

**AN
EVALUATION REPORT OF
STUDENT ATTITUDE AND BEHAVIOR CHANGES
TO
THE TENNESSEE DEPARTMENT OF EDUCATION
AND VOLUNTEER TENNESSEE
ON THE LEARN AND SERVE AMERICA SCHOOL-BASED PROGRAM**

**STUDENT DATA SETS FROM 2008-2009
YEAR THREE OF THE LEARN AND SERVE PROJECT**

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Executive Summary of the Evaluation Outcomes for the Tennessee Learn and Serve Program

The 2008-09 School-based Learn and Serve grant was implemented by the Tennessee Department of Education in collaboration with Volunteer Tennessee. *Twenty-one sub-grantees from public schools across the state were selected* to provide high quality service-learning projects, incorporating student voice and student planning, requiring no less than 30 hours per semester, and integrating service-learning within the academic curriculum. The sub-grantees achieved the following goals: (1) during the 2008-2009 grant year 3,000 students engaged in service-learning programs, and 2) through service-learning participation, students were reconnected to their schools and communities and gave 192,972 of hours of service to their Tennessee communities while developing academic skills and knowledge.

In the grant proposal for this project, the primary intermediate outcomes were projected for attitudinal changes related to **student resiliency and problem-solving. Improvements in student attitudes** were expected to build over the three-year grant, as teachers trained in the Lions-Quest *Skills for Action* program developed mastery of how to use the program and learned ways to connect service-learning projects and tasks to academic subject areas. The survey measurement tools, *Pre/Post Resiliency Survey, Tennessee Department of Education and Volunteer Tennessee, Learn and Serve Secondary Survey, Grades 6-12*, and the *Pre/Post Resiliency Survey, Tennessee Department of Education, Learn and Serve Elementary Survey* (see Appendix A) were derived from the *School Connectedness and Student Resiliency Student Survey* (Laird, Malinoff, and Black, 2002).

Evaluation Outcomes:

- **High School Service-learning Sample Size**-Over the 2008-2009 year, 1,041 high school students participated in service-learning and completed either pre- or post-survey which analyzed for growth in attitudes and projected behavior. After validity checks to exclude students with unreliable or unmatched surveys (often no post surveys) there were 661 high school aged service-learners at pre survey, with 437 from sites across Tennessee and 224 from the Memphis City High schools (see Table 1 and 2 in this narrative for these valid cases).
- **High School Comparison Sample Size**-There were 750 high school comparison students in the same schools who did not participate in service-learning but completed pre surveys and 755 comparison students completed a post survey. After excluding students experienced in service-learning, the valid case count for the comparison group was 492 students at pre survey and 435 at post survey.
- **Middle School Sample Size**-The middle school data sets were checked for validity as well. The valid cases used for middle school students were: 75 service-learning students at pre and post survey from Henry, Polk and Weakley Counties, and 34 comparison middle school students were matched at pre survey and at post survey. This year there were fewer students

in the middle school sample because no Memphis middle schools submitted surveys to the evaluator.

- **Elementary Sample Size**-There were 74 elementary school students participating in service-learning who met the valid case criterion at pre survey, and 75 at post survey. The elementary comparison group of valid cases had 51 students at pre survey and 51 at post survey.
- **Matching Pre-surveys and Post Surveys**-While the overall number of surveys was smaller than in previous years, this was because the analysis was for matched students. This was to insure that students were present for most or the entire course of service-learning. Some sites did not provide pre or post surveys. Haywood, McNairy and Putnam counties did not provide pre or post data, and only half (mostly missing post data) of the research design surveys were provided for Grundy County, Lenoir City, and Oneida Special School District.
- **Missing data**-Memphis City Schools had some missing data from Trezevant and Wooddale teachers at the high school level, but complete survey sets were sent from other teachers from these two schools to be able to represent the service-learning students. Memphis middle schools data was missing from Ida B. Wells Academy and Sherwood Academy and yet, last year they did provide surveys. Some Memphis elementary surveys were provided by Hamilton Elementary this year, but post surveys were missing from Circles of Success Academy, Rozelle Elementary, and KIPP Diamond Academy (only pre-surveys were received). Teacher illnesses and complications at the time of post surveying were the usual reasons for missing data.
- **Problem-solving results for a performance measure**-One of the key performance measures related to the overall goals of the Tennessee Learn and Serve programs was that by year 3, 50% of the students participating in service-learning activities would report increased problem-solving as measured by the survey. This performance target was not achieved; the percentage of students reporting an increase in problem-solving for year two was 47%. The 47% figure is very close to the target criterion (50%).
- **Resiliency performance measure achieved**-The second performance measure was the outcome target that 50% of service-learning participants would increase their resiliency. This goal was achieved and exceeded with 69.82% of the students in year three increasing their assets of resiliency components.
- **Many Attitude Changes in the Other Tennessee High School sample**-Each item on the Resiliency survey was examined via analyses of variance and analyses of covariance to check the hypothesis that participation in service-learning was associated with attitude gains. For the high school –Other Tennessee data set, when using analyses of covariance to control for comparison student improvements, there were twenty-eight significant gains for the attitudes statements for which the service-learning students improved (at $p < .05$). This is the largest number of attitude survey item changes for students in traditional high schools that has been recorded since the first year of Tennessee Learn and Serve evaluation. One behavior

item, the number of hours spent volunteering in the community increased over time for the students participating in service-learning.

