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## ABSTRACT

The Office of Institutional Research (OIR) tracked all students who first enrolled at Northern Virginia Community College (NVCC) in the fall of 1994 for three years to learn the proportion and characteristics of those who were retained each semester. Retention rates were compared across different racial groups to answer the question of whether there were significant variations in retention rates across different racial groups, and what effect this may have on the retention rates at NVCC as an institution. To study retention patterns, OIR looked at the data for two major groups of students: all first-time students in the fall 1994 semester, and first-time students who were only enrolled full-time in the fall 1994 semester. OIR also examined both cohorts to see whether enrollment or non-enrollment in developmental or ESL courses during fall 1994 or spring 1995 had any relation to retention patterns. During their first year at NVCC, first-time students who enrolled in developmental courses had a higher retention rate than first-time students who did not take these courses. Overall, for the fall 1994 cohort of first-time students, the group with the highest retention rate was Asian students, followed by Hispanic students. Black and White students had the lowest retention rates. For full-time students, the retention rates were higher, but the same racial patterns were evident. (Contains 12 figures and 6 tables.) (VWC)

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# RETENTION OF FALL 1994 FIRST-TIME STUDENTS BY RACE

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## Research Report No. 2-99

Office of Institutional Research  
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# RETENTION OF FALL 1994 FIRST-TIME STUDENTS BY RACE

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# RETENTION OF FALL 1994 FIRST-TIME STUDENTS BY RACE

## ***Executive Summary***

The Office of Institutional Research (OIR) recently examined a cohort of students in order to better understand the retention patterns at Northern Virginia Community College (NVCC). OIR followed all students who first enrolled at NVCC in the Fall of 1994 for three years ending with the Spring 1997 semester. These students were followed to learn the proportion and characteristics of those who were retained each semester. Retention in this report was defined as students who each semester returned to NVCC, graduated, or transferred. In a community college setting, characterizing retention as those students who return, graduate, or transfer is considered more appropriate.

The major goal of this report was to compare retention rates across the different racial groups. The rationale for such focus was to answer the question of whether there were significant variations in retention rates across the different racial groups, and what effect this may have on the retention rates at NVCC as an institution. To study the retention patterns, OIR looked at the data for two major groups of students: 1) all first-time students in the Fall 1994 semester, and 2) first-time students who were only enrolled full-time in the Fall 1994 semester. OIR also examined both cohorts to see whether enrollment or non-enrollment in developmental or ESL courses during Fall 1994 or Spring 1995 had any relation to retention patterns. This was done by further dividing the cohorts into four categories: 1) those who *enrolled* in a developmental math and/or English course, 2) those who *did not enroll* in a developmental math and/or English course, 3) those who *enrolled* in an English as a Second Language (ESL) course, and 4) those who *did not enroll* in an ESL course.

The following is a brief summary of the major findings:

### **First-Time Fall 1994 Students:**

#### General

- At the end of the first semester, 55% of the cohort was retained. After one year at NVCC, 39% of the cohort was retained. At the end of three years, less than a quarter, 21%, of the first-time Fall 1994 students were retained.
- For the Fall 1994 cohort of first-time students, the group with the highest retention rate was Asian students followed by Hispanic students. Black and White students had the lowest retention rates.
- During most semesters, the retention rates of Asian and Hispanic students were higher, about 20% and 10%, respectively, than that of White or Black students.
- After three years, larger proportions of Asian and Hispanic students were retained compared to White and Black students. By Spring 1997, (the end of three years) 18% of White students and 21% Black students were retained, whereas 35% of Asian students and 27% of Hispanic students were retained.

### Retention Rate by Enrollment or Non-Enrollment in a Developmental Course

- Overall, the students taking non-developmental courses were retained in subsequent semesters at a lower rate than the students taking developmental courses at NVCC during Fall 1994 or Spring 1995.<sup>1</sup>
- Regardless of developmental course enrollment, Asian students had the highest retention rate followed by Hispanic students. Both Black and White students were retained at similar rates in most cases. However, White students who enrolled in developmental courses were retained at a slightly higher rate than Black students enrolled in developmental courses.

### Retention Rate by Enrollment or Non-Enrollment in an ESL Course

- In general, Asian and Hispanic students were the two largest groups who enrolled in ESL courses during Fall 1994 or Spring 1995. However, a small number of White and Black students did take ESL classes in both the Fall 1994 and/or Spring 1995.<sup>2</sup>
- When comparing the retention rate of ESL students to non-ESL students, the non-ESL students showed a much lower retention rate. However, the number of students enrolled in an ESL course at NVCC during the first year was small.
- Regardless of ESL course enrollment, Asian students had the highest retention rate followed by Hispanic students. In most semesters, both Black and White students were retained at similar rates. However, Black students who enrolled in ESL courses had a higher retention rate than White students enrolled in ESL courses.

### **First-Time, Full-Time Fall 1994 Students:**

#### General

- First, it should be noted that only 20% of first-time Black students attended NVCC full-time, the lowest percentage of all groups. The largest group of full-time students were Asian students (49%).
- The retention rate for first-time, full-time students was higher for all racial groups as compared to the retention rate for first-time students. However, the patterns of retention between the racial groups did not differ between first-time and first-time, full-time students. For instance, Asian students had the highest retention rate followed by Hispanic students. Black and White students had the lowest retention rates in both cohorts of first-time students and first-time, full-time students.

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<sup>1</sup> Approximately 22% of the original cohort enrolled in a developmental math and/or English course at NVCC during Fall 1994 or Spring 1995.

<sup>2</sup> Because of the small number of White and Black students taking ESL courses at NVCC in Fall 1994 or Spring 1995, their corresponding percentages for all five semesters (i.e., 70% of White students returned Spring 1995) should be interpreted with caution.

### Retention Rate by Enrollment or Non-Enrollment in a Development Course

- Full-time students who enrolled in one or more developmental courses during the first year had a higher retention rate during subsequent semesters than those students who did not enroll in any developmental course.<sup>3</sup> However, the difference in the rates was relatively small (e.g., 2% to 3%).
- Asian and Hispanic students had the highest retention rates regardless of enrolling in developmental courses. Both Black and White students, regardless of enrollment in developmental courses, were retained at similar rates. However, during some semesters White students were retained at a slightly higher proportion than Black students.
- More than 77% of all full-time developmental students were retained in the second semester (Spring 1995). White and Black students had similar retention rates during the study period, although Black students' retention rates were slightly lower in some semesters. By Spring 1997 (after six semesters), 48% of Asian students who enrolled in developmental courses were retained as compared to 25% of Black students.

### Retention Rate by Enrollment or Non-Enrollment in an ESL Course

- When comparing the retention rates of ESL to non-ESL students, the non-ESL students showed a much lower retention rate. However, the number of students who enrolled in an ESL course was small.<sup>4</sup>
- The retention rates by racial groups, for both those who enrolled or did not enroll in ESL courses, indicated that Asian students had the highest retention rate followed by Hispanic students. In most semesters, both Black and White students were retained at similar rates. However, White students who were not enrolled in ESL courses had a higher retention rate than Black students not enrolled in ESL courses.

