prepared workforce, and it became increasingly clear that the "neglected majority," the middle range of students who were not traditionally college-bound, had not received either the type or quality of education needed for success.[2]

Federal legislation originally passed in 1990 set the groundwork for Tech Prep nationally, and Illinois has participated in the implementation of Tech Prep since then under the auspices of the Illinois State Board of Education, in cooperation with the Illinois Community College Board.

Program Components

A strong Tech Prep program serves students at the secondary and postsecondary levels, who select and travel career-oriented educational pathways that culminate in an AAS degree. To accomplish this, guidance and preparatory services are offered to help students make sound academic and career choices and to select appropriate core courses and work-based learning experiences. Many students are able to earn college credit while still in high school, through articulation agreements between high schools and colleges.

A high quality Tech Prep program prioritizes curriculum development to establish well-articulated programs of study, and to insure that they blend rigorous academic and career-technical courses. Integrated instructional methods are emphasized because of their effectiveness, as are close ties to business, industry and labor who bring expertise and resources to make students' learning experience more challenging and relevant. Professional development is critical to train teachers and counselors in this approach. Students from all backgrounds are encouraged to participate, with measures taken to help students consider non-traditional careers.

Administration and Funding

Tech Prep is administered by the Illinois State Board of Education in cooperation with the Illinois Community College Board, using federal funds available under the Carl Perkins Vocational and Applied Technology Act along with state general revenue funds. The state of Illinois is unique in its level of support for this effort, matching an annual federal allocation of $5 million with another $5 million from the state. Tech Prep initiatives are often closely aligned and jointly administered with other school reform initiatives.

Evaluation

Illinois has developed a comprehensive evaluation approach, the Illinois Tech Prep Evaluation System, which encompasses both quantitative and qualitative methods and employs a structured 2-day review process at each consortium on a five-year cycle. In addition, data are collected and compiled from all consortia on an annual basis showing activities undertaken and student enrollments.

THE SCOPE OF TECH PREP IN ILLINOIS

Number of Consortia, Schools, and Community Colleges

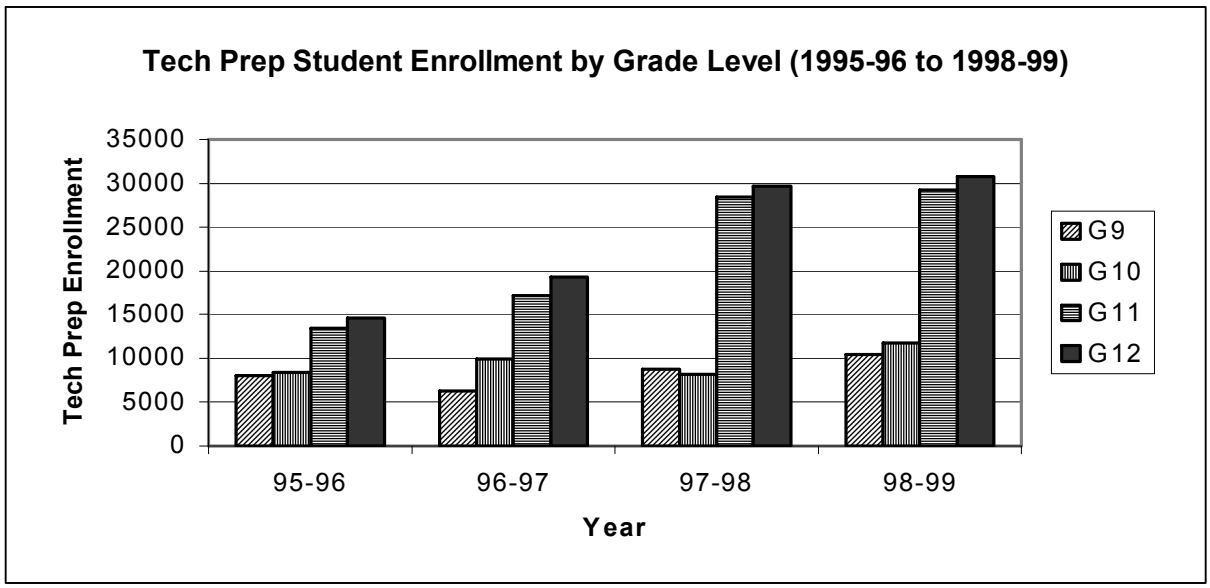
In Illinois, 40 consortia participated in Tech Prep in the 1999-2000 academic year. This group reported a total of 541 schools receiving Tech Prep funds, offering 1091 Tech Prep programs or sequences of study.[3] In addition, all 48 of Illinois' community colleges participate in Tech Prep activities.[5]

