

Evaluation of the Cleveland Scholarship and Tutoring Grant Program 1996-1999

Submitted by:

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Evaluation of the Cleveland Scholarship and Tutoring Grant Program 1996-1999

In June 1995 the Ohio legislature approved Legislation as part of House Bill 117 that established the Cleveland Scholarship and Tutoring Grant Program. The program plan consisted of two elements intended to provide families of students within the boundaries of the Cleveland City School District (CCSD) the opportunity to apply for either: (1) a *tutoring grant* to be used to obtain additional academic assistance for their child who continued to attend Cleveland public schools or (2) a *scholarship* (i.e., tuition voucher) that could be used to defray the cost of private school enrollment for their child. The program was to serve primarily low-income students, giving priority to students whose family income was at or below the federal poverty index, then to those whose family income was less than twice the federal poverty index, and finally to those whose family income was greater than twice the federal poverty index. Further, the program was to reflect the proportion of African-American students within CCSD. Within these parameters, available tutoring grants and tuition scholarships were to be awarded randomly by lottery. During the program's first year (1996-97), eligible students were those in kindergarten through grade three, with expansion of the program upward by one grade annually through eighth grade.

The legislation also required the Ohio Department of Education to contract with an independent research entity to conduct an evaluation of the Cleveland program, with a report due the legislature in September 1999. This evaluation was to focus on a variety of factors associated with the implementation and impact of the pilot program in Cleveland. Through a competitive bidding process, the Indiana Center for Evaluation at Indiana University was selected to conduct a substantial portion of the evaluation, under the direction of Dr. Kim Metcalf. Fundamental to the selection of the Indiana team were: (a) demonstrated evaluative competence and objectivity; and (b) a record of absolute neutrality on the issue of school choice and, more specifically, of school vouchers.

With the guidance of an independent advisory committee established by the Legislative Office of Education Oversight, the research team has focused on the impact of the program on students, families, and schools. The evaluation has included an examination of:

- Student academic achievement, attendance, conduct/behavior, commitment to education
- Parent involvement in child's education, satisfaction with schools, educational choices
- Student and family characteristics
- Classroom and school characteristics
- Basic functioning of the scholarship program

Foci of the Evaluation

Across the period of the project, data collection has focused on addressing the evaluative requirements of House Bill 215 and on additional issues that have evolved. These issues represent a range

of concepts, ideas, and elements associated with the Cleveland Scholarship Program and with school choice. However, they can be organized into two basic categories. The first category focuses on what can be called *process* or *descriptive* factors. These factors include student and family characteristics, parent or guardian choices about and perceptions of their children's school(s), and characteristics of the schools children attend. Evaluation activities in this category were directed at understanding how or why families make the educational choices they do, characteristics of the public and private schools and classrooms, whether or not families and children are satisfied with the choices they make, and what contributes to these perceptions.

The second category focuses on what can be called outcome or impact factors. These factors include the effects of the scholarship program on students, families, and schools. Evaluation activities in this category were focused on examining the impact of the scholarship program on students' achievement, attendance, and commitment to education, and also attempted to determine and explain the impact of the program on families, schools, and teachers.

Specifically, the evaluation examined the following process/descriptive and outcome/impact variables:

- | <u>Process/Descriptive Variables</u> | <u>Outcome/Impact Variables</u> |
|---|---|
| <ul style="list-style-type: none"> • Family Characteristics: family size, income, head of household, parents' education levels, etc. • Educational Choices: factors influencing choice of school, satisfaction with children's schools, perception of school effectiveness, etc. • Student Characteristics: gender, race-ethnicity, previous academic achievement, etc. • Classroom Characteristics: class size, teacher education level, teacher years of experience • Functioning of the scholarship program | <ul style="list-style-type: none"> • Student Academic Achievement • Student Attendance • Student Attitude toward School • Student Conduct/Behavior • Student Commitment to Education • Parent/Family Involvement in Child's Education • Functioning/Operation of the Classroom or School |

Data Collection Methods and Sources

Data collection efforts during the first three years of the project were focused on the process and outcome factors noted in the preceding section. To the fullest extent possible, multiple sources of data were used in examining each specific factor or variable. In order to accomplish this, seven specific methods of data collection were employed. Figure 1 below depicts each of the seven data collection methods and their relationship to the process and outcome variables investigated from March 1997 through May 1999.

Figure 1. Data Collection Methods and Sources.

| | Achievement Testing | CCSD Records | Classroom Characteristics Survey | Student Survey | Teacher Survey | Principal Survey | School Policy Analysis | Parent/Family Survey |
|---|---------------------|--------------|----------------------------------|----------------|----------------|------------------|------------------------|----------------------|
| Process/Descriptive Variables | | | | | | | | |
| Family Characteristics | | ✓ | | | | | | ✓ |
| Educational Choices | | | | | | | | ✓ |
| Student Characteristics | | ✓ | | | | | | |
| Classroom Characteristics | | | ✓ | | | ✓ | | |
| Functioning of the Scholarship Program | | | | | ✓ | ✓ | | ✓ |
| Outcome/Impact Variables | | | | | | | | |
| Student Academic Achievement | ✓ | ✓ | | | ✓ | | | |
| Student Attendance | | | | | ✓ | ✓ | ✓ | ✓ |
| Student Attitude toward School | | | | ✓ | ✓ | | | ✓ |
| Student Conduct/Behavior | | | | | ✓ | ✓ | ✓ | ✓ |
| Student Commitment to Education | | | | ✓ | ✓ | | | ✓ |
| Parent Involvement in Child's Education | | | | | ✓ | ✓ | | ✓ |
| Schools/Classrooms | | | | | ✓ | ✓ | | |

Extended technical explanations of the data collection methods employed in the present project can be found in annual reports submitted to the Ohio Department of Education. However, brief explanations of each of the seven data collection methods are provided below. As will be seen, data collection in years one and two focused primarily on the characteristics of students participating in the scholarship program and the impact of the program on students' academic achievement. In year three, evaluation activities were greatly expanded to include the full range of impact and process factors, including those for families, schools, teachers, and students.

Achievement Testing

A unique and important aspect of the present project is the controlled collection of student achievement data by evaluation personnel. Measures of student achievement were obtained through special administrations of the Terra Nova, a nationally available standardized achievement test produced by CTB/McGraw-Hill. These tests were administered to scholarship students enrolled in private schools and to samples of non-scholarship students enrolled in public schools. Proctors who were experienced classroom teachers and who were trained and supervised by evaluation staff administered all tests. By measuring students' achievement in this way, it was possible for the evaluation staff to ensure that all students were given an equal opportunity to perform on the test.

Third and Fourth-Grade Testing. Achievement tests were administered during each year of the project. As per guidance by the advisory committee, years one and two focused on collecting data on a cohort of students who had entered the scholarship program from public school as third graders in 1996 (N=183) and a comparison group of students who remained in public school. In May 1997 and May 1998, when the students were third and fourth-graders respectively, the *Terra Nova* was administered to these students and to the representative comparison group. In the first year of the project, 131 scholarship students and 590 public school students were tested (as third-graders). In year two, attrition had reduced the number of students in both the scholarship and comparisons groups. As a result, 94 scholarship students and 343 public school students were tested (as fourth-graders).

First-Grade Testing. By the beginning of year two, it was apparent that student attrition would continue to reduce the size of the groups being studied and, thus, the statistical power of the evaluation. On the suggestion of the evaluation team and with agreement by the advisory committee, it was decided that the longitudinal evaluation of student achievement would be more effective if it were designed to follow a cohort of students who entered either their private school as a scholarship student or public school from the beginning of their school careers (i.e., as kindergartners or first-graders).

