



## Introduction

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The following report outlines the findings for Texas Education Code, Chapter 19, Sec. 19.0041, which required a biennial evaluation and report assessing the effectiveness of Windham School District (WSD) programming. WSD worked with Sam Houston State University (SHSU) and Texas Tech University (TTU) to analyze WSD programming data as it related to the offenders who released from the Texas Department of Criminal Justice (TDCJ) in the 2010 school year. The *Evaluation of the Windham School District SY2010 Release Cohort, 2014* by SHSU and *The Windham School District Evaluation: Post-Release Wage-Earning and Recidivism Outcomes* by the Institute for Measurement, Methodology, Analysis and Policy at TTU provided the basis for this report. Descriptive statistics and correlational analyses of WSD programming and outcome measures were performed in the following areas:

1. Institutional Disciplinary Violations
2. Subsequent Arrests
3. Subsequent Confinements
4. The Cost of Confinement
5. Educational Achievement
6. High school equivalency examination passage
7. The kind of training services provided
8. The kind of employment the person obtains on release
9. Whether the employment was related to training
10. The difference between the amount of the person's earnings on the date employment is obtained following release and the amount of those earnings on the first anniversary of that date
11. The retention factors associated with the employment

WSD program attendance data were used to identify correlations between WSD programming and outcome measures. Program participation included those who had attendance hours and those who attended and completed WSD programs. Of the 71,063 offenders released in SY2010, 46,702 offenders participated in one or more WSD programs.

The *SHSU study* utilized several types of regression analyses to capture correlations between variables and comparison of descriptive statistics between variables, while the *TTU study* used three major types of state-of-the-art multivariate analyses; predictive analytics/data mining, latent class analysis, and survival analysis.

## Part A – Program Evaluation

### (1) Institutional Disciplinary Violations

The impact of WSD program participation is evident when comparing institutional disciplinary violations between non-WSD offenders and WSD offenders who had attendance hours and those who attended and completed programming. The more exposure offenders had to the academic, vocational, and life skills programs, the less likely the offender would commit an institutional disciplinary violation.

The *SHSU study* reported descriptive statistics and correlations of the WSD programs when analyzing institutional disciplinary violations. Overall, the more exposure and higher attendance of WSD programs, the lower the institutional disciplinary violations per year. Academic programs, Vocational programs, CHANGES, and Cognitive Intervention Program (CIP) were all correlated with institutional disciplinary violations per year. CHANGES and Vocational programs showed the strongest degree of correlation, meaning CHANGES and Vocational programming were better predictors of institutional disciplinary violations per year not occurring when compared to WSD offenders in other WSD programming.

The number of violations per year fluctuated when programs were separated by academic, vocational, Changes, and CIP. Important to note, the varying programs are developed to assist in the offender’s overall educational and cognitive/behavioral growth; therefore, developmentally, offenders experiencing growth in these areas may experience a spike in violations at the beginning of programming. Across all WSD programming, whether offenders participated in 1 - 4 WSD programs, institutional disciplinary violations consistently decreased the longer WSD offenders attended and/or completed each program.

#### *Academic*

WSD offenders who only participated in the Academics program reported higher institutional disciplinary violations per year, compared to Non-WSD offenders and other WSD offenders. The number of offenders in only Academics programming is the largest group (n=9,671), with a significant portion of the offenders mandated into the program, because they had not obtained a high school diploma or GED prior to incarceration. This is the most heterogeneous group within the current data report. Statistically and theoretically, this group is likely to report inflated/deflated numbers for the majority of variables examined. Secondly, offenders in this group have had the least amount of WSD programming exposure and the majority of attendance is mandated; therefore, offenders are not choosing to be involved in the academic programming and less likely to follow the rules.

The number of violations per year drops dramatically once the offender has been exposed to the WSD academic programming. The more attendance hours the offender had in the academic program, the lower his/her institutional disciplinary violations. Overall, the number of violations dropped from 2.3 to 1.5. The *SHSU study* reported once WSD offenders attended more than 1075 program hours, violations per year dropped nearly 35% to 1.5 institutional disciplinary violations per year.

