

2017 ILLINOIS CAREER AND TECHNICAL EDUCATION REPORT

This report is being submitted to comply with Illinois School Code [105 ILCS 435/2e](#), which requires a written Career and Technical Education (CTE) report shall be issued to the Governor annually.

EXECUTIVE SUMMARY

In Illinois, CTE programs prepare students for postsecondary education and careers in high-wage, high-skill, and high demand occupations in five career clusters: 1) Agricultural Education (Ag); 2) Business, Marketing and Computer Education (BMCE); 3) Family and Consumer Sciences (FCS); 4) Health Science Technology (HST); and 5) Technology and Engineering Education (T&EE). Illinois CTE State Courses in various career pathways/ programs of study, work-based learning opportunities, and Career and Technical Student Organizations (CTSO) strengthen students' technical and employability skills, while meeting Illinois Learning Standards and closing academic achievement gaps.

A successful secondary CTE delivery system in Illinois is contingent upon two levels of support: 1) The Illinois State Board of Education (ISBE) providing state-level leadership, technical assistance, and accountability to Education for Employment (EFE) Systems and 2) EFE Systems providing planning and delivery resources to local districts and Area Career Centers (ACCs). In Illinois, there are 56 EFE Systems, including three systems organized by the state agencies which serve secondary students as part of their responsibilities: Illinois Department of Juvenile Justice, Illinois Department of Human Services Office of Mental Health Services, and the Office of Rehabilitation Services.

In FY 2017, 634 out of 708 Illinois public high schools, excluding regional programs and ACCs, offered CTE programs in the five career clusters: 1) 332 Ag, 2) 576 BMCE, 3) 487 FCS, 4) 205 HST, and 5) 536 T&EE. 591 of these high schools offered multiple CTE programs. The percent of Illinois students enrolled in public secondary school CTE programs remained level at forty-five percent from FY 2016 to 2017; however, the total enrollment declined by 3,056 students. All 1,326,168 public elementary students (grades K-8) were provided career information and awareness opportunities through EFE Systems. Students who completed CTE programs graduated from high school at a large percent of 96.5 and 95.7 for CTE special needs students, including those with disabilities, economically disadvantaged, students-as-parents, those preparing for nontraditional fields, displaced homemakers, and limited English proficient students.

Of the \$40,004,782 federal Carl D. Perkins Career and Technical Education Act (Perkins) FY 2017 funding Illinois received, \$20,877,582 was distributed by ISBE to EFE systems for the delivery of high-quality local CTE programs, \$2,392,279 for required federal leadership projects, and \$725,000 for administration. Federal leadership projects included the Illinois Association for Career and Technical Education for professional improvement and leadership training, University of Illinois – Project Lead the Way that brought early exposure of engineering concepts to high school students, and the Illinois Career and Technical Education Special Populations Leadership Project for professional development and technical assistance for improvement of CTE education and access to nontraditional students.

Federal Perkins funding requires state Maintenance of Effort funds, which totaled \$38,062,100 in FY 2017 in Illinois. Two percent of that (\$830,000) was utilized for State Leadership/Technical Assistance, and the remaining 98 percent (\$37,232,100) was distributed to local and regional agencies for the support of secondary CTE programs and elementary career development programs. Illinois State CTE Projects included: the Gender Equity Advisory Committee, the Computer Science Task Force (recommendations made to the Governor on July 1, 2017), the Illinois State University – Technical Assistance for Rigorous Academic and Career Technical Education for teacher and administrator CTE professional development, 8 CTSOs, the Illinois Coordinating Council for CTSOs for state officer and advisor leadership training, the Regional Safe Schools Cooperative Education Program to provide cooperative education classroom and work experience to students at risk of

dropping out of school, and online innovative CTE lesson development through the Facilitating Coordination in Agriculture Education and Center for Agricultural and Environmental Research and Training Inc.

In FY 2018, ISBE plans to fund and enhance existing federally and state funded projects, as well as forge into new partnerships. ISBE's goal has and will continue to be providing equitable access for all Illinois students to high-quality CTE programs that lead to college and career readiness. This completes one piece of ISBE's vision of Illinois becoming a state of whole, healthy children nested in whole, healthy systems supporting communities wherein all citizens are socially and economically secure.