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<sup>3</sup> Approximately 41% of first-time, full-time Fall 1994 students enrolled in a developmental math and/or English course their first semester at NVCC.

<sup>4</sup> The majority of those who took an ESL course were Asian students. Most first-time, full-time students (81%) did not take an ESL course.

# RETENTION OF FALL 1994 FIRST-TIME STUDENTS BY RACE

## *Introduction*

Retention research has important implications for educational policy and planning. In her review of retention and attrition studies of community colleges, Florence B. Brawer described the characteristics of those most likely to remain in school and those at risk of dropping out.<sup>5</sup> According to Brawer, being a member of an ethnic minority group, other than Asian, appeared to relate to school drop out. In addition, Brawer found that full-time school attendance appeared to be associated with educational persistence.

Recently, University of Iowa educational researchers examined freshman-to-sophomore retention rates at two-year and four-year public and private institutions.<sup>6</sup> For 1998, the freshman-to-sophomore retention rate was 55% at two-year institutions compared to 73.6% at four-year institutions during the same year. For those two-year public institutions with open admission, (i.e., NVCC), the freshman-to-sophomore retention rate was 51.2% in 1998. In general, over the past fifteen years, the freshman-to-sophomore retention rate for two-year colleges has gradually declined.

With these findings as a backdrop, the issue of retention was examined at Northern Virginia Community College (NVCC). In order to better understand the retention patterns at NVCC, the Office of Institutional Research (OIR) recently examined a cohort of students. OIR followed all students who first enrolled at NVCC in the Fall of 1994 for three years ending with the Spring 1997 semester. Specifically, these students were followed to learn the proportion and characteristics of students who were retained each semester. For this report, retention was defined as students who each semester returned to NVCC, graduated, or transferred. In a community college setting, characterizing retention as those students who return, graduate, or transfer is more meaningful.

The major goal of the report was to compare retention rates across the different racial groups. The rationale for such focus was to answer the question of whether there were significant variations in retention rates across the different racial groups, and what effect this may have on the retention rates at NVCC as an institution. To study the retention patterns, OIR looked at the data for two major groups of students: 1) all first-time students in the Fall 1994 semester, and 2) first-time students who were only enrolled full-time in the Fall 1994 semester. OIR also examined both cohorts to see whether enrollment in developmental or ESL courses during Fall 1994 or Spring 1995 had any relation to retention patterns. This was done by further dividing the cohorts into four categories: 1) those who *enrolled* in a developmental math and/or English course, 2) those who *did not enroll* in a developmental math and/or English course, 3) those who enrolled in an English as a Second Language (ESL) course, and 4) those who *did not enroll* in an ESL course.

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<sup>5</sup> Brawer, Florence B. "Retention-Attrition in the Nineties", A Digest From the ERIC Clearinghouse on Community Colleges. [www.gse.ucla.edu/ERIC/libraryset.html](http://www.gse.ucla.edu/ERIC/libraryset.html).

<sup>6</sup> "Freshman-to-Sophomore Persistence Rates By Institutional Control, Academic Selectivity, and Degree Level: 1993 to 1998", Postsecondary Education Opportunity, no. 74 (August 1998): 1-7.



This report presents the information in two parts (I and II), each of which has three sections. Part I, section 1 of the report presents the retention patterns of all first-time Fall 1994 students by race. In Part I, section 2, the first-time Fall 1994 students are further examined by enrollment or non-enrollment in developmental math and/or English courses to learn how these may relate to retention rates. Part I, section 3 repeats the analysis for students enrolled or not enrolled in ESL courses during Fall 1994 or Spring 1995. Part II presents the retention patterns for all first-time, full-time Fall 1994 students. It follows the same structure as Part I, that is retention was examined by race, enrollment in developmental courses, and enrollment in ESL courses.

## ***Findings***

### **First-Time Fall 1994 Students**

As would be expected, as each semester progressed the proportion of students retained decreased. For the cohort of first-time Fall 1994 students, the rate of retention between Spring 1995 to Spring 1997 dropped 34%. At the end of the first semester, 55% of the cohort was retained. One year after starting at NVCC, 39% of the cohort was retained. At the end of the study, less than a quarter, 21%, of the cohort was retained. For the whole cohort, retention patterns by race showed that White and Black students were retained at approximately the same rate. However, the group with the highest retention rate was Asian students followed by Hispanic students.

### **First-Time, Full-Time Fall 1994 Students**

Retention patterns remained consistent for the cohort of first-time, full-time Fall 1994 students. However, retention rates for first-time, full-time students were higher for all racial groups as compared to the retention rates for the total cohort (i.e., first-time students).

### **Enrollment or Non-Enrollment in Developmental or ESL Courses**

When both cohorts of students were divided into the categories of enrollment or non-enrollment in a developmental course or an ESL course, the same retention patterns were seen as for first-time and first-time, full-time students. Asian students were retained in higher proportions followed by Hispanic students. Furthermore, Black and White students had the lowest retention rates.<sup>7</sup> The first-time students enrolled in non-developmental courses had a lower retention rate than first-time students enrolled in developmental courses during Fall 1994 or Spring 1995. For the first-time, full-time cohort the difference in the retention rates between students enrolled in college level courses and those enrolled in developmental courses during Fall 1994 or Spring 1995 was small.

Charts supporting the findings are inserted throughout the report. Appendix A includes the raw percentages presented in the charts.

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<sup>7</sup> The reader should be aware that data for the ESL courses must be interpreted with caution because of the small numbers of students enrolled in these courses at NVCC in either Fall 1994 or Spring 1995.

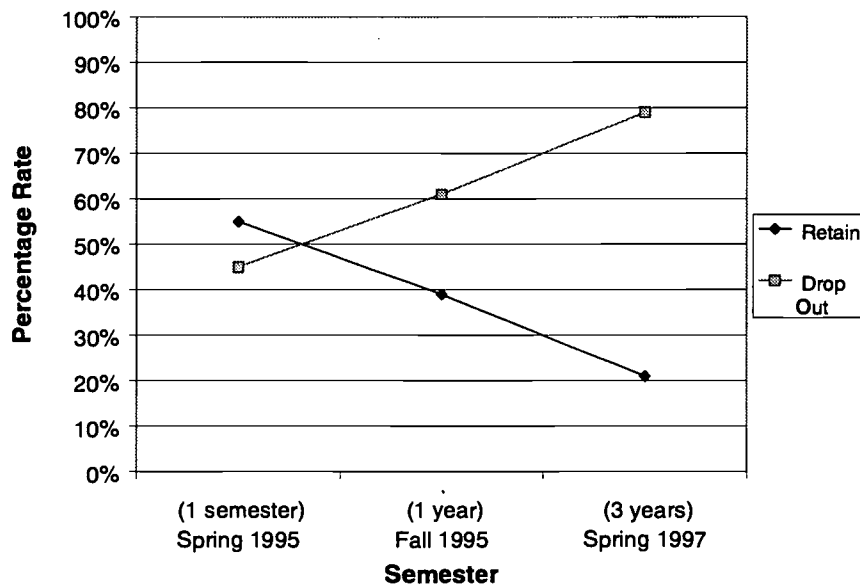
## Part I: First-Time Fall 1994 Students

Part I presents the retention patterns of all NVCC *first-time* Fall 1994 students by race. Table 1 and Figure 1 show the retention rates for the whole cohort for the following time periods: Spring 1995, Fall 1995, and Spring 1997. Figure 2 shows the retention rates for all first-time students by race. Figures 3 and 4 show the retention rate for non-developmental and developmental students, respectively. Similarly, Figures 5 and 6 provide information about non-ESL and ESL students, respectively.

