

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF EDUCATION
CAREER AND TECHNICAL EDUCATION

CAREER AND TECHNICAL EDUCATION PROGRAM
ANNUAL PERFORMANCE REPORT
2009-20010

DECEMBER 2010

Commonwealth of Puerto Rico
DEPARTAMENT OF EDUCATION
Career and Technical Education

NARRATIVE PERFORMANCE INFORMATION

July 1, 2009 - June 30, 2010

1. Implementation of State Leadership Activities

Secs. 124(b) and (c) of *Perkins IV* describe the required and permissible use of state leadership funds, respectively. Provide a summary of your state's major initiatives and activities in **each of the required areas**, as well as **any of the permissible areas that your state has chosen to undertake** during the program year.

a. Required Use of Funds:

- Conducting an assessment of the vocational and technical education programs funded under *Perkins IV*.

The Puerto Rico Department of Education (PRDE) operates as an unitary educational system, which serves as SEA as well as the LEA on the Island. The PRDE manages the island's schools within a framework of seven geographical regions. Each region is headed by a Director, and within the regions there are school districts for a total of twenty eight (28) distributed islandwide. Each school that supports a CTE program has an administrator that oversees the program. The Puerto Rico educational system is comprised by secondary and postsecondary levels. The secondary level (K-12) has a total of 1,482 schools, of which 129 are CTE high schools (grades 10-12). As for the postsecondary level, the Puerto Rico Technical Institute (PRTI) has four (4) campuses located at San Juan, Ponce, Manatí and Guayama that offer associate degrees in 17 academic and technical offerings. These are in the areas of health, business administration and engineering technologies. Also, another postsecondary institution is the Tool and Dye School that offers a certificate in this area. Career and Technical Education Programs are assessed in order to maintain their quality and relevance.

Secondary Level

The Puerto Rico Department of Education has established a Student Information System (SIS) to collect valid and reliable data of the student population it serves. At the end of each semester, all schools are required to submit enrollment reports and disaggregated data of all CTE students. All schools will receive their performance level in relation to student achievement, placement, graduation rate and state occupational certification tests' performance. Data is also gathered on nontraditional enrollment and graduate students' follow up in relation to: employment, military services and continuing postsecondary education. Data from all CTE students that are assessed

are recorded on individual student profiles within the Student Information System (SIS) and are classified within each occupational program area. Each program is provided with specific information regarding its contribution to the academic performance of CTE participants.

Also, the Student Information System (SIS) provides an online student report card. Through this System parents are allowed to access information regarding student's progress and academic achievement. Also, it provides CTE management with valid and reliable information for decision making. Ongoing revision will be conducted in order to ensure that data entered is accurate and reliable.

Postsecondary Level

During 2009-2010 the Campus Information System (CIS) for the Postsecondary level, continued to be implemented throughout the four (4) campuses. During its implementation, it reflected the need for further programming of other areas in order to be fully operational. PRDE hired the BSI company for this programming. CIS will be fully operational by August 2011. Annual Performance Indicators data, which constitute an evaluation tool, was gathered by staff at the offices of student support services at each campus (Excel application). Once this information system is fully implemented, it will also provide an effective student tracking system from secondary to postsecondary levels as well as graduate students' follow-up in relation to: employment, military services and continuing postsecondary education.

- Developing, improving, or expanding the use of technology in career and technical education.

PRDE is implementing its Technology Plan to impact the administrative aspect of the Agency in order to be more effective and efficient, and allow to properly focus time and energy on improving the teaching and learning process and overall student achievement. As part of this Plan, it establishes the infrastructure to support PRDE's technology system across the 1,482 schools in the seven (7) educational regions. At this moment, PRDE has established Internet connection throughout the CTE schools for classroom instruction as well as to access the Student Information System (SIS). Such data is made available to teachers, parents, and administrators. All CTE teachers must report student information into data server. Reporting requirements for Carl D. Perkins compliance include: student and teacher demographics, school organization, course enrollment, and academic as well as occupational performance.

The PRDE provided funds under Perkins to improve the quality of the occupational programs and to ensure that instruction is relevant to business and industry. Thus CTE schools requested the necessary equipment to enrich participating student's learning experiences. The CTE programs have been enhanced with up-to-date laboratory equipment for students to learn and practice in a real work scenarios. Training for teachers has been provided in the use of computer technology for classrooms applications, to ensure that competencies taught by each program are those required for a high-skill, high wage, and high demand occupation, according to industry requirements.