Delivery of Career and Technical Education

CTE programs in Illinois strengthen students' technical and employability skills, assist in meeting the Illinois Learning Standards, and close achievement gaps. Illinois districts depend on high-quality CTE programs to prepare students for college and career.

Role of the Illinois State Board of Education

The Illinois State Board of Education (ISBE) provides state leadership, technical assistance, and monitoring for CTE programs. ISBE CTE staff provides curriculum guidance for programs, state and federal grant administration, data collection and monitoring, student and teacher association advisement, and intra- and inter-agency liaisons. These activities improve CTE programs, ensuring students are prepared for college and careers.

ISBE serves as the state agency responsible for the administration, operation, and supervision of Career and Technical Education programs under the Carl D. Perkins Career and Technical Education Act of 2006. ISBE distributes Perkins funds to unit and high school districts, as well as Area Career Centers, through the Illinois Education for Employment (EFE) Systems. The Illinois Community College Board (ICCB) distributes Perkins funds to the 39 Illinois community college districts, consisting of 48 community colleges.

Role of the Education for Employment Systems

The Education for Employment (EFE) systems support local districts in the cooperative planning and delivery of high-quality Career and Technical Education to students within their system. The EFE systems promote continuous improvement and accessibility of secondary CTE programs. They also provide accountability for the use of both state and federal CTE funds. In addition, the systems work collaboratively with local postsecondary institutions to create programs which enhance both the technical skills and academic development of students along with articulating postsecondary training programs, employment or both.

There are 56 EFE systems operating in the state, including three systems organized by the state agencies which serve secondary students as part of their responsibilities: Illinois Department of Juvenile Justice, Illinois Department of Human Services Office of Mental Health Services, and the Office of Rehabilitation Services. All Illinois high schools and Area Career Centers are members of an EFE system.

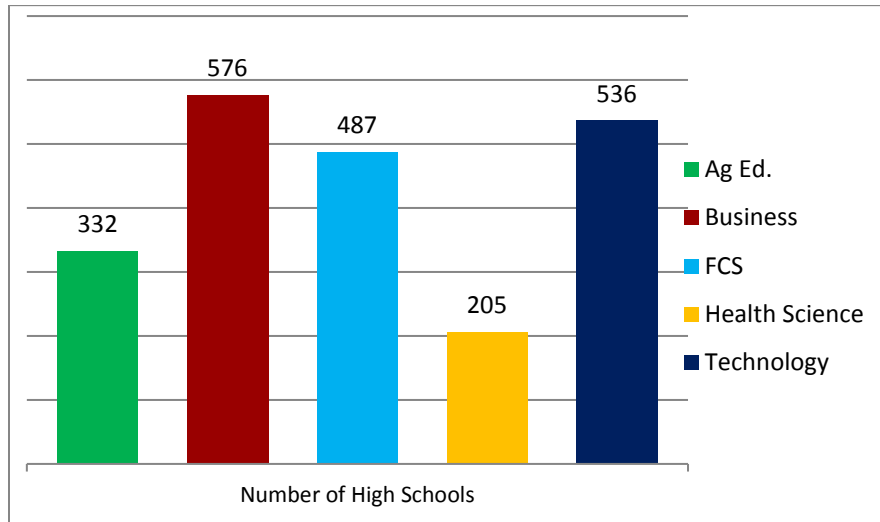
Role of High School CTE Programs

CTE educators provide instruction for careers in high-wage, high-skill, and high-demand occupations. The secondary CTE instructional programs in Illinois are grouped into five broad areas based on the related content. These content areas are Agricultural Education; Business, Marketing and Computer Education; Family and Consumer Sciences; Health Science Technology; and Technology and Engineering Education.

In total for fiscal year 2017, 634 out of 708 Illinois high schools participated in CTE programs. Among those 634 participating schools, 332 high schools provided Agricultural Education; 576 high schools provided Business, Marketing and Computer Education; 487 high schools had programs in Family and Consumer Sciences; 205

schools had Health Science Technology programs; and 536 high schools had Technology and Engineering Education programs.