Numbers of Students Enrolled/Transferring/ Graduating

In the 1998-99 academic year, Illinois schools reported 82,205 Tech Prep students in participating high schools, or 15% of all Illinois secondary students.[4] Tech Prep student enrollment grew from 44,473 in 1995-96 to 82,205 in 1998-99, an increase of 85%.[4] In the subsequent year, Tech Prep high school graduates totaled 25,782, and there were 3,583 students reported at the postsecondary level.[3]

Enrollment Trends

While numbers of participating students in grades 9 and 10 grew modestly, participants in grades 11 and 12 more than doubled from 1995-96 to 1998-99. Female enrollment remained steady at 46-47% of total students during these years. Students with disabilities comprised 8% of the population during this period.[4]



Source: Illinois Student Information System, Illinois State Board of Education.

Articulation and Dual Credit

Of all students enrolled in postsecondary Tech Prep programs in 1999-2000, local consortium leaders estimated that 89% earned some form of college credit while in high school, up from 52% the previous year. With the exception of one consortium, all consortia reported that secondary-postsecondary sequences were available to students, and 75% of consortia reported more than 10 articulated program sequences in place.[3]

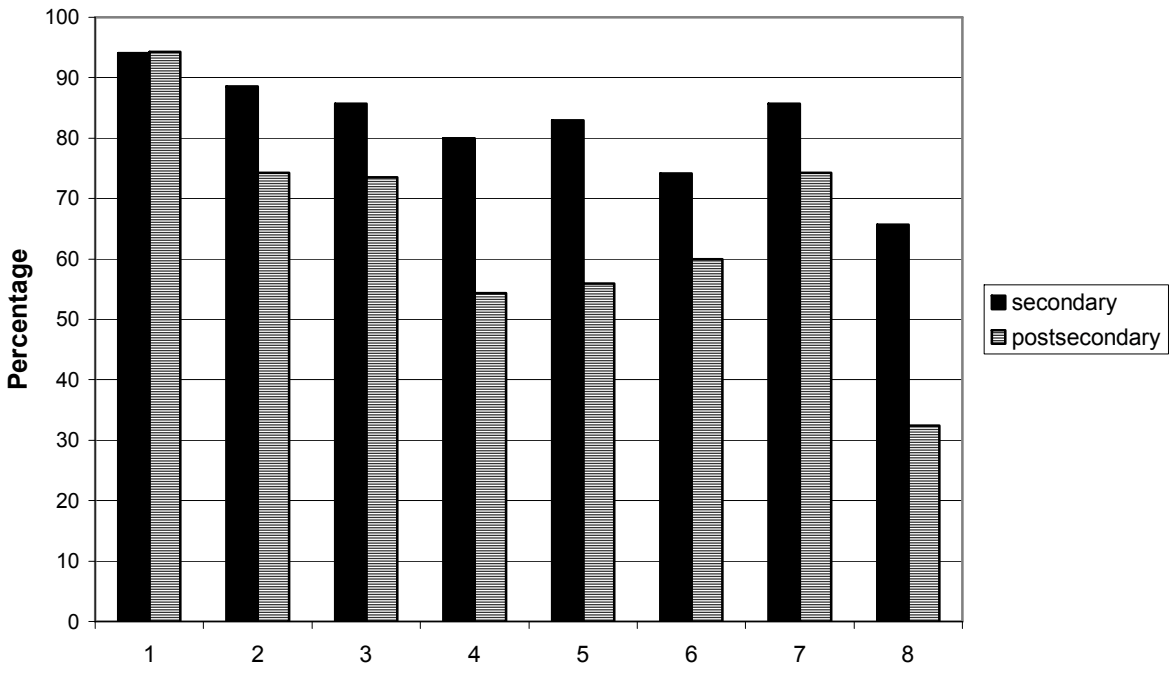
Work Based Learning

Almost all consortia (94%) reported that all of their postsecondary programs provided some forms of work-based learning experiences with an average of 14 programs per consortium. The most common types were paid and unpaid internships/clinicals. In 1999-2000, a total of 1,600 experiences were provided to Tech Prep student statewide.[3]

Curriculum Reform

Since the 1992-93 academic year, there have been increasing numbers of curricular reform initiatives in Illinois' Tech Prep consortia, with a wide range of strategies used. These range from efforts to more fully integrate academic and career-technical content, to improved sequencing or grouping of courses. Interdisciplinary courses are found in 74% of secondary and 60% of postsecondary institutions. A large proportion of schools provide "career academies" in affiliation with consortia, including 66% of all participating secondary schools in 1999-2000.