As for the postsecondary level, the Puerto Rico Technical Institute and its four (4) campuses have invested \$588,267 in purchasing computers and other technology equipment to establish new laboratories and update existing ones in the areas of: Information System, Mechanics, Nursing, Robotics, and Engineering Technology. Also, equipment has been acquired to provide for the infrastructure needed to support the implementation of the CIS which will provide the necessary information to comply with Carl D. Perkins reporting requirements by December, 2011. As stated before, annual performance indicators data for CAR 2010 was provided by the staff at the offices of student support services at the four (4) campuses.

A new Internet provider was contracted to strengthen the existing one. In addition, other databases such as EBSCO and Ocean Net were acquired to strengthen library resources in support to the teaching and learning process.

In addition, teachers are implementing new projects to integrate technology into the curriculum as well as strengthening existing technical programs. Twelve (12) professors are initiating efforts for the offering of online courses in the areas of: Mathematics, Nursing and Information Systems. It is expected that these offerings will be ready for implementation by August, 2011.

- Offering professional development programs, including providing comprehensive professional development (including initial teacher preparation) for career and technical education teachers, faculty, administrators, and career guidance and academic counselors at the secondary and postsecondary levels.

Secondary Level

A professional development plan was designed and implemented to include teachers from the following programs: the Family and Consumer Science Education, Health Science Education, Agriculture, Marketing Education, Business Administration and Industrial Education.

A total of seven hundred and twenty three (723) CTE teachers (698) and Occupational Coordinators (25) participated in thirteen-one day workshops on Program of Study. Other professional development activities conducted were: two-day workshop on renewable energy for agriculture teachers (80); four-day workshop on Economy and Finance for business administration teachers (8) and a two-day stock market investment workshop for business and marketing teachers (53). A total of nine hundred and ninety five (975) teachers from the Family, Career and Community Program participated in workshops conducted in the following topics: Parliamentary Law (200); Skills Assessment (700) and Preparation of Pastry products (75). In addition, three (3) CTE staff members attended a three-day Microsoft Institute.

Postsecondary Level

Professional development activities were conducted at the postsecondary level. Twenty (20) new teachers were offered a pre-service workshop on topics related to the Puerto Rico Technical Institute. Two (2) Technology Congress were held with concurrent sessions offered by industry representatives covering emerging technology topics. A total of one thousand two hundred

(1,200) participants and sixty (60) professors attended. Also, another workshop was offered to one hundred and fifty (150) students and fifty (50) professors in the topic of Learning Styles.

- Providing support for career and technical education programs that improve the academic and career and technical skills of students through the integration of academics with career and technical education.

Secondary Level

All student services at the school level are available to CTE students to include special projects, tutoring and other supplemental student services for students with low academic achievement, in order to strengthen academic skills in the basic academic disciplines.

PRDE Circular Letter #19-2006-2007 was revised by a thirty five (35) Committee Members, most of them CTE teachers (22). A special education teacher was also included. Its revision incorporated Program of Study in the clusters of Business Administration and Construction and Architecture. All secondary students, including career and technical students, are required to take the same numbers of academic credits that are required for high school graduation.

CTE programs have continued the curriculum revision in an ongoing basis, in order to ensure rigorous academic content and inclusion of the most up-to-date knowledge and technical skills. The integration of academic standards into each occupational program curriculum is required and offered to all students, including CTE students.

The new curricular documents prepared were designed and distributed by the Career and Technical Education Program to CTE schools and integrated to occupational offerings. Also, textbooks in different occupational areas were bought.

- **Education for Family & Consumer**— For the Pastry course the following textbooks were bought: “On Baking” and “Serve Safe”.
- **Industrial Education**-- Cosmetology; Barber and Hair Stylist; Small Engines Mechanics; Marine Engines Mechanics and Auto Collision Repair curriculum documents were revised.
- **Agriculture Education**-- Agribusiness and Floriculture curriculum documents are in the final revision phase, and the following courses will be subjected to revision: General Agriculture and Agrosience.
- **Health Occupations Education**-- Sterile Room Technician; Health Management Information System Assistant and Health Office Assistant curriculum revision was conducted.
- **Business Administration Program of Study** – For the Career Pathway of Business, Management and Administration, the following textbooks were purchased: -- Spread

Sheet/Data Base and Desktop Publishing, Office 2007, Principles of Supervision and Administration; Shorthand writing.