In year three of the project, and to enhance the quality of the longitudinal nature of the evaluation, achievement testing was conducted at grade one. To allow collection of baseline data (i.e., data indicating the level of children's achievement when they entered school), the Terra Nova was administered in November 1998 and May 1999 by evaluation staff. Included were scholarship recipients enrolled in private schools, scholarship applicant/non-recipients enrolled in public schools (students who had applied for a scholarship, but had not received one), and public school students. Across the fall and spring testing of first-grade students, a total of 3,152 students were tested. Of the students tested, 737 were scholarship students attending a private school, 536 were students who applied for but did not receive a scholarship and who were attending public school, and 1,288 were public school students who had not applied for a scholarship. Due to the late spring testing date in year three, scoring of test data from the spring administration has not been completed by the test publisher. The academic achievement of this cohort of students will be examined throughout the duration of the evaluation project, with longitudinal data collected from these students as they progress through second grade and beyond. Data from the two first-grade test administrations will be crucial as measures of baseline achievement as the project continues to examine the impact of the program on students' achievement in future years.

Analysis of CCSD Records

In any evaluation that examines student learning, it is important to include and control for non-instructional factors that may influence how well students perform. This was particularly true during years one and two of the evaluation project, when a focus was on students who entered the scholarship program as third graders after attending public school in previous years. Evaluation staff worked with representatives of Cleveland Community School District to obtain background information on all students who were included in testing during any year. On the basis of requests from evaluation staff, CCSD personnel identified and provided information on students' ethnicity, gender, school of enrollment, eligibility for the free or reduced price lunch program, and family head of household. Further, for students who entered the scholarship program as third graders, CCSD records were used to obtain measures of students' academic achievement *prior to their entry* in the program.

CCSD records were not available for scholarship students who had not attended a Cleveland public school prior to entering the program. In year one this included third-grade students who had attended a private school prior to the initiation of the scholarship program. Because it was not possible to obtain data that allowed the evaluation team to control for or match these third-grade students on the critical variables noted above, they were not included in the evaluation. In years two and three, CCSD records were unavailable for virtually all kindergarten or first-grade scholarship students who had begun their schooling using a scholarship to enroll in private schools. Since these students constituted the entire treatment group, the evaluation team developed procedures by which these data could be obtained or transposed from records maintained by the Cleveland Scholarship and Tutoring Grant program office.

Classroom Characteristics Survey

During year two, data were collected on the characteristics of the classrooms attended by the scholarship and public school students. These data were collected by evaluation team proctors through interviews with teachers and administrators in the schools where they had administered achievement tests. Through this process, data were collected on: the number of students in each classroom (i.e., class size), the highest degree completed by each classroom teacher, and the total number of years of teaching experience for each classroom teacher. The classroom-relevant data were used both to understand the nature and characteristics of the private and public school classrooms and to examine the effect of differences in these variables on students' achievement. In year two, classroom characteristics data were collected on 1,140 classrooms and teachers.

Student Surveys

Year three of the evaluation included collection of data on students who participated in the spring, 1999 achievement testing. These students were first-graders who had been enrolled in their public or private schools throughout the 1998-99 academic year and to whom it was possible for proctors to administer the surveys (N= 2,200). Students were asked to indicate their like or dislike regarding each of five statements about their attitudes toward school (e.g. How do you feel about school? How do you feel about going to college someday?). Each question was read twice to the students by the evaluation team proctor, and then students were asked to circle one of three faces (smiling, frowning, indifferent) that represented how they felt in response to the question.

Survey data on young children, particularly of attitudes, are often open to substantial variation. As a result, data from the student surveys were used in combination with teacher and parent data to examine the impact of the scholarship program on students' attitudes.

Teacher Surveys

In year three, a brief survey was distributed to all first grade teachers in both public and private schools throughout Cleveland. These surveys were delivered in person by evaluation team proctors at the conclusion of testing in each school in May 1999. All first grade teachers in these schools were asked to complete the questionnaire and to return it to the evaluation team in postage-paid envelopes. Thus, first grade teachers in all Cleveland public schools and in all private schools serving first-grade scholarship students received questionnaires (N=398). The survey focused on teachers' perceptions of: (a) each student's attendance, conduct, and interest in school (teachers were not informed about the scholarship status of any students); (b) involvement of parents/families of each student; and (c) impact of the scholarship program on them and their schools. The first portion of the instrument asked teachers to rate each of their students and the student's parent(s)/families on the factors noted above. A second section of the instrument asked teachers to indicate the extent to which they agreed with a series of statements about the impact of the scholarship program on their classroom and their school. In a final section of the instrument, open-ended questions asked teachers to explain their answers to earlier questions. Through repeated contacts by evaluation staff members, 40 of 67 surveys were returned by private school teachers (60%) and 175 of 331 surveys were returned by public school teachers (53%).

The data from these surveys were used to investigate issues associated with the non-academic impact of the scholarship program on students and families, and the more general impacts on teachers and schools (both public and private).

Administrator Surveys/School Policy Analysis

Year three data collection also included an attempt to obtain information from administrators in the private and public schools about student conduct and about the impact of the scholarship program on their schools. Evaluation team proctors hand-delivered to the principal of each public and private school (N=128) a brief survey, a letter of explanation, and a postage-paid return envelope. The first section of the survey asked the principal to provide basic information about his or her school (e.g., school size, number of teachers, etc.). A second section asked for information about overall student attendance patterns and the level and nature of parent involvement with the school. A third portion of the survey asked a series of questions about the impact of the scholarship program on the school, teachers, and the principal. Private school principals (i.e., those with scholarship students enrolled in their schools) completed a final section of the survey in which they compared scholarship students and their classmates on discipline, attendance, attitude, motivation, and general academic performance. In addition to data collected from the survey instrument, principals were asked to provide copies of their schools' attendance and conduct policies. Thirty-five of 47 private school principals (75%) and 52 of 81 public school principals (64%) returned both the survey and a copy of their school conduct/discipline policies.

Data from the administrator surveys were used to examine the characteristics of the private and public schools, the impact of the program on the schools, and, in the case of private schools,

administrators' perceptions of the school behavior of scholarship students. These data were used both independently and in combination with student, teacher, and parent data. Further, school policies were reviewed and analyzed to provide a context in which to interpret other ratings of student behavior and performance.

Parent/Family Interviews

A substantial effort in year three was focused on collection of data from families regarding their choices and satisfaction with the schools their children attended. The fundamental purposes of the interviews were to obtain:

- Data on the characteristics of families of public and scholarship students
- Data on parental satisfaction, involvement, and commitment to their children's school
- For scholarship families, information on how they learned about the program, why they chose to participate, their perceptions of the program, and other related factors
- Information that would allow computation of a measure of family income across scholarship (i.e., private school) and public school students (for use in future evaluation years)

Using CCSD records and data from the Cleveland Scholarship and Tutoring Grant office database, a stratified random sample of families was identified across grades kindergarten through five and in each of three groups (scholarship *recipients*, scholarship *applicant/non-recipients*, and non-applicant *public school students*). Critical to selection was ensuring at least 75 respondents in each cell (i.e. grade x scholarship status) to provide sufficient statistical power. In years one and two, the evaluation team collected data from teachers and schools to estimate the proportion of families with up-to-date and working telephone numbers on record. On the basis of these data, it was estimated that 90-95% of families could be reached by telephone. As a result, telephone interviews were conducted by the Indiana Center for Survey Research between March 22 and May 5, 1999. Of the 1,967 families who were drawn for the sample and who were appropriately classified in one of the three groups, 486 interviews were not completed due to: refusal to participate (N=149), participant interrupted and/or stopped the interview (N=38), respondent never available through duration of the project (N=274), or other reasons (e.g., respondent deceased, physically or mentally unable). Figure 2 depicts the distribution of the 1,481 families constituting the final sample for a response rate of 75.3%. In nearly 80% of cases, the child's mother was the respondent, with fathers (8.4%) and grandparents (6.6%) constituting most of the remaining respondents

Figure 2. Distribution of Respondents in Parent/Guardian Interviews

| Grade | Recipients | Recipient/Non-Applicants | Non-Applicants | Totals |
|--------------|------------|--------------------------|----------------|--------|
| Kindergarten | 77 | 76 | 80 | 233 |
| First | 79 | 80 | 79 | 238 |
| Second | 81 | 80 | 77 | 238 |
| Third | 76 | 83 | 78 | 237 |
| Fourth | 78 | 80 | 137 | 295 |
| Fifth | 77 | 88 | 75 | 240 |
| Total | 468 | 487 | 526 | 1,481 |

Each interview required approximately 20 minutes and was directed toward the child's primary caregiver. The respondent was asked a series of questions which required that they answer by selecting from a limited number of fixed choices often including "other". Most interview questions also allowed respondents to elaborate on or explain their answer if they wished. The interview was structured to allow collection of a substantial set of common data across the three groups (e.g., family income, family size, number of children's books owned, etc.), and to obtain specific data about the scholarship program from families who had applied.

