WYOMING CAREER TECHNICAL EDUCATION
2005-2006
Section B
Narrative Report

Executive Summary

Wyoming has a population of approximately 450,000 people and is geographically rural. The state population age continues to increase where the student population continues to decline. Major industries in the state include tourism, coal, methane and agricultural production. Coal and methane production are considered to be the primary source of state income. Education is a high priority in the state, as evidenced by the support of the legislature, school boards and the Wyoming Department of Education (WDE). The Wyoming Career Technical Assessment (WyCTA) is well established for all core indicators and the data demonstrates at or above proficiencies in all areas of program performance. Career technical and vocational leadership is strong in Wyoming with a great commitment to provide opportunities for all Wyoming students.

I. State Administration

A. Sole State Agency and Governance Structure

The designated eligible agency responsible for the administration of the Carl D. Perkins Vocational and Technical Education Act of 1998 (Perkins III) is the WDE. The Wyoming State Board of Education, which also serves as the State Board of Vocational Education, in concert with the State Superintendent of Public Instruction ensures that all students be provided the opportunity to participate in career technical programs in preparation for careers in order to become productive citizens. This is further reinforced through the State's Hathaway Scholarship program having as one of its requirements that each student follow a career plan of study based on the sixteen career clusters identified by the State. Also, The Board and the WDE ensure that all students have the opportunity to master an ambitious common core of knowledge and skills.

B. Organization of Vocational and Technical Education Programs

The WDE State Director of Career Technical Education (CTE) has oversight of the career technical education staff. The CTE staff including the Director consists of a supervisor, three consultants and one and a half administrative specialists. Also, the Director is the leader for the Distance Education Section, Agency Data Section, and Network Services Section. (chart page 18)

II. State Leadership Activities

Leadership funds are competitively awarded to meet the eight required and twelve permissible uses stated by federal law. The awards are monitored

through onsite visits, regional trainings and annual reports that document required activities, to include special population activities by program area. Also, all grant activities are required to report on data compiled from the electronic WyCTA of 10th grade vocational students and 11th and 12th grade vocational concentrators, as well as post-secondary concentrators, reported within the 16 career clusters to determine programmatic status. Data was collected on 9,218 secondary and 4,798 postsecondary CTE students during this reporting period. A complete disaggregation as required for Perkins also is reported. Local education agencies (LEAs) and institutions use the WyCTA assessment data for school and program improvement as well as to evaluate activities.

A. Required Uses of Funds

Grant recipients during 2005-2006 have increased professional development in-service to improve teacher quality, provided and improved services to grow program activities, and provided workshops and pre-service training for both career technical and academic teachers. Integration of academic and CTE programs continue to be encouraged and integration is being better received by academia. Partnerships are continuously being developed as CTE is gaining additional support from the state legislature and small business. Wyoming has received a statewide Gear Up grant which is providing more CTE opportunities for the students of Wyoming.

- Assessment

The WyCTA is a proven state developed assessment that reports comprehensive student and program performance. This data is used to monitor the progress of both student and programmatic activities in response to state negotiated targets for requirements of the Perkins Act. The state target goals are used to identify areas of focus for program and school improvement. The results are electronically published annually in "The Carl Perkins WyCTA State Report-Secondary Schools" and "The Carl Perkins WyCTA State Report-Post-Secondary Schools". The reports are available on the WDE website www.K12.wy.us for public view. These reports contain disaggregated results for special populations, as well as, program evaluation data. The WyCTA disaggregates data into categories of individuals with disabilities, economically disadvantaged, nontraditional students, limited English proficiency, single parents, displaced homemakers and by other educational barriers. State performance indicators, technology preparation and other pertinent data are collected to access activity performance. For this reporting period, all secondary targets for negotiated indicators were met, and only one post secondary target was not.

- Technology Expansion

The WDE has demonstrated great strides in technology expansion. The Director has lead the Distance Education Section resulting in contained increased usage of the Wyoming Equality Network video. This is a two-way interactive video system which provided a 5.3% increase in educational usage from 27,436 hours in the 2004-2005 school-year to 28,878 hours of usage in 2005–2006. This increase is due to an evolving awareness of the educational possibilities of this

educational venue. An increase of sites providing distance education to both secondary and post secondary institutions is enhancing the educational opportunities for all students within the state. Professional development is also an important use for educator in-services, workshops and meetings. The Wyoming Education Gateway continues to provide additional high tech educational resources to educators throughout the state by providing a medium for educators to share curriculum and electronic communication. This online single port of entry resource is fast becoming a valuable asset to Wyoming classroom teacher(s), parents and students. New No Child Left Behind Title IID grants and a new technology manager of infrastructure data-net will facilitate newer and improved technology for continued expansion in Wyoming.