**Table 1: Retention Rates for the Fall 1994 Cohort**

	Spring 1995 (1 semester)		Fall 1995 (1 year)		Spring 1997 (3 years)	
	Number	Percentage	Number	Percentage	Number	Percentage
<b>Retain</b>	5,169	55%	3,624	39%	2,002	21%
<b>Drop Out</b>	4,151	45%	5,696	61%	7,318	79%
<b>Total Cohort</b>	<b>9,320</b>	<b>100%</b>	<b>9,320</b>	<b>100%</b>	<b>9,320</b>	<b>100%</b>

**Figure 1: Retention Rate for the Fall 1994 Cohort:  
Spring 1995 to Spring 1997**



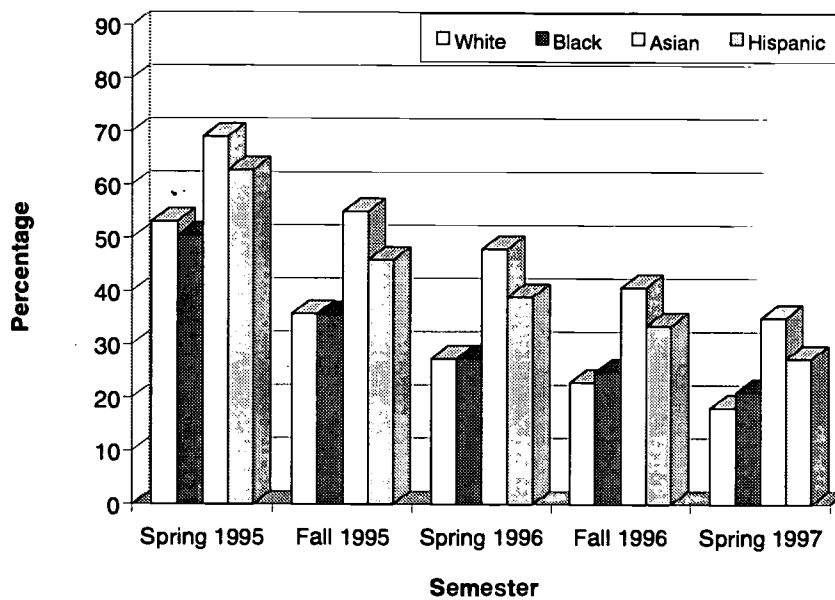
- At the end of the first semester, 55% of the cohort was retained (see Table 1).
- The one-year (Fall 1995) retention rate for the whole cohort was 39% (see Table 1).
- Three years later, less than a quarter of the students (21%) were retained (see Table 1).

## Section 1: First-Time Fall 1994 Students

This section shows, by racial groups, the proportion of first-time Fall 1994 students who were retained at NVCC from Spring 1995 to Spring 1997 (see Figure 2).

- In general, for each semester the rate of retention decreased for all groups (see Figure 2). The retention rate for White students in Spring 1995 was 53%, whereas in Spring 1997 the retention rate was 18%. Similarly, the retention rate for Black students started at 50% in Spring 1995 and ended at 21% in Spring 1997. Likewise, the retention rate for Asian students in Spring 1995 was 69%, whereas in Spring 1997 the retention rate was 35%. Furthermore, the retention rate for Hispanic students in the second semester at NVCC was 63% and in the sixth semester was 27%.

**Figure 2: Retention Rate for Fall 1994 First-Time Students: Spring 1995 to Spring 1997<sup>8</sup>**



- Figure 2 also shows that the retention rate of Asian students was about 20% higher during most semesters than that of White or Black students. For instance in the Fall 1995 semester, the retention rate of Asian students was 55% compared to 36% of White students or 36% of Black students.
- In their second semester at NVCC, more Asian and Hispanic students were retained as compared to White and Black students. Around 50% of White and Black students were retained the semester after they first started at NVCC (Spring 1995) as compared with 69% of Asian students and 63% of Hispanic students (see Figure 2).

<sup>8</sup> Retention rates for the four racial groups are presented for each of the five semesters (e.g., Spring 1995 to Spring 1997). In the figure, each of the bars reflects the retention rate for White, Black, Asian, or Hispanic students for the semester. All the figures in the report follow this format.

- Two years after starting at NVCC, a larger proportion of Asian and Hispanic students were retained. At the end of two years (Spring 1996), 27% of White and Black students were retained, whereas 48% of Asian students and 39% of Hispanic students were retained (see Figure 2).

**Section 2: First-Time Fall 1994 Developmental Course Enrollment**

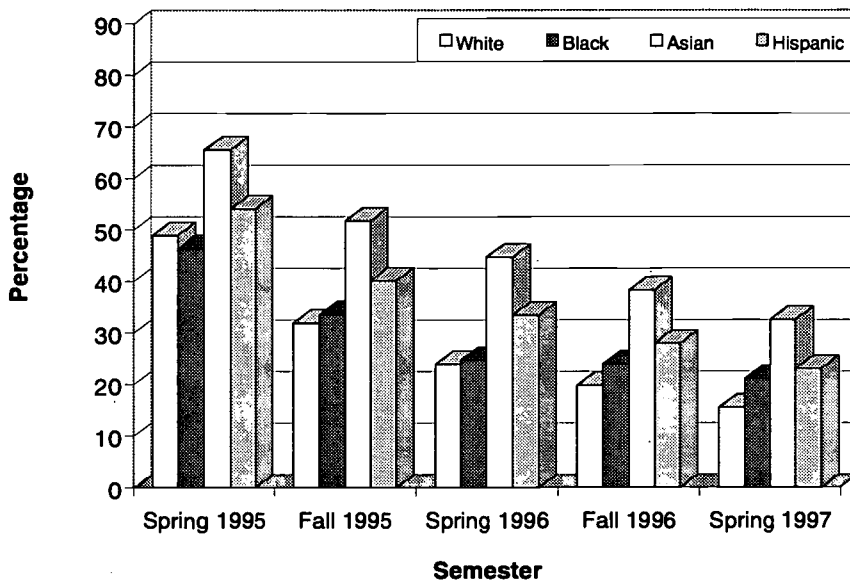
This section examined the retention rates for the cohort according to whether the student enrolled in a developmental course during Fall 1994 or Spring 1995. Figure 3 displays the retention rates by racial groups for students who did not enroll in a developmental course during the first year. Figure 4 presents the same information for those students who did enroll in a development course.