Cumulative Results and Findings

As noted earlier in this report, the foci of the evaluation have been on a variety of factors related to the *processes* involved in implementing and operating the scholarship program and to the *outcomes* of the program on children, families, teachers, and schools. In this section, results and findings across the three years of the project are presented and briefly discussed. These findings are organized into two basic categories (processes and outcomes).

Process or Descriptive Factors

Family Characteristics. Data on the characteristics of scholarship families were collected through CCSD records, Scholarship Office Records, and through the extensive Parent/Family interviews conducted in the third year of the project. Across these data, it is possible to develop a consistent picture of these families and to compare them with families who continued to enroll their children in Cleveland public schools.

Scholarship families tend to be low-income, of color, and headed by a single mother. These characteristics are not surprising given the goals of the scholarship program and the parameters used in selecting children for the program. Preference was given to low-income families and the existing racial proportions of CCSD were to be maintained. Of scholarship families, approximately 73.4% are non-white (60% of these non-white families are African-American), 70% are households headed by a single mother, and the mean family income is \$18,750. In these regards, scholarship families are very much like those of Cleveland public schools. Public school families also tend to be low-income (mean family income \$19,814) and non-white (79.4%). Public school families are somewhat less likely to be headed by a single mother (62-65%), though this difference is small.

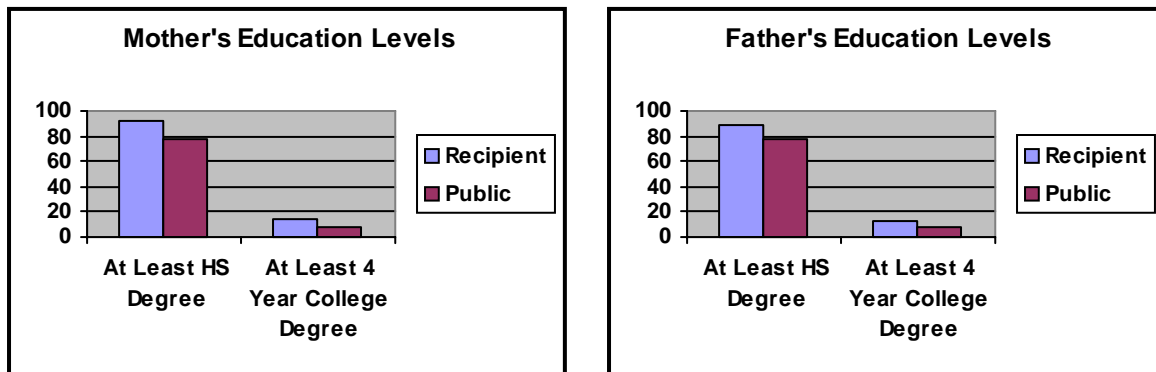
Likely because income is a primary consideration in the scholarship selection process, families who applied for but were not chosen to receive a scholarship are somewhat different from both scholarship recipients and public school families. Applicant/non-recipient families are about as likely to be non-white (77.3%) as were scholarship recipients and public school non-applicants. However, family income for applicant/non-recipients is significantly higher¹ (\$21,502) than for families in either of the other groups.

Beyond demographic characteristics, scholarship and public school families are different in some important ways, most notably in parents' education level (Figures 3 and 4). The mother's education level

1. Throughout this report, the term "significant" is used only when referring to the statistical consistency of a finding or result.

is significantly different between the groups; mothers of scholarship students were much more likely to have completed at least a high school degree or equivalent than public school mothers (91.6% and 78.1%, respectively). In addition, mothers of scholarship students were more likely to have completed a four year post-secondary degree (14.2% versus 7.8%). Further, fathers of scholarship students are more likely than public school fathers to have completed at least a high school degree (89.2% versus 77.7%), as well as more likely to have completed a four year post-secondary degree (12.1% versus 8.1%). Importantly, the learning environment at home that may support children's learning at school is relatively similar between scholarship and public school families. In both groups, an adult reads to the child an average of 3.54 times each week. However, the typical scholarship family has more children's books in the home than public school non-applicants. The average scholarship student has approximately 41 children's books, compared with 33 books for public school non-applicant families.

Figures 3 & 4. Parents' Education Levels



In general, the scholarship program seems to be serving the families for which it was intended; that is, minority families of low income. Further, the program generally does not seem to support the private school enrollment of more advantaged (e.g., higher income) children. Though families of higher income apply for the program, the processes in place for selecting students to receive scholarships appear to be successful in giving first priority to low-income families. However, within this population and seemingly in spite of income, there is evidence that scholarship families possess a somewhat greater willingness than public school non-applicant families to devote limited resources to providing books that support their children's learning.

Educational Choices. An important issue in the school choice debate generally, and in the debate over school vouchers specifically, is how and why families make the educational choices that they do. In family interviews conducted in the spring of year three, parents and guardians who had applied for a scholarship were asked a series of questions to examine how and why educational decisions were made.

In families that had applied for a scholarship, mothers were most likely to have made the decision both to apply for and to accept the scholarship. Mothers were involved in choosing to apply for a scholarship in 89.7% of the cases. In addition, the mother made the decision about whether or not to use the scholarship in 90.4% of cases where a family was offered a scholarship. Fathers were involved with the mother in making determinations about applying for or using a scholarship in 17.3% of families who

applied for but did not receive a scholarship and in 13.0% of families that were offered a scholarship. However, fathers were the primary decision-maker in only 3.2% of non-recipient families and 1.7% of families that were offered a scholarship. In 5.8% of the cases, grandparents were also involved in the decision.

The most important reasons for applying to the scholarship program were educational quality and school safety. A belief that private schools offer a better education than public schools was rated as either very important or somewhat important by 96.4% of respondents. This is further substantiated by the 84.6% of respondents who indicated a belief that public schools provide “low-quality education” and the 78.0% who reported a general “dislike of Cleveland public schools”. School safety was also an extremely important motivator for families. Ninety-five percent of respondents rated concern for their child’s safety as important in their decision, with 87.6% rating it as very important and 7.4% rating it as important. It is noteworthy that the issue of school safety was rated as “very important” by a greater percentage of respondents than any other issue. Financial reasons were also cited as either “very important” or “somewhat important” by 88.7% of families. Follow-up statements made by respondents suggest that a scholarship was the only way they felt they could send their children to a private school. The interview did not specifically address the importance of religion in applying to the scholarship program, but this was noted in unsolicited comments by several of the respondents. A number of these individuals indicated that they wanted their child to receive a more religiously-based education, which they felt was not provided in public schools. However, for at least two respondents, the decision about where to enroll their child (one private school, one public school) was based on a desire to avoid “forced religion”.

The parent interview also asked those who had applied for a scholarship but enrolled their child in a public school to explain this decision. The majority of non-recipients (53%) reported that their child was not chosen to receive a scholarship and, of these, 77.3% had family incomes above \$30,000. An additional 9.4% specifically indicated that their household income was too high to be eligible. Substantial numbers of parents were notified that they had been awarded a scholarship either too late to use it (9.4%) or were not notified at all (8.4%). Only 2.1% of respondents indicated that they had been offered a scholarship but had chosen to have their child remain in their neighborhood public school. A variety of reasons were noted for not using the scholarship by another 17.6% of families, though many of these might well have fallen into one or more of the above categories. These included: concern over private schools’ lack of capacity to serve children with special needs, family income that was too high, transportation problems, inability to enroll in the private school of choice (lack of available spaces in school), or inability of the family to provide the tuition money necessary in addition to the scholarship.

