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Educators' Perceptions of Mobile Students and the Interventions that Assist Them

Timothy Bruce Bostic
Virginia Commonwealth University

Mary Angela Coleman
Virginia Commonwealth University

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Timothy B. Bostic, Ph.D.
MERC Research Co-Director
Virginia Commonwealth University

Mary Angela Coleman, Ph.D.
MERC Research Co-Director
Virginia Commonwealth University

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Introduction

In the educational climate of No Child Left Behind (NCLB), school personnel are searching for any means available to help all children succeed academically and meet state standards. School teachers and administrators in Virginia are no different. All schools and school districts, in Virginia and across the country, must demonstrate through adequate yearly progress (AYP) that children are achieving state standards of education. AYP requires that schools not only show that all students are achieving state standards but also that disaggregated groups of students (e.g. Black students, speakers of English as a second language, special education students) are meeting standards at acceptable levels.

In Virginia, AYP is demonstrated through students' pass rates on the Standards of Learning (SOL) tests among other benchmarks (e.g. graduation rate). Unfortunately, there are many subgroups of school children that have difficulty passing the test. While there are specific subgroups of students about which the state must report progress, Virginia educators are concerned with the academic success of all. Though transient, or highly mobile, children are not one of the disaggregated groups about which the state must report, and because research indicates that highly mobile students do not perform well on standardized tests, there still is a concern that these students, as a group, are not as successful in passing the SOL tests as other students (Mehana & Reynolds, 1995). Further, because some schools have larger proportions of highly mobile populations than others, there is a concern that highly mobile students may negatively impact a school's accreditation. In order to seek out the best research-based practices to help transient students pass the SOL tests and achieve academic success, research targeted at addressing the needs of these students must be conducted.

A mobile student is any student who moves during or between academic years. The more students move during their academic career the more mobile they are. While the terms mobile and highly mobile or transient and highly transient are frequently used, the literature provides no recognized manner for quantifying the difference between mobile and highly mobile. Logically, however, students who move more than the average student, which according to the General Accounting Office (GAO) is one or less times before third grade, can be considered mobile. When the number of moves increases within the same time period, students can begin to be considered highly mobile.

The increase in mobile students is not a phenomenon particular to Virginia. Citing research from a General Accounting Office (GAO) report, which looked at a stratified sample by census region and three levels of urbanization of 15,000 third-graders, Kariuki and Nash (1999) found that approximately 17% have attended three or more schools since first grade. This equates to one in six children, or more than 500,000. Further, 24% have attended two schools since first grade. The mobility rate increases when examining inner city children separately. One in four inner city children changed schools three or more times, in comparison with one in seven rural or suburban children changing schools. Analyzing the mobility for these children during the school year showed that 11% changed schools once and two percent (2%) changed schools twice (Mehana & Reynolds, 1995; Mao, Whitsett, & Melor, 1997). Society in general is becoming increasingly mobile, so it is no surprise that students served by public school systems are also experiencing a high rate of student mobility. Therefore, it is important to find ways to ameliorate the impact of being mobile for this large group of students.

Not surprisingly, there is a strong relationship between mobility and income. Thirty percent of third graders from low-income families, defined as having earnings below $10,000 per

year, have attended three or more schools in comparison with only eight percent of children in

families with income of $50,000 or more. As family income increased, fewer children changed

schools. Mao et al. (1997) also noted that the GAO study drew the conclusion that children who

come from economically disadvantaged homes or from inner city homes have a greater

likelihood of changing schools more frequently. Beyond the elementary school level, Mehana

and Reynolds (1995), citing research by Ingersoll, Scamman, & Eckerling (1989), point out that

there is a decrease in the proportion of mobile students as students move to higher grade levels.

Regardless of the grade level, however, there is a negative effect upon academic achievement.

As noted earlier, NCLB requires that all students make adequate academic progress. The large

number of students, who experience mobility and a concomitant drop in academic achievement,

is an important subgroup to target when analyzing ways to increase learning outcomes as

measured by standardized tests.

Due to the many factors contributing to mobility, the study of transient students is

complex task. First, the definition of mobility and its most appropriate measurement are varied.

Second, it is necessary to tease out the effects of factors correlated to achievement, such as

socioeconomic status and parental support, in order to isolate the effects of mobility alone.

Third, different disciplinary perspectives, such as sociology and psychology, must be taken into

account in order to enhance understanding of the issue. Finally, academic interventions which

help to ameliorate the impact of mobility have not been identified; however, gaining a thorough

understanding of the literature relevant to identifying academic interventions for highly mobile

students will assist in this endeavor.

Literature Review

Defining Mobility

In order to define mobility, a number of dimensions relevant to mobility must be addressed. Then, a decision must be made on how those dimensions will be measured. In many studies, mobility is often described as the number of times a student moves between kindergarten and graduation. Usually, schools calculate mobility as the number of students coming in versus leaving during the school year. However, mobility definitions have evolved. Ligon and Paredes (1992) were two of the first researchers to deconstruct the current notion of defining and calculating mobility. They surveyed school districts throughout the country, collected definitions and formulas for calculating mobility and applied those definitions and formulas to the public schools in Austin, Texas. Using the data collected, they found Austin Public Schools had a mobility rate between 8 and 44.8 percent. They concluded that the wide range of mobility statistics and definitions was the result of confusion among and within schools districts trying to answer several questions. Those three questions are:

1. How many students are stable and receive the full impact of a school's programs?

2. How many times is a school impacted by having to change a student's record as a result of the student's entering, exiting, or moving within the school?

