
The Effectiveness of Remedial Education—Using Pace Learning Systems— for Students who Previously Failed the Alabama High School Exit Exam

A synopsis of a doctoral dissertation by Timothy Lull, College of Education, The University of Alabama, 1999.

This study assessed the performance on the Alabama High School Exit Exam of students who previously failed one or more exam sections (Reading, Math, Language). Of 280 eligible students, 139 volunteered to participate in a remedial program using Pace Learning Systems. Participation in this program was for one period a day for which students received elective course credit. The Pace Learning program includes a series of instructional modules designed to teach basic academic competencies. The remaining students (141) continued to attend regular classes, and both groups continued to take regular core courses prescribed for the academic diploma. On average, the students who volunteered for the remedial program had previously scored 3% higher on the failed exam sections than had the comparison group (57% vs. 54%).

The performance of “Pace Learning” students vs. “Regular” students on a subsequent administration of the High School Exit Exam was compared. In every category, the re-take pass rate for Pace Learning remediation students was superior (overall pass rate of 78.4% vs. 45.5% on all retaken exam sections). Table 1 indicates the pass rates on each exam section for the two groups. Pass rate differences for students in Pace Learning Language remediation were especially striking (81.2% passing vs. 42.6% for regular class). Given that the Language Exam had been failed by more students than either the Reading or Math exams, improvement in this area is especially encouraging.

African American students and low SES students seemed particularly to benefit from remediation. (See Table 2.) Although white students had an overall higher pass rate on second administration, those receiving Pace Learning instruction also outperformed their regular class counterparts. Males seemed to benefit substantially from Pace Learning remediation in Reading (92.3% pass rate), whereas females improved significantly in Math (89% pass rate). Both groups in Pace Learning Language instruction passed the Language exam at high rates (76.7% and 87.8%, respectively; see Table 3).

The exit exam pass rates strongly imply that Pace Learning Systems instruction in Reading, Math, and Language was an effective intervention for these at-risk students. It should be pointed out that these students volunteered and thus might be considered more “motivated” or possibly more interested in trying an alternative method of instruction. Too, the remediation group began with a 3% higher score, on average, on their previously failed exam sections. However, the magnitude of the observed performance differences suggests the Pace Learning program was an effective “added ingredient” to the regular instruction undertaken by students who had previously failed the exit exam. Although some 45% of the students in regular classes passed upon retake, nearly 80% of students who received Pace Learning instruction did so.

*--Reviewed by Carl B. Clements, Ph.D.,
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Table 1. Exit Exam Re-Take Pass Rates for Students in Pace Learning Remediation and Regular Classes

Exam Section	Number of Students	Pace Learning Remediation	Regular Classes
Reading	93	76.5%	47.5%
Math	132	74.5%	48.1%
Language	209	81.2%	42.6%
All Sections	434*	78.8%	45.5%

*Sum is greater than number of students in study (280) because many had failed more than one section of the exit exam.

Table 2. Exit Exam Re-Take Pass Rates of African American, White, and Low SES Students

Exam Section	Group	Number of Students	Pace Learning Remediation	Regular Classes
Reading	African-American	58	76.9%	43.8%
	White	35	75.0%	51.9%
	Low SES	42	75.0%	38.5%
Math	African-American	74	70.7%	30.3%
	White	58	85.7%	61.4%
	Low SES	50	74.1%	26.1%
Language	African-American	110	75.8%	29.5%
	White	99	91.4%	51.6%
	Low SES	81	78.3%	22.9%

Table 3. Exit Exam Re-Take Pass Rates for Males and Females

Exam Section	Gender	Number of Students	Pace Learning Remediation	Regular Classes
Reading	Male	45	92.3%	50.0%
	Female	48	66.7%	44.4%
Math	Male	71	50.0%	50.0%
	Female	61	89.3%	45.5%
Language	Male	135	76.7%	41.3%
	Female	74	87.8%	45.5%