Families that receive a scholarship rely on a variety of factors when deciding where to enroll their children. The perceived reputation of the school was important to 96.6% of scholarship families (76.5% very important, 20.1% somewhat important). The second most important factor was availability of space in the school (92.7%). Location of the school in relation to the families’ residence was important to 86.4% of families, followed by recommendations of other people (80.6%). Of the five factors which families were asked to rate, religion was the least important reason for their private school selection, reported as important by 78.6% (48.3% very important, 30.3% somewhat important).

Student Characteristics. Scholarship students, like their families, are very similar to their public school counterparts. Scholarship students are predominately non-white (73.4% non-white, with 60% of the non-white students being African-American), low-income, and nearly equally male and female (51% and 49%, respectively). There is evidence to indicate, at least for those who began the scholarship program as third graders in the first year of the program, that students were achieving at higher levels than their public school classmates prior to entering the scholarship program. Scholarship students have moved significantly fewer times than either public school non-applicants or public school applicant/non-recipients. Across all grades, scholarship students have moved an average of 1.5 times since the child's birth, as compared to 2.2 times for public school students and 2.0 times for public school applicant non-recipients.

Scholarship students spend fewer hours watching television and playing video games on a weekday than public school students. Whereas parents of scholarship students reported that their child watched approximately 2 hours of television on a typical weekday, parents of public school students reported that their children watch an average of 2.4 hours of television on a typical weekday. There were no statistically significant differences in weekend television viewing and playing video games. Parents reported that all students, on average watch approximately 7 hours of television on the weekend.

Classroom and School Characteristics. In years two and three, data collection included examination of a small number of classroom and school characteristics that have been suggested in previous research as related to student achievement. Using the proctor administered Classroom Characteristics Survey, data were collected on class size, teacher education level, and teacher experience. The Administrator Survey, administered only in year three, asked for information related to school size, number of full time teachers, and grades served by the school.

Public schools tend to be substantially larger than the private schools attended by scholarship students. Public school size ranged from 150 to over 500 students, with the average public school serving between 401 and 500 students. The typical private school had between 201 and 300 students, ranging from schools of between 51-75 students to three private schools with over 500 students. Public schools reported having an average of between 21-25 full time teachers; the average private school reported having between six and ten full time teachers. While usually serving larger numbers of students, public schools were likely to include a more limited range of grade levels. All but one of the public school principals indicated grades ranging from kindergarten through fifth in their schools, the exception indicating only through grade four. A majority (N=28) of private schools reported serving grades kindergarten through eighth, with others serving students across a range of grades, mostly focused on the early primary grades.

Classroom and teacher data also suggest differences between public schools and the private schools attended by scholarship students. Private school classrooms have significantly smaller classroom sizes than public school classrooms, whereas public school teachers have significantly more teaching experience and are more likely to have completed coursework beyond their baccalaureate degree. Mean class size for private school scholarship students was 20.6 compared to a mean of 23.6 for public school teachers. More public school teachers reported having completed additional coursework beyond their undergraduate degree than private school teachers, many having completed a masters degree. In

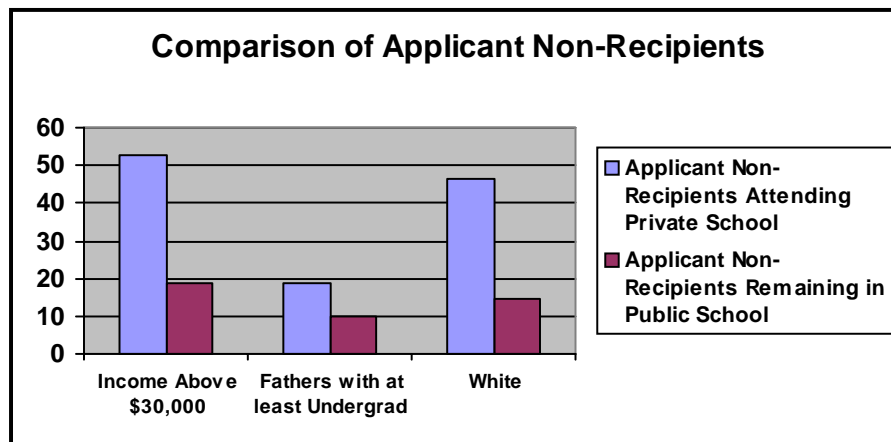
addition, public school teachers reported significantly more classroom experience than their private school counterparts (14.2 years versus 8.6 years).

Functioning of the Scholarship Program. The primary source of data regarding the functioning of the scholarship program was parents or guardians who had applied for a scholarship. During the telephone interviews conducted with these individuals in spring of 1999, scholarship recipients and scholarship applicant/non-recipients were asked a series of questions related to their perceptions of the scholarship program.

Both scholarship recipients and applicant/non-recipients felt satisfied with the scholarship program. Across these families, 97.4% reported being somewhat satisfied or very satisfied with the program on the basis of their experience. In contrast to those who were satisfied, 2.5% of respondents reported feeling somewhat or very dissatisfied with the scholarship program. In follow-up questions, three factors seemed to contribute to feelings of dissatisfaction. Problems with transportation, particularly in the first year of the program, were frequently cited. Among applicant/non-recipients, a lack of understanding about the program or the selection process was often noted. The most often reported source of dissatisfaction among all applicants was a perception that the scholarship program reduced the quality of private school education by allowing less involved parents or less able students admittance into private schools.

For a large proportion of scholarship families, the scholarship program provided educational opportunities and choice that they would not otherwise have had. Seventy-five percent of families that applied for but did not receive a scholarship enrolled their children in public schools. Among the 25% that enrolled in private schools without a scholarship, the vast majority reported higher incomes than those scholarship applicant non-recipients who remained in public schools (52.9% above \$30,000 versus 19.0% above \$30,000), had fathers who were almost two times more likely to have at least an undergraduate degree (18.9% versus 9.9%), and were more likely to be white (46.6% versus 14.8%). Thus, the program appears not only to provide opportunity for low-income, minority families, but is also reasonably effective in ensuring that scholarships are awarded to families in greatest need.

Figure 5. Comparison of Applicant Non-Recipients.



Efforts by the Cleveland Scholarship and Tutoring Grant (CSTG) Office to inform families of the program appear to be moderately effective. Most families (52.7%) reported learning of the scholarship program from letters or other information they received from the Scholarship and Tutoring Grant Office. Materials distributed by the CSTG through public and private schools were also noted by 42.9% of families, and newspapers, radio, television, or other media were indicated by 27.7% of families. Less formally, friends or relatives already participating in the program provided information to 26.1% of the families, and friends or relatives not participating in the program were noted in 17.1% of cases.

Both scholarship recipients and applicant/non-recipients predominately felt the program was “easy to use” (94.6%). When asked for suggestions about how the program might be improved, slightly less than 30% provided one or more ideas. The most frequent suggestion was to improve the quality, availability, and dependability of transportation to and from the schools. Also noted often was the need for more timely and accurate disbursement of funds to the schools. Other suggestions included a greater diversity and number of participating private schools, both within and outside Cleveland, and clearer and more timely information about the program and notification of scholarship awards.

Outcome or Impact Factors

Student Academic Achievement. Examination of the impact of the scholarship program on students’ academic achievement has been a primary focus of the evaluation since the program began. Data related to this question are obtained through administration of a standardized test to public and private students throughout Cleveland. Administered by the evaluation team, and selected because it represents the most up-to-date testing technology, the Terra Nova (CTB/McGraw-Hill) provides measures of student learning in subjects that are taught across schools and curricula. While no single achievement test score can fully reflect the breadth or types of students’ achievement, these scores provide a reasonable, reliable, independent indication of student learning. Achievement data have been collected on selected groups of students during each year of the project. Further, in year three, teachers were asked to provide a rating of their students’ overall achievement and the extent to which the student works to his or her potential.