**Table 2: First-Time Fall 1994 Student Enrollment in a Developmental Course**

	Number	Percentage
<b>Yes</b>	2,007	22%
<b>No</b>	7,313	78%
<b>Total</b>	<b>9,320</b>	<b>100%</b>

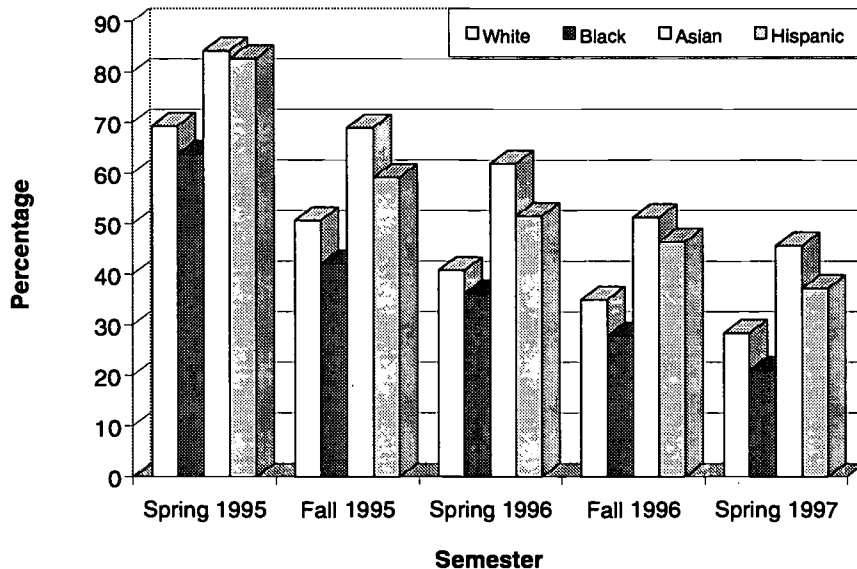
- Table 2 shows approximately 22% of the first-time Fall 1994 students enrolled in a developmental math and/or English course.

**Figure 3: Retention Rate for Fall 1994 Non-Developmental Students: Spring 1995 to Spring 1997**



- Overall, the students who enrolled in college level courses were retained in subsequent semesters at a lower rate than the students taking developmental courses (see Figures 3 and 4). For example, 49% of White students who took college level courses were retained in Spring 1995 as compared to 69% of White students who took at least one developmental course. This same pattern was found to be consistent for the other racial groups during subsequent semesters, with the exception of Black students during the Spring 1997 semester. During the Spring 1997 semester, Black students in either developmental or non-developmental courses were retained at the same rate (21%).
- Regardless of enrollment in developmental courses, Asian students had the highest retention rate followed by Hispanic students. For those not enrolled in developmental courses, both Black and White students were retained at approximately the same rate. However, White students who were enrolled in developmental courses were retained at a slightly higher rate than Black students (see Figures 3 and 4).

**Figure 4: Retention Rate for Fall 1994 Developmental Students:  
Spring 1995 to Spring 1997**

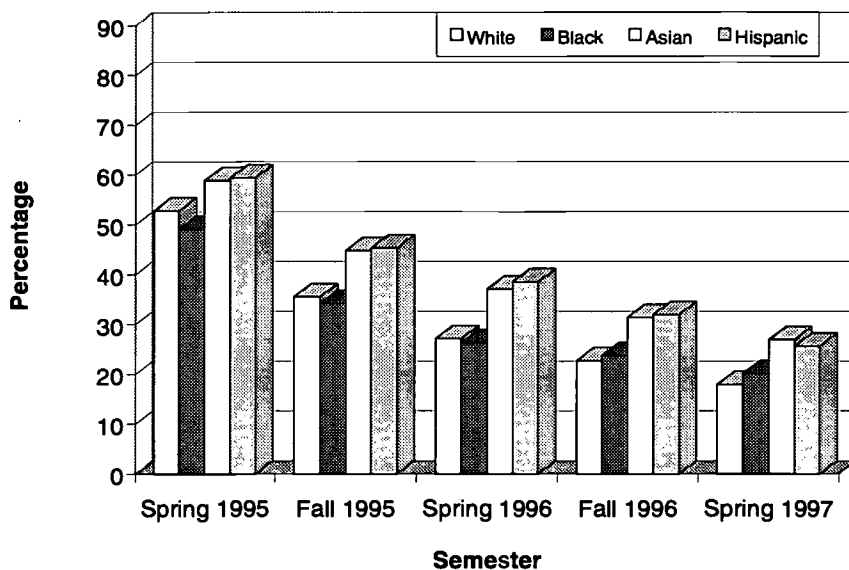


- Figure 4 shows that among all the racial groups taking developmental courses during Fall 1994 or Spring 1995, Black students were retained at the lowest rate across all subsequent semesters. For example, the retention rate of Black students in the Fall 1995 semester was 42% compared to 51% of White students, 69% of Asian students, and 59% of Hispanic students for the same time period.

### Section 3: First-Time Fall 1994 ESL Course Enrollments

This section examined first-time Fall 1994 students and their enrollment in an ESL course during the first year. Figure 5 indicates the retention rates by racial groups for students who did not enroll in an ESL course during the first year. Figure 6 presents the same information for those students who did enroll in an ESL course.

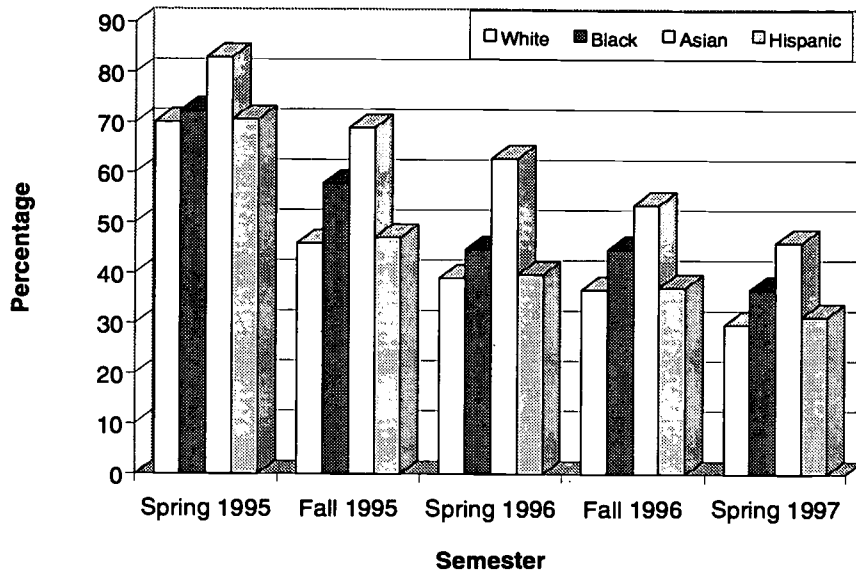
**Figure 5: Retention Rate for Fall 1994 Non-ESL Students:  
Spring 1995 to Spring 1997**



- When comparing the retention rates of ESL students to non-ESL students, the non-ESL students showed a much lower retention rate (see Figures 5 and 6). However, this finding should be interpreted with caution because of the small number of students who took an ESL course at NVCC during Fall 1994 or Spring 1995.
- In general, Asian and Hispanic students were the two largest groups who enrolled in ESL courses during the first year. However, a small number of both White and Black students did take ESL courses during this period (see Figure 6).<sup>9</sup>

<sup>9</sup> Because of the small number of White and Black students taking ESL courses at NVCC in Fall 1994 or Spring 1995, their corresponding percentages for all five semesters (i.e., 70% of White students returned Spring 1995) should be interpreted with caution.

