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# Comparison of the Enrollment Percentages of Magnet and Non-Magnet Schools in a Large Urban School District 

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#### Abstract

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#### Abstract

Are magnet schools in a position to meet diversity ideals? As districts are declared unitary and released from court ordered desegregation, many are framing their commitments to fairness and equity in terms of diversity-i.e., comparable rates of participation and comparable educational outcomes in all segments the student population. In this study, the enrollment statistics for magnet and contiguous nonmagnet public schools in Miami-Dade County Public Schools, a large, urban district that had been released from court ordered desegregation, were compared to each other and to district enrollment averages at two time points: the year the district was declared unitary and four years hence. Findings indicated that within four years of being declared unitary, the gains that the magnet schools had made with regards to Black/non-Black desegregation had eroded substantially. Also, in the four year span, magnet schools had not made significant strides in meeting the diversity ideals adopted by the district at being released from supervision by the court. These findings highlight the difficulty of attaining diversity in student enrollment characteristics when quotas are not used and suggest that recruitment and enrollment policies must be crafted with care if districts are to achieve diversity goals.


Keywords: magnet schools; race; ethnicity; gender; LEP; SPED; school desegregation; United States; 2001-2005.

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## Comparación de los porcentajes de matrícula escolar de escuelas magnet ${ }^{1}$ y no magnet en un distrito escolar urbano grande

## Resumen

¿Están las escuelas magnet en posición de poder cumplir con ideales de diversidad? En tanto los distritos escolares son declarados unitarios y exonerados del mandato de desagregación impuesto por los tribunales, muchos formulan su compromiso con la justicia y la equidad en términos de diversidad, es decir, índices comparables de participación y resultados educativos comparables en todos los segmentos de la población estudiantil. Este estudio compara las estadísticas de matrícula escolar de escuelas públicas magnet con sus vecinas no magnets en las Escuelas Públicas del Condado de Miami- Dade, un distrito escolar urbano muy grande que ha sido exonerado de la Orden jurídica de desagregación. Dicha comparación se realizó con los dos tipos de escuelas y con los promedios de matrícula escolar de todo el distrito en dos momentos específicos: el año en que el distrito escolar fue declarado unitario y cuatro años después. Los resultados indican que cuatro años después de haber sido declarado circuito escolar unitario, los logros que las escuelas magnet habían alcanzado con relación a la desagregación de Afroamericanos/no Afroamericanos han mermado sustancialmente. También, en el mismo período de cuatro años, las escuelas magnet no han hecho avances significativos para la consecución de los ideales de diversidad que fueron adoptados por el distrito cuando éste fue exonerado de la supervisión por parte de los tribunales. Estos resultados resaltan la dificultad de poder alcanzar diversidad en las características de la matrícula estudiantil cuando no se usan cuotas y, también, sugieren que deben crearse políticas de reclutamiento y matrícula escolar con mucho cuidado, si es que los distritos escolares quieren alcanzar las metas de diversidad.
Palabras claves: escuelas magnet; raza; etnicidad; género; LEP; SPED;
desagregación escolar, Estados Unidos, 20012005.

## Introduction

Desegregation was the primary reason for the creation of magnet programs and schools. In an era of court-ordered desegregation, these schools were envisioned as a key tool to increase nonBlack enrollment in predominantly Black schools and Black enrollment in predominantly non-Black schools. Now, as school systems are being declared unitary and are being released from court orders to desegregate, in progressively minded districts a vision of diversity has replaced the Black/White, Black/non-Black, or White/non-White mentality that had guided educational policies of equity. This new model suggests that the enrollment characteristics of schools and programs at the unit and at the group level should reflect district wide enrollment along diverse student factors. Can magnet schools make the transition to the envisioned ideals of diversity?