### ***Vocational***

WSD Vocational only programming reported 1.5 violations per year, which is lower to the comparison group of Non-WSD offenders (1.7). Notably, when vocational programming was combined with any other WSD program, institutional disciplinary violations per year decreased.

### ***CHANGES***

CHANGES only programming attendance and program completion ranged from 1.3 to 1.5 institutional disciplinary violations per year, both lower than the Non-WSD offender violations per year.

### ***Cognitive Intervention (CIP)***

Offenders who completed the CIP only program averaged 1.6 institutional disciplinary violations per year, lower than the Non-WSD offender violations per year.

## **(2) Subsequent Arrests**

When analyzing relative risk of re-arrest with a multivariate regression analysis, the *SHSU study* reported that WSD participation significantly reduced the likelihood of re-arrest for the SY2010 cohort. Likelihood coefficients less than 1.0 indicate a decrease in the likelihood of re-arrest, while coefficients greater than 1.0 indicate an increase in the likelihood of re-arrest. The strongest impact on decreasing the likelihood of re-arrest is Vocational program completion (.87), followed by CIP completion (.88), Academic attendance/completion (.92), and CHANGES completion (.93).

The strongest program effects in reducing the probability of re-arrest existed for the combination of completed Vocational programming and CIP. While the average non-WSD offender had a re-arrest probability of .54 accounting for age, gender, and incarceration history, a WSD offender who completed the Vocational training/CIP combination had a re-arrest probability of only .41. When comparing probabilities across all program combinations, WSD offenders had a lower probability of re-arrest than non-WSD offenders, with the exception of the Academic and CHANGES program combination

wherein both groups were similar in re-arrest (.54). Again, CHANGES and Academic programming are mandated programs for the majority of offenders.

Overall, re-arrest is less likely when offenders participate in WSD programs. Those offenders who complete WSD programs are significantly less likely to experience re-arrest.

The *TTU study* used predictive analytics in the form of classification and regression trees to predict who was going to have a higher or lower re-arrest rate. First-time offenders and repeat offenders were separated in all analyses due to the large discrepancy found between the groups within re-arrest results. While 49.4% was the overall re-arrest rate reported, rates for more specific variables within terminal nodes of the decisions tree showed re-arrest rates that ranged from 29.7% - 70.8%. Repeat offenders were found twice as likely to get re-arrested as first-time offenders.

For first-time and repeat offenders, CIP and WSD Vocational programs resulted in a decrease of likelihood of re-arrest when compared to Non-WSD offenders, with a 9% and 15% decrease in likelihood of re-arrest.

### **(3) Subsequent Convictions or Confinements**

According to the *SHSU study*, the average offender in the SY2010 release cohort who participated in WSD programming had a 14% probability of re-incarceration compared to the Non-WSD offender who had a 20% probability of re-incarceration. Subsequent regression analyses looked at specific WSD programs, and those who completed Vocational training, CHANGES, or CIP had lower probabilities of re-incarceration. Vocational training (.12), CHANGES (.13), and CIP (.13) all had lower probabilities of re-incarceration compared to the Non-WSD offenders (.20).

The probability of re-incarceration for offenders who attended WSD Academic programming by hours of class attendance had a lower probability of re-incarceration than Non-WSD offenders. As the number of WSD Academic attendance hours increased, the probability of re-incarceration decreased, and remained lower than the probability of re-incarceration for Non-WSD offenders (.20). Attendance was grouped the same as in the above comparisons for academic attendance (probability of re-incarceration); <325 hours (.18), 325-749 hours (.16), 750-1074 hours (.15), and 1075+ hours (.14).

