The Skillman Foundation's Good Schools Making the Grade Initiative Evaluative Study

Student Mobility and Stability Study: How did Recognized Schools' Mobility and Stability Data Differ from Other Schools in Detroit?

November 2008

Sharif M. Shakrani
Professor of Measurement and Quantitative Methods &
Co-Director of the Education Policy Center at MSU

Introduction

In 2004, The Skillman Foundation of Detroit, Michigan started an initiative to recognize successful schools in the city of Detroit. The initiative, entitled The Skillman Foundation's Good Schools: Making the Grade, aimed at identifying, recognizing and rewarding schools in Detroit that meet the Foundation's rigorous criteria for what a good school should be. All schools in Detroit, whether they are public, charter, religious or private, are eligible to participate. During the first year of the initiative, only elementary schools were eligible to apply; middle and high schools applied and participated in later years. To be recognized as a Good School, each applicant has to meet standards related to student achievement and school quality.

In 2005, The Skillman Foundation recognized and awarded 64 elementary schools. Of these, nine schools were recognized as High Performing schools. These schools rated high on the seven school quality indicators and had at least 75% of their students in the Proficient achievement category on the standardized state assessment program. Fifteen schools were recognized as Improving schools. These schools showed at least a 10% improvement in the number of students in the proficient category over the past two years on the state test and rated well on the seven school quality indicators. Forty schools were recognized as Aspiring schools. These schools wanted to participate in the initiative but did not quite reach the requirements set for the High Performing or Improving schools.

This study is aimed at the elementary schools recognized as High Performing and Improving in 2005. The study is concerned with the mobility and stability of students in these schools in comparison to other schools in Detroit. The purpose of this study is to

determine whether schools that have more stable student populations and less mobile students tend to do better academically, thus the Skillman Foundation recognizing and awarding them as good schools. The study will compare the stability and mobility rates of the High Performing and Improving schools to the average school in Detroit during the 2005-06 school year. The study will rely on the definitions and formulas for computing the stability and mobility rates that were developed for the United States Congress in 1994 by the General Accounting Office.[1]

Student Mobility and Stability Rates

Among the most elusive statistics in education today are student mobility and stability rates. Current research studies on mobility and stability rates vary significantly in their psychometric procedures, thus producing conflicting results. Studies conducted in Chicago using different formulas produced mobility rates that had ranges of 28 to 68% for the same year. Some of the most valid formulas are rather complex and take into consideration student enrollment in the first month of the school year, then average enrollment for the school year and enrollment during the last month of the school year. In large urban districts, these three numbers vary significantly at the school level, less so at the district level, because in most large districts, the students transfer between schools within the same district.[2]

The magnitude of student's movement at the elementary level has potential impact on students, teachers, classrooms and schools and substantiates the need for more attention to student mobility from educators and policymakers. Examining the patterns of

[1] General Accounting Office, Health, Education & Human Services Division. (1994, Feb). *Elementary School Children*, Washington, D.C., 94-95.
[2] Clark. S. (2001). Can standards help mobile students? *Catalyst*, April, 3.

student mobility will illuminate issues that all educators must confront. By examining how educators respond to different types of student mobility, we can learn more about meeting the needs of all students, transient and stable. The inclusion of parents and the community in future studies can help describe how mobility affects their children's education and what can be done to lessen the negative impact.

Several studies have examined the impact of mobility on aspects of academic achievement. As with most research studies there are limitations to what these studies tell us. Most importantly, because elementary school students may have family issues that contribute to their mobility, studies should take into consideration those prior characteristics in order to determine whether mobility itself is the cause of subsequent achievement and other problems in schools.[3]

Studies that account for socioeconomic differences of students find that mobility may be more of a symptom than a cause of poor academic performance. One well-designed study of elementary students in Baltimore found that although mobility during elementary school had a negative association with test scores, grades, retention and referrals to special education in the fifth grade, the association was largely insignificant once controls were introduced for family characteristics and first grade school readiness skills. In other words, most mobile students came from poorer families and had lower academic performance before they were mobile.[4]

[3] Rumberger, R. & Larsen, K. (1999). *The educational consequences of mobility for California students and schools*. Berkeley, CA: Policy Analysis for California Education.

[4] Nelson, P. & Simoni, J. (1996). Mobility and school functioning in the early grades. *Journal of Educational Research*, EJ 536 814.

Student Mobility in Urban Areas

Student mobility is widespread in the United States. According to the 2005 National Assessment of Educational Progress, 1/3 of fourth graders changed schools at least once during one school year.[5] Student mobility was even more widespread among economically disadvantaged and minority students. A mobility study conducted in 2004 revealed that 30% of Detroit students moved or changed schools in the first month of the school year.[6] The rates of mobility in Detroit may actually be increasing due to the severe economic and employment downturn that started more than a year ago.

The increasing number of charter schools in Detroit and surrounding areas and education "choice" programs have contributed to the significant increase in the number of students moving from Detroit Public Schools to charter schools and, to a lesser extent, to neighboring school districts. All these factors results in very high mobility rates among Detroit students.