Students who enrolled in the scholarship program in 1996-97 after attending a Cleveland public school during the preceding year had been achieving at significantly higher levels than their classmates *prior* to entering the program. As second graders, scholarship students’ Normal Curve Equivalent (NCE) scores in vocabulary and comprehension were 58.1 and 51.5, respectively, compared with 50.2 and 46.0 for their public school classmates. The data suggest that students who use their scholarship to move from public to private schools may be slightly higher achieving students.

However, these pre-program achievement differences were no longer statistically significant by the end of the second year of the program. Students who remained in the scholarship program from third to fourth grade had similar pre-program achievement levels (as measured in second grade) as those students who continued to attend public schools as third and fourth-graders. Pre-program achievement (second grade) of the 93 scholarship students who continued in the program as fourth graders was 52.6 in comprehension and 57.3 in vocabulary versus 48.0 and 52.9 respectively for public school students.

From year one to year two, 26 third-grade students did not return to the scholarship program.

These non-returning students had been achieving at significantly lower levels in reading, science and social studies than their peers who remained in the scholarship program (37.2 versus 45.2, 30.7 versus 41.5, 32.2 versus 42.0, respectively). These differences appear in spite of the statistical similarity of students' pre-program achievement scores. Thus, scholarship students who were doing less well after one year were most likely not to return to their private school. Review of public and private school records indicated that none of these students had enrolled in a Cleveland area school as a fourth grader, suggesting they may have left the Cleveland district.

At the end of the first year, scholarship students' academic achievement was compared with that of a group of representative public school students who had not applied for a scholarship. Comparison students were drawn from public schools in which tutoring grant students were believed to be enrolled.² After controlling for background and pre-program achievement, there were no statistically significant differences in third-grade achievement between scholarship students and their public school counterparts on any of the six scores provided by the Terra Nova. Scholarship and public school students performed similarly in reading (40.0 versus 39.5), language (39.7 versus 37.3), Mathematics (36.5 versus 37.5), science (36.0 versus 32.9), social studies (36.0 versus 36.0) and total score (37.7 versus 37.5).

The academic performance of these same groups of students was again measured at the end of the second year of the scholarship program (1997-98). In addition, data were collected in year two that allowed the evaluation team to control for a limited series of classroom characteristics (class size, teacher experience, teacher education level). Prior to conducting analyses of student achievement it was discovered that systematic differences in scores were apparent between students in the two private schools established specifically to serve the increased demand created by the scholarship program and those in private schools that had existed prior to the scholarship program. These newly established schools could not be included in year one analyses, but enrolled a large percentage of scholarship students and were important to the evaluation. As a result, second year analyses compared the performance of public school students, scholarship students in previously existing private schools, and scholarship students in the two new private schools.

Two sets of analyses were conducted. A first set paralleled those from year one, in that they examined student fourth-grade achievement after controlling for background and pre-program achievement. The results indicate that scholarship students in existing private schools had significantly higher test scores than public school students in language (45.0 versus 40.0) and science (40.0 versus 36.0). However, there were no statistically significant differences between these groups on any of the other scores. In contrast, scholarship students attending the two newly established private schools had significantly lower scores than both public school and other scholarship students on each of the six scores. A second set of analyses added control of classroom characteristic variables, providing a more

2. Because no randomly assigned comparison group was available in the first years of the project, the evaluation team believed it important to attempt to identify comparison students who were enrolled in schools as much like those previously attended by the scholarship students as possible. Analyses conducted by the evaluation team indicated that there were no statistically significant differences between public schools from which the comparison students were drawn (N=28) and the other Cleveland public schools (N=34) on any of 23 variables. Thus, the schools appear to be representative of Cleveland public schools more generally.

conservative estimate of the effect of the program. The results of these analyses revealed statistically significant differences between scholarship students attending existing private schools and their public school counterparts in science (38.3 versus 36.1), but did not reveal statistically significant differences on any of the remaining achievement measures. Again, however, scholarship students attending the two newly established schools had significantly lower test scores on all achievement measures than their public school or scholarship peers from previously existing private schools.

Thus, after two years, and for students who had attended public school prior to entering the scholarship program, there appear to be positive, but limited effects on achievement. What remains to be determined is whether the differences that appeared at the end of year two represent the beginning of a trend toward increased achievement in future years. Data from future testing, particularly that initiated with first-grade children in year three of the study, should provide more definitive answers to this question.

Student Conduct/Behavior. Throughout the first three years of this project, attempts were made to locate objective records of students' conduct and behavior for review and analysis. However, discussions with school officials as well as initial review of available records proved unproductive. Records of student conduct and behavior varied widely from school to school in the frequency with which records were updated, the types of data that were recorded, and the definitions or terms used to describe student behavior. These variations precluded their use in investigating students' conduct or behavior. As a result, data used to examine students' school conduct and behavior were drawn from teacher surveys and from administrator surveys and school policy reviews and supplemented with information from parent/family interviews. These data are primarily descriptive in nature and no baseline data were available by which to control for pre-program levels. As a result, it is not possible to isolate conclusively the impact of the scholarship program on students' conduct and behavior.

Teachers reported no significant differences in the classroom behavior of scholarship, applicant/non-recipient, public non-applicant, or private school students. Students' mean classroom behavior in each of the groups was rated as "about average". Similarly, principals rated the behavior of scholarship students as "about the same" as that of their public school or private school classmates.

While parents were not asked directly about their children's school behavior, scholarship parents felt positively about the role of their child's teacher in promoting classroom management. Almost 93% of scholarship parents, as compared to 85% of public school parents and 82% of applicant/non-recipient parents, believed that discipline was maintained by the child's teacher. Parents of scholarship recipients also reported higher levels of satisfaction with the order and discipline at the child's school than did parents of public school students or school applicant/non-recipients.

In addition, scholarship recipient parents perceived a greater level of respect between teachers and students than did public school non-applicant parents and public school applicant/non-recipient parents. Whereas approximately 95% of scholarship recipient parents believed there was respect between teachers and students at the child's school, approximately 83% of public school non-applicants and 78% of public school applicant/non-recipients believed similarly. Public school non-applicants also perceived a greater level of respect between teachers and students than did parents of public school applicant non-

recipients, perhaps reflecting an area of dissatisfaction for those public school parents who applied for a scholarship but did not receive one.

Student Attendance. Record keeping across the schools differs widely and, thus, no equivalent, reliable measures of students' attendance were available for examination. As a result, findings related to student attendance rates are based upon data drawn from the parent/family interviews, and teacher and administrator surveys. While not as precise as specific records of student attendance, they do provide some indication of how scholarship students' attendance compares with that of their classmates and public school peers. Further, in order to more fully understand these data, the review of school policies was used to establish the contexts within which students' attendance was considered. As with student conduct and behavior, no pre-program or baseline data were available by which to examine directly the impact of the program on students' attendance. However, patterns can be discerned in the present data and more conclusive data will be available in future years.

Again, students' attendance must be viewed within the context of the school he or she attends and the policies or expectations therein. In general, the private schools attended by the scholarship students had more liberal absence policies and higher absence rates. Public school principals considered 4-6 student absences to be problematic in contrast to the 7-9 considered problematic by private school principals. More specifically, the CCSD Student Handbook specifies the number of unexcused absences considered excessive: three days in a row, five in any quarter, or 18 in one year. Lowering of grades and Juvenile Court proceedings are listed as possible sanctions. Policies of the private schools were much more diverse. Many of the private school policy materials did not specify the number of absences that would be considered excessive. Of the five that did, the policies resembled those of CCSD, but were slightly less restrictive. Excessive absence was considered: three days in a row, five in any quarter, or 25 (30 for one school) in one year. Further, private school policies were much less likely to stipulate consequences for excessive absence, though referral to Juvenile Court was listed by three of the schools.