Magnet schools in Miami-Dade County Public Schools (M-DCPS) date to 1973, three years after the district was ordered by the courts to desegregate and the courts began to supervise

[^1]desegregation efforts. Almost thirty years later, by 2001, when the courts released the district from judicial supervision, there were 57 magnet schools in operation. Enrollment demographics in the school district had also changed substantially from the 1970 statistics. White enrollment had dropped from $53 \%$ in 1970 to $11 \%$. Black enrollment had increased from $25 \%$ to $30 \%$, and Hispanic student enrollment more than doubled by increasing from $21 \%$ to $57 \%$. Given these changes in demographics, a political swing away from race issues, increased understanding of root causes of underachievement such as poverty, and an increase in the political power of other groups such those that protect the interests of students with special needs, the district's School Board embraced a vision of diversity to assess the equity of its programs and outcomes. Consequently, magnet schools devised recruitment and enrollment policy intended to draw applicants from the full spectrum of its students.

## Literature Review

In 1972, Congress approved the Emergency School Aid Act as a means of providing school districts with strategies and funding for desegregation efforts. The Act included funds for the development of magnet schools, schools that would attract students regardless of race or ethnicity because of their specialized, high quality curriculum. It was envisioned that through voluntary enrollment, the schools would create racial balance.

Magnet programs and schools were placed in predominantly Black neighborhoods to attract White students as well as in predominantly White neighborhoods to attract Black students. In addition to desegregating schools, magnets were intended to raise educational achievement and to generate programs with specialized foci such as performing arts, biotechnology, communications, and language (West, 1994).

In some districts over time, magnet schools managed to reduce racial isolation and improve the quality of education. An example is Prince George's County magnet schools which have received accolades for their programs and outcomes (Steele \& Eaton, 1996). However, success in desegregation and in providing high quality educational options has not been uniform (Bracey, 1998). There have been cases of mismanagement or poor implementation and cases of barriers that have proven insurmountable. For instance, the demographics of a district or changes in demographics over time may make it exceedingly difficult to reduce racial isolation (e.g., Morantz, 1996; Steele \& Eaton, 1996). Also, good public relations campaigns or excellent physical plants, although initially successful, cannot in the long-term convince parents to choose schools that are not the high caliber that parents expect (Eaton \& Crutcher, 1996; Bracey, 1998). Moreover, the impact has often been found to be limited. Even districts that have received recognition for their implementation face the reality that although magnet programs may be integrated, these often coexist in schools with other programs that are racially isolated (Eaton \& Crutcher, 1996). Nonetheless, because of a generalized perception of success, the federal magnet program survived the elimination of the Emergency School Aid Act which started it (Orfield, 1996). Since 1985, support for schools has been provided through the federally funded Magnet Schools Assistance Program (West, 1994).

The political climate has changed considerably since magnet programs began. As districts are released from court-ordered desegregation and are declared unitary, meaning that they are no longer considered to have dual race-based educational systems, race-conscious admission is no longer legally viable (West, 1994). In this new era in which desegregation is no longer of primary consideration, progressive districts make commitments to maintain or improve the educational access to and educational outcomes for all their students and frame this commitment in terms of
diversity (Doorey \& Harter, 2002). With this change in paradigm from a dichotomous Black/White, Black/non-Black, or White/non-White model to one that is multi-factorial, a model that aims to serve all students regardless of race, of family income, or of students' educational labels, it becomes important to examine what happens to magnet school enrollments and to assess if magnet schools are meeting or approximating diversity ideals. This study was undertaken to address the issue of magnet school status with respect to diversity by comparing magnet and comparison public schools to each other and to district averages in a large urban multi-ethnic school system at the time of release from court ordered desegregation and four years hence.

## Methods

## Sample

Data for this study were from the public, general education schools and programs ( $n=357$ in 2001 and $n=378$ in 2005) of Miami-Dade County Public Schools, an urban Florida school district. Schools included charter, magnet, choice, and other regular education schools. Enrollment statistics from special education centers and from alternative schools were not included in the analyses. Across grades, student enrollment in 2005 was $60 \%$ Hispanic, $28 \%$ Black, $10 \%$ White, and $2 \%$ of other races. Eleven percent ( $11 \%$ ) of students in the included schools were receiving special education services (SPED). In elementary schools, almost three-fourths of all students participated in the free or reduced lunch program (FRL).

