

***I CAN Learn*<sup>®</sup> in Orleans Parish Public Schools  
Effects on LEAP 10<sup>th</sup> Grade Math Achievement, 2003-2004**

Peggy C. Kirby, Ph.D.

***ed-cet, inc.***

Select public schools in Orleans Parish began using the I CAN Learn<sup>®</sup> educational system in 10<sup>th</sup> grade mathematics classes just after the second semester of the 2003-2004 school year. These schools were selected primarily because they contained historically lower-performing students. However, because students were not randomly assigned to I CAN Learn<sup>®</sup> or traditional math classes, some other means of equating groups was necessary in order to determine the unique contribution of I CAN Learn<sup>®</sup>.

Orleans Parish public school students take the LEAP exit exam in the 10<sup>th</sup> grade. Data provided by the school district included 1,888 10<sup>th</sup> grade LEAP scores. ITBS math scores from the prior year were provided for 1,144 of these same students.

Student demographics were similar in I CAN Learn<sup>®</sup> (ICL) and traditional classes in terms of gender (54.3% female in traditional classes; 52.5% female in ICL classes). However, ethnicity differed in the two groups, with significantly more African American students (97.7%) in the I CAN Learn<sup>®</sup> classes than in traditional classes (90.6%). There were no white students in the ICL classes but 4.9% in traditional classes. By way of comparison, the Orleans Parish School District has 93% African American students.

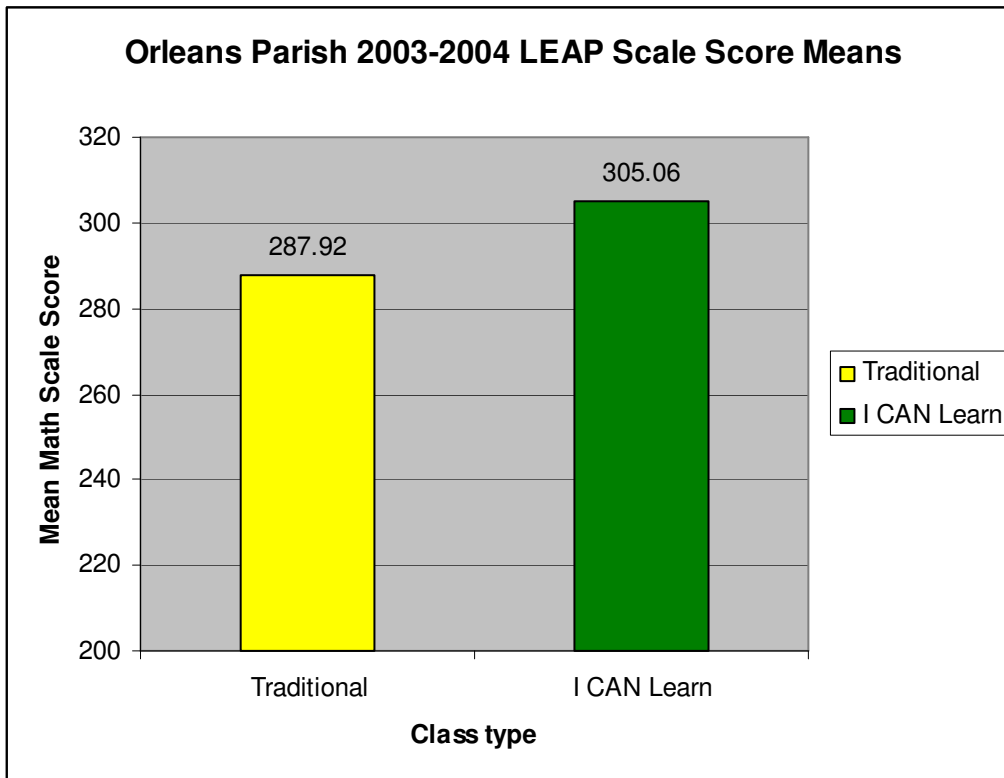
The percentage of students receiving free or reduced-price school lunch in the district is 77%. Although SES (free/reduced lunch) data were not provided for ICL and traditional classes, Orleans is clearly one of the lowest districts in terms of socioeconomic status of its students. Also, at the high school level, it can be assumed that more ICL students qualified for free or reduced price lunch because the schools in which ICL was placed were the lower-performing schools and did not contain any of the more elite magnet schools in the district.

Nevertheless, no assumptions were made about the equality of groups at the outset of the study. Instead, using analysis of covariance (ANCOVA) to analyze data, prior year ITBS math scores allowed each student to serve as his/her own control. After adjusting for prior achievement differences, I CAN Learn<sup>®</sup> students significantly outperformed traditionally-taught students by 18 scale score points on the LEAP math test. The ANCOVA summary table is presented in Table 1. Means for the two groups are presented in Figure 1.

**Table 1**  
**ANCOVA Summary Table for Effect of I CAN Learn<sup>®</sup>**  
**on 10<sup>th</sup> Grade LEAP Math Scores**

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	3513953.885	2	1756976.942	916.753	.000
Intercept	18889298.115	1	18889298.115	9856.028	.000
ITBS Math	3512008.161	1	3512008.161	1832.490	.000
Class type	40959.234	1	40959.234	21.372	.000
Error	2186752.107	1141	1916.522		
Total	102180995.000	1144			
Corrected Total	5700705.992	1143			

a. R Squared = .616 (Adjusted R Squared = .616)



Note: N=1,144; I CAN Learn n=166; traditional n=978

Given these findings, it can be concluded that in the short time it was used in Orleans Parish, the I CAN Learn<sup>®</sup> system has made a significant contribution to the improvement in high-stakes mathematics test scores in Orleans Parish schools. Additional analyses will be forthcoming, pending data availability.

**ed-cet**.....,inc.  
educational consulting, evaluation, & training

---

Peggy C. Kirby, Ph.D.  
2301 Killdeer Street  
New Orleans, LA 70122  
edcet@bellsouth.net

Voice/fax: (504) 288-1404  
Cell: (504) 905-5907