Principal ratings of attendance indicated that scholarship students were "about the same" as other students in the private schools (mean 2.94 out of 5). However, when teachers were asked to rate the attendance of the students in their classrooms, the pattern that emerges appears to reflect the somewhat differing public and private school policies. Public school students, both applicant/non-recipients and those who did not apply for a scholarship, are rated as having better attendance (mean rating 3.93 and 3.75, respectively) than either scholarship or non-scholarship private school students (mean rating 3.53 and 3.55, respectively). Across groups, scholarship applicant/non-recipients had significantly better attendance ratings than students in any other group, including their non-applicant public school classmates. Interestingly, there are no significant differences between scholarship recipients or their private school peers.

Student Commitment to Education. Data related to students' commitment to education were collected from principals across grades and from first grade teachers and students. These groups have access to unique aspects of students' behavior that gives them diverging perspectives on this variable.

Private school principals were asked to rate the attitude and motivation of scholarship students

when compared with their peers. According to principals, scholarship students are “about the same” as their non-scholarship peers in both attitude and motivation. First-grade teachers report no differences in interest or commitment to education between scholarship recipients, applicant/non-recipients, or public school students. Similarly, they reported no differences in the extent to which students in these groups worked to their potential. However, there were statistically significant differences between non-scholarship private school students and other students with regards to student potential. Non-scholarship private school students were rated as more likely to work to their potential than students in any of the other groups. Thus, teachers do not appear to perceive the scholarship program as impacting students’ commitment to education.

Results from the survey of first-grade students present a slightly different picture than those drawn from teachers. Across items asking students about their feelings or attitudes toward school, school work, and attending school in the future, there were no statistically significant differences between students who received a scholarship and were attending a private school and those who applied for a scholarship, but did not receive one and were attending a public school. A majority of students (50.0-82.0%) felt positively about these elements of school. However, public school students who had not applied for a scholarship reported more positive feelings on each of these items than either scholarship recipients or applicant/non-recipients (54.9-86.8% positive), and non-scholarship private school students reported less positive feelings (42.5-64.6% positive).

Whereas data from teachers and students do not seem to suggest that the scholarship program significantly impacts students’ commitment to education, data from the family interviews suggest a much stronger and positive impact. Parents of scholarship recipients reported that their children were more enthusiastic about learning than did parents of applicant/non-recipients and parents of public school students. Almost 96% of scholarship parents stated that their child was enthusiastic about learning, as compared to approximately 88% of public school parents and approximately 89% of applicant/non-recipients. Further, parents of scholarship recipients reported that their child enjoyed school more than applicant/non-recipients or public school parents. In contrast to the approximately 95% of scholarship recipient parents indicated that their child enjoyed school, only 90% of public school parents and approximately 92% of applicant/non-recipient parents reported similarly.

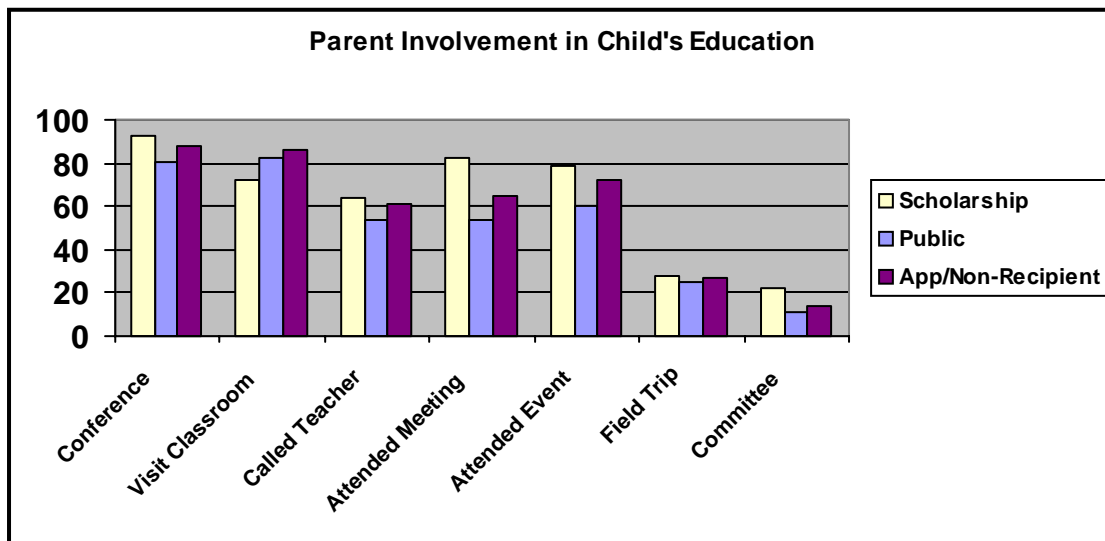
Parent/Family Involvement in Child’s Education. Data related to parent/family involvement in student’s education were collected during year three from parents through the telephone interviews (across all grades), and from teachers and principals through surveys.

Results from the parent/family interviews indicate statistically significant differences in parent perceptions of their involvement, and in both the number and type of activities in which they have participated. Eighty-five percent of scholarship parents perceived themselves as being involved in their child’s education compared with 79% of applicant/non-recipient parents and 73% of public school parents. Similarly, parents of scholarship students reported participating in significantly more activities than did parents of public school students. On average, parents of scholarship students reported participating in an average of five of the following activities:

- Attended parent-teacher conferences
- Visited child's classroom
- Called child's teacher
- Attended a general school meeting
- Attended a school or class event
- Volunteered at school
- Participated in a field trip
- Served on school committee

Applicant/non-recipient parents reported participating in an average of 4.5 activities and public school parents reported participating in an average of four activities. As reflected in Figure 6 below, a greater percentage of parents of scholarship recipients reported involvement in parent-teacher conferences, attending a general school meeting, attending a school or class event such as a play or concert, volunteering at school, and serving on a school committee. Parents of scholarship recipients also reported calling a child's teacher more frequently than did parents of public school parents. However, fewer parents of scholarship recipients reported visiting the child's classroom.

Figure 6. Parent Involvement in Child's Education

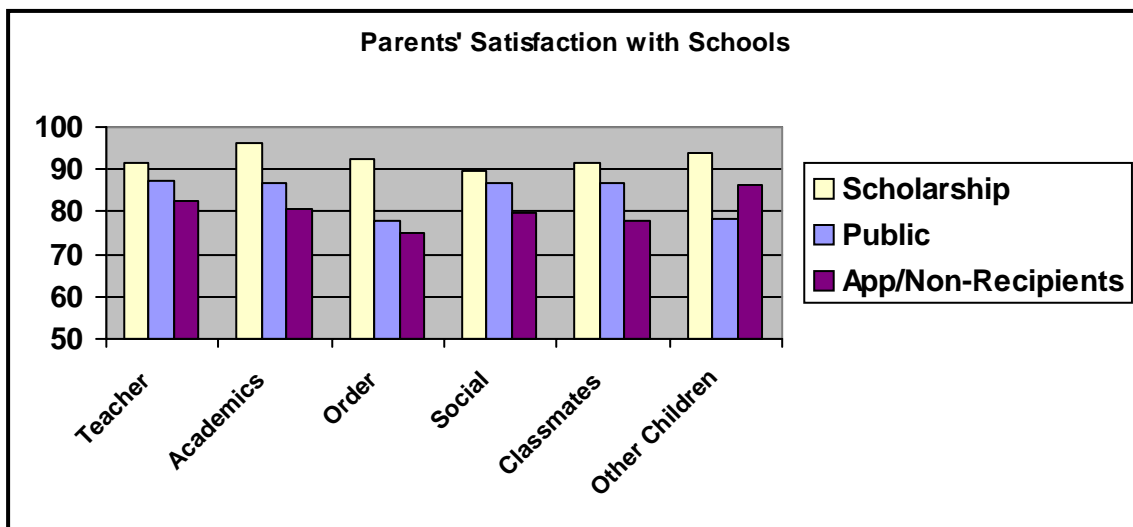


Results of the teacher surveys support this finding. First grade teachers perceived the parents of scholarship students to be more involved with the school than public school parents. Further, first grade teachers perceived scholarship parents to be more involved in the child's learning than public school and applicant/non-recipient parents.

