

THE CHELSEA STUDY

Findings from the Research

*Board of Directors Meeting
June 2, 2016*



Bridget Terry Long, Ph.D.
Saris Professor of Education and Economics

THE QUESTION

Parent involvement tends to be an under-utilized strategy to encourage college enrollment, and little research has been done to document whether *increasing* parental involvement has a positive impact on students

Inversant provides a context in which to investigate parental involvement within a college access program

- *What is the impact of Inversant on parent knowledge about college preparation?*
- *Does increasing parental involvement in the college access process improve student achievement?*

THE RESEARCH

- **Academic Performance & School Behavior:**
Does parental involvement in Inversant have an impact on the academic performance and behavior of their children?
- **The Qualitative Research:** Jodut Hashmi
 - **Parent Perspective:** Reflections on their involvement with FUEL and whether they use the information offered to them
 - **Student Perspective:** How they perceive their parents' involvement in FUEL and how helpful they believe FUEL's efforts have been



The Chelsea Public Schools

- ▶ City median income: \$40,487 (2010)
- ▶ Focus of the research: Chelsea High School (only public secondary school in Chelsea)
- ▶ HS graduation rate 50-55% during last 10 years
- ▶ Less than a quarter of Chelsea High School students progress to any form of higher education
- ▶ In 2011, on state standardized assessment test:
 - 40% of 10th grade students got “fail” or “needs improvement” on the English MCAS
 - 46% got these scores on the math MCAS



Analyzing School Records

- ▶ Does parental involvement in FUEL have an impact on the performance and behavior of their children?
 - High school course selection
 - Course performance and MCAS scores
 - Student attendance rates at school
 - Student behavior/discipline reports

- ▶ Student-level school records: 2008-09 to 2013-14 Chelsea High School students
 - FUEL participants
 - Families who withdrew from FUEL (**comparison group #1**)
 - Rest of the student body (**comparison group #2**)



Who are the families?

Table 1: The Characteristics of FUEL Participants

	FUEL Participants Before 2014	FUEL Participants New in 2014	All FUEL Participants
Demographic Characteristics			
Female	0.536	0.590	0.550
White	0.084	0.033	0.061
Black	0.101	0.098	0.108
Asian	0.022	0.049	0.029
Hispanic	0.793	0.820	0.802
Income Measures			
Free Lunch	0.866	0.672	0.835
Reduced-Price Lunch	0.034	0.197	0.068
Educational Categories			
Lmtd English Proficient	0.190	0.066	0.151
In Special Education	0.089	0.082	0.086
Observations	179	61	278



Student Background

Table 2: FUEL Participants Country of Origin

	Frequency	Percentage
United States	166	69.17
El Salvador	20	8.33
Somalia	11	4.58
Iraq	7	2.92
Guatemala	6	2.5
Honduras	5	2.08
Colombia	3	1.25
Dominican Republic	3	1.25
Bhutan	2	0.83
Cape Verde	2	0.83
Mexico	2	0.83
Puerto Rico	2	0.83
Santo Domingo	2	0.83
Uruguay	2	0.83



Research Concern: Participants may be different than other families (e.g., more motivated)

Table 3: Comparing FUEL and non-FUEL students at Chelsea High School

	All FUEL Participants	Students not in FUEL
Demographic Characteristics		
Female	0.550	0.468
White	0.071	0.078
Income Measures		
Free Lunch	0.817	0.870
Reduced-Price Lunch	0.304	0.216
Educational Categories		
Lmtd English Proficient	0.158	0.357
In Special Education	0.088	0.135
Observations	240	1,456



What impact has Inversant had on student educational outcomes?

- Inversant students do better on exams and have higher high school grades in key subjects.
- There is suggestive evidence that that grade performance gap increases over time, from 9th to 11th or 12th grade, which might be attributable partly to participating in and benefitting from Inversant .
- Inversant students are more likely to take math and science classes as high school juniors and seniors, which could indicate a higher likelihood of preparing academically for college.



What impact has Inversant had on student educational outcomes?

- Attendance levels are higher for Inversant students
- Finally, student plans at graduation, as measured by a self-reported survey, suggest that Inversant students are much more likely to enroll at a four-year college than non- Inversant students

Conclusion: The differences for Inversant students are resounding and suggestive of the positive benefits of the program



From the Qualitative Research

- Increased “college knowledge”
- Raised educational expectations for their children
- Parents report being more involved in specific college preparatory activities from fall to spring
- Parents feel they are part of a community where they meet others who face similar challenges and could access immediate guidance and support
- Some students participate in Inversant... *From the Spring 2013 Student Focus Groups*



Informing the Parents

- ▶ “I know these things – they tell us in school, but they don’t tell your parents. Your parents are kind of in the dark about it, especially if they come from another country and they’re not used to the system. So FUEL will explain everything to my mom in terms that she got it and she’s on the same page with me and when I tell her, ‘Oh, we need to make an appointment with TRIO to fill this out or we need to send this out,’ she knows what I’m talking about.”



Changing the Behavior of Parents

- ▶ “FUEL has helped me have somewhere to start saving money because before my mom joined FUEL we didn’t save any money and we kind of didn’t know where to start. But now how we put money every month into the [Metro Bank], that has really said like okay at least we have somewhere to begin.”



Changing the Behavior of Parents

- ▶ “I feel like it’s also opened up my mom’s eyes up more, she encourages more. Like to do good in school, she expects more of me even though like I’ve done great now and before...Like for example if I get like a B, she’ll be like ‘You should try to strive to get an A, because A is like better...’”
- ▶ My dad is far more strict than he was before because he had known a little, like the SATs and stuff like that, and now he’s pressuring me to take them and all the tests that we have to do, and my grades.”



Changing the Behavior of Parents

- ▶ “For me I notice that they’re more willing to do stuff for me like if they hadn’t know about all this college stuff and how important it is, I don’t think... cause my parents actually drove all the way to Amherst just to go to an open house and before I think they would have been like, “You don’t need to go. Why do you want to go there so much?” Or like, “Why do you care?” But they actually took the time out of their day to drive those two hours and I thought that was real nice.”



THE RESEARCH: Conclusions

- Inversant has given parents and students important information about how to prepare for college academically and financially
- Families are actively using that information to do specific tasks , and students report more parental encouragement and engagement
- Involvement in Inversant is associated with improved student achievement, attendance, and aspirations