However, the escalating mobility rates tell only a portion of the issue. We also need to consider and calculate the stability rate. This is not the opposite of the mobility rate. The stability rate is the number of students who stay in a particular school until the end of the school year. It is possible for a school to have a high mobility rate and still have a high percentage of students in stable circumstances. Stability supports better learning. Those who need stability the most, the poor, appear to have the least. The economically disadvantaged are far more mobile in urban areas.[7]

---

[5] NAEP. (2005).
[6] Detroit Public Schools. (2005). *Educational Technology Plan, 2006-2009,* 28. Detroit, MI.
[7] Kerbow, D. & Azocoitia, C. (2003, Winter). Student mobility and local school improvement in Chicago. Journal of Negro Education. Washington, D.C: Howard University.

When assessing the effectiveness of a school, issues that must be addressed include which students have attended the school for a sufficient time to be influenced by its programs and for whom the school should be held accountable. An index of stability communicates the proportion of students with whom the school has had contact over a significant amount of time. A higher stability rate is better for the quality of schooling.

Study Design

The formulas and description used in this study were developed by the United States General Accountability Office at the request of the United States Congress.[8]

1. **Stability Indices:** These describe the proportion of students who are enrolled for an entire school or a specified period of the school year.

   Formula for Stability Rate

   Stability rate (S) equals enrollment for school in month one (M1) minus the number of students in school at the end of the year (L) divided by enrollment for school in month one, times 100—yielding the stability rate percentage.

$$S = \frac{M1 - L}{M1} \times 100$$

2. **Mobility Indices:** These describe the proportion of students who enter the school after the first month count (E) and the students who move out before the last month count (L). Mobility counts are merely the number of students who change schools during the school year.

[8] General Accounting Office, Health, Education & Human Services Division. (1994, Feb). *Elementary School Children*, Washington, D.C., 94-95.

Formula for Mobility Rate

Mobility rate (R) equals the number of entrants (E) after the first month count plus the number of leavers (L) before last month count divided by the average enrollment for the 9 months (AVE) which is the average of the first and last month counts, times 100—yielding the mobility rate percentage.

$$M = \frac{E + L}{AVE} \times 100$$

The state of Michigan requires all public and charter schools to collect enrollment data by grade, school, and district in September (first month), February, and May (last month) of every school year. It is these enrollment data that were used in this study.

Findings

The schools in Detroit with the lowest mobility and greatest stability rates are the magnet or "examination schools" such as Bates Academy and Burton International School. Other elementary schools in Detroit that were recognized as High Performing, such as Chrysler Elementary, Gompers, Davison, Holcomb, and Nataki Talibah, also had significantly higher stability rates and lower mobility rates than the district average (see Table 1). Clearly, these schools and others that were recognized by the Skillman Foundation as High Performing due to student achievement and school quality are more successful in maintaining their student population than other schools. A more interesting finding from this study is the mobility and stability rates of the "Improving Schools." These are schools that showed at least a 10% improvement in the number of students in the proficient category on the Michigan Educational Assessment Program (MEAP) testing

over two years. Many of these schools had small percentages of their students in the proficient category but were able to make significant improvement from one assessment cycle to the next. Overall, the stability rates for most of these schools were higher than the district average (see Table 2). Preliminary data indicate that parents of students in these schools are gaining confidence in the ability of their children's school to raise the achievement of their students and thus are keeping their children in these "Improving Schools" at higher rates than the average elementary school in Detroit. Individual analysis of the 13 elementary schools recognized by the Skillman Foundation as improving in 2005 indicate that stability rates correlate highly with the percentage of students in the proficient category in mathematics and English language arts (reading and writing). A detailed survey of more than 13,000 sixth graders in Chicago indicated that 58% of student mobility was associated with a family residential move to a different location. However, 42% of families cited only school-related concerns, such as limited academic opportunities, failing schools, lack of safety, lack of parental involvement and deteriorating physical plants. These are factors that can be addressed if public urban schools want to improve the stability rates of their student populations.[9]

Conclusion and Recommendations

Frequent moves from school to school put students, particularly poor students, and their schools at a disadvantage. Mobility rates at Detroit schools are very high and getting worse. Mobility rates at schools that are academically high performing or making significant improvement in their achievement results have significantly lower mobility

[9] Kerbow, D. & Azocoitia, C. (2003, Winter). Student mobility and local school improvement in Chicago. Journal of Negro Education. Washington, D.C: Howard University.

rates and higher stability rates than other schools in the district. Parents of children in High Performing schools choose to keep their children in these schools unless forced to move by family relocation. Thus, mobility rates in these schools are very low, and the stability rates are exemplary. Schools improving in the category provide mixed results. Some exhibited significantly lower mobility rates while others had rates similar to the district average. These rates seem to be related to the level of achievement in these schools.

