# DELTON-KELLOGG ADULT EDUCATION CENTER MICHIGAN CAREER & TECHNICAL INSTITUTE 11611 WEST PINE LAKE RD PLAINWELL, MI. 49080

# Adding the Weaver Reading Intervention Program Supercharged Delton-Kellogg Adult Education Center Student (Ages 17 and ABOVE) Reading Performance

### Premise

A student's academic success hinges on his/her ability to read effectively. The earlier a student master's the basic reading skills, the stronger the foundation they have for future success. Students who can read well and efficiently have an easier time achieving academic success, which can translate into future personal success beyond academic studies. No one curriculum model or program yet developed can cover all the variables involved in learning to read. However, unlike traditional manufactured reading curriculum, the Weaver Reading Intervention Program is based on the philosophy that students must be taught how to comprehend before trying to do practice lessons rather than just providing practice lessons. And, that new words are learned through repetitive usage and exposure instead of single exposure to an isolated word.

# **Delton-Kellogg Education Center Demographics**

The Delton-Kellogg Adult and Alternative Education Program, located on the Michigan Career and Technical Institute Campus, Plainwell Michigan, serves alternative education students ages 17-19, adult education students ages 20 and above and G.E.D. students ages 18 and above. "Under the direction of Louise Angelo, every year the five instructors provide mastery-based instruction to approximately 160 alternative education students and over 400 Adult Basic Education (ABE) students. The Education Center graduated 143 students during the 2001-02 school year (http://delton-kellogg.k12.mi.us/MCTI.htm). Delton and surrounding area is largely agricultural made up of farmers who support the youth of the region (http://homepages.wmich.edu/~kroes/delton/)

### Method

#### Subjects:

Two Hundred and Eighty Nine (289) students ages 17 and above representing a mix from the G.E.D., alternative education and adult education programs participated in this study during the 2001-02 academic school year. Their reading levels ranged from a low of 1.1 to a high of 12.9 as measured by the Gates-MacGinitie Reading pretest.

#### Instruction:

Two Hundred and Eighty Nine (289) students used the Weaver Reading Intervention Program on average 2.5 hours per week for 30 weeks between pre-test and post-test dates.

#### Analysis:

All students were pre-tested and post-tested using the Gates-MacGinitie Reading Test. Raw scores were converted into Grade Level Equivalents (GLEs). The two-tailed paired-t statistic was used to determine the significance of pre-/post-test mean differences due to instruction at a P-value of 0.05.

# Results

2001-02 Academic School Year Student Scores Expressed in Normal Curve Equivalents (NCE)

Paired t-statistics	
Ν	289
Mean Difference	2.723529
Standard Deviation	2.424298
Standard Error	0.142606
Degree of Freedom	288
t-value	19.09831
Lower Control Limit	2.442848
Upper Control Limit	3.004211
P-value	0.0001

The following inferential observations were made using the paired t-statistic, two-tailed null hypothesis and a P-value of 0.05:

1. The two hundred and eighty nine (289) students ages 17 and above representing a mix from the G.E.D., alternative education and adult education programs collectively gained a mean difference of **2.72 Grade Level Equivalents** as a result of adding the **Weaver Reading Intervention Program** to the traditional Title 1 Reading Curriculum at a P-value of 0.0001.

# **Conclusion:**

The two hundred and eighty nine (289) student (ages 17 and above representing a mix from the G.E.D., alternative education and adult education programs) mean-difference gains demonstrated positive significant differences at P-values above 0.05, the lower level cutoff for statistical significance acceptance. The actual P-value of (.0001) means that if this study was replicated under similar conditions ten thousand times, the same results should be expected 9999/10,000 times. The Null Hypothesis is rejected in all cases; student gains are a result of adding the Weaver Reading Intervention Program into the traditional Delton-Kellogg Adult Education Center Curriculum.

Contact: Michigan Career & Technical Institute, 11611 West Pine Lake Road, Plainwell, MI 49080

Prepared by R&R and Associates, Saline, MI. for Weaver Instructional Systems, Grand Rapids, MI. Created on March 2, 2003 at 11:00 AM