- Professional Development

In accordance with The Wyoming State Board Accreditation Rules and Regulations, schools must provide professional development programs that support standards deployment for school improvement. State Career/Vocational Standards professional development must be planned, implemented and in direct support of CTE improvement goals. A systemic program of academic and career technical professional development must be in place to enhance student learning. LEA curricula are aligned with the state Career/Vocational standards and professional development has been provided to promote continuous improvement. Integration of CTE programs with academics is continuously being developed and deployed throughout the state. The WDE supports this development by providing staff development opportunities to administrators, teachers, counselors and partners through in-service conferences such as the semi-annual School Improvement Conference and regional workshops. The Wyoming Association of Career Technical Education (WACTE) is a state CTE educational association that promotes effective dissemination of professional development through the annual state conference. Annually this conference provides best practices; new and innovative teaching techniques; use of local and state disseminated technology; and sharing of effective teaching strategies with conference participants. One hundred and ten (110) secondary and postsecondary Carl Perkins program directors representing school districts and postsecondary institutions from across the state attended professional training. The secondary members' objectives were to discuss and receive input for the secondary indicator model, to discuss approaches for using data to affect instruction and program planning, and group sharing strategies for embedding reading, writing and math into the CTE curriculum. The post secondary representatives focused on the post secondary indicator model and approaches for using data to affect instruction and program planning at the post secondary level. Of special note is the increase of secondary students receiving a proficiency credential. Approximately 166 or 6.83% of students reported on the WyCTA either received a credential or had completed the requirements but had not yet received their credential this reporting period. This is a direct outcome of the state's focus to train educators to credential certifying in their content area.

- Strengthen Academic and Career Technical Programs

With one exception Wyoming school districts and community colleges are members of the North Central Association (NCA). The WDE School Improvement Unit provides guidance and assistance to districts through this improvement process, as well as providing school improvement resources to ensure program and student success. The process is an integrated, comprehensive evaluation tool built around state and federal policy and regulation. The process enhances district efforts in developing school improvement goals for student success. LEAs must document Perkins-funded programs in their school improvement profiling and planning. They are required to describe how their activities will support instructional improvement, specifically aimed at reading, writing and math, or specific district academic school improvement goals. Every district must utilize WyCTA results which are found in that school's profile and are considered in setting goals for improvement. All grant recipients must provide student-learning academic and CTE results as described in their application. The integration of academic and CTE program success as evidenced by assessment, monitoring and NCA have fulfilled the intent of Perkins goals and requirements.

In addition to strengthening academic and career technical programs, the WDE supports the deployment of contextual programs, such as Tech Prep, which provide not only for career employment but also CTE transitions from school to work, and from high school to community college and beyond. Accommodations and strategies are available and are individually designed to assist students to be successful in their educational career, as well as becoming successful as an employee in high skill, high wage jobs.

- Nontraditional

Competitive Perkins funds were awarded to three community colleges and the University of Wyoming for the 2005-2006 school year in the nontraditional category. As indicated by need, the overall goal for nontraditional CTE was to increase the gender equity in CTE programs and provide students with financial, academic and social support to be successful in their majors. In addition, career guidance, counseling, case management, supplemental services and employability enhancements were provided. Each community college also sponsored activities throughout the year to help students maximize their chances of being successful. Examples of these activities are job readiness workshops, job shadowing and internship experiences, diversity workplace presentations, proactive mentoring, job placement, job fairs along with career and employer advisement.

- Partnership Support

The WDE considers the school districts and community colleges as equal partners in the educational process of Wyoming's students. Counting among its members CTE teachers, administrators and counselors WACTE is a professional organization which provides workshops, training and an annual conference. The CTE staff maintains membership in all of the state associations, as well as, ex-officio members on the board and committees. The Wyoming Department of Workforce Services(DWS) is a strong partner in new career technical developments at the state level such as the Career Cluster

initiative and supplementing career counselor activities at all high schools throughout the state. The Wyoming Community College Commission (WCCC) is now working closely with the WDE to develop stronger ties with the community colleges in developing appropriate data elements for reporting purposes as well as assisting with upcoming legislation for student scholarships.

The WCCC and the DWS as working partners are committed to providing both secondary and post secondary CTE opportunities to all students. Other partners actively involved with the WDE are the Wyoming Board of Cooperative Educational Services (BOCES), Wyoming Contractors Association, and Small Business Administration are vital partners in continuous improvement of CTE. Because of the relationships developed between these partners, the WDE is in a more positive position to support and provide quality CTE to students at many levels throughout the state.

An outstanding example of cooperation and partnering amongst agencies in Wyoming career education is the Wyoming Career Education Junior High and High School Planning Guides that have been developed as a combined effort of the Wyoming Department of Education, the University of Wyoming, Community College System members, the Wyoming Business Council, DWS and the Wyoming Hathaway Scholarship Program. These guides, as well as the Career Cluster Guides provide parents, students and business community members with an in-depth look at careers in Wyoming. In addition, the guides provide a pathway for students to follow as they develop an education plan to meet their individual needs thus providing the state with a well prepared work force.