During academic year 2009-2010, the Puerto Rico Technical Institute and its four (4) campuses implemented fifteen (15) curricula that were revised during the previous academic year 2008-2009.

This curriculum revision process involved all ITPR stakeholders including teachers, technology coordinators, librarians, external evaluators, the advisory committee members of programs under revision as well as PRDE central level representatives. This revision considered industry needs, trends in the different fields under study, reports from the Puerto Rico State Approval Agency, recommendations from the Puerto Rico Council of Higher Education, and results from studies conducted in relation to occupations in high demand. It is well to note, that the Electric Engineering Technology was redirected to renewable energy to attend to needs in this present trend.

- Providing preparation for non-traditional fields in current and emerging professions, and other activities that expose students, including special populations, to high skill, high wage occupations, except that one-day or short-term workshops or conferences are not allowable.

Secondary Level

Besides, during academic year 2009-2010 seventy four (74) school counselors offered orientation and counseling services to two hundred eight thousand and eighty two (208,082) CTE students on a repetitive count. Of this amount, sixty eight thousand seven hundred and seventeen (68,717) which represents (30%) students received personal, academic and occupational sessions, either on an individual or group basis. As for the occupational sessions, counselors assisted CTE students through a career exploration process in order to foster their career decision. It is well to note, that two thousand eighty eight (2,088) special education students received these services. During academic year 2009-2010, the Secretary of Education approved the establishment of the Program of Study Office which is housed under the Assistant Secretary for Occupational and Technical Education. The Program of Study Office in coordination with the Counseling and Orientation Program under the Assistant Secretary for Student Services designed a comprehensive counseling program for the CTE secondary student population that will be implemented through the establishment of eight (8) Academic Information and Occupational Counseling Centers. These Centers will provide CTE students with a series of occupational awareness and exploration activities through a state of the art technology equipment that will develop the necessary skills that will assist CTE students in making academic, personal and occupational decisions.

In coordination with the Assistant Secretary for Student Services, counseling professionals at the educational regions were provided with training sessions and educational materials. They in turn, served as train of trainers to other counselors that conducted workshops for CTE secondary

students. Teachers were provided with strategies to increase non-traditional participation of CTE students.

PRDE has fostered student participation in CTE Programs, taking into consideration student skills and interests. It is committed to offer non-traditional occupational courses with the purpose of eliminating gender discrimination in CTE Programs. During 2009-2010, in order to promote gender equity in occupational schools, the Career and Technical Education Program upgraded equipment and acquired the educational materials for occupational courses offered in schools.

- Supporting partnerships among local educational agencies, institutions of higher education, adult education providers, and, as appropriate, other entities, such as employers, labor organizations, intermediaries, parents, and local partnerships, to enable students to achieve state academic standards, and career and technical skills or complete career and technical programs of study.

Partnerships with Institutions of Higher Education

A partnership was established with the University of Puerto Rico, Arecibo Campus, to provide courses to CTE students at all UPR campuses (11). This initiative offered CTE students access to other university life experiences which facilitated their decision to continue postsecondary studies. Programs of Study specifically in the Business Administration Area have promoted a seamless transition for CTE high school students to earn an associate degree or further their postsecondary education. These partnerships offered the opportunity to students at the secondary level to earn credits for courses at the postsecondary level.

Alliances Established by CTE Occupational Programs

Alliances have been established with **Educational Institutions** such as Sacred Heart University (Committee to define the Students' Profile for the 21st Century and the Alliance for the Economy and Finance); **Financial Sector** (Santander Bank, Alma Financial, Popular Bank, First Bank and Oriental Bank), **Professional Associations** (Marketing Association and Business Administration Teachers) **Industry Sector** (Industrial Education Council, Industry Association) and the PR Chamber of Commerce.