**Figure 6: Retention Rate for Fall 1994 ESL Students:  
Spring 1995 to Spring 1997**



- The return rate for ESL students was similar to the retention rate for developmental students, with the exception of: 1) Black students, taking ESL courses, had a higher retention rate than Black students taking developmental courses, and 2) Hispanic students, taking developmental courses, had a higher retention rate than Hispanic students taking ESL courses (see Figure 6).

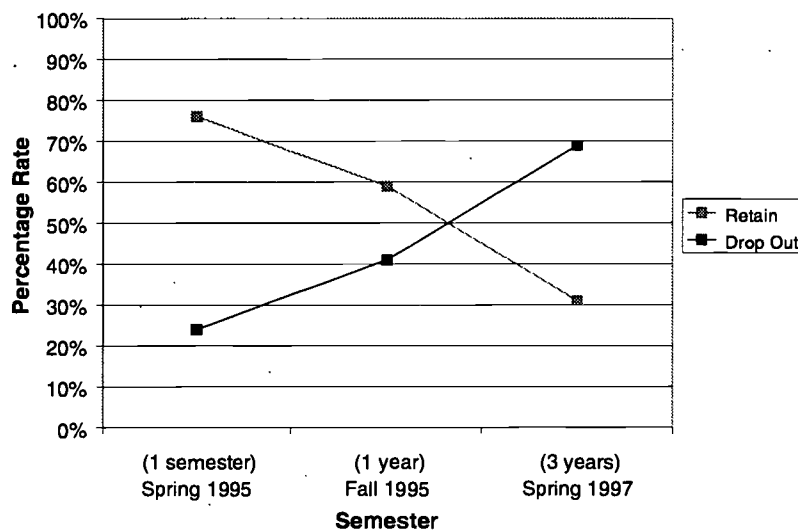
## Part II: First-Time, Full-Time Fall 1994 Students<sup>10</sup>

Part II presents the retention patterns for all NVCC *first-time, full-time* Fall 1994 students. Table 3 and Figure 7 show the retention rates for the cohort of first-time, full-time Fall 1994 students for the following time periods: Spring 1995, Fall 1995, and Spring 1997. Figure 8 shows the retention rate for all first-time, full-time students by race. Figures 9 and 10 show the retention rate for non-developmental and developmental students, respectively. Similarly, Figures 11 and 12 provide information about non-ESL and ESL students, respectively.

**Table 3: Retention Rates for the First-Time, Full-Time Fall 1994 Cohort**

	Spring 1995 (1 semester)		Fall 1995 (1 year)		Spring 1997 (3 year)	
	Number	Percentage	Number	Percentage	Number	Percentage
<b>Retain</b>	2,147	76%	1,660	59%	876	31%
<b>Drop Out</b>	672	24%	1,159	41%	1,943	69%
<b>Total Full-Time Cohort</b>	<b>2,819</b>	<b>100%</b>	<b>2,819</b>	<b>100%</b>	<b>2,819</b>	<b>100%</b>

**Figure 7: Retention Rates for the First-Time, Full-Time Fall 1994 Cohort:  
Spring 1995 to Spring 1997**



- Seventy-six percent of the first-time, full-time students returned after the first semester (see Table 3).
- The one-year (Fall 1995) retention rate for the first-time, full-time cohort was 59%. (see Table 3). The freshman-to-sophomore retention rate for all public community colleges in 1995 was 52%<sup>11</sup>. The NVCC retention rate was higher than the 1995 average for all public two-year institutions.

<sup>10</sup> Full-time students are defined as those students who take 12 or more credits a semester.

<sup>11</sup> "Freshman-to-Sophomore Persistence Rates By Institutional Control, Academic Selectivity, and Degree Level: 1993 to 1998", *Postsecondary Education Opportunity*, no. 74 (August 1998): 1-7.



- Three years later, 31% of the cohort was retained at NVCC (see Table 3).

### **Section 1: First-Time, Full-Time Fall 1994 Students**

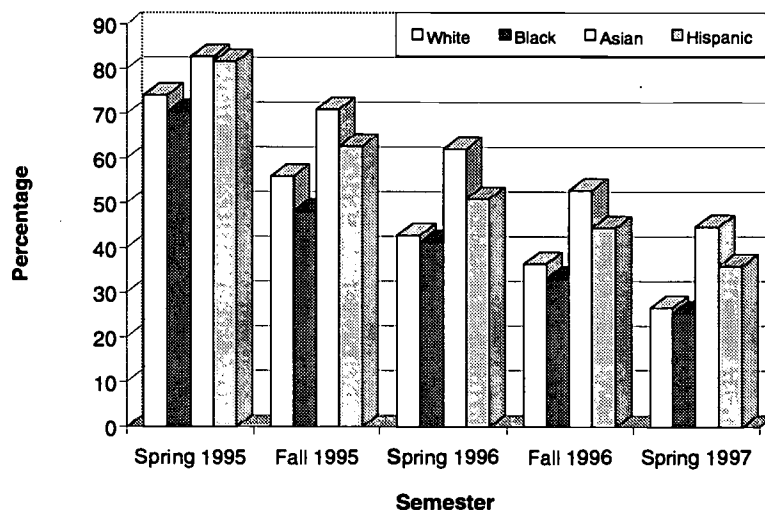
In this section, the retention rates for first-time, full-time students were examined by racial groups from Spring 1995 to Spring 1997 (see Figure 8).

Table 4 shows that only 20% of first-time Black students attended NVCC full-time, the lowest percentage of all racial groups. The largest group of full-time students were Asian students (49%), whereas 28% of White students and 38% of Hispanic students were full-time students.

**Table 4: Percent of All First-Time Fall 1994 Students Who Attended Classes Full-Time**

Race	All First-Time	Full-Time	% Full-Time
White	5,876	1,650	28%
Black	1,386	271	20%
Asian	1,053	518	49%
Hispanic	647	247	38%
Other	358	133	37%
Total	9,320	2,819	30%

**Figure 8: Retention Rate for Fall 1994 First-Time, Full-Time Students: Spring 1995 to Spring 1997**



- The retention rates for first-time, full-time students were higher for all racial groups as compared to the retention rates for the first-time Fall 1994 students (see Figures 2 and 8). However, the patterns of retention between the racial groups did not differ between first-time and first-time, full-time students. For instance, Asian students had the highest retention rate followed by Hispanic students. Black and White students had the lowest retention rates in both cohorts.

- In general, for each semester the rate of retention decreased for all groups (see Figure 8). The retention rate for White students in Spring 1995 was 74%, whereas in Spring 1997 the retention rate was 27%. Similarly, the retention rate for Black students started at 70% and ended at 25% in Spring 1997. Likewise, for Asian students the retention rate in Spring 1995 was 83%, whereas in Spring 1997 the retention rate was 45%. Furthermore, Hispanic students had a 82% retention rate in the second semester and by the last semester it was 36%.