The schools selected for analyses included 57 magnet schools and 57 comparison nonmagnet, non-charter schools. Magnet schools had either school wide magnets or one or more magnet programs that co-existed in a location that also contained the traditional curriculum offered students within the school's attendance boundaries. All magnet schools and programs had operated for at least 5 full academic years prior to October of 2005, the fourth year after court release.

Drafted after court supervision of Miami-Dade's schools ended, the current recruitment and enrollment policy for magnet schools places schools in four tiers, with priority in the magnet-school application process assigned to schools in different tiers. Non-magnet schools were assigned a score according to a formula that summed four percentages: the percentage of students at the school who did not participate in the free or reduced lunch program (FRL); the percentage of students who attained competency level or above in standardized tests of reading, of mathematics, and of writing. Schools with scores between 76.7 and 166 were designated Group I, schools with scores between 167 and 213 were designated Group II, schools with scores between 214 and 262 were designated Group III, and schools with scores between 263 and 349 were designated as Group IV. Applicants to magnets were classified according to the designation of their assigned schools. Magnets that were programs within a school recruited to admit and fill $20 \%$ of its seats from applicants from each of the four Groups detailed above and $20 \%$ from applicants from the school's attendance boundaries. All other magnets recruited to admit and fill $25 \%$ of its seats from each of the four Groups detailed above.

## Procedures

Comparison schools were selected to maximize proximity. For magnet programs that coexisted with a regular general education district program, the location's non-magnet enrollment served as comparison. For school wide magnets, the closest school of the same educational level was
selected for comparison. For these schools, an internet mapping service was used to identify the closest school of its level (elementary, middle, senior).

October FTE enrollment counts for 2001 and for 2005 by school/program were downloaded from the District's electronic database. Enrollment percentages were generated for magnet and for comparison schools for each of the following student characteristics: gender, race/ethnicity (Asian, Black, Hispanic, White and Other), participation in free and reduced lunch programs (FRL), Limited English Proficiency program status (LEP, non-LEP and former LEP), and special education services (SPED).

With the shift in understanding enrollment dynamics, from a dichotomy such as Black/nonBlack or White/non-White to a multi-factorial model of diversity, enrollment statistics were analyzed according to both models. Using the dichotomous model, for each time point, comparisons were made on the number of racially isolated schools. Because segregation in the district had been defined in terms of Black /non-Black enrollment, school enrollment percentages were coded as racially isolated if their Black enrollment was equal to or less than $10 \%$ or equal to or more than $85 \%$.

Using the diversity model, comparisons were made on the extent to which schools were comparable to district averages. Schools' percentage enrollments were deemed comparable to district averages if they were within $10 \%$ of the District average for the given level. For example, Black enrollment in elementary schools in the District under study was $28.3 \%$. Thus, elementary schools that had Black enrollment between $25.5 \%$ and $31.1 \%$ were considered comparable (subtracting and adding $2.8 \%$, respectively).

One final comparison placed each school in the broader distribution of all the sampled schools. The distribution of enrollment percentages of the two groups were compared by classifying enrollment percentages according to their ranking on the distribution of percentages for all 114 schools (57 magnet and 57 non-magnet schools). Percentages that equaled or fell below the $25^{\text {th }}$ percentage of that distribution were classified as "low." Percentages that equaled or exceeded the $75^{\text {th }}$ percentile of that distribution were classified as "high."

## Analyses

As noted above, several analyses were conducted to test differences between magnet and comparison schools and the extent to which the two sets of schools matched district averages. Differences in the number of racially isolated schools among magnet and comparison schools were tested with the Pearson chi-square statistic. ANOVA was used to test the difference between the average percentage enrollments of magnets and comparison schools. In other words, on average, did magnet schools differ from the comparison schools? Chi-square statistics were used to test for differences in the proportion of magnet and comparison enrollments that were comparable to the district average. Specifically, which type of school had more enrollment percentages that matched the district average? Last, chi-square statistics were used to test for differences in the distribution of enrollment percentages. For each student characteristic, which type of school had more "low" enrollment percentages and which type had more "high" enrollment percentages?