The Health Occupations Education Program established one hundred and ten (110) cooperative agreements. Approximately, one thousand one hundred (1,100) students conducted their internships at these health related facilities. These following are several of these institutions: Puerto Rico Cardiovascular Center; Dr. Pila Hospital; Dr. Tito Mattei Hospital; Manatí Medical Center; San Juan Bautista; Hospital; Dr. Sulsoni Hospital. Other health facilities were: Metropolitan Hospital; Perea Inc. Hospital; HIMA San Pablo Hospital; López Ambulance; General Castañer Hospital; Wal-Mart of Puerto Rico Pharmacies; Menonita General Hospital; Damas de Ponce Hospital and La Salud Pharmacy.

Also, PRDE established an alliance with the Puerto Rico Department of Agriculture (PRDA), for the Development of Youth as Entrepreneurs in Agriculture related business. Five (5) proposals were approved for a total of \$25,000 and its implementation will have a direct and indirect impact on one thousand two hundred (1,200) students at five (5) CTE schools.

Special Education: Participation in Inter-Agency Committees

The Assistant Secretary for Occupational and Technical Education represents the Secretary for the PR Department of Education on the Advisory Board of the Administration on Vocational Rehabilitation. PRDE is committed to direct efforts to provide a smooth transition of our special education students to further postsecondary studies or to enter the workplace.

PRDE initiated the implementation of two Programs of Study: one in Business Administration and the other in the Construction and Architecture Career Clusters. The following were activities in accordance to the Action Plan established for the Implementation of Program of Study. The following activities were conducted:

- (1) The establishment of the program of Study Office by the PRDE Secretary of Education.
- (2) Orientation sessions on Business Administration Career Cluster were offered to 698 CTE teachers. Of this total, 325 were Business Administration teachers while 170 were from the Construction and Architecture career clusters: Transportation (53), Human Services (49), Hospitality and Tourism (47), Health Occupations (33), Agriculture (14) and Arts and Communications (7). Also, a total of twenty five (25) Occupational Coordinators participated.
- (3) Four (4) meetings for curriculum revision and alignment of content and skills were conducted for Business Administration teachers.
- (4) Two (2) meetings were conducted to continue with the ongoing curriculum revision and alignment of content and skills in the Business Administration Career Cluster between secondary and postsecondary levels. Also, at the request of the Secretary of Education, a meeting was conducted with the Executive Director of the Puerto Rico Council on Higher Education which is the Agency responsible for licensing the operation of postsecondary institutions in Puerto Rico. During this meeting, efforts to establish an articulation agreement with the postsecondary level (PR Technological Institute and its four (4) campuses) was discussed.
- (5) Support services to students in participating CTE schools were offered to include orientation and counseling activities such as career awareness and exploration activities. Efforts to this regard are reflected with the establishment of eight (8) Centers for Academic Information and Occupational Counseling. These Centers cater to CTE students starting on ninth grade. This initiative is a joint venture between this Assistant Secretary for Occupational and Technical Education and the Students Service Area.

(6) During school year 2010-2011, eight (8) school counselors will be appointed to attend to the CTE student population. An Individual Plan of Studies was designed for students participating in the Business Administration and Construction and Architecture Program of Study. Currently, the contents of this plan are being programmed to be accessed on line through the PRDE website.

(7) Statistics from CTE students that participated in taking university courses through an articulation program with UPR Arecibo Campus and other UPR campuses reflected that 237 students (single count) participated in this initiative. Of these students, 169 obtained A's and B's grades on courses taken representing a 69%. Data gathered from the tracking system efforts, revealed that 160 students (68%) continued studies at the postsecondary level.

Postsecondary level

During academic year 2009-10, the Puerto Rico Technology Institute (PRTI) established two new alliances with universities in Puerto Rico. These were:

1. A collaborative agreement with the Metropolitan University in order that graduates of the Instrumentation Associate Degree at PRTI can pursue a Bachelors degree at such Institution.
2. An alliance with the Polytechnic University and the University of Puerto Rico, Aguadilla campus to offer a Technology Engineering Program.

Staff from the Technical Program and the Program of Study Office at the secondary level conducted several meetings to establish the admissions criteria for CTE students participating in articulation agreement with the Puerto Rico Technology Institute.