**Section 2: First-Time, Full-Time Fall 1994 Developmental Course Enrollment**

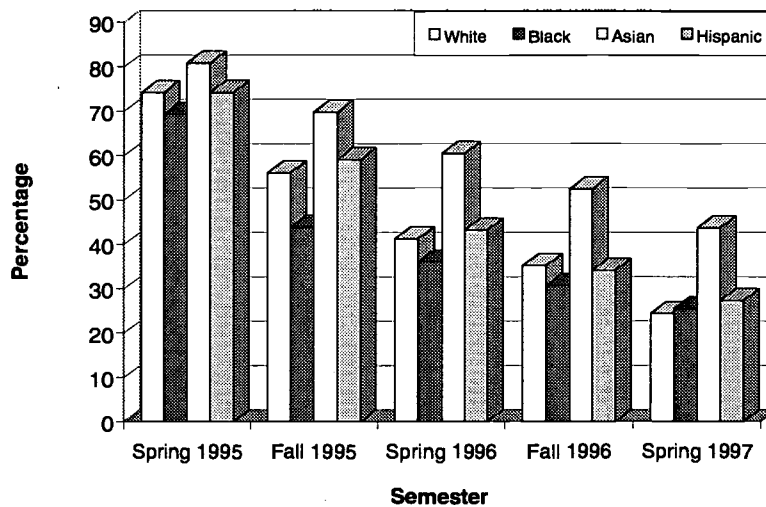
This section examined first-time, full-time Fall 1994 students and their enrollment in either a developmental math or English course during the first year. Figure 9 indicates the retention rates by racial groups for students who did not enroll in a developmental course during the first year. Figure 10 presents the same information for those students who did enroll in a developmental course.

**Table 5: First-Time, Full-Time Fall 1994 Students Enrollment in a Developmental Course**

	Number	Percentage
<b>Yes</b>	1,162	41%
<b>No</b>	1,657	59%
<b>Total</b>	2,819	100%

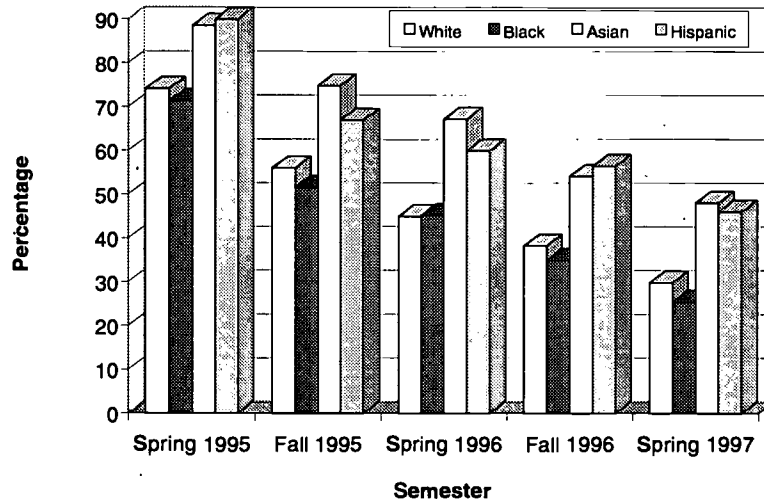
- Table 5 shows approximately 41% of first-time, full-time Fall 1994 students were enrolled in a developmental math and/or English course their first semester at NVCC.

**Figure 9: Retention Rate for Fall 1994 First-Time, Full-Time Non-Developmental Students: Spring 1995 to Spring 1997**



- Full-time students who enrolled in one or more developmental courses during the first year had a higher retention rate during subsequent semesters than those students who did not enroll in any developmental courses (see Figures 9 and 10). For instance, of those taking a developmental course in the first year, 56% of White students, 52% of Black students, 75% of Asian students, and 67% of Hispanic students were retained in Fall 1995. In comparison, 56% of White students, 44% of Black students, 70% of Asian students, and 59% of Hispanic students, who had never taken a developmental course, were retained during that same period.
- Both Asian and Hispanic students had the highest retention rates regardless of enrollment in developmental courses. Both Black and White students were retained at approximately the same rate. However, during some semesters White students were retained at a slightly higher proportion than Black students (see Figures 9 and 10).

**Figure 10: Retention Rate for Fall 1994 First-Time, Full-Time Developmental Students: Spring 1995 to Spring 1997**



- More than 77% of all full-time developmental students were retained in Spring 1995. White and Black students had similar retention rates, although Black students' retention rates were slightly lower (see Figure 10). By Spring 1997, 48% of Asian students who took developmental courses were retained as compared to 25% of Black students (see Figure 10).

### **Section 3: First-Time, Full-Time Fall 1994 ESL Course Enrollment**

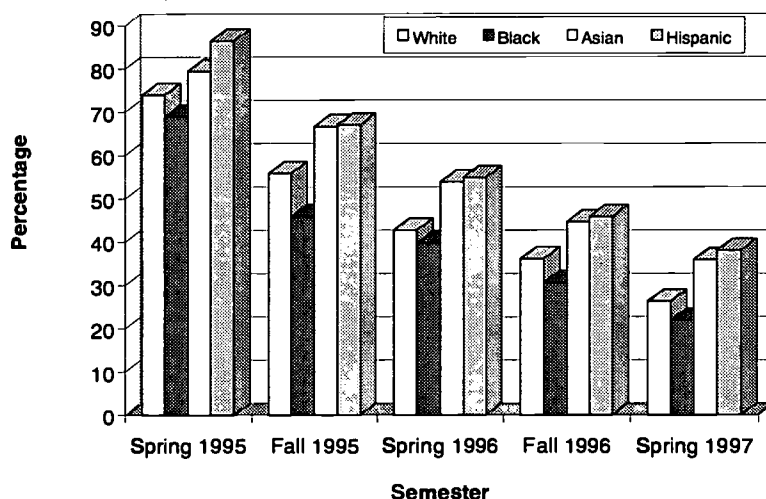
This section examined first-time Fall 1994 students and their enrollment in an ESL course during the first year. Figure 11 indicates the retention rates by racial groups for students who did not enroll in an ESL course during the first year. Figure 12 presents the same information for those students who did enroll in an ESL course.

**Table 6: First-Time, Full-Time Fall 1994 Students Enrollment in an ESL Course**

	Number	Percentage
<b>Yes</b>	535	19%
<b>No</b>	2,284	81%
<b>Total</b>	2,819	100%

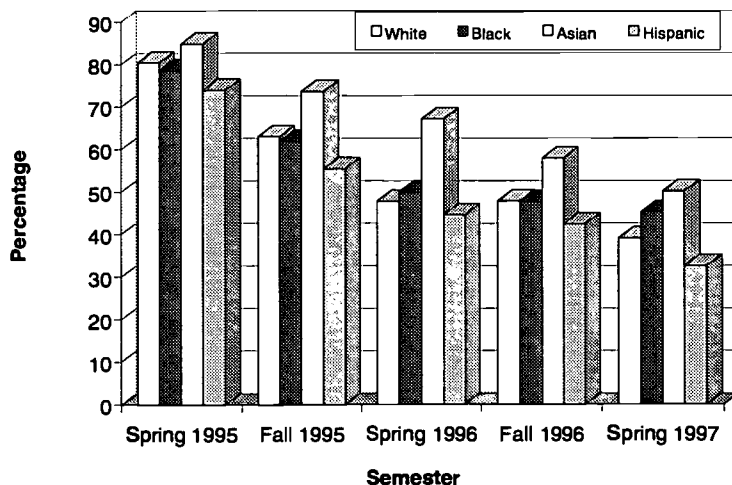
- Most first-time, full-time students (81%) did not take English as a Second Language (see Table 6).