## Results

## The Dichotomous Segregation Model: Racially Isolated Schools

In 2001, of 114 schools, 2 magnet and 28 comparison schools were racially isolated, $X^{2}(1$, 112) $=30.58, p<.00001$. In 2005, 16 magnet schools and 27 comparison schools were racially isolated, $X^{2}(1,112)=4.52, p=.026$. Thus, with respect to Black students, in both years, significantly fewer magnet than comparison schools were racially isolated. However, using 2001 proportions as expected values, chi-square statistics indicated that the change in the number of racially isolated magnet schools from 2001 to 2005 was statistically significant, $X^{2}(1,112)=101.88$, $p<.001$. Thus, racial isolation among magnet schools had increased significantly in the four years since court release.

## The Multi-Factorial Diversity Model: Differences in Average Enrollment between Magnet and Comparison School

Table 1 presents descriptive statistics of schools' percentages of enrollment in terms of gender, race/ethnicity, and participation in FRL, LEP, and SPED. Statistics are presented by year and by type of program/school: magnet, comparison, and all general education district schools. Readers should note that these figures are averages of percentages and as such are not directly comparable to percentages derived from totals.

Results of ANOVA indicated that magnet schools had significantly higher average percentages of females, and consequently significantly lower average percentages of males, than comparison schools; $F(1,112)=54.56, p<.000$ and $F(1,112)=46.46, p<.000$, respectively. Relative to comparison schools, in 2001 and in 2005, magnet schools also had significantly higher average percentages of Asian students $(F(1,112)=11.87, p<.000$, and $F(1,112)=15.65$, $p<.000$, respectively); of White students $(F(1,112)=8.08, p=.005$, and $F(1,112)=5.75, p=.01$, respectively); of Other students $(F(1,112)=15.36, p<.0002$, and $F(1,112)=15.67, p<.000$, respectively); and of non-LEP students $(F(1,112)=15.38, p<.0002$ and $F(1,112)=19.7$, $p<.000$, respectively). Also, in both years, magnet schools had significantly lower average percentages of students who participated in the FRL program $(F(1,112)=6.97, p=.01$ and $F(1$, $112)=6.38, p=.013$, respectively $)$; of LEP students $(F(1,112)=30.84, p<.000$ and $F(1$, $112)=28.4, p<.000$, respectively $)$; and of SPED students $(F(1,112)=87.66, p<.000$ and $F(1$, 112) $=108.29, p<.000$, respectively) than comparison schools.

Table 1
Average Percentages of Student Enrollment by Student Characteristic and by Type of School, 2001 and 2005