The most prevalent curriculum reform approaches in 1999-2000 involved integrating academic and career-technical content, and using applied instructional methods.[3]

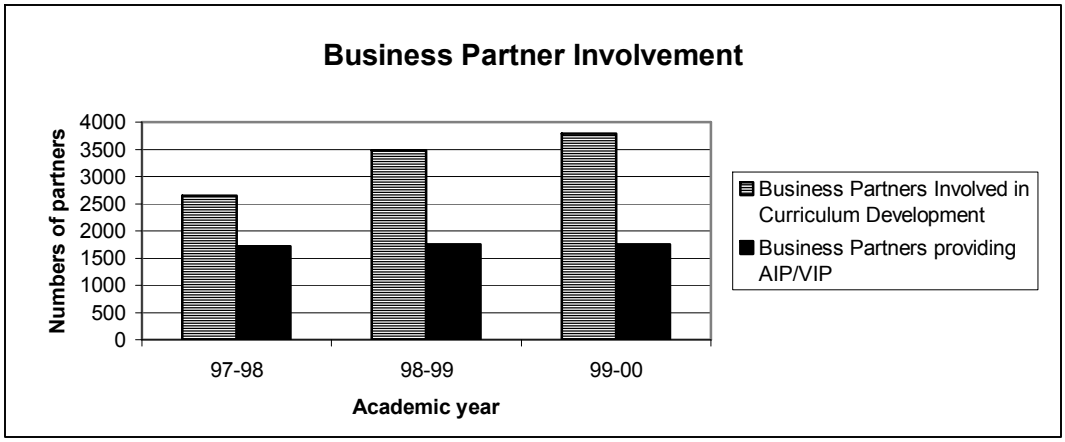


1. Supplementing existing career-technical courses with academic content
2. Supplementing existing academic courses with career-technical content
3. Adding applied curriculum to the existing curriculum
4. Replacing parts of the existing curriculum with applied academic courses
5. Coordination of academic and career-technical courses by sequencing and reinforcing related content
6. Providing interdisciplinary courses combining career-technical content
7. Organizing academic and career-technical courses around occupational/career clusters
8. Providing "academies" combining courses from career-technical areas and math, science, communication and other academic areas.

Source: *The Status of Illinois' Tech Prep Consortia: Summary Results for the FY'00 Final Reports*, OCCRL.

Business Partner Involvement

In 1999-2000, 3,793 business partners statewide were involved in curriculum development, with a median number of 58 partners per consortium. In the same year, 1,758 business partners provided instructor practicum (AIP/VIP) experiences with a median of 38 partners per consortium. These estimates reflect an increase of 15% for curriculum development and 6% for instructor practica from 1998-99 to 1999-2000.[3]



Source: *The Status of Illinois' Tech Prep Consortia: Summary Results for the FY'00 Final Reports*, OCCRL.

Core Achievements Identified by Consortia

In 1999-2000, consortium leaders reported that they were most proud of their efforts in professional development and curriculum development during the past two years. Curriculum development included both the creation of new programs and the revision/updating of existing courses and pathways. Other notable achievements were the expansion of articulation agreements and relationships with business.[3]

Major Barriers Identified by Consortia

Consortium leaders were also asked to identify barriers to optimal implementation of Tech Prep. In 1999-2000, consortium leaders cited: difficulties in finding time for joint planning (mentioned as a major/very major problem by 47%) and professional development (32%), problems with the quantity of paperwork (40%), and difficulties consistently identifying Tech Prep students (22%).[3]

THE ESSENTIAL AND SUPPORTING ELEMENTS IN ILLINOIS

Federal legislation requires that certain elements be in place in all Tech Prep initiatives. These essential elements are listed below with an assessment of their status in Illinois. In addition, several supporting elements have been identified through the Tech Prep Evaluation System (TPES) as necessary for the establishment of high quality Tech Prep programs. Their current status is also addressed. Data presented here reflect results from the evaluation of activities at 12 of the 40 consortia in Illinois during the 1999-2000 and 2000-2001 academic years.