- Corrections/Students with Disabilities

The Wheels and Sprockets Apprenticeship Training Drafting (WASAP) grant is a first year project located at the Cathedral Home for Children in Laramie. This grant provided funding to purchase laptop computers which allowed incorporation into the curriculum computer skills necessary to vocational education. Specifically this is an introductory computer class that teaches students how to navigate Microsoft Word, Excel, Outlook and Publisher. Basic skills learned allowed students to create basic work documents, spreadsheets, utilize email for employment purposes and create marketing materials for any industry. Acquisition of these skills allows students to compete for jobs in a variety of vocational areas such as auto parts clerk, auto parts repair, computer operator, data entry, medical assistant, pharmacy technician, etc.

- Special Populations

Special population assessment data is collected on the WyCTA and reported in the following categories: economically disadvantaged, disability, single parent, limited English proficiency, nontraditional, other educational barriers, tech prep and displaced homemaker categories. This data is reported from both secondary and post secondary institutions. The composition of these subpopulations has remained stable from previous years' reporting data with the exception of tech prep, which has had a steady annual increase. Information reported also identifies special populations in career technical course sequences and career technical certificate and degree programs. Each subgroup is monitored for

progress along with overall career technical results. A variety of agencies such as the Governor's Council for Developmental Disabilities, Montgomery Trust Fund for the Blind, Assertive Technology Centrum, Rehabilitation Enterprises of Northeastern Wyoming (RENEW), all seven Wyoming Community Colleges, and the WDE are entities preparing students with disabilities for future attendance at higher education or employment.

B. Permissible activities

During the funding year 2005-2006, no permissive activities were funded.

III. Distribution of Funds and Local Plan for Vocational and Technical Education Programs

The eligible recipients include 80 high schools in Wyoming's 48 school districts, a Bureau of Indian Affairs school, a charter high school, seven community colleges, 12 institutions and 10 Tech Prep consortiums.

IV. Accountability

A. State's Overall Performance Results and Program Improvement Strategies

Overall, the performance of Wyoming career technical students on the federal indicators is improving each year. In the area of academic attainment, statistical tests showed no significant difference between career technical concentrators and non-career technical students on the composite Proficiency Assessments for Wyoming Students (PAWS) score. However, there has been a steady increase for the past 3 years in the percent of career technical concentrators who are proficient.

In the area of career technical skills proficiency, results showed that 84.12% of reported seniors were proficient in at least 4 of the 6 WyCTA content areas (that is the Total WyCTA Scale). Senior vocational concentrators were most proficient in the areas of Employability (88%) and Math (87%) in 2005-2006. The lowest and highest areas of proficiency were only differentiated by 4%, indicating that across all areas, proficiency levels were fairly consistent. In addition, the sub skill that most 2005-2006 vocational concentrators were proficient in was Internet Searches (94%) under the Technology content area.

Across the past three years, results have been fairly stable. There were decreases (by only 1% to 2%) in the areas of Communication, Math, Affective/Thinking and Employability. There were no changes in the areas of Technology and Pre-employment. Analysis by subgroups showed that the percentage of students proficient on the total WyCTA was higher than the previous years for all subgroups, except females, whites, single parents, students with other educational barriers and students classified as "regular". This indicates that efforts should be made to meet the career technical needs of these students, such as increased outreach and training as well as professional development on how to better meet the needs of these populations. Data

instruments will be continuously improved to focus on core indicators indicating improvement.

The performance levels negotiated for the 2005-2006 year were exceeded in 13 of 14 indicators for both secondary and postsecondary levels. The Indicator not meeting its target was 4P2-Completion Non-Traditional. This indicator is under review for its measurement definition and will be receiving additional attention at the program level.

The target of 45.49% for indicator 1S1 Academic Attainment, the percent of CTE concentrators proficient on PAWS was exceeded with results of 61.41%. CTE concentrators scored higher in math and within 2.1% percentage points in reading and 2.7 percentage points a percent of non-CTE students overall on the PAWS, the state academic assessment for this reporting period. Indicator 1S2 Skill Proficiencies target was 73.77%. The CTE concentrators proficient or advanced in at least four of the seven assessment content areas, was 84.12%, which exceeded the target. For 3S1 the percent of completers who were followed up and placed in employment, post secondary, training, education or the military, an overall placement of 96.68% exceeded the target of 86.30%. The 2S2 Diploma & Credential target was 5.12% and was exceeded by 6.83%. The 3S1 indicator for Placement target, 86.30%, was exceeded by results of 96.68%. In Nontraditional Secondary indicators 4S1 and 4S2 participants and completers, targets of 19.84% and 22.19% were exceeded by 28.02% and 24.64% respectively. The use of Classification of Instructional Programs (CIP) codes instead of career cluster data has demonstrated greater accuracy in alignment of these indicators.