FY 2017 High School Programs in CTE Areas



FY 2017 High School Programs in CTE Areas

Table 1 (Number of Schools Providing CTE Programs - Excluding Region Programs & Area Career Centers) below indicates trend data for FY 2015 – FY 2017 CTE programs.

	FY17		FY16		FY15	
	#	%	#	%	#	%
Agricultural Education	332	15.5	329	15.2	322	16.1
Business, Marketing and Computer Education	576	27.0	587	27.1	579	29.0
Family and Consumer Science	487	22.8	493	22.7	482	24.2
Health Science Technology	205	9.6	221	10.2	125	6.3
Technology and Engineering Education	536	25.1	538	24.8	483	24.3

Schools Served by Multiple CTE Programs

Many high schools offer more than one program. The graph on the next page indicates the number of high schools that offered multiple programs.

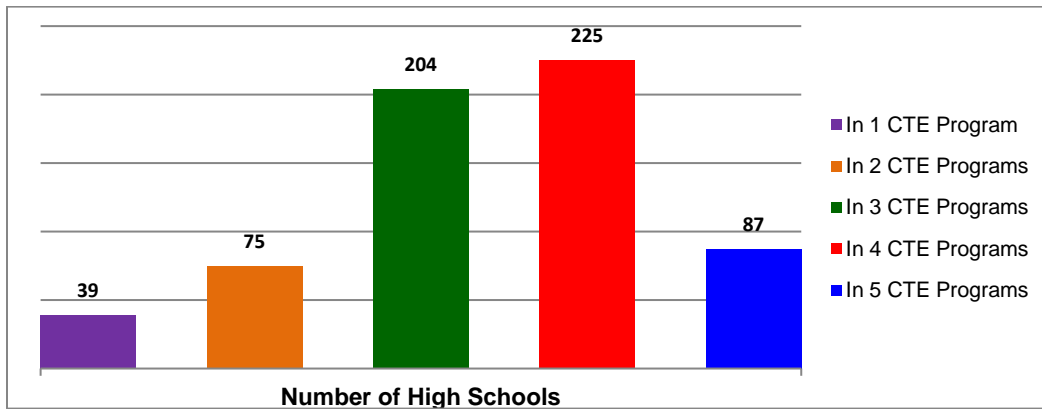


Table 2 (Number of Schools Serving Multiple CTE Programs – Excluding Region Programs & Area Vocational Centers) below indicates the trend data for FY 2015 – FY 2017 districts served by multiple CTE programs.

	Served 1 CTE Program Area	Served 2 CTE Program Areas	Served 3 CTE Program Areas	Served 4 CTE Program Areas	Served 5 CTE Program Areas
FY17	39	75	204	225	87
FY16	53	78	200	221	95
FY15	59	93	234	206	44

The Condition of Career and Technical Education in Illinois

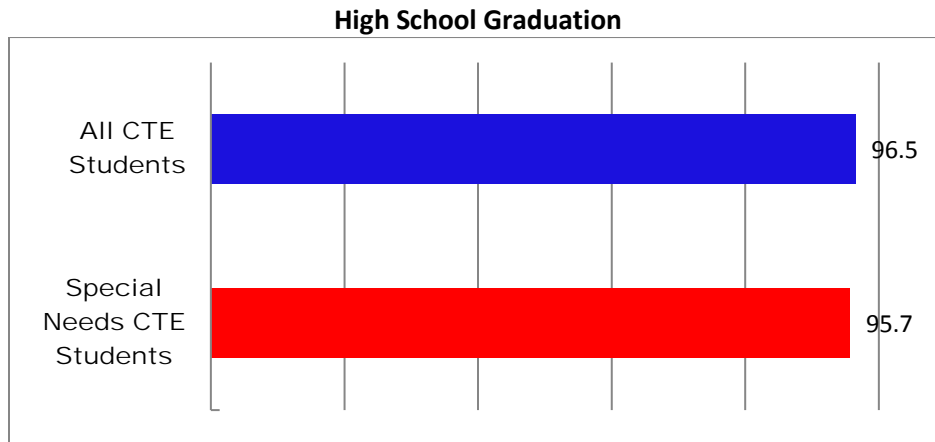
In FY 2017, forty-five percent of all Illinois students enrolled in public secondary schools (grades 9-12) participated in CTE. This is a zero percent increase from FY 2016. The total enrollment in CTE has decreased from 280,517 high school students in FY 2016 to 277,461 high school students in FY 2017. All elementary districts in the 56 EFE systems are provided the opportunity of career information and awareness activities for their students. This is offered to the total population of 1,326,168 elementary students (grades K-8) in public elementary schools. Table 3 below indicates the number of students served by CTE.