**Figure 11: Retention Rate for Fall 1994 First-Time, Full-Time Non-ESL Students: Spring 1995 to Spring 1997**



- When comparing the retention rate of the ESL to the non-ESL students, the non-ESL students showed a much lower retention rate (see Figures 11 and 12). However, this finding should be interpreted with caution because of the small number of students who enrolled in an ESL course from this cohort.

**Figure 12: Retention Rate for Fall 1994 First-Time, Full-Time ESL Students: Spring 1995 to Spring 1997**



## **Summary**

In order to better understand the retention patterns at NVCC, the Office of Institutional Research (OIR) examined a cohort of students. For three years, OIR followed all first-time students who enrolled at NVCC during Fall 1994. Specifically, the cohort was followed to learn the proportion and characteristics of students who were retained each semester. This study attempted to test the assertion found in the literature that ethnic minority students (other than Asian students) tend to have lower retention rates.

Within the cohort, the proportion of students who were retained in the second semester (Spring 1995) ranged between 50% and 69%. However, by Spring 1997 (the third year) the retention rate dropped between 18% to 35% among students from different ethnic groups. Asian students were consistently retained at a higher rate across all five semesters, followed by Hispanic students. Both White and Black students were consistently retained at similar rates across the five semesters.

A second analysis was conducted in which the students in the cohort were grouped according to whether or not they had enrolled in developmental courses. Retention patterns according to race for these two groups remained similar to the whole cohort. In all racial groups, students taking a developmental course were retained at a higher rate than those students not taking a developmental course.

A third analysis was conducted in which the students in the cohort were grouped according to whether or not they had enrolled in ESL courses. Similar to the second analysis, these two groups of students had similar racial retention patterns to the whole cohort. Again, students enrolled in ESL courses were retained at a higher rate than those not enrolled in ESL courses.

Three further analyses were then conducted on students within the cohort who were only enrolled at NVCC full time in Fall 1994. The first analysis on this group of students showed that retention rates according to race were similar to the whole cohort (Asian students having the highest retention rate followed by Hispanic students). A second analysis on full-time students examined retention rates by race according to whether the student was enrolled in developmental courses or not. A third analysis on the retention rates for full-time students was examined according to enrollment in ESL courses. Both of these sub-groups exhibited similar trends in retention rates by race to that of the entire cohort.

Florence Brawer's review of literature suggested that ethnic minority students had low retention rates (other than Asian). The present NVCC study only partially confirms this finding. Unlike Brawer's literature review, not all minority students at NVCC had lower retention rates compared to White students. Both White and Black students were retained at similar rates, but had the lowest retention rates of the ethnic groups.

When analyzing the cohort as a whole and not according to race, important trends can be seen. During the first year at NVCC, first-time students who enrolled in college level courses had a lower retention rate than first-time students enrolled in developmental courses. For full-time students, those enrolled in a developmental course re-enrolled at a higher rate than those students who did not enroll in a developmental course. The OIR analysis did confirm Brawer's finding that full-time school attendance was associated with educational persistence. Specifically, OIR's analysis showed that a

larger proportion of first-time, full-time students were retained as compared to the cohort of all first-time students.

There is evidence in the literature that academic selectivity and higher family income contribute to higher retention rates.<sup>12</sup> Being an open-enrollment institution, NVCC does not restrict admission based on academic performance. In addition, given the composition of the NVCC student population, it could be argued that family income might be a factor in current retention rates. OIR, in the present study, did not examine the role academic selectivity and family income has on student retention. The issue of retention is a complex one involving a multitude of factors, and the present analysis is by no means comprehensive and final. This report is only a first step towards understanding retention issues at Northern Virginia Community College.

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<sup>12</sup> "Freshman-to-Sophomore Persistence Rates By Institutional Control, Academic Selectivity, and Degree Level: 1993 to 1998", Postsecondary Education Opportunity, no. 74 (August 1998): 1-7.

## APPENDIX A

### NORTHERN VIRGINIA COMMUNITY COLLEGE RETENTION RATE\* FOR FALL 1994 FIRST-TIME STUDENTS BY RACE

FIRST TIME RETENT* RACE	HEADCOUNT		%		%		%		%		%	
	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*
	FALL 94	SPR 95	SPR 95	FALL 95	FALL 95	SPR 96	SPR 96	FALL 96	FALL 96	SPR 97	SPR 97	
WHITE	5876	3121	53.11	2102	35.77	1607	27.34	1347	22.92	1066	18.14	
BLACK	1386	699	50.43	493	35.57	379	27.34	345	24.89	292	21.07	
ASIAN	1053	727	69.04	579	54.99	505	47.95	429	40.74	369	35.04	
HISPANIC	647	406	62.75	297	45.90	252	38.95	217	33.54	177	27.36	
OTHER	358	216	60.34	153	42.74	134	37.43	107	29.89	98	27.37	
	=====	=====		=====		=====		=====		=====		
	9320	5169		3624		2877		2445		2002		

### RETENTION RATE FOR FALL 1994 FIRST-TIME STUDENTS BY DEVELOPMENTAL COURSE ENROLLMENT AND RACE

DEV RETENT* COURSE	RACE	HEADCOUNT		%		%		%		%		%	
		FIRST TIME	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*
		FALL 94	SPR 95	SPR 95	FALL 95	FALL 95	SPR 96	SPR 96	FALL 96	FALL 96	SPR 97	SPR 97	
NO	WHITE	4678	2290	48.95	1495	31.96	1118	23.90	928	19.84	726	15.52	
	BLACK	1063	493	46.38	357	33.58	262	24.65	255	23.99	224	21.07	
	ASIAN	856	561	65.54	443	51.75	383	44.74	328	38.32	279	32.59	
	HISPANIC	451	244	54.10	181	40.13	151	33.48	126	27.94	104	23.06	
	OTHER	265	145	54.72	97	36.60	89	33.58	69	26.04	62	23.39	
		-----	-----		-----		-----		-----		-----		
NO		7313	3733		2573		2003		1706		1395		
YES	WHITE	1198	831	69.37	607	50.66	489	40.82	419	34.97	340	28.38	
	BLACK	323	206	63.78	136	42.11	117	36.22	90	27.86	68	21.05	
	ASIAN	197	166	84.26	136	69.04	122	61.93	101	51.27	90	45.69	
	HISPANIC	196	162	82.65	116	59.18	101	51.53	91	46.43	73	37.24	
	OTHER	93	71	76.34	56	60.22	45	48.39	38	40.86	36	38.71	
		-----	-----		-----		-----		-----		-----		
YES		2007	1436		1051		874		739		607		
		=====	=====		=====		=====		=====		=====		
		9320	5169		3624		2877		2445		2002		