#### **(4) Cost of Confinement**

The Legislative Budget Board (LBB) currently calculates the cost of confinement for correctional institutions. The Windham School District cost per day of \$8.58 for FY 2010, which matches the cohort in this report, was reported by the LBB in the Uniform Cost Report to the 83<sup>rd</sup> Texas Legislature.

#### **(5) Educational Achievement**

Only the 30,785 offenders in the SY2010 release cohort who have ever participated in Academic programming are included in this section's result findings. Non-WSD offenders are not appropriate comparisons in this section since educational gains would not be anticipated without participation in Academic programming. While WSD adult basic education programs focus on numerous skills, advances in reading levels are highlighted.

WSD offenders who participated in Academic programming made significant education gains from time of assessment at incarceration (pre-testing) to release date (post-testing). Composite scores are grade equivalency scores that range from 1.0 – 12.9, coincide with grade level and month of year, and combine math, reading, and writing skills. Overall, WSD offenders had an initial average composite score of 6.10 and improved to a composite score of 7.92. Reading level gains alone increased from a 7.05 reading score to an 8.8 reading score. Important to note, this is an average gain of all WSD offenders within the Academic program.

Overall, the *SHSU study* report findings indicate WSD offenders improved their average reading ability to a significant extent. Of the WSD offenders who were initially classified as non-readers, 58% became readers, literate, or advanced readers while incarcerated. This translates to the fact that 3,237 WSD offenders who could not read at incarceration were able to read, considered literate, or advanced readers, once released. WSD offenders who were labeled as "readers," also made significant gains, 69.3% were newly labeled literate or advanced readers. Finally, of the WSD offenders who were initially classified as literate, 55.2% became advanced readers. Notably, 52.6% of WSD offenders attending Academic programs were advanced readers as measured by their highest reading level assessment prior to release, compared to 28.6% who were advanced readers at the beginning of incarceration.

Types of readers were discussed above as nonreaders (grade level of 3.9 or lower), readers (4.0 – 5.9), literate (6.0 – 8.9), and advanced readers (9.0 and higher). As a group, WSD offenders in the readers group demonstrated the most improvement with an average 2.39 reading grade level increase during incarceration. Those offenders who were Non-readers made similar significant gains of a 2.30 grade level increase in reading skills. Offenders who were literate increased their reading ability by nearly two full grade levels. WSD offenders in the highest reading group, advanced readers, initially had the least amount of increase possible since the assessment score ceiling is 12.9, yet still demonstrated almost a full grade level increase based on their attendance in WSD Academic programs. Across types of readers at incarceration, on average, WSD offenders attending academic programming improved reading levels and grade equivalency scores.

Average reading grade level by academic attendance hours was examined, and similar results were found when comparing reading grade level change across amount of academic program hours attended. Average reading grade change increased (grade level increase); <325 hours (1.05), 325-749 hours (2.09), 750-1074 (2.57), 1075+ hours (3.02). The pattern throughout the summary for impact of WSD academic programming is that the more hours attended the better the outcome for the offender upon release.

The *TTU study* included 125,687 offenders from the original 140,493 offenders in the grade-level gain data. The overall grade-level gain on the TABE was 0.52, which is equivalent to half a grade. Offenders within the subgroups of WSD offenders showed grade-level gains that ranged from .04 to 2.19. For example, the 2.19 grade-level gain represented offenders who were in state jails and attended parenting and completed academics with at least 172 hours in attendance. Importantly, all forms of WSD programs positively impacted grade-level gains for offenders.

## **(6) High school equivalency examination passage**

Findings indicated significant improvements in GED attainment when comparing offenders with/without GED completion at the time of incarceration versus time of release for the SY 2010 release cohort. Across the SY2010 release cohort, 25,686 offenders (36.1 percent) possessed a GED or high school diploma at the time of incarceration. At the time of release, 36,614 of the 71,063 offenders (51.5 percent) earned a GED or high school diploma.

Specifically, 30,785 offenders in the SY2010 cohort participated in an academic program. Of those, 14,404 attained the academic skills sufficient for attempting the GED. Almost 76% or 10, 928 of the 14,404 eligible offenders earned a GED while incarcerated.