3. How many times has an individual student's address changed such that the student's school assignment and attendance also changed?" (Ligon & Paredes, 1992, p. 7-9).

This study is pertinent to research on mobility because it can assist in clarifying school personnel's understanding of mobility, as well as how to best calculate the statistic.

Since 1992, other researchers have examined calculations of mobility. Audette,

Algozzine, and Michele (1993) and Mao, et al. (1997) calculated mobility using a formula that

adds the number of students entering and the number of students exiting within the school year

and divides that number by the total enrollment. This calculation has become fairly standard for

estimating mobility. However, as Ligon and Paredes (1992) pointed out that number can be

misleading. Often it is necessary to place parameters and provide operational definitions around

mobility calculations to provide context and richer description of mobility.

Alexander, Entwisle and Dauber (1996) distinguished between students who move within

a school system versus those who move out of the system. The researchers sought to identify if

significant differences existed. They found that students who moved within the system often

suffered more negative effects of mobility than students who moved out of the system. Then in

1999, Swanson and Schneider expanded the definition of mobility to three levels; school-only,

residence-only, and school and residence moves. The purpose in this study was to isolate

whether or not the effects of mobility on academic achievement were attributable to residential

moves, as well as school moves, or if there were different effects for students in the three groups.

Clearly, the measurement and definition of mobility impact researchers' results and

interpretations.

Mobility, Achievement and Their Correlates

The correlation of mobility with achievement is confounded by the need to isolate the

effects of the variable under consideration from the effects of other variables highly correlated

with achievement. For example, numerous studies that address the effects of mobility on

achievement control for socioeconomic status (SES) and ethnicity and found both variables to

exert influence on the dependent variable (Mao, Whitsett, & Mellor, 1997; Paredes, 1993; Reynolds & Mehana, 1995; Fisher & Matthews, 1999; Alexander, Entwisle, & Dauber, 1996).

With any discussion about defining and measuring a variable, it is necessary to account for the variable's correlates. For example, no matter how achievement is measured it correlates highly with a student's socioeconomic status (SES) and ethnicity. In fact, these two variables interact significantly with mobility (Paik & Phillips, 2002; Mao et al., 1997; & Mehana & Reynolds, 1995). As such, when considering the impact of mobility on achievement, regardless of how one chooses to measure achievement, it is imperative to consider and control for several variables. Most often researchers interested in measuring mobility control for gender, race, SES, and parents' education, because these demographic variables tend to be highly correlated with mobility. However, researchers have found other factors that correlate with mobility.

Because mobility is often confounded with changes in students' home lives, many studies attend to the variables of family structure. Tucker, Marx, and Long (1998) examined the effects of family structure on school children's achievement and found that highly mobile students (more than eight moves) who resided in dual parent homes were not significantly affected by their mobility; however, children in all other family structure types were significantly affected. In addition to family structure, other variables that have been considered in other studies include the home language, behavior data, and ethnicity (Paredes, 1993; Research for Better Schools, 1987).

Mobility and Social Support

There seem to be two competing theories about why mobility affects student achievement. One is a systems theory whereby transient students suffer because when families move, they move away from the human and institutional resources that would otherwise assist in

the child's academic achievement (Pribesh & Downey, 1999; Newman, 1988). In these instances, it is the family system that determines any effects of mobility on achievement. For example, if a family's move takes it to a location where more resources and support are available, the effects of mobility on achievement are reduced. In fact, Mehana and Reynolds (1995), citing research by Greene and Daughtry (1961) and Cramer and Dorsey (1970), note that military families, who have existing support structures to cope with moving, are not negatively impacted due to being highly mobile.

Academic Interventions

There is little literature that examines the impact of specific interventions; however, the few studies available do enhance understanding of which students should be targeted. In fact, most studies do make recommendations as to interventions schools could attempt in order to mitigate the negative impact of mobility. First and foremost, researchers indicate that mobility programs would be most useful if they were targeted at low-income students and students for whom English is a second language, since these students are the most mobile (Paredes, 1993; Research for Better Schools, 1987). Additionally, most of the recommended intervention strategies focus on finding ways to create programs that would address the needs of students living in poverty (Mehana & Reynolds, 1995). However, the specifics of the implementation of these programs are lacking.

A few innovative programs have been tried in school districts around the country. Schools in California have created an electronic tracking system that allows other schools to access student records in order to place students appropriately when they transfer to a new school. In Chicago, they have implemented a policy that allows students to complete the school year at the school where they started. In St. Louis, the school system transports students back to

their original school if they move (Vail, 1996). These programs, however, are the exception rather than the rule. In Dallas, which has a large population of children of migrant workers, programs have been set up to provide tutoring to these children, track the children, provide summer schools, and put families in need in touch with charitable and social service programs (Paik & Phillips, 2002).