### RETENTION RATE FOR FALL 1994 FIRST-TIME STUDENTS BY ESL COURSE ENROLLMENT AND RACE

ESL COURSE	RACE	HEADCOUNT		%		%		%		%		%	
		FIRST TIME	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*	RETENT*
		FALL 94	SPR 95	SPR 95	FALL 95	FALL 95	SPR 96	SPR 96	FALL 96	FALL 96	SPR 97	SPR 97	
NO	WHITE	5789	3060	52.86	2062	35.62	1573	27.17	1315	22.72	1040	17.96	
	BLACK	1310	644	49.16	449	34.27	345	26.33	311	23.74	264	20.15	
	ASIAN	611	360	58.92	274	44.84	227	37.15	192	31.42	165	27.00	
	HISPANIC	456	271	59.43	207	45.39	176	38.59	146	32.01	117	25.66	
	OTHER	295	172	58.31	126	42.71	110	37.29	87	29.49	82	27.79	
		-----	-----		-----		-----		-----		-----		
NO		8461	4507		3118		2431		2051		1668		
YES	WHITE	87	61	70.11	40	45.98	34	39.08	32	36.78	26	29.89	
	BLACK	76	55	72.37	44	57.89	34	44.74	34	44.74	28	36.84	
	ASIAN	442	367	83.03	305	69.00	278	62.89	237	53.62	204	46.15	
	HISPANIC	191	135	70.68	90	47.12	76	39.79	71	37.17	60	31.41	
	OTHER	63	44	69.84	27	42.86	24	38.10	20	31.74	16	25.40	
		-----	-----		-----		-----		-----		-----		
YES		859	662		506		446		394		334		
		=====	=====		=====		=====		=====		=====		
		9320	5169		3624		2877		2445		2002		

\* For this report, retention is defined as any student transferring to another educational institution, graduating from NVCC, or returning to NVCC the following semester.

\* Indicates Retention Rate.

SOURCE: NVCC/OIR CENSUS DATE FILES

## APPENDIX A (Contd.)

### FALL 1994 FIRST-TIME, FULL-TIME STUDENTS RETENTION RATE BY RACE

FIRST TIME RACE	HEADCOUNT		% RETENT*		% RETENT*		% RETENT*		% RETENT*		% RETENT*	
	RETENT* FALL 94	RETENT* SPR 95	RETENT* SPR 95	RETENT* FALL 95	RETENT* FALL 95	RETENT* SPR 96	RETENT* SPR 96	RETENT* FALL 96	RETENT* FALL 96	RETENT* SPR 97	RETENT* SPR 97	
WHITE	1650	1224	74.18	925	56.06	707	42.85	602	36.48	440	26.67	
BLACK	271	191	70.48	131	48.34	112	41.33	90	33.21	69	25.46	
ASIAN	518	429	82.82	368	71.04	322	62.16	274	52.90	232	44.79	
HISPANIC	247	202	81.78	155	62.75	126	51.01	110	44.53	89	36.03	
OTHER	133	101	75.94	81	60.90	68	51.13	56	42.11	46	34.59	
	=====	=====		=====		=====		=====		=====		
	2819	2147		1660		1335		1132		876		

### FALL 1994 FIRST-TIME, FULL-TIME STUDENTS BY DEVELOPMENTAL COURSE ENROLLMENT AND RACE

DEV COURSE	RACE	HEADCOUNT	% RETENT*		% RETENT*		% RETENT*		% RETENT*		% RETENT*	
		FIRST TIME FALL 94	RETENT* SPR 95	RETENT* SPR 95	RETENT* FALL 95	RETENT* FALL 95	RETENT* SPR 96	RETENT* SPR 96	RETENT* FALL 96	RETENT* FALL 96	RETENT* SPR 97	RETENT* SPR 97
NO	WHITE	950	705	74.21	533	56.11	392	41.26	334	35.16	231	24.32
	BLACK	114	79	69.30	50	43.86	41	35.96	35	30.70	29	25.44
	ASIAN	387	313	80.88	270	69.77	234	60.47	203	52.45	169	43.67
	HISPANIC	132	98	74.24	78	59.09	57	43.18	45	34.09	36	27.27
	OTHER	74	54	72.97	41	55.41	35	47.30	28	37.84	22	29.73
		-----	-----		-----		-----		-----		-----	
		1657	1249		972		759		645		487	
YES	WHITE	700	519	74.14	392	56.00	315	45.00	268	38.28	209	29.86
	BLACK	157	112	71.34	81	51.59	71	45.22	55	35.03	40	25.47
	ASIAN	131	116	88.55	98	74.81	88	67.17	71	54.19	63	48.09
	HISPANIC	115	104	90.43	77	66.95	69	60.00	65	56.52	53	46.08
	OTHER	59	47	79.66	40	67.79	33	55.93	28	47.45	24	40.67
		-----	-----		-----		-----		-----		-----	
		1162	898		688		576		487		389	
		=====	=====		=====		=====		=====		=====	
		2819	2147		1660		1335		1132		876	

### ALL 1994 FIRST-TIME, FULL-TIME STUDENTS BY ESL COURSE ENROLLMENT AND RACE

ESL COURSE	RACE	HEADCOUNT	% RETENT*		% RETENT*		% RETENT*		% RETENT*		% RETENT*	
		FIRST TIME FALL 94	RETENT* SPR 95	RETENT* SPR 95	RETENT* FALL 95	RETENT* FALL 95	RETENT* SPR 96	RETENT* SPR 96	RETENT* FALL 96	RETENT* FALL 96	RETENT* SPR 97	RETENT* SPR 97
NO	WHITE	1604	1187	74.00	896	55.86	685	42.70	580	36.16	422	26.31
	BLACK	229	158	68.99	105	45.85	91	39.74	70	30.56	50	21.83
	ASIAN	195	155	79.49	130	66.66	105	53.85	87	44.62	70	35.89
	HISPANIC	155	134	86.45	104	67.09	85	54.84	71	45.81	59	38.06
	OTHER	101	78	77.23	64	63.36	54	53.47	46	45.54	39	38.61
		-----	-----		-----		-----		-----		-----	
		2284	1712		1299		1020		854		640	
YES	WHITE	46	37	80.43	29	63.04	22	47.83	22	47.83	18	39.13
	BLACK	42	33	78.57	26	61.90	21	50.00	20	47.62	19	45.24
	ASIAN	323	274	84.83	238	73.68	217	67.18	187	57.89	162	50.15
	HISPANIC	92	68	73.91	51	55.43	41	44.57	39	42.39	30	32.61
	OTHER	32	23	71.88	17	53.13	14	43.75	10	31.25	7	21.88
		-----	-----		-----		-----		-----		-----	
		535	435		361		315		278		236	
		=====	=====		=====		=====		=====		=====	
		2819	2147		1660		1335		1132		876	

\* Indicates Retention Rate.

SOURCE: NVCC/OIR CENSUS DATE FILES



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