Parental Satisfaction. Data on parents' satisfaction with a range of elements associated with their child's school were collected in year three through the parent/family interviews. While not a direct measure of the effectiveness of the scholarship program, parents' satisfaction with schools may serve as

one indicator of the extent to which schools are successful in meeting the needs of students. Across the range of school elements, parents of scholarship students tend to be much more satisfied with their child's school than other parents. These parents have a significantly higher level of overall satisfaction with their children's schools than do public school or applicant/non-recipient parents. As shown in Figure 7 below, scholarship recipient parents are more satisfied with the child's teachers, more satisfied with the academic standards at the child's school, more satisfied with order and discipline, more satisfied with social activities at the school, more satisfied with the child's classmates, and more satisfied with other children at the child's school.

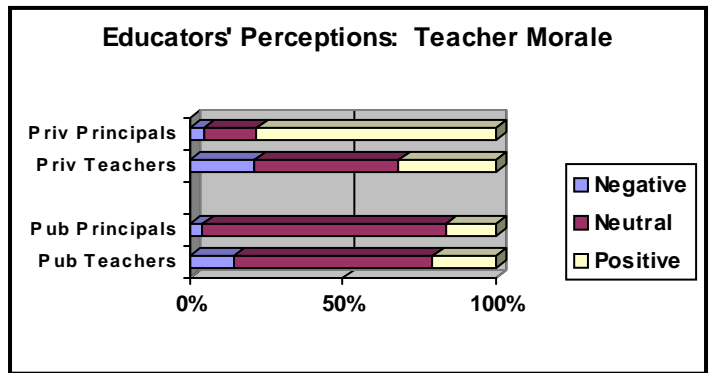
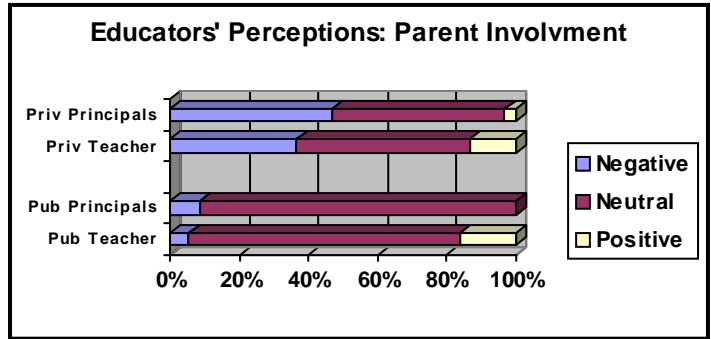
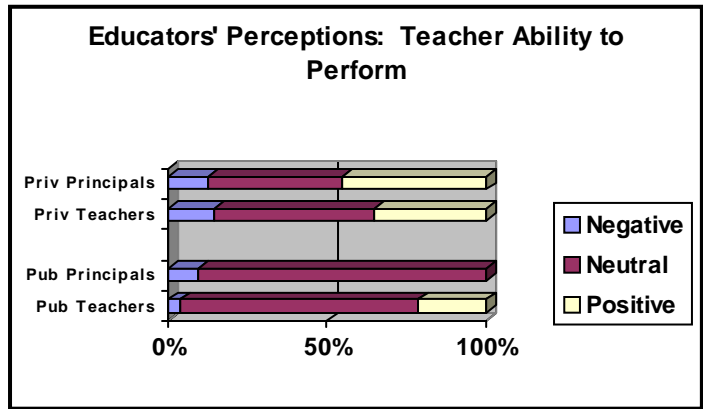
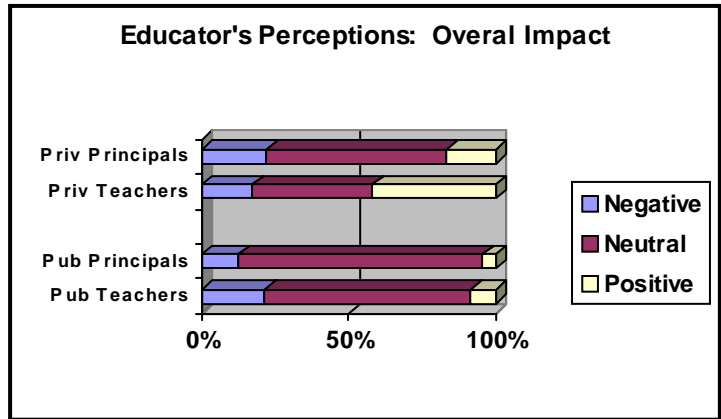
Figure 7. Parents' Satisfaction with Schools



In addition, public school parents who applied for a scholarship but did not receive one are less satisfied with the school their child attends than parents who did not apply for a scholarship. Results indicated statistically significant differences between public school applicant/non-recipients and public school non-applicants with regards to overall satisfaction with the child's school. Parents of public school non-applicants were more satisfied with social activities at the school, the child's classmates, and other students at the child's school.

Functioning/Operation of the Classroom or School. Public and private school principals and teachers were asked in their respective surveys to provide information on how the scholarship program has affected their schools and classrooms. Figures 8-11 graphically depict the results of this portion of the project.

Figures 8-11. Educators' Perceptions



Public school principals were largely neutral (83%) on the impact of the program, noting that it is too early to know how the program may impact public schools. Public school principals similarly indicated that the scholarship program had not impacted their teachers' ability to do a good job (89.6% reporting no effect), and had little impact on teacher morale (79.6% no effect), students (91.5% no effect), or on parental involvement (90% no effect). Their open-ended responses, however, reflect a general feeling that the voucher program draws away funds from the public schools.

Like public school principals, public school teachers were mostly neutral in their perceptions of the impact of the scholarship program on them or on their schools. Approximately 70% of public school teachers felt that the scholarship program had no impact at all on them and, in fact, a surprising number reported knowing little about the program, stating for example, "I've never even heard the term [scholarship program]." This pattern is found across the factors teachers were asked to rate. Almost eighty percent (78.8%) indicated no effect on parental involvement (16.0% positive), 74.8% indicated no impact on their ability to do a good job (21.3% reporting a positive impact), 65.2% reported no impact on teacher morale (20.6% and 14.2% positive and negative, respectively). Slightly more than 8% of public school teachers felt that the program had at least some negative impact on the public schools, but 21.3% felt that it had, instead, had a positive impact. Both teachers and principals in the public schools often felt that "problem students" were often forced out of the private schools and back into public schools, after "the state does its Average Daily Membership count in October."

Private school principals were less neutral, but only slightly more positive. An equal proportion of principals indicated the program had a positive and negative impact on their school (36.6%). Some private school principals reported a negative effect of the program on teachers' ability to do a good job (45.2% negative), and a majority of principals reported a negative effect on teacher morale (78.3% negative). In contrast, 46.9% felt that their students had been impacted positively as a result of the program. Across these factors, responses to open-ended questions suggest that the scholarship program infused in the private schools students of differing backgrounds and levels of achievement than were typical. The teachers often perceived that this new group of students and their experiences added value for the other students in the schools, while at the same time making it more difficult for teachers to perform to the level they were accustomed.

Private school teachers tended to be somewhat more positive about the program's impact on them and their schools than other teachers or principals, though a majority remained neutral. Slightly more than 37% reported the program had a positive overall effect on students, whereas only 15.8% felt the impact was negative. Approximately 37% felt that parental involvement had been positively impacted, with only 13.1% reporting negatively. Teachers were more neutral about the impact of the program on their ability to do a good job and on the teachers' morale. With regard to ability to perform, 29% indicated a positive effect, 10.5% reporting a negative effect (mostly due to perceptions of lower entry level performance and greater incidences of behavior problems among the scholarship students). Responses to the impact of the program on teacher morale were similarly dichotomous, with 31.6% feeling the program had positively impacted teacher morale and 21.1% reporting a negative effect.