Table 3: Number of Students Served by CTE

Fiscal Year	Total HS Population Grades 9-12	CTE Participants	Percent
FY2017	617,485	277,461	45%
FY2016	619,292	280,517	45%
FY2015	619,733	255,544	41%
FY2014	604,277	284,864	47%
FY2013	608,132	241,295	40%
FY2012	614,854	300,983	49%

Graduation from High School

There was a total of 139,133 graduates in Illinois in FY 2017. Of the Illinois graduates, there were 29,950 CTE completers. As indicated in the graph on the next page, 96.5 percent of the FY 2017 students who completed CTE programs graduated from high school and 95.7 percent of CTE special needs students graduated from high school. This includes students with disabilities, economically disadvantaged students, students-as-parents, students preparing for nontraditional fields, displaced homemakers, and limited English proficient students.



Enrollment in Postsecondary Programs

Of the CTE students that continue into postsecondary education, more than 63.5 percent of CTE concentrators enrolled in either two-year or four-year institutions, based on National Students Clearinghouse data. A CTE concentrator is a secondary student who has earned three or more credits in a single CTE program area (e.g., health care or business services) or two credits in a single CTE program area, but only in those program areas where two credit sequences at the secondary level are recognized by the state and/or its local eligible recipients.

Federal and State Career and Technical Education Funding Sources

Table 4 (Components of Federal and State Appropriations) below indicates the components of the federal and state appropriations in FY 2017.

Table 4: Components of Federal and State Appropriations

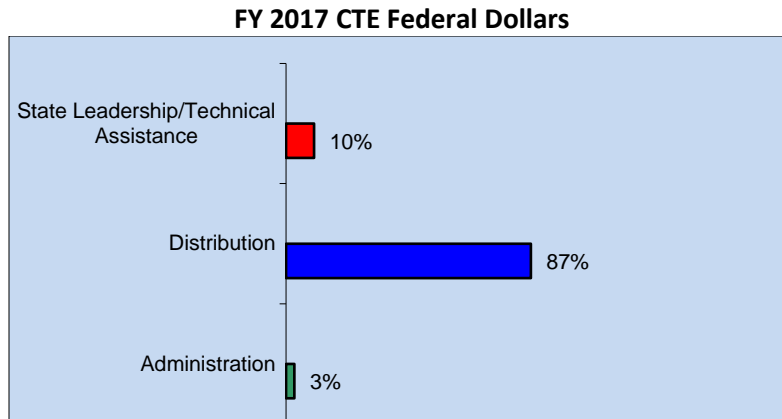
	Appropriation	Administration	Distribution	State Leadership/ Technical Assistance
Federal	\$23,994,861	\$725,000	\$20,877,582	\$2,392,279
State	\$38,062,100	\$928,771	\$37,232,100	\$830,000
Total	\$62,056,961	\$1,653,771	\$58,109,682	\$3,222,279

Federal - Perkins Career and Technical Education Grant

The State of Illinois was allocated \$40,004,782 from the federal Carl D. Perkins Career and Technical Education Act (Perkins) to support both secondary and postsecondary CTE programs. ISBE administers Perkins CTE programs and the Illinois Community College Board (ICCB) administers Perkins postsecondary CTE programs. The

Director of the Center for Teaching and Curriculum at ISBE is also the state director of Career and Technical Education.