| Characteristic | Magnet |  |  |  | Comparison |  |  |  | All Schools |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | S.D. | Min. | Max. | Mean | S.D. | Min. | Max. | Mean | S.D. | Min. | Max. |
|  | 2001 |  |  |  |  |  |  |  |  |  |  |  |
| Female | 56.6 | 8.9 | 29.4 | 71.8 | 47.7 | 2.1 | 43.7 | 51.8 | 49.9 | 5.6 | 29.4 | 78.1 |
| Male | 43.4 | 8.9 | 28.2 | 70.6 | 52.3 | 2.1 | 48.2 | 56.3 | 50.1 | 5.6 | 21.9 | 70.6 |
| Asian | 2.4 | 3.1 | 0 | 13.0 | 0.9 | 1.0 | 0 | 3.5 | 1.2 | 1.7 | 0 | 13.0 |
| Black | 45.3 | 21.6 | 11.3 | 92.8 | 50.5 | 35.8 | 0.4 | 98.6 | 36.1 | 33.8 | 0 | 100 |
| Hispanic | 37.6 | 14.8 | 4.2 | 68.9 | 40.8 | 32.2 | 1.0 | 95.5 | 51.3 | 30.7 | 0 | 98.0 |
| White | 12.6 | 11.2 | 0 | 37.4 | 7.2 | 9.2 | 0 | 37.7 | 10.2 | 11.8 | 0 | 52.6 |
| Other | 2.1 | 2.6 | 0 | 15.1 | 0.7 | 0.9 | 0 | 4.2 | 1.2 | 1.6 | 0 | 15.1 |
| Free/reduced lunch | 51.4 | 23.4 | 12.1 | 95.4 | 63.1 | 24.0 | 17.2 | 98.8 | 63.8 | 26.4 | 1.3 | 98.8 |
| Limited English Proficiency | 4.0 | 5.0 | 0 | 21.8 | 13.6 | 12.0 | 0.5 | 59.8 | 18.5 | 15.7 | 0 | 86.8 |
| Special Education | 4.5 | 4.3 | 0 | 18.6 | 13.5 | 5.9 | 2.8 | 37.6 | 10.5 | 8.0 | 0 | 100 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Female | 56.1 | 9.4 | 26.8 | 79.4 | 47.4 | 2.6 | 39.2 | 53.2 | 49.9 | 6.6 | 26.8 | 91.9 |
| Male | 43.9 | 9.4 | 20.6 | 73.2 | 52.6 | 2.6 | 46.8 | 60.8 | 50.1 | 6.6 | 8.1 | 73.2 |
| Asian | 2.0 | 2.3 | 0 | 10.9 | 0.7 | 0.8 | 0 | 2.9 | 1.1 | 1.5 | 0 | 10.9 |
| Black | 44.9 | 30.0 | 2.2 | 96.5 | 49.8 | 35.5 | 0.4 | 98.5 | 34.0 | 34.3 | 0 | 100 |
| Hispanic | 40.6 | 24.1 | 2.8 | 87.0 | 42.5 | 32.3 | 1.5 | 96.6 | 54.7 | 31.4 | 0 | 98.3 |
| White | 10.0 | 10.4 | 0 | 37.9 | 5.9 | 7.9 | 0 | 34.5 | 8.8 | 10.7 | 0 | 54.6 |
| Other | 2.4 | 2.4 | 0 | 11.7 | 1.1 | 1.1 | 0 | 5.2 | 1.5 | 1.6 | 0 | 11.7 |
| Free/reduced lunch | 57.9 | 22.1 | 13.9 | 92.3 | 67.6 | 18.9 | 25.9 | 95.9 | 65.1 | 24.6 | 4.3 | 100 |
| Limited English Proficiency | 3.5 | 5.3 | 0 | 26.1 | 11.2 | 9.5 | 0.4 | 55.9 | 16.3 | 15.0 | 0 | 85.9 |
| Special Education | 4.7 | 4.4 | 0 | 17.7 | 14.7 | 5.8 | 2.6 | 38.9 | 10.5 | 6.6 | 0 | 43.8 |

Magnet schools $n=57$; Comparison schools $n=57$; All schools in $2001=357$; All schools in $2005=378$.

Table 2
Number of Schools with Enrollment Percentages within 10\% of District Average