Further, suggestions have been made as to what school districts might implement in order to target highly mobile student populations. First, most of the research suggests finding ways for school districts to endeavor to keep children in their first school whenever possible (Mao et al., 1997). Second, researchers suggest creating intervention programs for which poor families would be eligible (Mehana and Reynolds, 1995). Because findings indicate that behavior problems that may be linked to low teacher expectations can cause learning problems for transient students, professional development for teachers working with these children is suggested (Research for Better Schools, 1987; Paik & Phillips, 2002). Programs that work to make children new to the school feel comfortable and connected are also recommended along with outreach programs that help parents understand school policies and connect them with community services (Paik & Phillips, 2002).

The literature indicates that a clearer understanding of mobility and its correlates is emerging. However, the confluence of these variables (low SES, English as a Second Language, etc.) on a child's ability to learn make it necessary for school districts to work at addressing the issues that districts may be able to influence. By researching the efficacy of effective programs that work with mobile populations, schools districts can make inroads that will lessen the impact of mobility on their students.

Methodology

Procedures

This study had three primary objectives: 1) to identify an appropriate measure of

mobility and identify mobile schools; 2) to ascertain from key informants in mobile schools how

mobility is or is not addressed; 3) to find out how key informants perceive mobility and mobile

students; and 4) to find out if key informants believe mobility has an impact in their schools. A

descriptive study employing mixed-methodology was used, the design included two phases. In

the first phase, attendance data was acquired from seven school divisions in the Richmond

metropolitan area. In September, 2005, a data request letter was sent to the divisions'

Superintendents, personnel in charge of data collection, and study team representatives.

Attendance data for each elementary school in each division for the school years between 2001

and 2004 was obtained (see appendix A for a description of attendance codes). Data were

received from five school divisions in central Virginia. In one division, data were provided only

for the first two quarters of current (2005/2006) school year. Attendance data included all of the

codes that the school systems used to both enroll and withdraw students from school. Using the

total number of times specified entry and withdrawal codes were used (see appendix A) and the

total enrollment for the school, mobility rates were calculated for each school in each division for

each of the three school years. A school was identified as mobile if the yearly mobility rate was

two or more standard deviations above the mean mobility rate for the division or if the study

team or school division personnel provided qualitative evidence for identifying a school as

mobile. In one division, mobile schools were identified as the four schools with the highest

mobility percentages in the division. The study team decided that interviewing approximately

three schools per division was sufficient. Thus, if more than three schools were identified as

mobile in a division, the study team representative of that division provided information, or solicited it from other division personnel, to assist in deciding which schools to interview. For example, in one division schools were chosen to provide diversity in school type (i.e. a rural school, a suburban neighborhood school, a school close to the county line). Once schools were identified, the principal of each school was contacted to participate in the study's second phase.

In the second phase, the study team invited principals to participate in an individual interview, which lasted one-half to three-quarters of an hour. In addition, we requested that they identify those employees in their schools who are knowledgeable about mobile students. Identified individuals were interviewed separately from their principal. If only one person was identified, that person was interviewed individually. If more than one person was identified, those people were interviewed in a group setting. Interviews were semi-structured. The foreshadowed questions were

1.) What do you believe are some of the characteristics of your mobile student population (i.e. low SES, ESL, family dynamics) and your perception as to why these children are mobile (accredited school, running from special ed. designation, etc)?

2.) Do you have any programs currently in place to help ameliorate the impact of mobility on your students? If yes, what kinds of programs and do you believe they are helping to overcome the problems associated with mobility for your highly mobile students?

3.) Do you have suggestions for things that could be done on either a district or school level to help mobile students?

4.) How do you think mobile students are affecting the academic achievement of your school and district (math and English SOLs)?

5.) What process do you currently have in place for dealing with students moving in or out of the school?

6.) Do you believe that mobile students differ depending on the reasons why the child is moving?

After the first two interviews, the study team found a seventh question emerged

7.) Do you find the teachers and school staff make personal sacrifices to aid mobile students and, if so, would you share anecdotes that describe the kinds of things they do?

The researchers conducting the interviews recorded participant responses by hand. Subsequently, all notes were transcribed into a text document for analysis.

Sample

Attendance data were requested for all elementary schools in the participating MERC school divisions. Data were received for a total of 114 elementary schools: Nine schools participated in the qualitative phase of the study. All schools were accredited, and other descriptive information about those nine schools is presented in Table 1.

Table 1

School Demographic Information

	A	B	C	D	E	F	G	H	I
Total enrollment	426	623	539	630	348	454	472	733	812
% F & R lunch	56	56	81	70	95	83	25	61	17
Title I (yes or no)	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
% ethnic minority	43	57	76	75	100	100	23	88	16

Note: Data obtained for the 2003-2004 year from the National Center for Education Statistics, Common Core of Data.

Data Analyses.

