

**DOES THE PARENT INSTITUTE FOR QUALITY EDUCATION (PIQE)  
PROGRAM INFLUENCE STUDENT SUCCESS?**

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## Summary

### Research Question

In examining how school practices to promote partnerships influence student success, this study considers PIQE as such a school practice and tests for differences between students of parents who have graduated from PIQE to those with parents who have not.

### Methodology

Using simple random sampling, data of 598 students were examined. Causal comparative research design allowed for adequate controls. Twenty of the 187 parent survey respondents were PIQE graduates. Independent samples *t*-tests were applied.

### Key Results

- Students of PIQE graduates performed at a higher level across all indicators of student success when compared to students of non-PIQE graduates (see Table 1).

**Table 1**

***Independent samples t-tests***

Dependent variables	Are you a PIQE graduate?		
		N	Mean
Math Fall '06	Yes	20	73.450
	No	132	64.717
CST ELA '06	Yes	15	339.53
	No	94	325.12
CST Math '06*	Yes	15	401.20
	No	94	355.76
Average Daily Attendance	Yes	19	.9701
	No	125	.9654

\*Statistically significant (2-tailed) > .05

- The difference is statistically significant for CST Math 2006.

### Conclusion

Students do better when their parents act as advocates for their children (Jordan, Orozco, and Averett, 2002). Research consistently shows that PIQE is an effective strategy for schools to employ in their efforts, as PIQE is distinguished by its effectiveness in helping parents build such advocacy skills. It is critical for school practitioners and leaders to enroll the support of parents as advocates in the education of their children and to ensure parents are equipped with the advocacy skills required to support the success of their children. Such action on the part of the school is of clear benefit to student success.

## **DOES THE PARENT INSTITUTE FOR QUALITY EDUCATION PROGRAM (PIQE) INFLUENCE STUDENT SUCCESS?**

### **Introduction**

In the interest of clarifying best practices and advancing theory, leading researchers have long called for more research that examines how school practices to promote school, family, and community partnerships influence student success (Henderson and Mapp, 2002; Epstein, 2001; Jordan, Orozco, and Averett, 2001). Since many schools implement the Parent Institute for Quality Education (PIQE) program in the interest of improving student success, this study examines differences in student performance between student of parents who have graduated from PIQE and those with parents who have not.

PIQE, established in 1987, is a nationally acclaimed program based upon the theories of action research. Over the years, many schools have boasted about the impact PIQE has had in helping parents build advocacy skills in support of their children's learning. In 2000, Janet Chrispeels and Elvira Rivero presented a highly respected paper exploring the effects of PIQE on 198 Latino immigrant parents using pre-test and post-test survey data, observations, in-depth interviews and review of artifacts. Chrispeels and Rivero measured effects and found notable differences in pre-test and post-test data, concluding that parenting practices can be influenced when information is provided by a "cultural-broker," such as that which the PIQE program provides. Other studies have replicated these findings. Since PIQE appears to influence parenting practices, does the program influence student success as well?

### **Methodology**

#### Research design

The sample consisted of 598 students' selected using simple random sampling from an elementary school district in Southern California. Dependent student success variables included California Standardized Test (CST) ELA 2006, CST Math 2006, Fall Math Trimester 2006, and Average Daily Attendance (ADA) 2006. The district provided this testing and performance data. Parents and teachers of students received coded surveys adapted from Joyce L. Epstein and Karen Clark's 1990 (revised in 1993 to current version) surveys titled, *The Surveys of School and Family Partnerships: Questionnaires for Teachers and Parents in Elementary and Middle Grades*. The researcher added a question so parents could indicate if they were or were not a Parent Institute for Quality Education (PIQE) graduate.

As many factors influence student success beyond parent involvement, the research design controlled for variance of extraneous variables by conducting research in a highly homogenous Title I district with a consistent record of strong administrative leadership, high teacher retention, and supportive parent involvement policies. PIQE had worked with the schools of this district over the past years, but had not conducted services at schools within the current year that this study had occurred. Controls in this causal-

comparative (*ex post facto*) research (Leedy and Ormrod, 1985) enabled statistical tests to describe relationships between the independent variables and dependent variables using independent samples *t*-tests in SPSS.

#### Research question

When comparing student performance differences between students of parents who have graduated from PIQE to those with parents who have not, are there significant differences in student success?

#### Sample

One-hundred eighty-seven parents returned surveys representing a response rate of 31.27%. Demographic data showed that 100% of students were Title I eligible. The majority were native Spanish speakers (60.2%) of Hispanic/Latino descent (80.7%). Very few students participated in Special Education or GATE programs. In terms of teacher characteristics, over 40% ranked Class VII, which reflected the highest education classification recognized in this District, and 95% had full credentials. The average teacher had about 13 years of experience. Twenty parent respondents indicated they were PIQE graduates.