Essential Elements in Illinois[6]

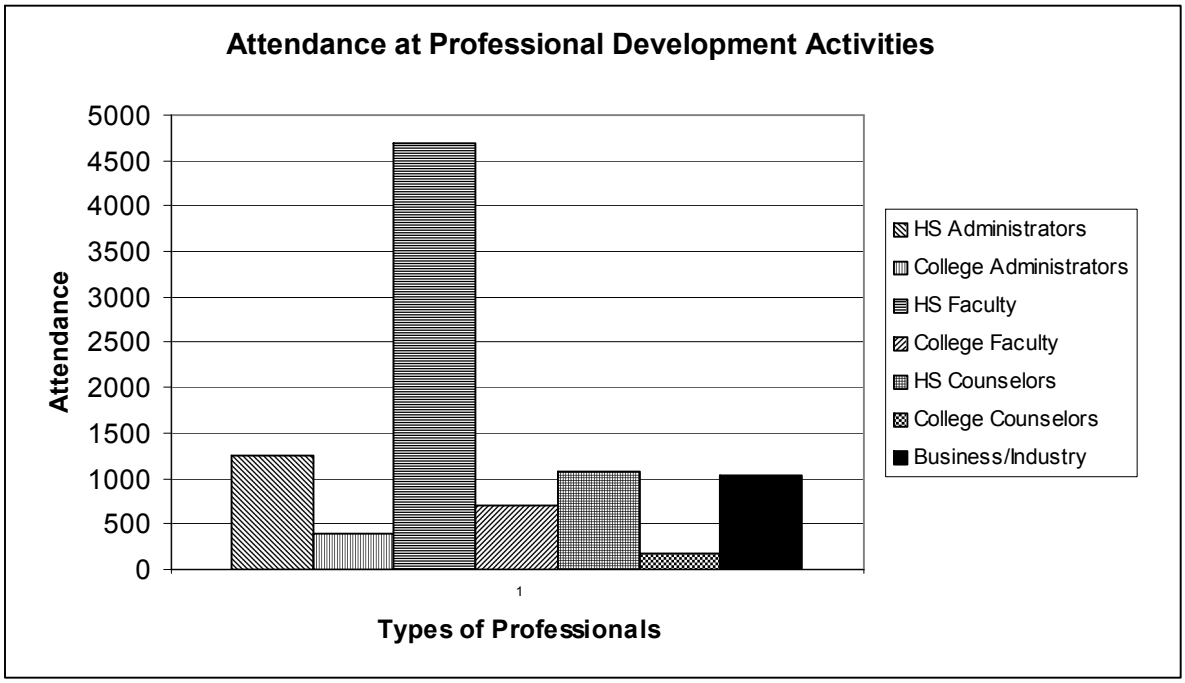
2+2 Pathways—All consortia have established curriculum pathways that span at least the last two years of high school and the first two years of college. Some have included the first two years of high school and/or two additional years of college as well.

Articulation—All consortia have established secondary-postsecondary articulation agreements that encompass both academic and career-technical courses. Fewer have agreements that embrace full career pathways. Dual-credit agreements are common, but students are often inadequately informed of these opportunities.

Curriculum Development—There is extensive involvement of business representatives in the curriculum design process, increasing its relevance to real world situations. Consortia work hard to bring curricula into alignment with state and national standards, to integrate academic and career-technical courses, and to develop sequences of courses that effectively span secondary and postsecondary systems. Because curriculum development is a very time-consuming process, there is still much to be done.

In-service Training for Teachers—Training activities sponsored by Illinois consortia were attended by 5,385 faculty members in 1999-2000. Of these 87% were from secondary schools, and 13% from community colleges.[3]

In-service Training for Counselors—Many consortia offered training specifically to help counselors serve as advisors for students in Tech Prep programs. In 1999-2000, 1,256 counselors were trained in the state, comprising 13% of all people trained.[3] Further training is vital to insure that students get needed guidance.



Source: *The Status of Illinois' Tech Prep Consortia: Summary Results for the FY'00 Final Reports*, OCCRL.

Equal Access for Special Populations—Special populations are represented in Tech Prep programs roughly in proportion to their presence in the overall school-age population. However, students need greater guidance and support to participate in programs that are non-traditional for their gender.

