How Quantum Learning Teaching Strategies Affect Learners

A Masters Study About Quantum Learning Effects on Student Attitudes Toward Learning and Academic Achievement Aurora University, June 2002

Abstract

7th and 8th grade students, parents and teachers from Westfield Community School, Carpentersville, IL, were surveyed to discover student attitude and confidence levels. ISAT scores of the students surveyed were also compared. For 7th grade Social Science ISAT scores and for 8th grade Math ISAT scores were used.

Students are all on four or five-person middle school interdisciplinary teams—some were in Quantum Learning classrooms and others in traditional classrooms. Results do support brain-based education.

"We started out very excited about Quantum Learning after a five-day course in the summer of 1999. To apply strategies that are founded in scientific research just makes sense. We are now very excited about the positive results from this project. Our methods have changed, our love of our careers has expanded and now, we can show that our changes have benefited our students."

Lisa Barlas, Ann Campbell & Heidi Weeks Authors of the Study

Results	Quantum Learning Classroom	Traditional Classroom
Test Scores		
7 th Grade ISAT Social Studies Students met or exceeded the standards	85%	77%
8 th Grade ISAT Math Students met or exceeded the standards	57%	55%
LD ISAT Intensive Math Students met or exceeded the standards	17%	0%

Quantity of time teachers spend using major brain-based components		
Multi-Modal lesson design are used a % of the time	88%	24%
Teachers help students to answer the question, "what's in it for me?"	72%	8%
Teachers find opportunities to celebrate learning	83%	14%
Teachers use visual aids to help students remember, think and succeed	82%	63%

Confidence Level Comparison		
Students reported the highest level of confidence (top of five)	26%	18%
Parents reported the highest level of their child's confidence (top of five)	54%	38%
Students with LD reported confidence in the highest two levels (out of five)	86%	35%
Parents of students with LD reported confidence in the highest two levels	78%	7%
(out of five)		

Parent Involvement Comparison		
Parents stated specific instructional strategies and methods the teachers were	85%	14%
using to help the students		
Parent response for the survey	99%	Low

Conclusions

Overall Quantum Learning students performed better and felt more confident about school. Quantum Learning teachers also felt better about their students and work.

Quantum Learning parents were able to state many strategies that led to student success while traditional parents focused more on grades and student effort. When middle school students are excited enough about school to tell their parents what goes on in class, the whole school community benefits. ISAT test scores showed larger percentages of Quantum Learning students scored higher, and fewer scored lower than traditional classroom students.

The teacher survey comparison showed that Quantum Learning teachers use multi-modal instruction, enriched learning environment, state changes and music more than traditional teachers. What is interesting to note are the levels of difference between Quantum Learning and traditional teachers.

17% more LD students receiving Quantum Learning instruction met state standards on the Intensive Math ISAT. Many students with learning disabilities have learning styles other than those normally addressed in school. Therefore the multi-modal instructional style of Quantum teaching, along with the emphasis on learning environment could prove very beneficial for LD students.

Would Quantum Learning strategies affect LD students and regular education students differently? The answer is yes, however, both are affected in positive ways.

One reason for the confidence levels not being very different could be that part of our Quantum Learning classroom philosophy is to teach students to honestly and accurately self-reflect. More parents of Quantum Learning and traditional students responded, as we expected. More parents of Quantum Learning students felt their children were extremely confidient.

Our teacher survey results truly show the differences between Quantum Learning and traditional instruction. We would like to provide our administration with these results and encourage them to provide staff development in the use of the successful strategies noted in this project.

"Personally, using Quantum Learning in our classrooms has led us to better relationships with our students and helped us to keep the passion in what we do every day."

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