INTRODUCTION
Western Dakota Technical Institute continues to develop an assessment process designed to help WDT identify areas for improvement and to create improvement plans. During the 2012-2013 academic year, the Assessment Committee completed the syllabi project started in 2010-2011. With the project’s completion, all of WDT’s more than 400 master syllabi follow the same format, have updated student learning outcomes utilizing Bloom’s Taxonomy, include an assessment statement that identifies the core abilities the course will address, and have verified credit hours utilizing the Carnegie credit hour guidelines.

In the 2013-2014 academic year, the Assessment Committee will work to fulfill the potential of WDT’s assessment processes. There has been some backsliding in assessment of student learning during recent years. This can be attributed to several reasons, including faculty turnover, lack of organized assessment training, and significant administrative workload that has prevented the needed focus on assessment.

WDT recognizes these deficiencies. In 2013-2014, they will be addressed in several ways:

- An electronic, easier-to-follow assessment process will be created
- The new process will be introduced to faculty
- A new administrative position with assessment responsibilities will be investigated

WDT believes those steps will help bring assessment the attention it deserves and needs so the institution is more regularly engaged in ongoing assessment activities.

STUDENT LEARNING
WDT has identified seven core abilities as essential workplace skills that cut across occupational and academic titles. They are broad, common abilities that students must possess to be prepared for the workforce and for lifelong learning. Core abilities are not taught in lessons. Instead, they are broader skills that run through courses and lessons. WDT’s core abilities:

- **Life Skills**—Apply the principles of physical and psychological wellness to his or her life.
- **Analytical Skills**—Apply principles and strategies of purposeful, active, and organized thinking.
- **Communication Skills**—Apply appropriate writing, speaking, and listening skills in order to precisely convey information, ideas, and opinions.
- **Technology Skills**—Possess the knowledge and skills necessary to use a computer and other technology methods utilized within his or her chosen field.
- **Teamwork Techniques**—Work with others to complete tasks, solve problems, and resolve conflict.
- **Social Values**—An individual possesses an awareness of differences in backgrounds and cultures and demonstrates respect while working with different backgrounds and cultures.
- **Employability**—Apply effective work habits and attitudes in the classroom or training situation.
WDT uses direct and indirect measures to assess these core abilities. Through surveys of WDT’s stakeholders, WDT collects and acts on responses to make informed, data-driven decisions. Through assessment activities at the program level, WDT instructors understand where to focus their attention so students graduate with the skills and experiences they need to succeed.

SURVEYS
Other, indirect measures of institutional effectiveness are provided by surveys of our stakeholders, including students, faculty, and staff. WDT sometimes uses the survey results for program and service planning and improvement efforts, but more work is needed in this area.

Student Satisfaction Survey (SSI)
Biannually, WDT conducts the Noel Levitz Student Satisfaction Inventory. This survey assesses student satisfaction in and out of the academic classroom. The survey was conducted in April 2012. Results for individual programs were shared with faculty, but there has been little follow-up. This is an area for improvement.

Student Focus Groups
Student focus groups are conducted as needed to gather direct student input regarding a variety of issues and concerns on the WDT campus. Information gathered from these sessions is used to improve and enhance the WDT community. Results are disseminated as appropriate. Based on the information from students, program advising efforts are under review, and several campus policies are being reviewed and updated.

CORE Drug and Alcohol Survey
In coordination with the Campus Community Wellness Coalition, WDT administers the CORE Drug and Alcohol Survey. The results of this survey assist WDT Student Services personnel in programming and identifying potential intervention programs. This survey was administered in February 2012. Results of the 2012 survey were reviewed, and activities were adjusted to achieve improved results.

Graduate Placement Report
The Graduate Placement Report is conducted on an annual basis. WDT contacts graduates six months after graduation to identify if the graduate is employed. Additional information is gathered on wage, degree-related employment, continuing education, and whether the graduate has stayed within the state. The results identify employment trends, and the data is used by programs, advisory boards, the Office of Career and Technical Education, and the Federal Department of Education to help solidify the integrity of WDT programs. For example, low placement and/or wages have caused programs to be reviewed to see if they are still viable. In 2013, WDT decided to discontinue the Collision Repair program in part because of Placement Report results.
ANNUAL PROGRAM ASSESSMENT REVIEW
Faculty are responsible for maintaining assessment books that include past and current assessment activities, three-year goals, and documentation of various items such as program budgets, advisory board minutes, and curriculum changes. Three days are dedicated at the end of the spring semester for faculty to compile and report their assessment activities for the year.

Through the annual review, instructors make changes to their program that will impact current and future students. The following summaries from select programs show the work being completed in program assessment and assessment of student learning.

Business
The Business program found that deficiencies continue in the area of written communication skills. Oral communication skills also were deficiencies simply because students did not include the audio component in their electronic portfolios. Faculty will create action plans for the 2013-2014 academic year to address the areas of deficiency. Faculty found that employability skills at internship sites improved as shown in employer evaluations.

In response to industry needs, the program will incorporate a two-credit Project Management class to teach students how to manage a project from start to finish. Faculty believe this project will increase the employability of program graduates. It will be offered for the first time in the spring 2014 semester.