| Characteristic | 2001 |  |  |  | 2005 |  |  |  | 2001 to 2005 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Magnet } \\ n \end{gathered}$ | Comp. <br> n | $X^{2}$ | $p$ | $\begin{gathered} \text { Magnet } \\ n \end{gathered}$ | Comp. <br> n | $X^{2}$ | $p$ | $X^{2}$ | $p$ |
| Female | 16 | 51 | 44.35 | 0.000 | 19 | 51 | 7.9 | . 000 | 0.80 | ns |
| Male | 16 | 51 | 44.35 | 0.000 | 22 | 52 | 34.6 | . 000 | 3.17 | ns |
| Asian | 6 | 3 | 1.09 | ns | 2 | 2 | 0 | ns | 2.96 | ns |
| Black | 9 | 2 | 4.93 | 0.026 | 3 | 2 | 0.21 | ns | 4.75 | 0.029 |
| Hispanic | 8 | 3 | 2.52 | ns | 7 | 3 | 1.75 | ns | 0.15 | ns |
| White | 2 | 2 | 0.00 | ns | 6 | 1 | 3.81 | ns | 8.33 | 0.004 |
| Other | 4 | 4 | 0.00 | ns | 3 | 4 | 0.15 | ns | 0.26 | ns |
| Free/reduced lunch | 5 | 8 | 1.37 | ns | 12 | 11 | 0.05 | ns | 10.72 | 0.001 |
| Limited English Proficiency | 2 | 5 | 1.37 | ns | 3 | 9 | 3.35 | ns | 0.52 | ns |
| Former LEP | 3 | 6 | 1.09 | ns | 3 | 6 | 1.09 | ns | 0.00 | ns |
| Non-LEP | 17 | 23 | 1.39 | ns | 12 | 28 | 9.86 | . 003 | 2.08 | 0.15 |
| Special Education | 2 | 12 | 8.14 | 0.004 | 3 | 12 | 6.22 | . 024 | 0.52 | ns |

## The Multi-Factorial Diversity Model: Comparison to District Averages

Table 2 presents the number of magnet and comparison schools within $10 \%$ of district averages in 2001 and in 2005. It also presents the results of chi-square statistics on the comparison between the two groups of schools in 2001, in 2005, and from 2001 to 2005. As can be seen from the Table, in 2001 significantly more magnet $(n=9)$ than comparison schools $(n=2)$ matched the district average on the enrollment of Black students.

In 2005, significantly more comparison $(n=28)$ than magnet $(n=12)$ schools matched the district percentage of non-LEP students. In both years, comparison schools matched the district significantly more frequently than magnet schools on the percentages of males (51 and 52 vs. 16 and 22), of females ( 51 and 51 vs. 16 and 19), and of students receiving special-education services (12 each year vs. 2 and 3). In absolute numbers, except for gender, the numbers of schools in each group that matched the district averages were low, in the single digits.

One can also compare the numbers of magnet schools in 2001 and 2005. Generated on the number of magnet schools that had 2005 enrollment percentages within $10 \%$ of district averages using 2001 proportions as expected values, chi-square statistics appear in Table 2 at the extreme right under the heading "2001 to 2005." In other words, from 2001 to 2005, were there significant changes in the proportion of magnet schools that were within $10 \%$ of the district average? Results indicated that the drop in the number of magnet schools that matched the district average of Black student enrollment, from 9 to 3 schools, was significant. Also, the following increases in the number of magnet schools that matched district averages were significant: the increase from 5 to 12 schools with respect to FRL, and the increase from 2 to 6 schools with respect to White student percentages.

## Magnet and Comparison Schools Relative to the Sample

To complete the portrait of magnet school enrollment in 2005, chi-square analyses of the proportion of "high" and of "low" enrollment percentages at magnet and at comparison schools indicated significant differences between the two groups on the following enrollment percentages (Table 3). Relative to comparison schools, magnets had significantly higher numbers of schools with "low" enrollment percentages of male students ( $n=28$ ), students participating in the free and reduced cost lunch program ( $n=20$ ), students with Limited English Proficiency ( $n=26$ ), and students receiving special education $(n=27)$. Relative to comparison schools, magnets also had significantly higher numbers of schools with "high" enrollment percentages of female students ( $n=28$ ), Asian students $(n=23)$, Other students $(n=20)$, and non-LEP students $(n=22)$. Relative to magnet schools, comparison schools had significantly higher numbers of "low" enrollments of female students ( $n=21$ ), White students ( $\mathrm{n}=19$ ), Other students ( $n=21$ ), and non-LEP students ( $n=22$ ). Finally, comparison schools had significantly higher numbers than magnet schools of "high" enrollments of: male students ( $n=21$ ), LEP students ( $n=23$ ), former LEP students ( $n=19$ ), and SPED students ( $n=24$ ).