Post secondary Academic Attainment 1P1, Skill Proficiencies 1P2, Completion 2P1, Placement 3P1, Retention 3P2, and Nontraditional Participation 4P1 exceeded target levels. Only the Completion Non-traditional 4P2 did not meet its target. The Academic Attainment target was 95% and results reported were 97.79%. The Skill Proficiencies target was 56.43% and results were 73.64%. The Completion target of 56.79% was exceeded with 57.94%. The Placement target of 85.63% was exceeded by 97.94%, the Retention target of 79.53% was exceeded by 98.68%, Nontraditional Participation target was 14.87% and the reported results were 21.13%. The Nontraditional Completion target was 15.59% and results were 14.22%.

As indicated above, only students in Core Indicator 4P2 did not meet the established targets for 2005 – 2006. 4P2 is the percent of students in under-represented gender groups who completed a nontraditional program in the reporting year. This indicator will be addressed with the post secondary institutions during the development of the new state plan during the spring of 2007. Efforts will be focused on developing strategies to ensure improvement in this population of concentrators.

While Tech Prep participation increased by 5%, Career Technical Student Organization (CTSO) participation decreased by 1% between 2005-2006 and 2004-2005. Examination of Total WyCTA proficiency by Tech Prep and CTSO participation showed that Total WyCTA proficiency for those who participated in

a Tech Prep program was 3% lower than last year and proficiency levels for CTSO participants was 2% lower. In general, Tech Prep and CTSO participants have outperformed non-Tech Prep and non-CTSO participants over the past three years.

While CTE students participating in a Tech Prep program tend to perform slightly higher than CTE students not participating in such a program, this difference is small and not statistically significant. A slightly higher proportion of students participating in tech prep programs (98.4%) go on to some type of advanced placement as compared to CTE students not participating in a tech prep program (95.7%). Overall, placement is very high across both subgroups. The proportion of Tech Prep students placed in related employment was higher in 2005-2006 compared to students not in Tech Prep. However, somewhat surprisingly, participation in Tech Prep does not seem to increase the likelihood that students would go on to higher education.

B. State's Performance Results for Special Populations and Program Improvement Strategies

It is important to keep in mind that the overall population of Wyoming is small and fairly homogeneous (particularly in terms of ethnicity) relative to other, larger states*. This means that there is a smaller proportion of vocational students and concentrators, and even smaller numbers within special populations as compared to what would be found in most other states. For example, for 1S2, the number of 12th grade vocational concentrators with disabilities was only 135 and of these students 70 were proficient, producing a 51.85% proficiency rate. Moreover, in the populations of displaced homemakers, other educational barriers and limited English proficiency, the total number of students in these special populations are even smaller (n=3, 50, and 27 respectively). For ethnicity, the number of 12th grade vocational concentrators is less than 30 for most categories, with the exception of Whites (2063) and Hispanics (146). What this means is that the proficiency rates are unstable amongst most of the special populations and ethnic categories with small sample sizes. That is, the addition of a few students can change the proficiency level dramatically (e.g., adding one proficient displaced homemaker increases their proficiency rate from 33.3 to 50.0). Therefore, when dealing with such small numbers and not a randomly selected population, it is not surprising to obtain divergent success rates.

*The 2000 U.S. Census data ranked Wyoming as the least populous state.

2005-2006 Targets	73.77
2005-2006 Statewide Results	84.12 (1933/2298)
Gender - Percent of Students Meeting Target	
Male	80.51 (1070/1329)
Female	89.06 (863/969)
Ethnicity - Percent of Students Meeting Target	
American Indian	50.00 (18/26)
Asian/ Hawaiian/Pacific Islander	90.91 (20/22)
Black	84.00 (21/25)
Hispanic	82.19 (120/146)
White	84.83 (1750/2063)
Other	66.67 (4/6)

I. Special Populations - Percent of Students Meeting Target	
Individuals With Disabilities	51.85 (70/135)
Economically Disadvantaged	77.12 (246/319)
Single Parents	74.29 (52/70)
Displaced Homemakers	33.33 (1/3)
Other Educational Barriers	70.00 (35/50)
Limited English Proficient	44.44 (12/27)
Non-Traditional	87.99 (249/283)
Tech-Prep	83.31 (624/749)

C. Definitions (Underline all or portions of any definitions that have changed from the previous program year.)

- **Vocational Participant**

A student who is enrolled in a vocational education program that offers a coherent sequence of courses of instruction which are in size, scope and quality to be effective and directly related to the preparation of individuals for employment in current emerging occupations.

- **Secondary Vocational Concentrator**

A student who has taken three or more semester courses in a vocational program, including those who may be currently enrolled in their third course.