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The Career and Technical Education Program benefited one thousand four hundred ninety one (1,491) participants with forty-four (44) occupational courses, offered by CTE teachers at twenty (20) Correctional Institutions. These courses were offered in order to improve their quality of life and help them develop occupational skills that will facilitate their integration to the workforce once they re-enter the community. Some of the courses that were offered in these institutions included: automotive collision repair, auto mechanics, welding, electricity, cabinet and furniture making, tailoring, dressmaking, bakery, florist, graphic art, horticulture and computers, among others. Four hundred and forty six (446) certificates were granted to the participants that completed these courses. Educational materials and equipment were purchased for the amount of twenty-three thousand five hundred thirty five dollars (\$23,535.). Also, six (6) teachers from the Family, Career and Consumer Program offered the Parenting Skills Course to five hundred seventy six (576) juvenile delinquents at six (6) Juvenile Institutions under the Puerto Rico Department of Correction.

- Providing support for programs for special populations that lead to high skill, high wage and high demand occupations

According to data gathered from the Student Information System, regarding students from special population groups that were enrolled in the Business Administration Program of Study, grades 10-11, the following Table reflects the numbers and the percentages of this population by categories served.

**Special Population Categories by Number of Participants, Grades 10-11 in the Business Administration Program of Study
2009-2010**

SPECIAL POPULATIONS STUDENT	Participant No.	Percent (%)
Disability Status	609	7.93%
Economically Disadvantaged	5,490	71.46%
Single parent	27	0.35%
Displaced homemaker	---	0.00%
Limited English Proficient	13	0.17%
Nontraditional Enrollees	1,190	15.49%

Also, CTE teachers offered a total of twenty one (21) different courses at six (6) participating special education institutions.

Courses Offered by CTE Teachers at Special Education Institutions

Courses Offered	
Food Preparation	Auto Mechanic
Industrial Sewing	Culinary Arts
Welding	Pastry
Construction/Carpentry	Cosmetology
Tapestry	Marketing
Cabinet-making	Building Maintenance
Horticulture	Business Education
Technology Education	Technical Education
Home Economics	Auto Collision
Electricity	Technician
Plumbing	Sewing

- ***Psychological Services***

CTE students received psychological services by referrals from the Social Worker and Counselors at their schools. These services were offered at seven (7) participating schools in the seven (7) Educational Regions benefiting a total of two hundred and thirty (230) students in double counting at a cost of \$20,625. Services offered were

interventions with students on an individual basis, parents, group of parents as well as students, and students in crises. Also family therapy case discussions and technical assistance for eligible recipients were conducted.

- Offering Technical Assistance to Eligible Recipients.

Public Policy on Non-Discrimination

The Civil Rights Component has conducted thirteen (13) on site visits to subrecipients in order to verify that schools where occupational courses were offered complied with Civil Rights Law. During these visits, technical assistance was offered as needed, on the appropriate implementation of the PRDE public policy on non-discrimination. Also a voluntary compliance plan was requested to those schools that reflect non-compliance.

b. Permissible Activities Include:

- Improving Career Guidance and Academic Counseling Programs.

Secondary Level

Besides, during academic year 2009-2010 seventy four (74) school counselors offered orientation and counseling services to two hundred eight thousand and eighty two (208,082) CTE students on a repetitive count. Of this amount, sixty eight thousand seven hundred and seventeen (30%) students received personal, academic and occupational sessions, either on an individual or group basis. As for the occupational sessions, counselors assisted CTE students through a career exploration process in order to foster their career decision. It is well to note, that two thousand eighty eight (2,088) special education students received these services. During academic year 2009-2010, the Secretary of Education approved the establishment of the Program of Study Office which is housed under the Assistant Secretary for Occupational and Technical Education. The Program of Study Office in coordination with the Counseling and Orientation Program under the Assistant Secretary for Student Services designed a comprehensive counseling program for the CTE secondary student population that will be implemented through the establishment of eight (8) Academic and Occupational Information Centers. During school year 2010-2011, eight (8) occupational counselors will be appointed at each of these centers to service CTE students.

In coordination with the Assistant Secretary for Student Services, counseling professionals at the educational regions were provided with training sessions and educational materials. They in turn, served as train of trainers to other counselors that conducted workshops for CTE secondary students. Teachers were provided with strategies to increase non-traditional participation of CTE students.

PRDE has fostered student participation in CTE Programs, taking into consideration student skills and interests. It is committed to offer non-traditional occupational courses with the purpose of eliminating gender discrimination in CTE Programs. During 2009-2010, in order to promote gender equity in occupational schools, the Career and Technical Education Program upgraded equipment and acquired the educational materials for occupational courses offered in schools.