Attendance data were analyzed using SPSS 13. Calculation of the mobility rates from the attendance data used the following formula: the total number of students enrolling after September 30 plus the number of students withdrawing divided by the total school enrollment.

The analysis in the second phase was qualitative. Constant comparison was used to extract relevant themes from the transcripts from the key informant interviews. The qualitative data analysis employed adhered to the standard procedures described in the works of Miles and Huberman (1994) and Lincoln and Guba (1985). In addition, a list of programmatic activities and informal practices to ameliorate the impact of students' mobility was compiled from information provided in interviews.

<div align="center">Results</div>

Quantitative Results

The first objective in this study was to identify an appropriate measure of mobility and identify mobile schools. Four of five districts provided the study team with attendance data for all three years. One district provided attendance data from the first two quarters of the current school year. This division's data were not included in the following statistics. Data were received on a total of 83 elementary schools: The overall mobility rate across all divisions over three years averaged .18 (.09 s.d.) with a minimum three year average of .04 and a maximum of .49. In 2001/2002, the mean was .16 (.09 s.d.); in 2002/2003, it was .19 (.10 s.d.); in 2003/04, it was .19 (.10 s.d.). From 2001-2003, there were mobility rates as low as zero and as high as approximately .5. In 2003/2004 no schools had zero mobility; however, the maximum rate remained stable at .49. Aggregate mobility statistics for each division are presented in Table 2.

Table 2

Average Yearly Mobility Rates by Division

Year	Division			
	A	B	C	D
2001/2002	.16 (.10)	.14 (.08)	.33 (.05)	.08 (.01)
2002/2003	.18 (.10)	.19 (.10)	.37 (.06)	.09 (.01)
2004/2004	.17 (.10)	.19 (.08)	.35 (.05)	.08 (.02)

Attendance data for one division was provided as the total count of students, by grade, moving into each school and moving out of each school, as well as the Sept. 30 total enrollment. Data were provided from the first and second quarters of the 2005/2006 school year. The average mobility among this sample was .06 (.02 s.d.) with a minimum mobility rate of .01 and maximum of .11. Appendix B contains a complete table of mobility rates for all participating schools.

Schools in four divisions were chosen to participate in the qualitative phase of the study based on being significantly above the mean mobility rate. In most cases, schools with yearly mobility rates that were two or more standard deviations above the mean were chosen for consideration. In addition, there were some schools chosen based on qualitative information provided by the study team member from that division or the division's research office, despite not meeting the two standard deviation requirement. Mobility rates for these schools are show in table 3.

Table 3

School Mobility Rates per Year

Year	School								
	A	B	C	D	E	F	G	I	J
Mobility 01/02	0.32	0.2	0.47	0.32			0.1	0.23	0.08
Mobility 02/03	0.33	0.29	0.52	0.43			0.22	0.32	0.08
Mobility 03/04	0.31	0.27	0.49	0.4	0.09*	0.09*	0.21	0.25	0.1

* Rates for the first two quarters of the 2005-2006 school year

Qualitative Results:

The objectives of the qualitative phase of the study were to ascertain how mobility is addressed, how mobility and mobile students are perceived, and how mobility impacts the schools. Transcripts from all interviews were read by the two of the study team researchers. The two researchers then compared their observations and reached consensus about the emergent themes. Four themes emerged from interviews: 1) the characteristics of mobile students, 2) the causes of mobility, 3) the social impacts of mobility, and 4) the academic impacts of mobility. In addition, the researchers extracted information regarding the programs currently in place at schools that address the needs of mobile students.

Characteristics of Mobile Students. The key informants were clear that the biggest cause of mobility for their students center around their home lives though for some students they are relatively unaffected by the family's mobility. It is important to note that when discussing the academic issues for mobile students, the key informants are generally discussing the mobile students who tend to come from families with low incomes, for whom English is a second language, or who are in crisis due to the dynamics of the family. These problems are exacerbated

by the fact that the families do not have any support structures in place to help them cope with crises. The key informants indicated that these tend to be the biggest characteristics of their mobile students. The low incomes create problems for the students' families in terms of making rent payment, thus leading to eviction. The employment issue for these families means that they are not employed in stable jobs and must move in order to find work. The other main issue is the lack of records for the students when they transfer to the new school. These points are illustrated best by statements from the key informants.

> "Many live in motels or trailer parks where rent is paid weekly. Poverty, the lack of extended family in the area, and transient employment are all factors that impact mobility."

> "Characteristics are low SES, a lot of ESL [students] moving in the school and low achievement."

> "One thing we do, we can't wait for mail for records. We use faxes and ask for records over the phone. We get a better turn out with faxes. New York City is the worst in terms of getting records."

> *Causes of Mobility.* While the causes of mobility are outside of the control of the

schools, the key informants also were quite clear about the reasons these students are so mobile. The fact that these children come from families for whom housing is constantly an issue leads to them being extremely mobile. The types of jobs that many of the parents hold are not ones that are secure or well paying. Thus, the parents must move in order to find work because the job they have is temporary, or they have to move in order to secure a higher rate of pay. Parents do not understand how to negotiate these problems in order to limit the impact of mobility on their children's education. Also, the families are often in crisis due to their inability to meet basic

needs, and the immediacy of those needs often eclipses their concerns about their children's education.