The appropriation to ISBE for secondary federal Career and Technical Education was \$23,994,861. Of which, \$20,877,582 was distributed by ISBE to EFE systems for the delivery of high-quality local CTE programs. ISBE used \$725,000 for administration and \$2,392,279 for required federal leadership projects. The chart below shows the distribution of these funds on a percentage basis.



Illinois Federal Leadership Projects

The *Illinois Association for Career and Technical Education (IACTE)* was funded with \$20,000 to provide professional improvement activities and leadership training for more than 300 secondary and postsecondary CTE teachers. These activities were conducted primarily at the 87th Annual IACTE Conference/Professional Development Institute held February 15-16, 2017, in Springfield and during the affiliate professional development conferences.

The *University of Illinois – Project Lead the Way* brings early exposure of engineering concepts to students in high school, providing the path to more formal engineering preparation in institutions of higher education or the path to technologically oriented jobs. The project provided \$100,000 for training and professional development for those who teach this core group and engineering-oriented courses in Illinois high schools. In FY 2017, approximately 450 Illinois high school teachers attended training and/or professional development.

The *Illinois Career and Technical Education Special Populations Leadership Project* provides \$275,000 (with \$60,000 - \$150,000 of this amount devoted to nontraditional students per Perkins legislation) for statewide professional development and technical assistance to educators for the improvement of instructional services for special populations in CTE with an emphasis on the recruitment and retention of students preparing for a nontraditional career field. Leadership activities included a focus on performance assessment and accountability training, professional development, and technical assistance educator resources. The project website (www.illinoiscte.org) hosts resources for CTE programs and the educational community. Along with the website, Facebook® and Twitter® accounts are used to provide information regarding classroom strategies and other resources with a focus for on economically disadvantaged students and nontraditional careers. Education for Employment (EFE) directors, educators, and stakeholders were presented research-based strategies and activities to help improve recruiting and retaining students in nontraditional occupations based upon Illinois Career and Technical Education trend data. More than 160 educators were directly served through professional development activities in FY 2017, resulting in an impact on more than 12,000 students.

State Career and Technical Education Funds

The state appropriation for secondary Career and Technical Education for FY 2017 was \$38,062,100. This amount has remained approximately the same since FY 2004 due to the Maintenance of Effort (MOE) requirement. The Carl D. Perkins Career and Technical Education Act of 2006, Title III, Part A, Section 311 (b), contains a MOE provision which requires equal or greater state expenditures for CTE programs for the second fiscal year preceding the fiscal year for which the determination is made.

Out of the \$38,062,100, ISBE distributes a total of \$37,232,100 to local and regional agencies for the support of secondary CTE programs and elementary career development programs. The remaining funds are used for state leadership grants. The state line item can only be used for grants as no administrative expenditures are allowed.

The state appropriation includes:

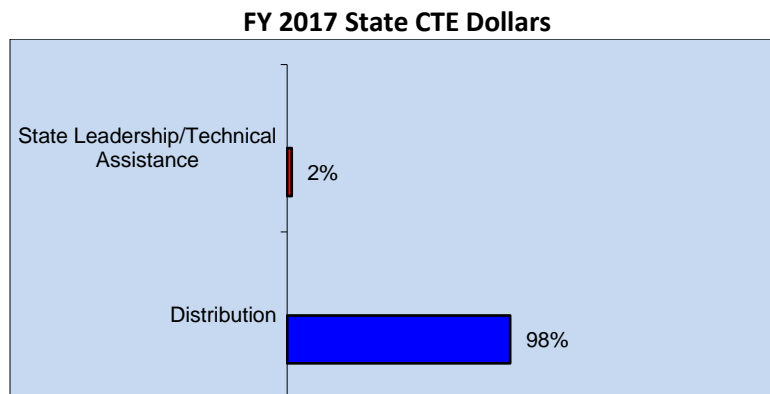
- Secondary CTE Programs: \$34,679,418
- Elementary Career Development Program: \$1,326,168
- Regional Coop Ed Program: \$1,037,312
- Student Organizations (CTSOs): \$189,202

State leadership projects in the amount of \$830,000 include:

- Technical Assistance
- Professional Development
- Curriculum Development

The graph below shows the distribution of these funds on a percentage basis:

- State Leadership/Technical Assistance: 2% (\$830,000)
- Distribution to local and regional agencies: 98% (\$37,232,100)



Illinois State CTE Projects

The *Gender Equity Advisory Committee (GEAC)* functions to advise and consult with ISBE to ensure that all students have equal educational opportunities to pursue high-wage, high-skill occupations leading to economic self-sufficiency (Public Act 91-304). The GEAC met in February and October of 2017. Dedicated professionals shared knowledge and information regarding initiatives in equity work across the state, including collaborations on Science, Technology, Engineering and Mathematics (STEM) equity in the classroom, career exploration events, conferences, and trainings. The committee received CTE state and national trend data and reported on instructional practices across the state for improving CTE participation of nontraditional and other special populations defined by Perkins legislation.

The *Illinois State University – Technical Assistance for Rigorous Academic and Career Technical Education Project* assists ISBE in implementing statewide teacher and administrator professional development focused mainly on high-quality reform with an emphasis on Career and Technical Education content areas.

This project used \$330,000 in funds to coordinate the delivery of the Connections Conference, two summer teacher workshops titled *Creating Quality Assignments*. 33 teachers attended the workshop in Moline and 64 teachers attended the workshop in Springfield. A total of over 648 educators participated in these activities.

The Connections Conference was held at the Tinley Park Convention Center, IL on April 24-25, 2017. The conference focused on new and innovative practices in both core academic and CTE content areas. It featured administrators, teachers, counselors and other educators from Illinois sharing innovative programs and strategies that have been successful in Illinois schools.

Approximately 551 educators were in attendance from mainly middle/junior high, secondary, and postsecondary schools. Teachers accounted for 74%, administrators 17%, and counselors 9% of the conference attendance.

Participant evaluations revealed that of the 117 sessions offered. 92 received a 3.0 – Good score or better (out of 4.0 – Excellent), and 7 received between 2.0-2.9 – Fair score or better. 8 sessions did not receive evaluations, and 10 sessions were cancelled last minute. The overall conference evaluation data showed an average score of 3.3 out of 4.

Career and Technical Student Organizations (CTSO) are co-curricular entities that provide secondary students with competitive-based activities that expand classroom instruction to strengthen academic and technical skills. These competitive events develop leadership qualities in students. Students can also gain industry-related experience. In addition, CTSOs provide state and national conferences, which foster student-employer networking, workplace, and leadership skill development. In FY 2017, 36,663 students were members of a CTSO. Table 5 (CTSO Funding Distribution) indicates the grant distribution funding for the state-approved CTSOs.

Table 5: CTSO Funding Distribution

Illinois Association of DECA (DECA)	\$17,301
Illinois Association of Family Career and Community Leaders Association (FCCLA)	\$19,679
Business Professionals of America Illinois Association (BPA)	\$15,473
Illinois Association of Skills USA	\$15,989
Technology Student Association (TSA)	\$14,461
Illinois Association of Health Occupations Students of America (HOSA)	\$15,663
Illinois Future Business Leaders of America (FBLA)	\$15,945
Illinois Association FFA (FFA)	\$35,575
Total	\$150,086

The *Illinois Coordinating Council for Career and Technical Student Organizations (ICCCTSO)* is made up of the state advisers, executive directors, and presidents of the eight secondary CTSOs that are listed above. The ICCCTSO received \$39,116 to coordinate the activities of the individual career and technical student organizations. A three-day leadership conference is held July 16-18, 2017 in Springfield. The leadership conference provided training for CTSO state officers and advisors. It also provided direction in various Career and Technical Education initiatives.