Computer-Aided Drafting
The program identified students in the program’s final architectural projects needed to improve in the area of applying effective use of CAD software to develop drawings in a manner that was efficient and compliant with standard industry practices. To address this, the program:

- Developed network access that allowed students to work on projects from home through Autodesk cloud computing
- Incorporated checkpoints throughout the final project to evaluate progress

The program found that cloud computing worked better after the strategy was revised during the project. Checkpoints were added, but they were not as effective as faculty hoped. As a result, this item will be assessed again in 2013-2014.

Computer Science
The program faculty member began doing more in-class demonstrations after seeing students were not understanding some topics. Previously, the instructor would go through his lecture and give a small example. After questioning students, it was clear they were not understanding. The instructor tried new tactics such as explaining topics in more depth and relating the material to real-world examples. The results did not change significantly. The instructor then completed one of the unassigned homework problems during class. That opened the door to questions from students such as why this and why that, and then the instructor saw the light bulbs coming on. The instructor continued that approach for the remainder of the semester with the same positive results.

Health Information Management
Program faculty wanted to evaluate if the grades of Health Information Students in a medical terminology course were impacted when those students were enrolled in the course with students from other healthcare programs.

In the past, Health Information Management students had their own medical terminology course (MDS110). To assess student success in the new course (HC213), program faculty compared final exam grades earned in both courses. Students in the new course earned a higher average grade than those enrolled in MDS110. The results showed that combining students from multiple programs into one course did not have a negative impact on performance.

**Environmental Engineering Technician**

Employer evaluations of the program’s 2013 graduates measured the interpersonal and professional behavior of students while working in internships and co-ops. When looking at all questions asked, employers rated the students “Well Above Average,” the highest score possible, 65% of the time. Overall, employers rated our students Interpersonal and Professional Behaviors “Well Above Average” or “Above Average” 96% of the time. Those results are below the 2012 results of 90% and 99.5%, respectively. Faculty still believe the program’s students are well prepared for employment in the field, but changes are being made based on the results and follow-up discussions with internship and co-op supervisors. As a result of the survey responses and discussions with industry, faculty will incorporate more class presentations to improve communication skills.

**Fire Science**

The Fire Science program went through significant changes during the 2012-2013 academic year that WDT believes will result in a stronger, more efficient program that meets the needs of students and industry. The changes were prompted by suggestions from major employers and by the need to transition the program from an academy model to a collegiate model. Examples:

- Program staffing was revised to create more appropriate faculty-student ratios
- The program advisory committee reviewed curriculum and suggested changes that brought the program into alignment with limits on credit hours overall and by semester while meeting industry needs
- Posted credit hours for each course were compared to what was occurring in classrooms and labs, and changes were made as needed
- The program’s student handbook was rewritten to clarify expectations, requirements, and policies
- Clear expectations were created for instructors, adjuncts, substitutes, and lab aides

**Law Enforcement Technology**

The Law Enforcement Technology program used a variety of assessment tools during the 2012-2013 academic year. In hopes of increasing the level of success of students in LET 126, LET 216, and LET 226, the Physical Training courses completed throughout the program, faculty incorporated:

- Midterm and random fitness evaluations
- More focused class participation
- Individualized training
- Peer-driven sessions

**WDT Mission**

Western Dakota Tech is a public institution of higher learning that embraces quality programs, expert faculty and staff, and a commitment to academic excellence to teach the knowledge, skills, and behaviors students need to be successful.
Faculty reported that the changes seem to have had positive results with students. This new approach will continue. In addition, program faculty recommended the hiring of a professional fitness trainer to work with students. This change was incorporated in the fall 2013 semester.

**Pharmacy Technician**
Students were tested multiple times on weight and measurements in multiple pharmacy courses in addition to being tested in Pharmacy Calculations (PHR127). The students showed understanding from the beginning, but the repeated testing increased their understanding and mastery of the topic of weights and measurements. In addition, the repeated quizzes and testing led to higher scores and grades in the Pharmacy Calculations course. Faculty will continue to use early and repeated quizzes and testing for weights and measurements and for other topics that often confuse students.

**Surgical Technology**
The program director implemented more instruments testing in the classroom as a result of feedback from clinical sites. Students in the past crammed for exams and dumped the information for tests. As a result, students did not know their instruments as well as would be preferred during summer clinical rotations.

**Welding**
After discussions with industry, the program recommended that Precision Machining Technology be created as a stand-alone diploma program. The new program was approved in 2013 and was offered beginning in the Fall 2013 semester. Also based on industry recommendations, an associate of applied science degree program in Drafting and Machining Technology was created to prepare students who have skills in these related fields.

In the area of assessment of student learning, the program chose to investigate student abilities in GMAW and SMAW welding courses. Instructors found that most students adapt well to a team environment and that additional work is needed on the ability of students to follow fabrication instructions and maintaining quality and uniformity in a production scenario. As a result, the faculty will:

- Present students earlier in the semester with more written instruction and basic diagrams for each assigned project
- Stress the importance of quality control more often and earlier in the fabrication process
- Talk more about the importance of attendance since the students who had better attendance performed at a higher level