The housing issue causes mobility because if the parents are unable to pay their rent, they are forced to move in with relatives, a homeless shelter, or places that are cheaper than the ones in which they are currently living. Many of the students come from families in crisis because of abuse of some sort. The children are forced to move because the custodial parent is being abused and must hide from the abuser. The other issue often seen is divorce that leaves the custodial parent in a financially precarious position, leading to them needing to move in their search for affordable housing or stronger support networks.

"It is the families in crisis which have the at-risk characteristics. They live in housing projects. Their records indicate they move a lot."

"The primary reason for mobility in this population is due to socio-economic reasons and/or family dynamics (divorce, custody, domestic abuse, etc.)."

The Social and Academic Impacts of Mobility. Academically, because these students are constantly moving, there is a lack of instructional continuity, teachers cannot rely on the home for support, and they do not receive the foundational knowledge that would help them succeed. When students move three to seven times a year, often to different counties and frequently to different states, there is an inability on the children's part to understand how what they were learning at their previous school is related to what they are learning at the school in which they are currently enrolled. Often, just as the school and the classroom teacher understand what academic needs a child might have, she moves before a remediation program can be established.

Many of these children's homes do not have the support structures in place so that what is being learned at school can be reinforced at home through homework. If families are living in

homeless shelters, motel rooms, or with friends, there is not a dedicated place where the children can do their homework. Since the families are constantly moving, many of the children never have the opportunity to learn the basics that will allow them to meet with success in school.

"They have gaps due to a lack of continuity of instruction. Teachers know that they have to give kids all because they can't rely on the home either educationally or socially."

"Students who move in are often far below the grade level on which they must be tested for SOL testing and have been taught a curriculum different from that in the state of Virginia."

"Some students have been in five to seven schools in a year. Academic achievement is impacted by the different curricula, lack of stability, and lack of foundation."

"Moving because of housing issues creates a bigger problem. Some don't even live in places where homework is doable."

Socially, mobile children have issues with hygiene, socialization issues, and emotional problems. Many of the students, due to their lack of a stable home life, do not have the ability to clean their clothes, take care of their health, or bathe. One key informant explained that the school has put a washer and dryer in so that children who are coming to school in dirty clothes have the opportunity to have their clothes washed. Also, funds have been established so that new clothing can be purchased for the students whose parents are unable to purchase school uniforms or appropriate school clothes.

"Teachers here will provide for students. They buy clothes, and community leaders donate so that kids can have uniforms. . . every child received a hat, gloves, and scarves this winter"

"They [the children] have to be on the street all day. So you want a child who has had almost no sleep, and often lacks essentials like underclothes, to focus?"

Since many of the students are coming from schools that have chaotic and un-safe climates, they must learn to negotiate learning in an environment that is supportive and non-threatening. An excellent example of this problem was a young boy who had moved to Virginia from Philadelphia.

"Student X had come from Philadelphia, and he had learned that he needed to show he would fight in order not to be picked on. We had to help him understand that we cared about him and wanted to learn. He started with us in 4th grade, and his teacher worked to get him engaged. She went to his house to help him and work with him. His teacher got him to engage with the school. By 5th grade he was on grade level and was close to getting on the honor role. Also, he was involved in the music program. Then his parent lost her housing, and he moved. He would have definitely passed his SOL's, but he was gone."

Many of the children are withdrawn emotionally because of the turmoil they are experiencing at home due to the problems that their caregivers face. One key informant noted that "students whose moves are precipitated by . . . family dysfunction tend to have more social problems than those whose moves are the result of upward mobility or military moves." One key informant pointed out that for kids living in this constant state of flux, it leaves them unable to process their emotions, and some "parents are very resistant to counseling for their kids." It was noted that many of these kids will share stories with the faculty about traumatic events in their home lives, but will not show any type of emotional reaction to the stories they are recounting.

"Sometimes students must move unexpectedly in the middle of the day due to domestic situations. Students who have had this happen frequently seem to show little emotion when the move takes place."

Programs. The programs in place at the schools work to address both the social and academic impacts of mobility. However, in all cases, the key informants stressed that while the programs do help mobile children, they are in place for all of the students that they might help. These programs range from formalized systems of addressing the academic and social impacts of mobility as well as informal systems that work to address many of the social impacts of mobility. On the academic side, the biggest issue is making sure that the school provides the new student with the correct learning environment. Due to the inadequacy of record transfer, many schools test or assess the students within the first three days of their arrival so that the appropriate academic programs can be established. This process allows for the students to be identified as gifted or struggling so that either remediation or enrichment programs can be established. As one key informant noted, "we try to take a proactive approach to providing services." Another pointed out that "all new students are tested for their accurate reading level as soon as possible so that they can be integrated into the small group level reading groups that take place each day." Additionally, some of the schools have people that go into neighborhoods after school and on weekends to help the students complete and understand the homework provided by the school.