- **Secondary Tech Prep Student**

A student who has taken one semester of a concurrent enrollment class or course in a Tech Prep program/consortia under a Tech Prep articulation agreement; and is currently taking a second semester course; or has taken two or more semester courses in a Tech Prep program or Tech Prep articulated program, or apprenticeship/certificate program.

- **Post secondary Vocational Concentrator**

A student who has taken six or more semester courses in a vocational program, including those who may be currently enrolled in their sixth course.

- **Post secondary Vocational Tech Prep Student**

A student who has taken two semester courses and is currently taking a third semester course in an articulated Tech Prep program/consortia (in both secondary and post secondary programs); or has taken three or more semester courses in a Tech Prep program or Tech Prep articulated program, or apprenticeship/certificate program.

D. Measurement Approaches

CORE INDICATOR 1: Student Attainment

1S1 Secondary Academic Attainment

The measurement approach for 1S1 is the state academic assessment. The definition is the percent of CTE concentrators proficient on PAWS. The instructionally supportive design of PAWS presents a palette of information

focusing on individual student growth and performance. Assessments in PAWS include reading, writing and math. The PAWS was administered to all students in the 3-8 and 11th grades, including those in special population groups. The assessment was given in the spring to all Wyoming 11th graders. For the 1S1 indicator, the target of 45.49% was exceeded by the result of 61.41%.

The PAWS results can be disaggregated and the data is monitored by school districts and the WDE to measure all students' progress, including special populations. The test prompts went through a Bias and Sensitivity Committee to ensure that there is no bias toward any identifiable group. Differential Item Functioning (DIF) analyses were conducted to provide a last check on the potential bias of any test items.

A committee reviewed all aspects of the PAWS to determine how the assessment can be improved in quality, as a data resource, and to meet No Child Left Behind requirements.

1S2 Secondary Skill Proficiencies

National and state standards and assessment were used as the approach with a measurement definition of the percent of 12th grade CTE concentrators who were proficient or advanced in at least four of the six WyCTA content areas. The WyCTA was administered to all CTE students in 10th grade and all CTE concentrators in the 12th grade including all special population groups. Results are real time and provide schools with useful data to be used for program improvement. The 10th grade data is used for district monitoring and for program improvement for students still in school. Data from the 12th grade is used for federal reporting and state improvement purposes. For the 1S2 indicator, the target of 73.77% was exceeded by the result of 84.12%.

The SCANS report was used to develop the assessment areas and scoring rubrics of the WyCTA. All necessary skills found in the SCANS are assessed within the WyCTA. The indicators identified by SCANS are made up of the five workplace competencies (resources, interpersonal skills, information, systems and technology) and the three-part foundation of basic academic skills, thinking skills and personal qualities which are needed for solid job performance. The WyCTA is administered to all CTE concentrators and includes six areas: Applied Communication, Applied Mathematics, Affective & Thinking Skills, Technology, Pre-Employability and Employability Skills.

Internal consistency reliabilities (Cronbach's Alpha) and inter-rater reliabilities are routinely performed. Validity is assessed in a number of ways: 1) face validity by experts in the area of CTE education who helped design and continually improved the assessment; 2) factor analyses demonstrate that the assessment areas are measuring the constructs of interest; and 3) concurrent validity was established through a study in which the WyCTA results were correlated to the ACT Work Keys.

1P1 Post secondary Academic Attainment

The measurement approach used is academic course completion. The measurement definition is the percent of general education courses passed with

a C or better by CTE concentrators. NCA verifies that academic content standards meet accreditation standards. It also verifies that academic programs use reliable assessment instruments to ensure consistent program data. The WyCTA is a proven assessment instrument aligned to these content standards. For the indicator 1P1, the target of 95.00% was exceeded by the result of 97.79%.

1P2 Post secondary Skill Proficiencies
The measurement approach for skill attainment used the category defined as national and state standards and assessments, specifically the WyCTA referenced in 1S2 the percent of post secondary vocational concentrators who were proficient or advanced in at least four of seven WyCTA content areas. For the indicator 1P2, the target of 56.43% exceeded by the result of 73.64%.

Internal consistency reliabilities (Cronbach's Alpha) and inter-rater reliabilities are the same as 1S2. This data is used by the school districts and WDE to measure the progress of all students, including special populations.

CORE INDICATOR 2: Credential Attainment

2S1 Secondary Completion
Completion and attainment of a high school diploma or its equivalent is based on state requirements. Students must meet state graduation requirements to receive a diploma or its equivalent.

All students, including those in special populations are included in the graduation statistics. For the indicator 2S1, the target of 94.67% was exceeded by the result of 96.71%.