- **Memphis High School students in service-learning had more limited attitude changes-** There were only two attitudes with a significant improvement for students participating in service-learning in Memphis (“Adults are easy to talk to.” and “I think I can make a difference in school.”). Memphis high school students had two behavior changes with increased sports involvement and more hours spent per week in worship services at the end of June, 2009 in contrast to June of 2008.
- **Middle School Attitude and Behavior Changes-** There were no positive attitude changes from the small sample of service-learning students in middle schools. Analyses of covariance demonstrated that after controlling for comparison group effects, the middle school service-learning students showed significant reductions on bingeing on alcohol when measured from pre survey to post survey. They also reported more involvement in sports activity after participation in service-learning. Since very few students binged on alcohol in 2008 or 2009, these findings need to be replicated with a larger middle school research project.
- **Elementary School Attitude Changes-**The elementary data set was small. Two of the 25 survey items showed significance using analysis of variance with the probability set at $p < .05$. The first was an increase in service-learning students’ agreement that they knew how to calm themselves when angry. About half of these participating students (52.88%) agreed at pre-survey, and this increased to two in every three students at post survey (66.67%). The comparison students’ agreement about this impulse control survey item declined over time from 59.32% to 45.84%. Service-learning students also improved on their agreement that they could wait their turn and listen to others.
- **Collection of Student Performance and Behavior Data-**Teachers of students at Jefferson County, Montgomery County (Northeast High), Science Hill Alternative Learning Center (Johnson City), Oak Ridge Alternative Middle School and Oak Ridge Alternative High School and Henry County’s Lakewood Middle School and Harrelson Middle School provided data to the evaluator on students performance (overall grade point averages) and behavior records for service-learning students. Some of the teachers collected student data on comparison or control students as well.
- **Grade Point Averages Increase-**These grades and behavior records were used as an investigatory research strategy. Larger samples of matched students would be needed to generalize the findings. The first finding was that the **service-learning students’ overall grade point averages increased by 14%**, from 2008 to 2009 and this was a statistically significant gain. There was an insignificant, less than 1% gain, for the comparison students. The positive and significant improvement associated with service-learning participation was seen as an additional outcome from the Tennessee Learn and Serve program.
- **Decrease in Out-of-School Suspensions-**Out-of-school suspensions showed decreases over the same time periods with a **72% decline for service-learning students** and a 50% decline for the comparison students. The sample numbers were small, and there were so few

suspension events for the comparison group that the significance testing was not valid. These limited samples mean that other research should be done to verify the relationship of service-learning and decreased out-of-school suspensions.

- **Decrease in In-school Suspensions-** In June of 2008 the students who would soon be attending a service-learning class had accumulated 250 infractions for misbehavior and were given an in-school suspension. After the service-learning program, these same students had only 77 in-school suspensions, a **72% decline**. The comparison students were fewer in sample size and they had only 15 in-school suspensions in 2008 and 13 in 2009. A larger sample of students in both groups might verify or add validity to this finding of a relationship between service-learning and the decline for in-school suspensions.
- **School Absences-**The last behavior record set was student absences from school. The service-learning students did not show the expected decline in days absent, and the comparison group had **2%** decline in days absent over the same time period. The days absent changes over time needs to be investigated in upcoming years.
- **Earlier research-**These school performance and behavior findings from the 2008-2009 year follow some of the results of a larger sample of students (N=558 service-learning students and 121 comparison students) measured in 2004-2005 in Tennessee. In this study, “Re-engaging suspended students in Tennessee: Longitudinal benefits from service-learning,” all four of these measures showed significant academic and behavioral impact associated with service-learning (see the abstract of findings from the International Research Symposium on Service-learning, Tampa, Florida, October, 2007 or contact Volunteer Tennessee).

Project presentations by site coordinators in March, 2009 revealed that, many student efforts at the sub-grantee sites had interesting impacts on communities by working with Lions Clubs or other clubs/agencies to provide medical screening. Students in other sites wrote and collected materials to military persons based abroad, and at other sites students tutored elementary students and helped at elementary schools’ family reading nights.