The depressed economic situation in Detroit is the major contributing factor for student mobility, accounting for about 60% of all the school moves made by students at the elementary level. This is due to family residential moves. However, about 40% are due to other factors such as dissatisfaction with the quality of the school's educational program, academic performance of the student and the school's accountability status. A high stability rate of students in the same school offers better learning circumstances for all concerned—students, teachers, support staff, principals and parents—if the school is to make progress in improving its educational outcomes.

Schools in Detroit must direct their efforts at making families feel welcome and mobile students feel cared about in the school environment, but educators must recognize that special efforts are also required on a continuous basis to retain their student population.

Efforts to close the massive achievement gap between majority and minority will hinge on how Detroit educators respond to the needs of their mobile and stable student populations. Schools that create a climate of caring and a sense of belonging for all students and improve their academic progress will be in the best position to maintain

students and to provide effective instruction and educational programs that make a difference in the lives of students and their families.

Student mobility is increasing in Detroit Public Schools, and the value society places upon offering choices to students and their parents is adding to this increase. Additional strategies are needed to help mobile and stable students achieve more, and to help their parents connect as vital partners in education.

The schools in Detroit with the lowest mobility and greatest stability are high achieving schools. Parents strive to compete to send their children in these schools despite the distance the school may be from their homes. Students in schools like Bates, Burton International, Nataki Talibah, and YMCA Service Learning Academy are more stable and less mobile, and they achieve well in academic areas, a clear indicator of being labeled a “Good School” by The Skillman Foundation. These schools keep their students’ needs first. More schools in Detroit need to do what these students are doing so they can be recognized as Good Schools: Making the Grade.

Table 1

The Skillman Foundation's Good Schools: Making the Grade Initiative
Mobility and Stability Study of Students in Detroit Schools
2005-06 Data

Enrollment Data

	No of Schools	Sept Count (M1)	Average Count (AVE)	Entrants (E)	Leavers (L)	Stability Rate (S)	Mobility Rate (R)
Detroit Public K-5	130	57,165	54,163	16,525	18,232	68.11%	64.17%
High Perform. Schools	7*	2,696	2,561	243	393	85.42%	24.83%
Improving Schools	13**	6,081	5,656	1,322	1,640	73.03%	52.36%

* Cornerstone (private school) does not report enrollment data
Newberry Elementary School was closed in 2005.

** Christ the King (parochial) does not report enrollment data.

Table 2

The Skillman Foundation's Good Schools Making the Grade Initiative

Mobility and Stability Rates

2005-06 Data

Performance Level*	School	Gr Lvl	Sep. Enroll. (M1)	Type**	05 Skillman Grants	Stability	Stability rate (%)	Mobility rate (%)
High Performing	Bates (K-8)	K-5	479	D	100,000	431	89	11
High Performing	Burton International (K-8)	K-5	359	D	75,000	318	88	13
High Performing	Chrysler (K-5)	K-5	177	D	50,000	154	87	10
High Performing	Cornerstone (K-8)	K-8	838	P	100,000	-	-	-
High Performing	Davison (K-6)	K-6	810	D	75,000	548	67	22
High Performing	Gompers (K-5)	K-5	286	D	100,000	236	82	25
High Performing	Holcomb (K-5)	K-5	381	D	100,000	291	76	31
High Performing	Nataki Talibah (K-8)	K-5	304	C	100,000	237	78	35
High Performing	Newberry (K-5) Closed 05	K-5	252	D	50,000	-	-	-
Improving	Academy of the Americas (K-8)	K-5	539	D	25,000	366	68	51
Improving	Burns (K-6)	K-6	584	D	50,000	397	67	55
Improving	Carstens (K-5)	K-5	387	D	25,000	283	73	28
Improving	Christ the King (K-8)	K-8	199	P	50,000	-	-	-
Improving	Crary (K-5)	K-5	451	D	50,000	321	71	58
Improving	Dixon Elem/Middle (K-8)	K-5	403	D	50,000	274	68	53
Improving	Foreign Language Immersion (K-8)	K-6	408	D	50,000	329	81	22
Improving	Genesis (K-6)	K-6	342	D	15,000	242	71	54
Improving	John R. King (K-6)	K-6	544	D	50,000	326	59	71
Improving	Mark Twain Elem (K-8)	K-5	281	D	15,000	172	61	68
Improving	McKenny (K-6)	K-6	421	D	15,000	303	72	63
Improving	Wayne (K-5)	K-5	382	D	15,000	271	68	59
Improving	Wilkins (K-6)	K-6	593	D	25,000	415	70	61
Improving	YMCA Serv Learn Academy (K-8)	K-5	746	C	50,000	678	81	19
Improving	Yost Academy (K-5)	K-5	179	D	10,000	120	67	59

* Cornerstone (private school) does not report enrollment data
Newberry Elementary School was closed in 2005.
Christ the King (parochial) does not report enrollment data.

** D: Detroit Public Schools; C: Charter Schools; P: Private or Religious Schools