2S2 Secondary Diploma & Credential
The measurement approach for 2S2 is national and state standards and assessment, and the state approved WyCTA. The measurement definition is the percent of 12th grade CTE concentrators who graduated with a certification or credential. Districts report the number of students who receive both an industry-recognized proficiency credential and a high school diploma in the WyCTA. All students, including those in special populations, are included in the graduation and proficiency/certificates/credentials statistics. Although the target for this indicator was met, this area demonstrates that additional focus needs to be placed on certification or credentials. The geographic and rural nature of Wyoming does not lend itself easily to certifications or credentials. Few programs are available to secondary students. Some of the most common credentials earned were Certified Nurse Assistant, CPR, ServSafe, Microsoft Office Specialist, National Center for Construction Education Research and Pro-Start Certification. For the indicator 2S2, the target of 5.12% was exceeded by the result of 6.83%.

2P1 Post Secondary Completion
The measurement approach for 2P1 is state and local requirements for a post secondary degree or credential. The measurement definition is the percent of CTE concentrators who have taken at least two years of coursework or 60

semester hours and have completed a certificate or a degree or attained their educational goal. Students attaining a college degree must meet individual college graduation requirements. Students receiving industry certification must pass certification requirements stipulated by those specific industries. All students, including those in special populations, are given full access to academic and career technical programs and measurements. Each college is required to sign an assurance that no student is discriminated against. Wyoming post secondary education is primarily directed towards ensuring that its students receive the knowledge and skills to be placed into meaningful and gainful employment. This may mean falling short of receiving the degree or credential. Student goals may have been met by attaining skills leading to high wage employment. Conversely, some students transfer from the community college system to a university system without acquiring a certificate degree or credential and their goals also being met. In both instances students are regarded as successful. For the indicator 2P1, the target of 56.79% was met with a result of 57.94%.

CORE INDICATOR 3: Placement and Retention

3S1 Secondary Placement

The measurement approach for 3S1 is placement and retention based upon administrative record matches and exchanges. The measurement definition is the percent of program completers who were followed up and placed in employment, post secondary, training, education or the military. The WDE has formed numerous partnerships with other state agencies, post secondary institutions and the military to share information. Reciprocity agreements are in place for employment statistics in other states. Surveys will continue to be sent to CTE students by the school from which they graduated. This will serve to enhance the data received from developed partnerships, specifically with Research and Planning of the Wyoming Department of Employment (DOE). The collection of data is based on standardized definitions of the three types of placement (post secondary, employment or military). Placement is measured on those placed within one year after leaving secondary education. Measurement is based on a non-duplicated count for the three types of placement. State focus in this area has accomplished desired results and will be continuously monitored. For the indicator 3S1, the target of 86.30% was exceeded by the result of 96.68%.

3P1 Post Secondary Placement

The 3P1, as with the 3S1 measurement approach is through surveys, placement records and administrative record exchanges and matches. The measurement definition is the percent of CTE concentrators who were program completers or graduated within the past one to three years who were followed up and placed in employment, advanced training, continued education or the military. Standardized definitions of retention for employment and military service are specified, and local follow-up surveys are administered by community colleges. For the indicator 3P1, the target of 85.63% was exceeded by the result of 97.94%.

3P2 Post secondary Retention
The measurement approach for 3P2 is through administrative record exchanges. The measurement definition is the percent of students who graduated from the University of Wyoming, were placed and retained in employment one year later. The administrative wage record was used as the retention indicator to determine employment status. For the indicator 3P1, the target of 79.53% was exceeded by the result of 98.68%.

CORE INDICATOR 4: Participation in and Completion of Nontraditional Programs

4S1 Participation in Secondary Nontraditional Programs
The measurement definition for 4S1 is the percent of students in under-represented gender groups who participated in a nontraditional program in the reporting year. The WyCTA assessed the number of under-represented male and female students who participated in nontraditional CTE programs. School districts targeted programs that the Wyoming Employment Resources Division, Research and Planning and the U.S. Department of Labor designated as high-wage and met nontraditional program definitions. Data was collected from all secondary CTE students at the 10th grade and concentrators at the 11th and 12th grades. Participation rates were calculated based on CIP codes. For the indicator 4S1, the target of 19.84% was exceeded by the result of 28.02%.

4S2 Completion of Secondary Nontraditional Programs
The measurement definition for 4S2 is the percent of students in under represented gender groups who completed a nontraditional program in the reporting year. Secondary completion is based on district-designated sequence of courses within the nontraditional programs. Accuracy in reporting is based on state-established definitions of nontraditional programs. Secondary career technical education participants are measured and reported only if they complete a nontraditional program. For the indicator 4S2, the target of 22.19% was exceeded by the result of 24.64%.

4P1 Participation in Post secondary Nontraditional Programs
The measurement definition for 4P1 is the percent of students in under-represented gender groups who participated in a nontraditional program in the reporting year. Programs are continually reviewed and student participation is more accurately reported based on state-established definitions of nontraditional programs and under-represented gender groups. Secondary CTE participants in post secondary are measured and reported if they participate in nontraditional programs. For the indicator 4P1, the target of 14.87% was exceeded by the result of 21.13%.