Conclusions and Discussion

In spite of a growing number of private and publicly-funded school choice programs across the country, the Cleveland Scholarship Program remains one of the most contentious and hotly debated educational experiments in the country. The program reflects a growing trend toward privatization of public services, particularly in education. As such, the Cleveland experiment offers the opportunity to learn much about the efficacy of providing families with a vastly wider range of choices for their children's education. The Ohio legislature's commitment to ongoing and intensive evaluation of the program from its inception is noteworthy.

As with all experiments that examine the effects of changing long-held ideas, policy, or ways of operating, it will take time to fully understand how, why, and for whom the Cleveland Scholarship Program works. At the end of the third year, many of the operational elements of the program have only recently become routine. Teachers, students, principals, and families continue to learn to work within and in spite of the parallel systems of public and private schools available to them. Thus, while it is possible to develop some reasonable conclusions about the program and its impact on those families and educators who it affects, much remains to be learned. In each of the following sections, we present what we believe to be reasonable conclusions about the Cleveland Scholarship Program, drawn from data collected over the past three years, and note issues or questions that remain unanswered or partially answered.

What is Known

Though more limited in number than many would wish, several defensible conclusions can be drawn about *process/descriptive* and *outcome/impact* factors associated with the scholarship program.

- *The scholarship program effectively serves the population of families and children for which it was intended and developed.* The program was designed to serve low-income students while maintaining the racial composition of the Cleveland Public Schools. Participation data support the fulfillment of these dual objectives. Students who receive scholarships are primarily African-American children from low-income families. Because they frequently live in households headed by a single mother, they are further "at-risk" academically. The effectiveness of the program in providing scholarships to those students most in need is also supported by data indicating that most children from families with higher incomes who apply for a scholarship do not receive one.
- *The majority of children who participate in the program are unlikely to have enrolled in a private school without a scholarship.* Seventy-five percent of those applicants who did not receive a scholarship remained in public school. In spite of the generally higher income of families who applied for a scholarship but did not receive one, only a very small percentage (approximately 25%) of these families actually enrolled their children in private schools. Thus, the scholarship program appears to offer low-income families one of very few avenues for pursuing private education for their children.
- *Parents who apply for the scholarship program are likely to be better educated, and more interested, motivated, and involved than parents who do not apply.* Even in the lowest income levels, parents who pursue a scholarship for their children are more likely to have completed a college degree and to engage in a greater number of school-related activities (e.g., parent-teacher

conferences, interacting with the teacher, etc.). Further, there is some evidence to suggest that obtaining a scholarship may affect parent involvement. Parents who applied for a scholarship but did not receive one more closely resemble other public school parents than scholarship parents in the number and types of school activities in which they participate.

- *There are substantial differences between public and private school classrooms and schools.* Public schools tend to be larger in terms of student enrollment and number of full time teachers, but to include a smaller number of grades than private schools. Public school teachers are also likely to possess considerably more teaching experience than their private school peers and to have completed coursework beyond their undergraduate degree. On the other hand, private school classrooms serving scholarship students tend to be smaller than comparable public school classrooms. While each of these factors may affect some schools more positively than others, across these limited variables there appears to be no substantial benefit to either public or private schools.
- *Participation in the scholarship program appears to substantially improve parents' perceptions of and satisfaction with their children's schools.* This conclusion is based upon findings associated with reasons given by parents for applying to the scholarship program and their ratings of satisfaction with the private schools their children attend. Parents in both the recipient and non-recipient groups of scholarship applicants indicate that the two most important factors in their decision to pursue a scholarship were improving the quality of their children's education and enhancing the safety of their children while at school. When asked about their satisfaction with several elements of the school their children attend, scholarship recipients were much more satisfied than either applicant/non-recipient parents or public school parents who did not apply for a scholarship. In fact, satisfaction of applicant-non-recipients was more comparable to other public school parents than to scholarship parents.

What Remains to be Learned

As noted above, even intensive evaluation of a complex educational program is insufficient to provide definitive conclusions to all important question over a three year period. In addition, as the project has progressed, a number of issues or questions have arisen that were not originally considered, but which bear examination. The following represent many of the issues which remain to be clearly answered.

- *It is not clear what impact the scholarship program will have on either the public or private schools.* Data on this issue are limited, inconclusive, and suggest a variety of factors that may substantially influence schools and teachers. Both public and private school representatives are largely neutral or undecided about whether the scholarship program has affected them positively or negatively. For most public schools, this may be due to the comparatively small number of students who use a scholarship to attend a private school. This may also explain why many public school teachers had little understanding or knowledge of the program. While public school representatives expressed concern over the potentially negative effects of the program in reduced resources and diminished public support, they seldom reported experiencing them. Private school representatives were more likely to feel positively or negatively about the impact of the scholarship program and to base these feelings on experience.

- *The effect of participation in the scholarship program on students' academic achievement is not yet clear.* Available data indicate small but statistically significant effects on students' achievement in two of five cognitive domains (language and science) after two years in the program. What remains to be determined is whether the gap diminishes, remains, or widens with time.
- *The effect of participation in the scholarship program on students' attendance, conduct, and commitment remain uncertain.* A critical problem in objectively examining these elements of the program is a lack of reliable and equivalent measures across the range of public and private schools. The evaluation to date has relied on ratings and reports by teachers and principals to attempt to examine this issue, and the findings are largely inconclusive. However, further collection of data on these factors for students who continue to attend their public or private schools should provide the basis for conclusions.
- *While there are substantial differences in some factors associated with the classrooms in which scholarship and public school students learn, little is known about the types of instructional interactions that occur in these classrooms.* Public school teachers are more experienced and have somewhat more education than the private school teachers in the study, whereas private school classes are slightly smaller. While these factors may be associated with greater or lesser degrees of student learning, they do so only indirectly by influencing how teachers engage and interact with students during instruction. Many scholarship parents feel that the smaller class sizes provided by private schools improve the attention their child receives, and many public school advocates believe that greater teacher experience and education enable a teacher to be more confident and competent. However, research on the relation between these factors and student learning is not yet conclusive. To the extent that school choice is intended to enable parents to be effective consumers of education, it is important that we understand much more about how the public and private school classrooms work.
- *An important issue for examination is the impact of the ongoing court battles over the constitutionality of the scholarship program on the schools, teachers, families, and students.* Ongoing uncertainty about the status of the scholarship program has been a source of concern for many scholarship parents and for the private schools that they attend. These were expressed in unsolicited comments made by parents during the telephone interviews and by principals in their surveys or informal meetings with the evaluation staff. Many parents fear that they might be forced to move their children out of the private schools to which they had only recently become adapted. For others, the primary concern was the issue of how best to proceed with enrolling their children for the upcoming fall. What is unclear is how families will resolve this issue, and how the court battles may effect parent satisfaction with the program and continued participation. In addition, given the uncertainties of the program, private schools have been reluctant to add new classes or hire new teachers to meet the increased demand created by scholarship students. Private school principals often noted that they only accepted new students in classes that were already established, but not yet full. As a result, and as reported by families, many students could not enroll in the school of their choice because there were no places for them. What remains to be learned is whether resolution of the constitutionality issue will enhance the capacity of the scholarship program through increased private school enrollment of scholarship students.

Ongoing and Future Evaluation Activities

An ongoing focus of evaluation is the impact of the scholarship program on students' academic achievement. Although small differences were found in language and science after two years, it is uncertain what the extended or cumulative effects of the program may be. The large cohort of first grade students who were tested in 1998-99 offers an excellent opportunity to assess the long-term effects of the scholarship program on student learning. Reliable and substantial baseline data have already been collected on this group of young students and will be integrated with additional data in future years. Plans are already in place to follow the scholarship, applicant/non-recipient, and public school students who constitute this cohort as they progress through school.

In addition, future evaluation activities are expected to include collection of data related to the:

- Experiences of families, students, and educators in and with the scholarship program
- Impact on schools and families as legal challenges to the program continue and are resolved
- Effect of the program on students' attendance, conduct, and motivation over time and the development of reliable, standardized measures for recording these data