#### Validity

The dependent student success variables were compared between the sample and survey respondents using one-sample *t*-tests. No significant differences were found.

Linear regression models assessed if extraneous variables were significant predictors of dependent variables. The key extraneous variables controlled for in this study included Title I status, class size, English Language Learner status, GATE status, Special Education status, ethnicity, Teacher Education status, Teaching Credential status, years of teaching experience, and Parent Education status. The forward method was applied. English learner status and Special Education status were the only two factors found to be significant predictors. These results applied to the dependent variables of CST ELA and CST Math variables only. Here, additional statistical controls were applied as appropriate. However, it is important to note that these same student characteristics were not significant predictors of Fall Math Trimester scores or ADA. All other extraneous variables were found not to be significant predictors of student success variables in this study and thus were adequately controlled for through the homogenous nature of the sample.

Additionally, cross-tabs were used to assess if the educational level of parents in this study was a significant factor in PIQE graduation. In comparing PIQE graduates and non-PIQE graduates to the self-reported educational level of parents using Pearson Chi-Square tests, no statistically significance differences were found.

## Results

Independent samples *t*-tests were applied to compare the differences among children of PIQE graduates to those of non-PIQE graduates on four key measures of success. The PIQE variable allowed for the simple grouping of students by yes or no. These test results show that students of PIQE graduates performed at a higher level across all indicators of student success when compared to students of non-PIQE graduates (see Table 1). These same patterns were found when controlling for effects from special education and English language learner sub-groups.

**Table 1**

***Independent samples t-tests***

Dependent variables	Are you a PIQE graduate?	N	Mean
	Math Fall '06	Yes	20
No		132	64.717
CST ELA '06	Yes	15	339.53
	No	94	325.12
CST Math '06*	Yes	15	401.20
	No	94	355.76
Average Daily Attendance	Yes	19	.9701
	No	125	.9654

\*Statistically significant (2-tailed) > .05

The difference is statistically significant for CST Math 2006 (see Table 2).

**Table 2**

***Independent samples t-tests***

Dependent variables	<i>t</i>	df	Sig. (2-tailed)
Math Fall	1.88	31.466	.069
CST ELA '06	.970	107	.334
CST Math '06	2.165	107	.033*
Average Daily Attendance	.561	142	.576

\*Statistically significant (2-tailed) > .05

## Conclusions

This research finds that the children of PIQE graduates performed at higher levels when compared to children of non-PIQE graduates. More specifically, this difference is statistically significant when comparing CST Math scores of 2006. These findings support Chrispeels and Rivero’s study of 2000 and others, providing additional insight as to the program’s influence on student success. Research consistently shows that PIQE is an effective strategy for schools to employ in their efforts.

A key element that themes through the research (Jordan, Orozco, and Averett, 2002) is the importance of parents performing in the role of advocate. Parents positively influence their child’s success in school when they are knowledgeable of their roles and responsibilities as advocates and comfortable with their skills in navigating through the educational system. A distinguishing element of the PIQE program is its emphasis on advocacy. This study offers a typology of seven key practices that parents can do to promote student success as compared to Joyce L. Epstein’s typology of six key practices (see Table 3).

<b>Table 3</b>	
<b>Six types of parent involvement practices</b>	<b>Seven types of parent involvement practices</b>
Parenting	Parenting
Communicating	<b>Advocating</b>
Volunteering	Communicating
Learning at home	Volunteering
Decision-making	Learning at home
Collaboration	Decision-making
	Collaboration

Building on Epstein’s Six Types of Parent Involvement model, the framework of seven practices adds the element of *Advocating*. This element was placed as the second type because the role of advocate is a foundational disposition encapsulating all remaining activities. Clearly one could compare the difference between a parent who communicates with the school, volunteers, assists with learning at home, participates in decision-making, and builds collaborative relationship and one who does so as an advocate for their child’s success and the success of all children. The public education system in America presupposes that parents are active advocates for their children and holds the educational system to account. Decades of research examining the impacts of social capital shows stark distinctions between families with high social capital and those with relatively lower social capital compared to their understanding and skill in working with educators (Colman, 1990; Lareau, 1987).

Schools build social capital by helping parents build their awareness, knowledge, and skills about their roles and responsibilities as advocates. Clearly, this research, consistent

with the body of research, underscores how important it is for school practitioners and leaders to enroll the support of parents as advocates in the education of their children and to ensure parents are equipped with the advocacy skills required to support the success of their children. Such action on the part of the school is of clear benefit to student success.

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