4P2 Completion of Post secondary Nontraditional Programs
The measurement definition for 4P2 is the percent of students in under-represented gender groups who completed a nontraditional program in the reporting year. Post secondary completion measurement is based on the student completion in the reporting year of designated nontraditional CTE programs. Post secondary CTE participants are measured and reported if they

complete any program designated nontraditional. For the indicator 4P2, the target of 15.59% was not met with a result of 14.22%.

Based on results of the WyCTA scores, the state Technology, Careers & Data Unit, LEAs, and higher education institutions are better able to target areas for improvement. The following secondary and post secondary charts arranged by category and proficiency scores for the past five years are provided for review.

Secondary WyCTA Scores

	% Proficient or Above				
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Applied Communication Skills					
Listening	78%	85%	89%	91%	89%
Speaking	76%	82%	87%	88%	88%
Reading	74%	82%	85%	88%	87%
Writing	70%	78%	83%	86%	83%
Applied Math Skills					
Basic Operations	78%	85%	88%	90%	89%
Measurement	75%	83%	86%	90%	88%
Data Representation	69%	78%	83%	87%	84%
Advanced Math	56%	Removed	Removed	Removed	Removed
Affective & Thinking Skills					
Cooperation	72%	81%	84%	84%	84%
Problem Solving	71%	79%	84%	86%	84%
Work Ethic	74%	82%	82%	84%	82%
Thinking	79%	84%	85%	88%	86%
Leadership	Not assessed	69%	76%	79%	77%
Applied Science Skills					
Lab Skills	75%	Removed	Removed	Removed	Removed
Scientific Method	68%	Removed	Removed	Removed	Removed
Data Analysis & Interpretation	65%	Removed	Removed	Removed	Removed
Conceptual Applications	65%	Removed	Removed	Removed	Removed
Technology					
Operating Systems	75%	82%	87%	87%	90%
Software Applications	77%	83%	87%	88%	89%
Networking & E-mail	78%	87%	86%	100%	Removed
Internet Searches	83%	89%	93%	93%	94%
Business Technology	Not assessed	78%	84%	87%	85%
Pre-Employability					
Career Interests	80%	86%	89%	88%	89%
Career Prerequisites	78%	84%	87%	88%	88%
Employment Potential	79%	84%	88%	87%	89%
Resume-Application-Interview	74%	83%	86%	88%	86%
Employability					
Punctuality & Attendance	77%	78%	83%	85%	82%
Interpersonal Relations	79%	82%	87%	89%	87%
Attitude & Appearance	79%	82%	87%	88%	87%
Task Completion	76%	82%	85%	87%	85%
Skill Performance	Not assessed	84%	88%	89%	88%

Post Secondary WyCTA Scores

	% Proficient or Above				
	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006
Applied Communication Skills					
Listening	82%	74%	80%	79%	82%
Speaking	80%	70%	76%	75%	81%
Reading	79%	73%	77%	76%	82%
Writing	74%	69%	73%	72%	78%
Applied Math Skills					
Basic Operations	78%	67%	73%	74%	81%
Measurement	75%	63%	72%	73%	79%
Data Representation	69%	57%	63%	70%	76%
Advanced Math	52%	51%	52%	67%	71%
Affective & Thinking Skills					
Cooperation	75%	67%	72%	70%	77%
Problem Solving	80%	72%	72%	71%	77%
Work Ethic	77%	70%	76%	76%	78%
Thinking	84%	70%	75%	71%	80%
Applied Science Skills					
Lab Skills	81%	71%	74%	84%	84%
Scientific Method	72%	59%	67%	79%	76%
Data Analysis & Interpretation	70%	57%	63%	77%	78%
Conceptual Applications	71%	59%	65%	77%	79%
Technology					
Operating Systems	84%	65%	72%	80%	83%
Software Applications	82%	67%	69%	81%	82%
Hardware	Not assessed	61%	71%	79%	79%
Networking & E-mail	88%	Removed	Removed	Removed	Removed
Internet Searches	88%	74%	79%	85%	87%
Industrial & Business	Not assessed	61%	70%	75%	80%
Pre-Employability					
Career Interests	86%	65%	80%	82%	83%
Career Prerequisites	84%	67%	76%	75%	79%
Employment Potential	82%	61%	78%	80%	79%
Resume-Application-Interview	79%	Removed	72%	74%	77%
Employability					
Punctuality & Attendance	81%	Removed	Removed	Removed	Removed
Interpersonal Skills	84%	72%	79%	77%	80%
Attitude & Appearance	85%	74%	80%	76%	81%
Task Completion	83%	72%	77%	73%	80%
Skill Performance	Not assessed	68%	77%	72%	80%

The WyCTA is directly aligned to the state Career/Vocational standards, and it is updated as changes in programming and data collection are made. It is important to keep in mind that these changes were made when making comparisons across years. Because of these changes, a new procedure was used to determine WyCTA proficiency levels. To be proficient in a WyCTA content area, students had to be proficient in at least three of the four sub-skills within the Technology, Affective & Thinking, Applied Communications, Pre-employability, and Employability content areas, and had to be proficient in at least two of the three sub-skills within the Math content area. To be proficient in the overall WyCTA assessment, students had to be proficient in at least four content areas.