Postsecondary Level

The Occupational Coordinators (5) offered services to approximately eight hundred forty six (846) postsecondary students during 2009-2010, among the four (4) campuses. The workshops they carried out were related to job search, interview and job retention; curriculum vitae preparation; teamwork and employment security. These coordinators managed two hundred (200) requests for reasonable accommodation from students with special needs.

- Supporting career and technical student organizations.

Student organizations from the six (6) Career and Technical Education Programs have a total enrollment of eighteen thousands five hundred seventy two (18,572) students (See Table below).

Enrollment of Student Organizations

Student Organization	Enrollment
Future Farmers of America (FFA)	2,167
Future Business Leaders of America (FBLA)	8,222
Family, Leader, Careers and Community of America (FLCCA)	2,220
Marketing Students Association	2,280
Health Occupations Students Association	835
Skills USA (VICA)	2,848
TOTAL	18,572

They are well structured through the regional chapters of each organization at the same PRDE seven (7) educational regions. Each student organization appoints a State Board of Directors that oversees the seven (7) regional boards. Each Board designs the Annual Activity Plan that is implemented islandwide through the Local Chapters. All activities conducted to include workshops, conferences, seminars, monthly meetings and community work are co-curricular in nature and an integral part of the CTE program. Teacher advisors and coordinators of local and regional chapters serve as mentors and oversee the effective implementation of the Annual Activity Plan. They offer assistance and follow up so that all activities are conducted and that student members fully participate.

Reports from these associations reflect high attendance of students and their teacher advisors and coordinators to all activities that were held. Data to this regards is presented in the following table:

**Number of Participants in Activities conducted by Student Organizations
during 2009-2010**

Student Organization	Number of Students	Number of Teachers Advisors, and Coordinators	Number of Activities
Family, Career and Consumer	1,455	55	13
Future Business Leaders of America (FBLA)	3,665	375	20
Marketing Students Association	2,645	147	12
Future Farmes of America	1,662	71	11
Skills USA (VICA)	3,340	320	16
Health Occupations Student Association	1,905	32	10
TOTAL	*14,672	*1,000	82

**Student and teacher advisors attendance on a repetitive count.*

These organizations are affiliated to their respective national associations in the mainland. During 2009-2010, each organization carried out competitive skills events at the regional and state level in the selected occupational area. Students that obtained first place in these competitions, are the ones allowed to participate at the national level and such activity is regarded as an integral part of the CTE instructional program. This year a total of one hundred sixty three (163) students from the six (6) CTE Programs attended such competitions. Student organizations have proved to be an effective retention strategy as well as the mechanism to support future graduates in all CTE Programs.

To this regards, during the summer 2010, members of the Family, Careers and Consumer student Organization that attended the national conference held at Chicago, Illinois won eighteen (18) gold medals, eleven (11) silver medals and one (1) bronze medal for a total of thirty (30) projects in competencies such as “Star Events”, “Be Part of it”; Financial Fitness”; “Stop Violence”, “Leaders at Work” and “Alumni”, among others. Another example of awards granted at the national level, was to the Future Business Leaders of America (FBLA) that obtained the following recognitions: “Who is Who in FBLA”; “Outstanding Local Advisor”; “Adviser Hall of Fame”; “FBLA #3 Top Fundraiser State” (for March of Dimes); “Largest FBLA State Chapter” and “Market Place”.

PRDE has established as a requirement for graduation that each student carryout a total of forty (40) hours of community work. These projects must be coordinated through the Family, Career and Community Program. In the case of CTE students, these are motivated to engage in projects directly related to: tutoring, recycling, natural resources and construction projects (plumbing electricity and welding). During year 2009-2010, a total of forty five thousand two hundred (45,200) students participated in community work projects benefiting a total of one hundred eighty two thousand six hundred eighty two (182,682) individuals.

- Supporting career and technical education programs that offer experience in, and understanding of, all aspects of an industry for which students are preparing to enter.

CTE Occupational Program provides students with a variety of work based learning experiences so they can engage in real work scenarios. Approximately three hundred (300) industries, banks and commerce offered three thousand nine hundred forty five (3,945) CTE students with work-based learning opportunities. Each CTE Program has an Advisory Council with members that offer assistance in curriculum revision to respond to industry needs. Council members are continuously in the process of integrating resources and strategies, to strengthen CTE curriculum.