"We have a homework helpers program that goes into the low-income neighborhoods."

Since all key informants seemed to be keenly aware of the way the social problems mobile children face have a detrimental impact on their academic achievement, they have many programs that address the social impact. These programs range from helping students with the purchase of school supplies, buddy programs that match new students with a peer who can

"show them the ropes," specifically identified people who work with parents and families to help them to address their mobility, and, in once case, a liaison who helps link families to different social services that are available to them.

"An Intervention Strategist funded through a grant is the link to families with housing, food, medical, and financial needs. She and two assistants transport parents to school and assist them in solving family crises." "Our Intervention Strategist is known throughout the county because of how much time and effort she puts in to helping families helping their children succeed."

Many of the schools have the guidance counselor or a *Communities in Schools* person have lunch with the children and get to known them on a personal level so that they can get a better understanding of what their social and emotional needs might need to be met in order for them to be successful academically. There are also groups or teams, formally or informally, established in the schools. At one school they have a Student Assistance Team comprised of guidance counselors, an assistant principal, a literacy coach, a social worker, and a school psychologist. This team works together to assess the children and develop plans to help them address whatever needs the Student Assistance Team believe need to be met. Anyone in the schools can recommend a child be considered by the Student Assistance Team. Another school has a team "which is used to discuss access to school and perform pre-screening to stop families, pro-actively, from being mobile. Many of the schools rely on school and business partnerships that create funds to provide supplies to students who do not have the financial capability of acquiring them.

All of the schools established some type of buddy system for the new student. These programs usually require the buddy or ambassador to go through training with a mental health

expert who helps the students understand how important it is that they help acclimate the new student.

> "They learn techniques to make students aware. It helps students become acculturated to a new school."

> "With the Student Host Program in grades 1-5, a boy and a girl in each classroom serve as buddies to the new students. The buddy goes through a one time training on giving a tour of the building and how to make introductions to key people throughout the building."

All of these programs highlight the importance the educators place on addressing the social impact of mobility. They realize that if they were to ignore these issues, they would not be able to help the students achieve academically. One key informant put it best saying, "developing pathways for children requires us to pay attention to more than just academic roles."

Discussion

During the quantitative data collection, it became clear that even though schools were highly mobile based on the fact that the mobility rate for the individual school was well above the mean for the entire division, the individual school did not always consider mobility as a problem. One theme that recurred throughout the qualitative phase of the study was the lack of access to the students' records. There was a large concern that because of an inability to acquire information on the students, the schools were placed in a position of placing students without the requisite information that would have assured the appropriateness of the placement. In one instance a gifted student was not identified until the records reach the school. Unfortunately, by the time the school received the records and began to make changes to place the student appropriately, she was gone.

While all of the schools worked diligently to acquire students' records, they were frustrated by a lack of expediency on the part of the schools which the students had attended previously. The accessibility problem with the records led to frustrating delays in insuring that all of the appropriate academic interventions needed by a student were put in place as soon as possible. Further, in the case of Special Education students, there were times when the parents, whether due to being uninformed or due to a desire not to have their children labeled, did not inform the schools of the children's Special Education needs. Therefore, no Individual Education Plan (IEP) was being used to address the specific learning needs of the students. These administrative issues led to frustration on the part of the school personnel because they wanted to insure that their students got everything that they needed in order to succeed academically. These problems were seen when students were transferring from other districts and from other states; these problems were not an issue when the children were transferring within an individual district. The problem with obtaining records increased the further the children moved from their previous school (i.e. district to district, state to state), and increased when the children had been attending numerous schools each academic year.

The schools are working to create academic and social interventions that truly help their students overcome the problems associated with mobility. When no formal programs were in place, the schools found alternative means to support students. Throughout the key informant interviews, it was made clear that the teachers work to help their students financially. In some cases there are formal programs where businesses in the community help to provide the students with all of the supplies necessary for school. Also, there were Angel Tree programs set up so children were able to have a Christmas. However, most of the help came through informal means. When an individual school would learn that one of their student's family was in need,

they would pass a hat among the faculty to raise the funds that were necessary. One teacher got a friend to pay $1,500 for everyone to go on a field trip. Over and over again, situations were recounted about teachers taking students shopping for school clothes, school supplies, and in some cases helping with hygiene issues.

In terms of helping the students academically, the schools work to overcome the lack of records by testing and assessing as soon as possible. In most of the schools, the students were tested within their first three days at the school in order to establish their reading level. This allowed for the schools to not have to rely on previous records that may or may not show up. The students were also encouraged to engage in after school activities that would provide them with opportunities to remediate any academic problems that they might be having. Some of the schools have established programs so that there are people going in to neighborhoods to provide help with homework and tutoring. Programs such as this illustrate the level of commitment that the school personnel have made to insure that the students have every opportunity possible to succeed academically. Further, the schools are using all of the data available to make the appropriate academic decisions for their students.