E. Improvement Strategies for Next Program Year

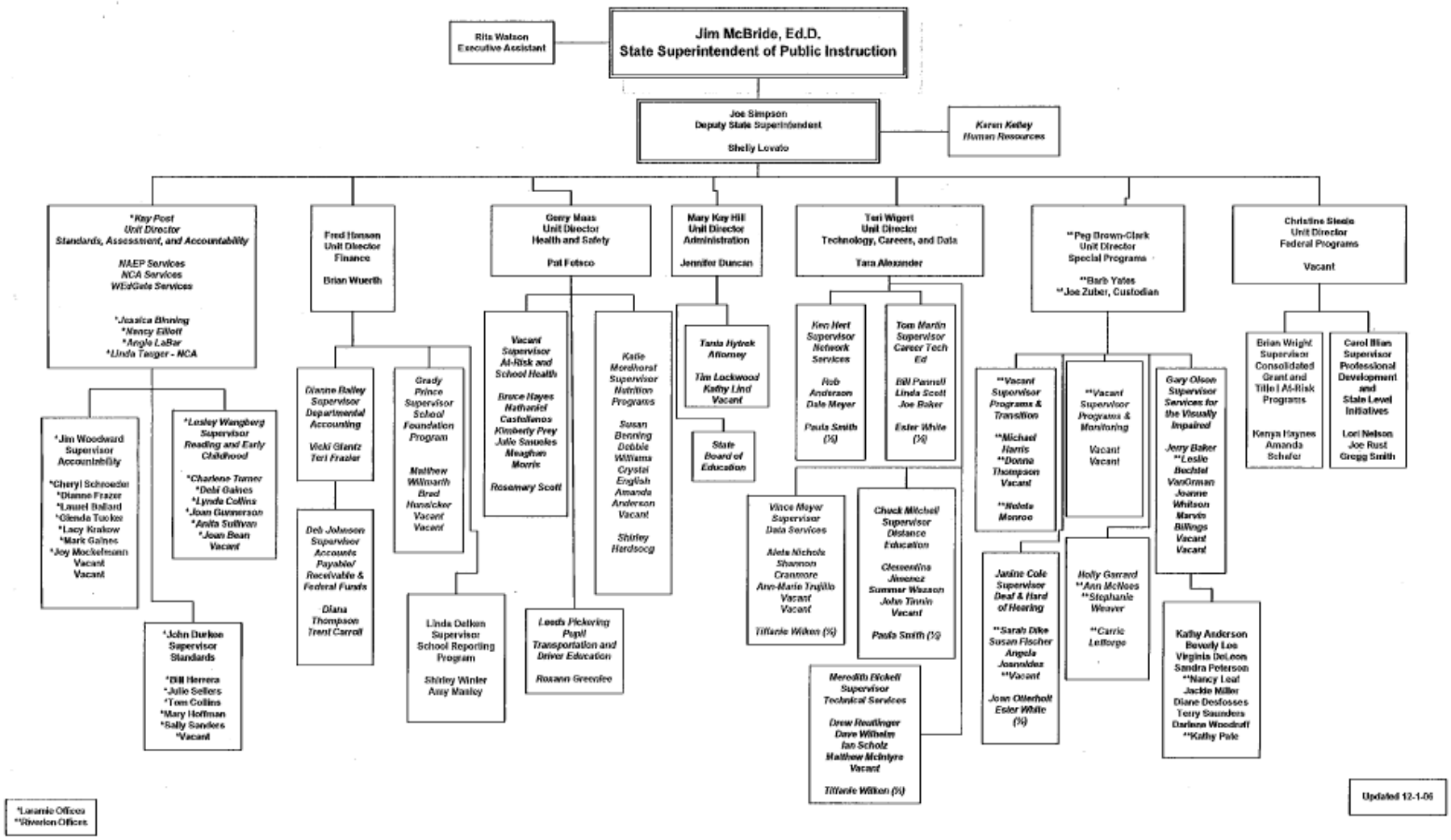
Strategies will be developed from statewide planning based upon new data collected in the fall of 2006. The WyCTA data will be extremely useful in planning and provide direction for program and student success. School improvement through the use of the WyCTA data collection will be targeted in the WyCTA spring 2007 training.

V. Monitoring Follow-up

The State of Wyoming did not receive a monitoring visit during the 2005-2006 program year.

VI. Workforce Investment Act (WIA) Incentive Grant Award Results

The State of Wyoming did not receive WIA funds for the 2005-2006.

Wyoming Department of Education

December 2006