Table 3
Number of Schools with "Low" and with "High" Enrollment Percentages, 2005

| Characteristic | $25^{\text {th }}$ "Low" percentile or lower |  |  |  | "High"$75^{\text {th }}$ percentile or higher |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Magnet <br> n | Comp. <br> $n$ | $X^{2}$ | $p$ | Magnet <br> n | Comp. <br> $n$ | $X^{2}$ | $p$ |
| Female | 7 | 21 | 9.26 | . 004 | 28 | 0 | 37.12 | . 000 |
| Male | 28 | 0 | 37.12 | . 000 | 7 | 21 | 9.28 | . 004 |
| Asian | 11 | 17 | 1.7 | ns | 23 | 5 | 15.34 | . 000 |
| Black | 13 | 15 | 0.19 | ns | 10 | 18 | 3.03 | ns |
| Hispanic | 11 | 17 | 1.7 | ns | 13 | 15 | 0.19 | ns |
| White | 9 | 19 | 4.73 | . 049 | 18 | 10 | 3.03 | ns |
| Other | 7 | 21 | 9.3 | . 004 | 20 | 8 | 6.82 | . 016 |
| FRL | 20 | 8 | 6.82 | . 016 | 10 | 18 | 3.03 | ns |
| LEP | 26 | 2 | 27.27 | . 000 | 5 | 23 | 15.34 | . 000 |
| Former LEP | 17 | 11 | 1.7 | ns | 9 | 19 | 4.73 | . 049 |
| Non-LEP | 6 | 22 | 12.12 | . 001 | 22 | 6 | 12.12 | . 001 |
| Special Education | 27 | 1 | 32 | . 001 | 4 | 24 | 18.94 | . 000 |

## Discussion and Conclusions

This study was conducted to explore the extent to which magnet schools had reduced Black racial isolation in 2001, had maintained 2001 levels four years after being released from court ordered desegregation, and were in a position to fulfill the vision of enrollment diversity that has replaced the non-segregation vision. As such, this article compared the enrollment characteristics of magnet and contiguous non-magnet schools to district averages, to each other, and across time (the latter for magnet-district comparisons only).

In terms of Black racial isolation as defined by Black enrollments of lower than $10 \%$ or $85 \%$ or higher, significantly fewer magnet than comparison schools were isolated in 2001 and in 2005. However, in comparison to 2001 status, significantly more magnet schools were racially isolated in 2005. Thus, in four year's time after the district was declared unitary, there was a significant reversal in desegregation.

Analyses were also conducted to determine the extent to which magnet schools were in a position to meet the new diversity ideal by being representative of the district. In terms of the extent to which magnet schools were representative of district averages, results indicated that comparison schools were significantly more likely than magnet schools to have enrollment percentages that were similar to district averages. This finding was evident in both years of analyses. Also, over time, magnet schools became significantly less representative with respect to Black student enrollment and significantly more representative with respect to White student enrollment and with respect to the percentages of students who participated in the free and reduced-cost lunch program. This shift can be interpreted as the result of the recruitment and enrollment policy that was adopted by the district after it was declared unitary. Recruitment groups were defined in terms of participation in the free and reduced-cost lunch program and in terms of achievement, an outcome that is associated with income.

With respect to average enrollment percentages, at both time points, magnet schools had significantly higher enrollment percentages of females, of Asian students, of White students, of

Other students, and of non-LEP students than comparison schools. Also at both time points, magnet schools had significantly lower percentages of students who participated in the lunch program, of students with Limited English Proficiency, and of students receiving special-education services. These findings were consistent with results of analyses on the distribution of enrollment percentages for the two types of schools. As compared to each other, magnet schools had significantly more schools with "high" enrollments of females, Asian, Other, and non-LEP students as well as "low" enrollments of males, students who participated in the lunch program, students with Limited English Proficiency, and students receiving special-education services.

