

## Rationale

### Introduction

What does it take to establish a high quality academic program in a low performing high school? What are the consequences of trying something of this sort—for the program, the students who participate in it, those who don't, and the school as a whole? In broader terms, is it possible to use well-defined academic programs in schools to interrupt the reproduction of social and educational disadvantage (Bourdieu & Passeron, 1990) for low-income students and students of color?

In an effort to answer these questions, my dissertation research will examine the development and outcomes of a high quality academic program, the International Baccalaureate Diploma Program (IB), in two contrasting schools. One school serves a community that is relatively disadvantaged according to a wide range of social and economic indicators including but not limited to: school and neighborhood resources, family income, parents' educational attainment, and English language proficiency. The other school serves a community at the other end of the socioeconomic spectrum. Consistent with decades of research about the correlation of socioeconomic status (SES) and educational achievement, the first school is considered to be "low performing," the second "high performing." But where do these correlations accurately predict outcomes and where are their predictions inaccurate? Can an IB program established in a low performing school provide the same kinds of educational opportunities to students as an IB program in a high performing school? If not, why not? And if so, what does that suggest about the relative importance of both SES and program design in shaping the educational futures of diverse students? Are the opportunities in fact greater for low performing schools because there is more room for student growth?

Answers to these questions bear directly on one of the most critical social and educational dilemmas of our times: educational inequality, manifested in this case in college-going rates. College education appears to have powerful benefits for communities, the society as whole and for those individuals who graduate from college (Perna, 2003).

### Background and Context of the Proposed Study

The conceptual framework for this study is guided by two strands of research; research on how schools can encourage high academic achievement for students traditionally underrepresented (Latino and African American) in four year colleges in California and studies of reform program implementation in urban school contexts.

Research on academic achievement has identified teacher quality, rigorous academic curriculum and an atmosphere that supports academic success as highly correlated with high academic achievement (Adelman, 1999; Lee, 2001). Studies also find that students from disadvantaged socioeconomic backgrounds are more likely to attend schools with poorly qualified teachers, less rigorous curriculum and a less supportive academic environment (ACLU, 2001; Education Trust-West, 2004; Goldhaber & Anthony, 2003). In addition to school factors, research continues to point to the importance of family resources for academic success. Latino and African American students are more likely to be raised in less educated, single parent, low-income households located in less stable neighborhoods than European American students (Barton, 2003; Lee &

Burkam, 2002). A variety of institutions have introduced school intervention programs designed to overcome research-identified barriers in an effort to raise the academic achievement of disadvantaged students (Borman, Stringfield, & Rachuba, 2000). In general these programs fall into two categories: organizational level intervention efforts and student level interventions. Research on these programs finds interventions can be effective if they have the necessary resources and if they are able to create an appropriate match between the program offerings and the students they serve. Noteworthy programs combine rigorous coursework with high expectations for students and “scaffolds” that are specifically designed to help students overcome the barriers they face (Gándara & Bial, 2001; Mehan, Villanueva, Hubbard, & Lintz, 1996). Interventions that begin early and are sustained over a period of four years or more also have the greatest impact on students.

International Baccalaureate (IB) Diploma Program is an internationally recognized and externally validated comprehensive program of study that provides students with access to highly trained teachers and a very high level curriculum. While not traditionally seen in this light, recently schools that serve SES disadvantaged students have implemented IB as a type of organizational level intervention effort designed to stimulate high achievement. While school personnel hope to use the IB program to develop high achievement, research on program implementation in urban school settings predicts program staff will adapt the program to suit their students. Often this means watering down the rigor of the curriculum (Metz, 1990), and limiting services to students due to constrained resources (Louis & Miles, 1990). However, I anticipate that the IB Organization's oversight of program quality will mediate some of the “downward adjustment” Metz witnessed in schools serving poor students, so that students at both Vista and Jefferson will have had exposure to similar academic curricula.

### Dissertation Outline

Section 1—Environment and History of the two schools and description of their IB Programs

Chapter 1: A picture of the two schools in 2005

Chapter 2: Background of International Baccalaureate Organization

Chapter 3: A comparison of the historical development of IB programs at each school

Section 2—Data on the IB programs' implementation and outcome

Chapter 4: Analytical comparison of IB Programs at Jefferson and Vista High Schools

Chapter 5: Program outcomes & Who is the program working for?

Section 3—Analysis of the Data

Chapter 6: Results & Analyses

Chapter 7: Implications

## **Methods**

### Study Design

The study I am proposing for my dissertation follows the models of implementation studies that look closely at the internal characteristics of schools, how the schools are organized and the external context including the local history (Huberman & Miles, 1984; Metz, 1986). In order ascertain the level of program implementation and fidelity of the programs they studied, researchers looked at a wide range of variables; these include aspects of program organization

and organizational capacity, barriers and resources, and program outcomes for students, staff and the local community (Louis & Miles, 1990).