Also as a result of the active participation of these members, the following achievements have been attained:

- Offerings of industry internships and other work-based learning opportunities for teachers and students in real work scenarios.
- Development and implementation of curricula that respond to the present needs of industry, commerce and banking sectors.
- Coaching to Skills USA student members so they can compete successfully at the state and national events.

- Supporting family and consumer sciences programs.

The Family, Career and Consumer Program was offered at five hundred and forty two (542) schools with seven hundred and thirty eight (738) high qualify teachers (HQT). The Program provided different educational activities in order to promote lifelong learning experiences to a total of three thousand seven hundred (3,700) students that are enrolled in the Leaders of Family, Career and Community Student Organization.

Also, this Program offered services to adults in a variety of courses, in twenty (20) public high schools and centers located at correctional institutions. A total of four thousand four (4,004) adults benefited from such services of which eighty eight percent (88%) were females and twenty two percent (22%) males. As a result, after taking these courses, many participants are able to initiate their own business and attain financial independence.

- Providing activities to support entrepreneurship education and training.

The curriculum core for all CTE programs include a course in Entrepreneurship education in order to develop the necessary knowledge and skills for students interested in self-employment in their chosen occupation upon graduation. Also, this course is offered at three (3) correctional

institutions so that offenders develop the necessary skills that will allowed them to be self employed in their selected occupation, once they re-enter the community.

As stated before, the Family, Career and Community program offered services to four thousand four (4,004) adults in variety of courses by which participants were able to start their own business and attain financial independence.

- Supporting occupational and employment information resources.

At the secondary level, students at participating CTE schools were offered career awareness and exploration activities by a total of seventy four (74) professional counselors. Through these activities CTE students are able to make appropriate occupational choices.

A total of five (5) meetings were conducted with industry representatives in an effort to identify the occupations in high demand and credentials needed and supported by industry. As for the postsecondary level, five (5) Industry Coordinators offer postsecondary students job seeking activities related to job interviews and job retention as well as how to prepare a curriculum vitae. They also assessed job opportunities and referred graduate students for placement.

- Developing or enhancing data systems to collect and analyze data on secondary and postsecondary academic and employment outcomes.

The Student Information System, currently in place for the secondary level, is always closely monitored in order to guarantee data quality and validity. At the end of each semester, all schools will receive their performance level in relation to student achievement, placement, graduation rate and state certification test's performance. Data is also gathered on non-traditional enrollment graduate students' follow-up in relation to: employment, military services and continuing postsecondary education.

As for the postsecondary level, PRDE hired the programming services for the campus information system: Until it is fully operational by FY 2010-2011 data for all performance indicators, and statistics is being gathered and analyzed by staff members from the student support offices.

1. Progress in Developing and Implementing Technical Skills Assessments

Sec. 113 (b) of *Perkins IV* describes the core indicators of performance for CTE students for which each state is required to gather data and report annually to the Department. Among the core indicators are: student attainment of career and technical skill proficiencies, including student achievement on technical assessments aligned with industry-recognized standards, if available and appropriate. While the Department recognizes that a state may not have technical skill assessments aligned with industry-recognized standards in every career and technical education program area and for every career and technical education student, the Department asked each state to identify, in Part A, Sec. VI (Accountability and Evaluation) of its new *Perkins IV* State Plan:

- the program areas for which the state had technical skill assessments;
- the estimated percentage of students who would be reported in the state's calculation of career and technical education concentrators who took assessments tests; and
- the state's plan and timeframe for increasing the coverage of programs and students reported in this indicator to cover all career and technical education concentrators and all program areas in the future.

The following is an update of PRDE progress and plan for implementing technical skill assessment with respect to the three items mentioned above.

The PRDE considers the most valid form of technical skill assessment to be a comprehensive and cumulative assessment of technical skill attainment, aligned to industry standards course and program content. These are measured by different forms of assessment to include: tests; papers; projects; demonstrations of competency, critical thinking, and problem solving. Other evaluation activities are conducted by the industry sector to ensure that CTE students have mastered the necessary academic and career and technical skills before they move into more advanced courses or complete their postsecondary education.

As a result, PRDE has been working to develop or adopt technical skill assessments for CTE courses based on industry standards as determined from alignment with the CTE model curriculum standards and framework and taking into consideration industry recommendations. The emerging industry-based technical skill assessment will be used as reference to identify crossover between industry practical needs and PRDE programmatic goals to determine the skills and knowledge upon which the test for each program area will be based.