Socially, the schools strive to make the students feel safe and secure as much as possible. The schools use some type of a buddy system to create a peer support network for the students who enter. The students are also assessed by the schools' guidance counselors as soon as possible to make sure that any socialization problems the student may have are addressed as quickly and efficiently as possible. Some of the schools, due to Title I funds or grant money, have a dedicated staff member who works to help stabilize the families. In one school there is a liaison who helps connect families with social services that will help them with issues of housing, health care, food, and clothing. This type of support helps to ameliorate the impact of

many of the problems the families are having that impact their children's ability to succeed in educational settings.

Throughout the interviews it became clear that many support systems established to help the schools meet adequate yearly progress also help the mobile student population. The school personnel are extremely grateful that these types of supports are in place. However, it is the amazing number of personal sacrifices on the part of the school's personnel that make a difference in the lives of their students, academically and socially. The key informants made it clear that they took care of the emotional and social problems of the students so that they could achieve academically. An underlying theme emerged that made it clear that the schools were not willing to lower their expectations for the students academically. Therefore, they had to remove the problems that might be impinging on the students' chances for academic success, thus providing them with the opportunity to meet the educational goals established for them by the schools.

Consideration of Implications in Light of Existing Research:

The research conducted by Mao et al. (1997) illustrated that there was a relationship between mobility and socio-economic status. The findings from this study support this relationship. When key informants were asked about the characteristics of their mobile students, they consistently indicated that the students' socio-economic status and all that it entails created the mobility problem. Additionally, research by Tucker, Marx, and Long (1998) and Paredes (1993) discuss the fact that family structure and home language have an effect on students being mobile. This study's findings also found that key informants believed that single parent families and families for whom English is a second language contributed to the mobility rate of their students. The research by Greene and Daughtry (1961) and Cramer and Dorsey (1970) found

that the children of military families do not suffer due to mobility because of the support systems in place for their children and their families. The key informants often wished that the support systems provided to military families were available to all families because they see that their students from military families do not suffer negative educational consequences because of moving.

Since poverty is so closely associated with mobility, the key informants consistently stressed that it was issues with ameliorating the impacts of poverty that would be most beneficial in terms of helping their students stop being mobile. The research studies on the types of intervention strategies that make a difference also stress this fact (Mehana & Reynolds, 1995; Research for Better Schools, 1987). The key informants also stressed the need for a smoother system for obtaining students' records. The research by Vail (1996) indicates that California has actually created an electronic tracking system that provides access to students' records, thus allowing for appropriate student placement as soon as they enter a new school.

The social interventions established by previous research are in line with the findings from this study. Mehana and Reynolds (1995) point out the importance of helping families who are mobile connect with the social services that may help stabilize them. While a few of the schools in this study actually have a person or program that actually does this, almost all of the key informants indicated that having a person, whether it be a social worker or a liaison person, who could do this for their students' families would be beneficial. All of the schools interviewed in this study have programs in place that help students feel comfortable and connected as soon as possible. This finding is in line with the suggestion by Paik and Phillip (2002) that schools need to accomplish this connection as soon as possible for mobile students.

Limitations

This study had several limitations. First, data was provided only by five of the seven districts. More data would have provided a better understanding of overall mobility rates in the region against which to evaluate the mobility rates of specific divisions and schools. Furthermore, while all of the schools collect attendance data using the same attendance codes, the data was not always stored or managed in a manner accessible for analysis. Consequently, while the request for data was made in September of 2005, it was February before some divisions were able to provide any data at all. Problems with the collection of quantitative data compressed the time frame within which qualitative data could be collected and forced interviewing to occur during spring testing, which was an inopportune time for most school personnel.

Second, there is a lack of accurate quantitative data which describes the demographic characteristics of the mobile student population. In interviews, school personnel talked about mobile students based on their perceptions of the student sub-group; however, the characteristics of the population are unknown. For example, without knowing if low SES students constitute the majority of the mobile student population, it is difficult to know if school personnel's perceptions are based on the fact that low-SES students are the majority of mobile students or if low-SES students may not be the majority, but take up the majority of time, energy and resources.

A third limitation is that while themes were emergent, time constraints prohibited researchers from conducting additional interviews that would have provided more support for the applicability of the results and potentially to a better definition of mobility.

Lastly, the method chosen for calculating mobility is not sophisticated enough to capture all types of mobility. For example, students with multiple home moves while having never changed schools were not captured. Thus, mobility estimates may be underestimated. Coupled with the fact that there is no established statewide parameter for what constitutes a highly mobile student population, researchers were unable to come to any definitive conclusion of what a highly mobile student population looks like. The researchers were limited to defining mobility and describing the impact of mobility based only on the perceptions of school personnel. Thus, there were cases in which principals of schools with some of the lowest mobility rates were more concerned about mobility than principals of schools with higher mobility rates.