## **(7) Kind of training services provided**

In SY2010, 10,835 offenders participated in vocational training services, and 5,205 vocational certificates and 5,100 industry certificates were awarded. Of the participating offenders, 10,599 offenders participated in full-length vocational courses, 126 offenders were short-course participants, and 116 offenders were apprenticeship related training participants. (Offenders may have participated in more than one type of vocational course.)

Vocational classes range from full-length courses (600 hours) to short courses (up to 200 hours). Short courses are offered periodically to prepare offenders for specific prison jobs or to provide basic occupational skills training for offenders with imminent release dates. Below is a summarized list of the main areas of vocational opportunities.

- Construction
- Welding
- Masonry
- Carpentry
- Electrical
- Automotive
- Business Image Management & Multimedia
- Computer Maintenance
- Business Computer Information
- HVAC
- Custodial Services
- Food Service

Important to note, when comparing the list of vocational training above, the list of employment areas (below) obtained by the SY2010 release cohort are found to overlap. The next section will provide, more specifically, how vocational training programs in WSD related directly to employment once released.

While Life Skills training programs are not considered Vocational training programs, CHANGES (mandated class) and CIP provide the skills needed to obtain a job through the interview process and maintain a job through learning necessary behavior and social skills.

### **(8) Kind of employment the person obtains on release**

The SY2010 WSD offenders gained employment in one of twenty-two different NAICS designated economic sectors listed alphabetically below:

- Accommodation and Food Services
- Administrative and Support and Waste Management and Remediation Services
- Agriculture, Forestry, Fishing and Hunting
- Arts, Entertainment, and Recreation
- Construction
- Educational Services
- Finance and Insurance
- Health Care and Social Assistance
- Information
- Management of Companies and Enterprises
- Manufacturing
- Mining, Quarrying, and Oil and Gas Extraction
- Other Services (except Public Administration)
- Primary Metal Manufacturing
- Professional, Scientific, and Technical Services
- Public Administration
- Real Estate and Rental and Leasing
- Retail Trade
- Transportation and Warehousing
- Utilities
- Wholesale Trade
- Wood Product Manufacturing

### **(9) Whether the employment was related to training**

Data obtained from the Texas Workforce Commission (TWC) reported multiple positions for offenders upon release, some of which had distinct NAICS categories. The use of the TWC data to examine employment is limited because NAICS codes are assigned to the employer rather than job specific. Additionally, employment rates and/or earnings may be underestimated because TWC data does not include contract labor, day-labor wages, or out-of-state wages earned by offenders.

TWC data demonstrated that the majority of the positions held by WSD Vocational offenders were related to Vocational training received. Specifically, 14,940 offenders in the SY 2010 cohort attended vocational training. Of those, 6,762 offenders were employed during the first year subsequent to their release. Of the 6,762 WSD offenders who attended/completed vocational training and reported wages, 93% (6,286 WSD offenders) were employed in positions that were related to the Vocational training received through WSD programs.

When comparing offenders who participated in vocational training to the comparison group of offenders who did not participate in any vocational training while incarcerated, the percentage employed was higher for participating offenders by an average of 2.4% to 13.6%. Notably, 34.1% of offenders who did not participate were employed at least one quarter, while all groups who participated in vocational training were higher with ranges based on programming from 36.5% to 50%. In summary, offenders who completed WSD Vocational training programs were most likely to report employment.

The *TTU study* analyzed whether or not training was related to a higher probability of being in a wage-earning group post-release. When compared to those who did not attend WSD for any training, ranges of higher probability of being in a wage-earning class ranged from 6.6% to 20.6%. The average amount of wages earned was \$4,685 for the 5 quarters. Wages varied widely for subgroups of offenders, \$827 - \$8,586. In summary, across each subgroup (WSD program – a combination of WSD programs), those who attended/completed a program(s) were more likely to earn wages post-release.