My study is based on a comparative case study design (Yin, 1989). I chose the two schools I will be studying using purposeful sampling (Patton, 1990). Yin points out that in order to conduct a valid case study researchers must understand that case studies involve different levels of questions and the researcher should be clear from the outset of their study how each of their research questions fit into the following framework.

Level 1	Questions asked of specific interviewees
Level 2	Questions asked of the individual case
Level 3	Questions asked of the findings across multiple cases
Level 4	Questions asked of an entire study – for example, calling on information beyond the multiple cases and including other literature
Level 5	Normative questions about policy recommendations and conclusions, going beyond the narrow scope of the study

(Yin, 1989)

First, I will be comparing the two IB programs across dimensions such as organizational capacity, resources and barriers, and outcomes; these represent my Level 1 and Level 2 research questions according to Yin's framework. I will also seek to answer level 3, 4 and 5 questions:

- Level 3
- Can an IB program established in a low performing school provide the same kinds of educational opportunities to students as an IB program in a high performing school? If not, why not?
- Level 4
- Do my cases follow patterns predicted by:
    - social capital theory
    - the program implementation literature?
- Level 5
- How viable is a policy recommendation to implement IB Diploma Programs at schools serving low income students?
  - What have I found about the relative weight of SES and program design in shaping the educational futures of diverse students?

### Data Sources

In order to make data collection for the proposed project more manageable for each of my research questions I have identified the data I will use to answer that question, defined each of the variables and set the parameters of each variable where appropriate. Below is a brief description of the six areas of data collection.

### A. State and Federal Policies and Funding

Data Source: California Department of Education Data Base

State and federal guidelines and funding influence how school programs are developed. If a program serves a certain ethnic group or serves an additional purpose such as student desegregation, then school personnel may find that additional funds are available from the state to fund programs at their school.

### B. Geographic location and population within the school boundaries

Data Source: US Census data, CBEDS data

Census data will provide important information on the neighborhood contexts for each school and provide information related to the resources and challenges that the local context adds to the schools (Metz, 1989). I also hope to find out how many students come from outside the schools' designated boundaries and outside the schools' districts.

### C. District Office

Data Source: Interviews with superintendent and district level magnet coordinator

District offices provide the direction for the schools in the district (Metz, 1986). I will define assistance as: aspects of the environment other than financial resources that contribute to program operation, such as staffs' positive attitudes, aspects of school organization, and level of cooperation from non-program staff. I will define barriers as: staff's negative attitudes towards the program, aspects of school organization that hinder program operation.

D. The High School Data Source: CBEDS data, Interviews with principals, assistant principals and a representative selection of teachers both IB and non-IB, and parent IB booster club participants.

In both cases the IB programs I am proposing to study function within large comprehensive high schools. Thus, the school context undoubtedly also influences the IB program. Resources available at the school, such as students, teachers, classroom space and funds may all influence the IB program. School level administrators can also constrain or encourage program functions. I will interview principals and key school administrators in charge of the master schedule to understand how these individuals perceive the purpose of the IB program, the role the program plays within the school, their role in the program and the level of funding the program receives. Based on implementation research, a highly integrated reform program is more likely to be sustained over the long term (Louis & Miles, 1990).

E. IB Program Data source: Interviews with IB coordinator, and teachers, school records, teacher surveys

### *Teachers*

Number of years teaching, type of credential and subject area of teachers' degrees are all factors past research shows have an effect on student academic achievement (Darling-Hammond & Youngs, 2002). I will create a survey that will assess teachers' backgrounds, the number of hours of IB-sponsored professional development completed in the past three years and attitudes towards students and teaching.

### *IB Coordinators*

I will interview each of the program coordinators to gain an understanding of the theories that drive their actions as program coordinators. I will use several different indicators to measure program outcomes at this level. For example, I will interpret that teachers enrolling in IB professional development means better teaching quality and greater program capacity.

### *IB Courses* Data: Field notes from course observations

Research by Riehl (Riehl, Pallas, & Natriello, 1999) found that schools often attach similar names to courses that are in fact very different (Metz, 1989). In order to determine if IB courses at the two schools are similar to one another I will observe two classes at each school.

### *Student Outcomes*

What impact does the program have on students? (for both European American and underrepresented minority students; disaggregated by ethnicity)

- A. Do IB seniors at low SES school complete A-G courses more frequently than similar students in similar high schools without an IB program? How does IB students performance on standardized tests compare to similar students?
- B. How does the A-G course completion and pass rate at high SES and low SES school compare to similar schools in California without IB programs?
- C. What are the attrition rates for both IB programs?

### F. International Baccalaureate Organization

Data source: Interviews with program personnel, web site

I will interview appropriate program personnel in order to gain an understanding of the structure of the organization. I will also seek to understand how the IBO affects individual high school programs. High school program coordinators actions may be constrained by IBO accountability measures such as: a) Teacher credential requirement, b) Teacher professional development hours, c) Course curriculum guidelines, and d) Membership and testing fees.

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