Regional Safe Schools Cooperative Education Program (RSSCEP) provides annual grant awards, with a base of \$35,000 for each Regional Office of Education (ROE), plus Americans with Disability ACT (ADA) and/or low-income count. Subpart K (254.110-254.1198) of the Illinois Administrative Code (Title 23) administrative rules governing Career and Technical Education authorizes the Illinois State Board of Education to provide grants to school districts to develop career-related classroom instruction and cooperative work experience for students who are currently enrolled as full-time students in the regular school program but are at risk of dropping out of school. The purpose of the RSSCEP is to provide alternative cooperative education for suspended or expelled youth due to gross misconduct who are 16 years or older and are administratively transferred to a Regional Safe School Program. The program is designed to motivate and encourage students to complete high school while enabling them to make a successful transition to postsecondary education, employment, or other career advancement opportunities. Twenty-four ROEs applied for the RSSCEP grants in FY 2017.

The Computer Science Education Task Force

[PA099-0647](#) amended the School Code and requires ISBE to establish a Task Force on Computer Science Education setting forth provisions concerning the members of the task force:

1. to analyze the current state of computer science education;
2. to analyze current computer science education laws in other jurisdictions, both mandated and permissive;
3. to identify best practices in computer science education in other jurisdictions; and
4. to make recommendations to the General Assembly including fiscal commitment, if applicable.

The Task Force summarized its findings and recommendations in the final report (<https://www.isbe.net/Documents/CSETF-final-report-20170628.pdf>) received by the General Assembly on July 1, 2017.

Future developments in Career and Technical Education

Recommendations and Activities for Fiscal Year 2018

Continue Current Innovative Projects, including but not limited to:

Project Lead The Way (PLTW) is funded through federal Perkins Leadership dollars. It is one of the leading national STEM curriculums in the country. The Pathway to Engineering curriculum provides a specific focus on technology and engineering concepts combined with the application of math and science. This allows students to follow a pathway to formal postsecondary preparation in engineering and technology-oriented careers. The EFE systems are key partners in providing cooperative efforts to offer courses at various locations. Since 2003, more than 660 Illinois teachers have received substantial professional development to support implementation of the Pathway to Engineering curriculum. Since FY 2013, Illinois PLTW Pathway to Engineering has enrolled an average of 14,000 to 17,000 PLTW students at the high school level annually. The Illinois PLTW State Leadership Team continues to meet to carry out a strategic plan for continued growth. In FY 2017, eleven new PLTW Pathway to Engineering high school programs were implemented (153 total programs). In FY 2018, fifteen new high school started to implement Engineering programs (168 total programs). It is anticipated that ten new programs will be implemented in FY 2019.

Career Pathways/Programs of Study

Career Clusters are groups of occupations and industries based on common knowledge and skills. Career Pathways are systemic frameworks organized around Career Clusters for transforming educational institutions by proactively providing a multi-component organizing tool for schools and students to work toward a specific career. Pathways comprise of more specific Programs of Study. Programs of Study (POS) are sequences of courses and applied learning experiences that include both academic and CTE content and where students

pursue a pathway of coursework. POS also includes articulation and dual credit opportunities that lead to postsecondary degrees and industry-recognized certifications and/or licenses as well as work-based learning and project-based experiences and connections to supporting activities in approved career and technical student organizations and professional networks.

CTE Curriculum Resources

The Facilitating Coordination in Agriculture Education (FCAE) and Center for Agricultural and Environmental Research and Training Inc. (CAERT) partners with ISBE to develop, update, and disseminate online CTE curriculum in all content areas. Each year, the goal is to develop more than 200 online CTE curriculum lessons and supplemental materials incorporating the Illinois Learning Standards for math, English language arts, and science. For FY 2017, more than 225 new CTE lessons were developed for CTE educators. Business and industry professionals and CTE educators contribute to the creation of the lessons. In FY 2018, FCAE and CAERT will continue to collaborate with a new curriculum project to develop additional innovative lessons and resources.

In summary, CTE programs in Illinois provide instruction for careers in high-wage, high-skill, and high-demand occupations in Agricultural Education; Business, Marketing and Computer Education; Family and Consumer Sciences; Health Science Technology; and Technology and Engineering Education. CTE programs continue to strengthen students' technical and employability skills; articulate transitions to postsecondary training programs, employment, or both; assist in meeting the Illinois Learning Standards; and close achievement gaps. These programs are instrumental in supporting local districts to ensure student success and promoting continuous improvement.