Parameters were established to ensure that the development of these technical skill tests will comply with the purpose of certifying the CTE student for industry recognition. Last year, technical skill assessment were developed and administered to CTE students participating in the Business Administration Program. The participation of industry sector in evaluating our CTE students was crucial to ensure the recognition of the business sector as well-prepared potential employees. The Business Administration Program was submitted to the requirement of Technical Skill Assessment Test in order to ensure student attainment of career and technical proficiencies which in turn were aligned with industry-recognized standards. The performance test was administered to students that have completed their first year of their Program of Study.

2. Implementation of State Program Improvement Plan 2010-2011

In order to comply with Sec. 113(b)(3) of Perkins IV, PRDE developed and implemented a program improvement plan with special attention to those indicators that were not attained during school year 2008-2009. Comparison between the Negotiated FAUL and the Actual Results revealed that we accomplished the Core Indicators in the Secondary Level: 2S1, 3S1, 4S1, 5S1, 6S1, and 6S2, except for 1S1 and 1S2. Results for the Postsecondary level, when comparing the Negotiated FAUL and the Actual Results of the Core Indicators resulted in that Core Indicators: 1P1, 2P1, 3P1, 4P1, 5P1, and 5P2 were attained.

During 2009-2010, CTE secondary schools that failed to meet Core Indicators 1S1 and 1S2 the previous year, were identified. Efforts were conducted through the implementation of improvement plans. Activities such as after school tutoring and special academic projects were conducted. Data for the Core Indicators for school year 2009-2010, revealed that PRDE failed to attain the same Core Indicators: 1S1 and 1S2. These schools have been already identified.

PRDE will present the following plan of activities (See Table) in an effort to improve to achieve the core indicators 1S1 and 1S2 in the next academic year 2010-11. We will be coordinating with the Assistant Secretary for Academic Affairs to address those indicators in one hundred twenty nine (129) CTE schools that have already been identified. These activities are mandatory for schools to achieve their core indicators, which in term impact our CTE students that are enrolled in these schools.

PRDE State Program Improvement Plan 2010-2011

Action/Activity	Responsible	Timeline
Identify the schools that in previous year registered low core indicators and corresponding programs.	State Director CTE	November 2010
Coordinate efforts to identify categories of all students and CTE students	State Director, CTE Programs and Academic Affairs	December 2010
Identify the disaggregated categories of students and those to be impacted.	PRDE Central Planning Office	January 2011
Identify the strategies to be conducted for each program within the school.	State Director, local school director and Planning Office	January 2011
Review and revise results and establish new strategies for improvement.	State Director, USATAD Office, local school director and Planning Office	March 2011
Puerto Rico Achievement Test Administration	Central Planning and Evaluation Office	April 2011

3. Implementation of Local Program Improvement Plan

Each School Council reviews its data in comparison to the national standards and individual scores to ensure competence and academic achievements. Each school must assess their performance data to document the degree by which Perkins funds improved CTE programs. The local plan from each school must reflect how Basic Grant funds provided for continuous improvement. The outcome of this evaluation will provide additional information that will be used in the design of strategies for the next academic year. If the programs at each school do not meet at least ninety percent (90%) of the established standards, then they are required to submit an improvement plan and are subjected to monitoring visits.

The PRDE's Career and Technical Education Program has a monitoring assessment cycle in place which consist of a self study and annual progress report in accordance to the activities submitted as part of the Local Plan. Once a school is placed under an improvement plan, monitoring activities are conducted including on-site visits to ensure that the corrective action plan is implemented effectively. Besides the occupational plan, each school establishes their own academic improvement plan accordingly which is implemented on an integrated basis with the occupational one. Each CTE school design and implement the assessment plan to determine how their special populations were served. The Occupational Planning Office is responsible for overseeing that these activities are conducted.

The Occupational Planning Office has established an evaluation method that establishes the criteria used to approve the Local School Plans in compliance with Sec. 122 (c)(1)(F). A two-day training was conducted to offer orientation on Local Plan Guidelines to one hundred and forty (140) CTE School Directors. Specifically, requirements established for the request of Perkins funds were emphasized particularly to new CTE applicants as well as other CTE Directors.