Preparatory Services—Individual Career Plans (ICPs) are used by many schools, although they are not always well maintained. Increasing numbers of career exploration activities are underway in consortia. A need has been identified for more extensive efforts to market Tech Prep to students and parents and expand career guidance efforts.

Work-based Learning—Work-based learning opportunities are widespread in Illinois, although the number of reported offerings decreased significantly between 1998-99 and 1999-2000. Extensive business involvement was instrumental in providing valuable learning experiences.

Supporting Elements in Illinois[6]

Leadership, Commitment and Administrative Support—Tech Prep programs often share administration with other educational governance structures with varying degrees of success. TPES reports note the important role currently played by knowledgeable and committed leaders serving as Tech Prep coordinators and board members.[6]

Parental Support—Although many parents are supportive of their children's participation in Tech Prep, others need more information about it, and about the value of 2-year Associate Degrees in general.

Business, Labor, and Community Involvement—There is extensive involvement by business and industry, a clear asset for curriculum improvement, professional development, and work-based learning opportunities. Little involvement by labor and community groups has been noted.

Transition of Students to Postsecondary Education—Good mechanisms for student transition have been established although their effectiveness is unknown because of difficulties in identifying and tracking students. Many students require extensive remediation at the postsecondary level.

Secondary/Postsecondary Collaboration—Gains in articulation and curriculum development have been made through collaborative efforts. Further work is needed to establish good mechanisms for student tracking, guidance and transition.

Identification and Accurate Reporting of Tech Prep Students—Local consortia employ different approaches to identify and track Tech Prep students, leading to inaccuracies in counts and difficulties in evaluating outcomes on the state level.

Evaluation and Program Improvement—Illinois' Tech Prep Evaluation System is beginning to yield valuable data for program assessment and improvement. Some consortia are undertaking additional studies on a limited basis, and when done, are extremely helpful.

BUILDING A FUTURE FOR TECH PREP

Tech Prep has had a positive impact on education in the state of Illinois. Collaborative efforts at the state and local level are building an educational system that can serve students for many years to come. To sustain this effort, it is essential to:

1) Increase secondary and postsecondary collaborative efforts to support further articulation and dual-credit initiatives.
2) Expand training and marketing efforts to increase the visibility and effectiveness of Tech Prep.
3) Continue to work closely with business partners to build the best possible curriculum, based on current industry needs and practices, while also incorporating current research on effective teaching and learning strategies.
4) Build career exploration and guidance systems that help students to choose their future directions wisely.
5) Collaborate with community organizations to encourage participation by diverse student populations.

6) Continue to use the Tech Prep Evaluation System to improve the programs, while also drawing on best practices from around the nation.

ONLINE RESOURCES

Office of Community College Research and Leadership/UIUC—resources on Tech Prep evaluation at *http://occrl.ed.uiuc.edu /TPES*

Illinois State Board of Education (ISBE)—information on Tech Prep in the state of Illinois at *http://www.isbe.state.il.us/techprep*

Illinois Community College Board (ICCB)—information on Illinois community colleges at *http://www.iccb.state.il.us/*

National Center for Career and Technical Education (NCCTE)—research results and exemplary program models at *http://www.nccte.com/programs/*

Office of Vocational and Adult Education of the U.S. Department of Education—facts, funding, program models at *http://www.ed.gov/offices/OVAE*

Center for Occupational Research and Development (CORD)—link to the National Tech Prep Network at *http://www.cord.org/*

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[1]Illinois State Board of Education. (2001). *Illinois Tech Prep definitions*. Retrieved October, 30, 2001, from http://www.isbe.state.il.us/techprep/define.htm.

[2] Parnell, D. (1985). *The neglected majority.* Washington, DC: Community College Press.

[3] Hood, L., & Bragg, D. (2000, April). *The status of Illinois' Tech Prep consortia: Summary results for the FY'00 final reports,* Champaign, IL: OCCRL-UIUC.

[4] Illinois Student Information System (ISIS), Illinois State Board of Education, 1995-96 to 1998-99.

[5] OCCRL-UIUC. (2000, September). *Tech Prep in Illinois: Did you know?* (fact sheet). Champaign, IL: Author.

[6] Kim, J., Bragg, D., & Barnett, E. (2001, August). *Illinois' Tech Prep on-site review and improvement process for 2000-2001: Cross-consortium results and implications for practice.* Champaign, IL: OCCRL-UIUC.

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