### **(10) The difference between the amount of the person's earnings on the date employment is obtained following release and the amount of those earnings on the first anniversary of that date**

The *SHSU study* analyzed employment quarterly earnings through groups based on vocational training participation. Categories of comparison for descriptive statistics were Average 1<sup>st</sup> quarter employment earnings, Average Quarterly Earnings (all quarters employed), and Average Difference earnings (1<sup>st</sup> quarter - 4<sup>th</sup> quarter). Offenders who completed WSD Vocational training had *higher 1<sup>st</sup> quarter earnings* and *higher average quarterly earnings* as compared to those in the “No Vocational training”.

WSD offenders who completed programs had a higher wage-earning differential between the 5<sup>th</sup> quarter post-release from the 1<sup>st</sup> quarter post-release when compared to those who did not participate in WSD programming. Similar to all previous results, first time offenders had better outcomes than those who were repeat offenders. Overall, Industry Certification, WSD Vocational, and GED attainment showed higher wage-earning differentials (in descending order of differential dollar amount).

The *SHSU study* also found that reading level had an impact on earnings. When comparing average quarterly earnings by reading level among the groups who completed/attended vocational training, the average quarterly earnings are consistently higher for those with reading levels above 6.0. Offenders who had a reading level above 6.0 and completed Vocational training had the highest reported average quarterly earnings. Consistently across comparisons of program completion, the completion of Vocational training, beyond participation alone, was specifically valuable regarding 1<sup>st</sup> quarter earnings and average quarterly earnings.

### **11) The retention factors associated with the employment**

The *SHSU study* found that both academic and vocational education contributed to successful employment retention among offenders released in SY10.

The *SHSU study* found that the WSD offenders who completed vocational training were more likely to report higher wages than those who did not complete programming. Offenders who had a reading level above 6.0 reported higher quarterly earnings and a higher percentage from each group were employed for all four quarters. In summary, the study indicates that on average, offenders who retained employment had higher educational achievement scores, were somewhat more likely to have achieved an industry certification, and were significantly more likely to have a high school diploma or GED.

## Part B – Programming Changes

The program evaluation as outlined in the *SHSU study* and the *TTU study* indicate that WSD is meeting its statutory goals to:

- 1) Reduce recidivism;
- 2) Reduce the cost of confinement;
- 3) Increase the success of former inmates in obtaining and maintaining employment; and
- 4) Provide an incentive to inmates to behave in positive ways during confinement or imprisonment.

WSD evaluated its programs and the following changes have been made:

- Industry certification opportunities were increased. OSHA (Occupational Safety and Health Administration) training was provided to WSD students as well as offenders employed in TDCJ industry jobs. OSHA training provides information to help offender workers to identify job related hazards which hopefully will reduce the number of worker injuries.
- Vocational programming was increased at state jails. Short courses were added to provide training for highly employable jobs in the telecommunications field for short term offenders. Participating offenders have the opportunity to earn WSD certificates of completion as well as one or more industry certificates.
- Title I services were increased to provide computer based instruction to students who are 21 years of age or younger. Title 1 services are provided in conjunction with regular literacy programming to reinforce reading, writing, and math concepts to younger offenders.
- Professional Development Training is being provided to WSD teaching staff. Instructors are attending training provided by Mockingbird Education and are implementing an integrative and multi-sensory approach to improve academic results and strengthen learner outcomes through active learning and resilience education. This training allows WSD staff to better prepare students for success in the classroom and workplace.
- WSD provided related services to assist offenders who face cognitive barriers and exhibit behavioral issues. Assessment and Counseling services were provided by Licensed Specialists in School Psychology (LSSPs).

The following reports can be viewed in their entirety at [www.wsdtx.org](http://www.wsdtx.org).

- *Windham School District Evaluation: Post-Release Wage – Earning and Recidivism Outcomes*
- *Evaluation of the Windham School District SY2010 Release Cohort, 2014*