Conclusions

Based on the results, implications and limitations, the researchers feel several conclusions may be drawn regarding assisting mobile student populations to achieve academically. First, the districts should establish a record transfer system that facilitates speedier access to student records. Second, schools with highly mobile populations need a dedicated staff member to link their students' families with social services. Similarly, programs currently in place at individual schools should be evaluated to see which ones work. Subsequently, those that work to help mobile students succeed should be replicated. However, there are several low-risk, low-cost programs that already could be promoted by divisions, such as popcorn parties and newcomer groups. Third, more formalized discussion and training regarding how school personnel can meet the needs of mobile students would be desirable. For example, one principal mentioned the need to provide cross-cultural in-service education, and another principal indicated a desire for more information about the transitional services available to mobile students and their families. Finally, divisions should work to identify and establish a shared definition and benchmark for

identifying highly mobile schools. In this way, divisions can provide more formalized and targeted support to individual schools with higher than average mobile student populations.

Suggestions for future research include student level data analysis which considers the number of times students move (both home and school mobility). The current data does not allow for analysis as to whether or not mobile students are underperforming as a group and key informant interviews were inconclusive on this point. Further, more detailed and accurate analysis of mobility would allow for specifically identifying best practices in schools which are both highly mobile and whose students are meeting with academic success.

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Appendix A

Attendance Codes

Withdrawal Codes:

- W1: Pupil promoted to another grade or room within same school

- *W2: Pupil promoted/transferred to another school within city or country

- *W3: withdrawal pupil transferred to a non-public school (private, parochial, home-schooled, etc.)

- *W4: Transfer to another public school in another county/city within state

- *W5: Transfer to public school out of state

- W6: Student dies

- W7: Pupil graduated

- *W8: Withdrawal for other reasons; not entering any other school, ex. Not re-enrolling

- *W9: After 15 consecutive absences, students who are expected to re-enter school.

    - *Example, a long term suspension, or long illness, that doesn't qualify for homebound instruction. At the end of the school year, student is coded W8 if he or she doesn't ever reenter.*

Entry Codes:

- *E1: Entered this school year in this or any state in a public school
- *E2: Pupil from another state who has not previously entered a public school in this state
- *R1: switched within school
- *R2: Received from another school within same county or city
- *R3: Within state but outside our county/city
- *R4: withdrawal (20 day suspension) Reentering same school after a withdrawal (used for suspension, hospitalization or going to another division)

* asterisk indicates codes used in calculating mobility.

Appendix B

Mobility Rates of Individual Schools

Mobility 0102	Mobility 0203	Mobility 0304
0.00	0.00	0.11
0.03	0.05	0.04
0.03	0.07	0.09
0.04	0.04	0.06
0.04	0.22	0.26
0.05	0.08	0.08
0.06	0.07	0.06
0.07	0.05	0.05
0.07	0.05	0.06
0.07	0.07	0.08
0.07	0.14	0.16
0.08	0.07	0.12
0.08	0.08	0.10
0.08	0.10	0.06
0.09	0.07	0.09
0.09	0.08	0.08
0.09	0.08	0.11
0.09	0.09	0.08
0.09	0.10	0.09
0.09	0.12	0.12
0.09	0.19	0.17
0.10	0.09	0.09
0.10	0.12	0.11
0.10	0.14	0.13
0.10	0.18	0.16
0.10	0.22	0.21
0.11	0.11	0.12
0.11	0.15	0.18
0.11	0.15	0.21
0.11	0.17	0.24
0.11	0.18	0.17

Mobility Rates of Individual Schools (cont.)

Mobility 0102	Mobility 0203	Mobility 0304
0.11	0.19	0.14
0.12	0.14	0.19
0.12	0.17	0.13
0.13	0.10	0.12
0.13	0.14	0.14
0.13	0.17	0.16
0.13	0.20	0.14
0.13	0.22	0.29
0.14	0.11	0.15
0.14	0.12	0.13
0.14	0.13	0.10
0.14	0.19	0.18
0.15	0.09	0.19
0.15	0.12	0.10
0.15	0.15	0.13
0.15	0.16	0.14
0.15	0.17	0.20
0.16	0.16	0.15
0.17	0.15	0.15
0.17	0.21	0.24
0.17	0.24	0.24
0.17	0.31	0.23
0.17	0.31	0.26
0.19	0.15	0.16
0.19	0.16	0.17
0.19	0.20	0.19
0.19	0.25	0.28
0.20	0.20	0.18
0.20	0.25	0.23
0.20	0.28	0.27
0.20	0.29	0.27
0.20	0.37	0.23
0.21	0.23	0.20

Mobility Rates of Individual Schools (cont.)

Mobility 0102	Mobility 0203	Mobility 0304
0.21	0.23	0.28
0.22	0.18	0.19
0.22	0.19	0.28
0.22	0.26	0.26
0.23	0.20	0.15
0.23	0.32	0.25
0.25	0.31	0.30
0.26	0.32	0.25
0.27	0.23	0.24
0.27	0.35	0.38
0.27	0.40	0.38
0.28	0.30	0.30
0.28	0.31	0.33
0.31	0.35	0.35
0.32	0.33	0.31
0.32	0.43	0.40
0.37	0.37	0.28
0.38	0.36	0.31
0.47	0.52	0.49

Mobility 05/06
0.11
0.10
0.09
0.09
0.08
0.08
0.07
0.07
0.07
0.07
0.07
0.07
0.07
0.07
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0.04
0.03
0.02
0.02
0.01