In interpreting these findings, readers should note that "high" and "low" were relative, not absolute terms. They were determined from the distribution of the sample schools such that "high" represented the 25 percent highest enrollment percentages by factor among the 114 schools and "low" represented the 25 percent lowest enrollment percentages by factor among the same schools. For instance, "high" enrollments of White students included schools with $10.77 \%$ or higher White student enrollment. Indeed, the school with the highest White enrollment had 37.9\% White students.

With the exception of gender percentages among comparison schools, very few schools in either group had enrollment percentages within $10 \%$ of district averages. This finding is consistent with results from prior analyses of the district's charter and non-charter schools (Arcia, in press). Miami-Dade is a large and heterogeneous school district.

The modest success of magnets in the district with regards to reducing and to maintaining a reduction in the number of racially isolated schools is consistent with findings from other studies of magnet schools across the nation (Popell \& Hague, 2001; Rossell, 2003; Steele \& Eaton, 1996). In a study of Duval County magnet schools, Poppell and Hague (2001) found that roughly half of the schools with magnet programs met the minimum desegregation requirements of the court's mandate. Other districts across the nation have had similar results in attaining their goals (Bracey, 1998).

In an evaluation of 119 grants awarded by the Magnet Schools Assistance Program, Steele and Eaton (1996) found that the amount of change obtained in minority isolation was small, that gains decreased over time after the termination of the grant, and that gains were highly dependent on the demographics of the district. Factors that hampered reduction in racial isolation were initial high minority enrollment in a district and growth in minority enrollment during the period under study. A factor that facilitated a reduction in racial isolation was implementation of a magnet program in a school that had much higher minority enrollment than other schools in the district. In other words, for isolation to diminish, there must be a pool of students from other races in nearby schools.

Willingness of students of races other than Black to enroll in magnet programs is a key issue in determining magnet school success to decrease racial isolation. Results of surveys conducted across 600 school districts (Rossell, 2003) indicated that on average, only $12 \%$ of White students were willing to transfer to magnets in minority neighborhoods. Willingness to enroll was $13 \%$ for schools with more than $50 \%$ minority, and willingness to enroll further declined to $5 \%$ if the busing distance was 45 minutes or longer. For these and other factors, Rossell concluded that beyond a certain point, depending on the size of the district, increasing the number of magnet schools makes them increasingly less effective in desegregation.

Together, these results mean that to successfully reduce Black racial isolation, a district must have a large number of White students. In the district under study, White enrollment had decreased steadily over the years such that in 2005 only $9 \%$ of the students were White. Also specific to the district is the fact that Hispanics constitute the ethnic majority, and their willingness to transfer to a magnet school in a Black neighborhood is not known. A third important factor is that the district
covers a large geographic area and has distinct residential patterns by race and by income. It is not known if the district had reached or surpassed the point at which additional magnet schools fail to assist and may indeed hamper desegregation.

Results of analyses should be interpreted with care. Generalizations to other districts may be limited because enrollment outcomes are clearly dependent on numerous contextual factors and these differ across districts. Notwithstanding, to the extent that substantial differences exist in the enrollment characteristics of magnets and non-magnets, results imply that due consideration should be given to the methods used to test achievement outcomes of magnet schools. Magnet and other schools may not be directly comparable. In the district under study, magnet schools had overenrollment of students who traditionally perform better academically than other students.

Overall, the results of this study suggest that magnet schools might not be in a position to make real the vision of diversity that guides the most progressive current educational thought. To the extent that the results in the district studied mirror the reality of other districts, results raise a red flag for other districts. If districts embrace a model of diversity to promote educational equity, they must craft policies clearly tailored to the desired outcomes.

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[^1]:    ${ }^{1}$ Las "Magnet Schools" son escuelas públicas especializadas que tienen un enfoque particular en una o varias disciplinas o áreas académicas, y cuyo objetivo es atraer estudiantes con intereses académicos específicos.

