This Research Brief provides enrollment and performance information on first-time students\(^1\) enrolled in Student Development 100 - College Success Skills (SDV 100). SDV 100 is designed to help students make a successful transition to college by providing them with essential skills to accomplish their academic goals. Part I of this Research Brief presents the SDV 100 enrollment rate for students from three cohorts: Fall 2004, Fall 2005, and Fall 2006. In Part II, the performance of these students is compared to the performance of students who were not enrolled in SDV 100.

Part I. SDV 100 Enrollment Rate of First-Time Students\(^2\)

Part I presents the enrollment rate of first-time students from three cohorts (Fall 2004, Fall 2005, and Fall 2006) who enrolled in SDV 100 in their first or second semester.

Enrollment Rate by Cohort

Figure 1 presents the SDV 100 enrollment rate for three cohorts of first-time students: Fall 2004, Fall 2005, and Fall 2006. The figure shows the percentage of students who enrolled in SDV 100 in either their first or second semester. As shown in Figure 1, a higher percentage of students from all three cohorts enrolled in SDV 100 in their first semester in comparison to their second semester. There was a decrease in the SDV 100 enrollment of first-time students in both semesters from Fall 2004 to Fall 2006.

Figure 1: SDV 100 Enrollment Rate by Cohort

<table>
<thead>
<tr>
<th>Cohort</th>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2004</td>
<td>21.5%</td>
<td>10.5%</td>
</tr>
<tr>
<td>Fall 2005</td>
<td>20.9%</td>
<td>9.6%</td>
</tr>
<tr>
<td>Fall 2006</td>
<td>20.2%</td>
<td>8.1%</td>
</tr>
</tbody>
</table>

\(^1\) First-time students are those who are attending any post-secondary educational institution for the first time.

\(^2\) Enrollment rates presented in Figures 1 through 3 show the percentages of students who enrolled in SDV 100 in their first two terms at Northern Virginia Community College. Students who did not enroll in SDV 100 in those terms are not included. Therefore, percentages do not total 100.
Enrollment Rate by Age Group

Figure 2 presents the SDV 100 enrollment rate of different age groups of students who enrolled in the course in their first or second semester. As the figure shows, a higher percentage of students in all age groups enrolled in SDV 100 in their first semester. The highest percentage of students who enrolled in SDV 100 in either semester was aged 22 or younger (26% in the first semester and 10.4% in the second semester).

Enrollment Rate by Number of Credits

Figure 3 displays the SDV 100 enrollment rate of first-time students taking different course loads. A higher percentage of students enrolled in SDV 100 in their first semester regardless of course load. The highest percentage of students enrolled in SDV 100 during their first semester (31.8%) took a total of 12 to 17 credits. The highest percentage of students enrolled in SDV 100 during their second semester (12.1%) took a total of 18 or more credits. Part-time students (students taking fewer than 12 credits) had the lowest SDV 100 enrollment rate for both semesters.

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3 Enrollment rates presented in Figures 2 and 3 are calculated by taking an average of the number of first-time students enrolled in SDV 100 in Fall 2004, Fall 2005, and Fall 2006.
Part II. Performance of First-Time Students

Part II compares the performance of first-time students enrolled in SDV 100 to the performance of first-time students not enrolled in the course. Performance is measured as the average of students' cumulative grade point average (GPA) at the end of the semester during which they were enrolled in SDV 100.

Performance by Cohort – First Semester

Figure 4 presents the average GPA of each cohort of students (Fall 2004, Fall 2005, and Fall 2006) who enrolled in SDV 100 and those who did not enroll in the course in their first semester. As shown in the figure, the average GPA was higher for students from all three cohorts who enrolled in SDV 100 during their first semester compared to students who were not enrolled; these differences were statistically significant.

Performance by Cohort – Second Semester

In Figure 5, the average cumulative GPA is compared for students who enrolled in SDV 100 in their second semester and those who did not enroll in the course in their first year. Three cohorts are compared: Fall 2004, Fall 2005, and Fall 2006. The average GPA of students from the Fall 2004 and Fall 2005 cohorts who enrolled in SDV 100 during their second semester was higher than the average GPA of students in those cohorts who were not enrolled during those terms. The average cumulative GPA of the Fall 2006 cohort was the same regardless of SDV 100 enrollment status in the second semester. The difference in the average GPA for students in the Fall 2004 cohort who enrolled in SDV 100 in their second semester and those who did not was statistically significant.

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4 Average Fall GPA is used to measure first semester performance. Average Spring GPA is used to measure second semester performance.

5 Statistical tests were performed to determine if the differences in the average GPA between groups were significant. All statistically significant differences are noted within the text as applicable and in the last section of this document.

6 First-time students who took SDV 100 during their first semester are not included.
Performance by Age Group – First Semester

Figure 6 displays the average GPA\(^7\) for each age group of students who enrolled in SDV 100 and those who did not enroll in the course during their first semester. As the figure shows, the average GPA was higher for students who were enrolled in SDV 100 during their first semester than for those who were not. This is true for all age groups. The differences in the average GPA for all age groups based on SDV 100 enrollment status were statistically significant.

![Figure 6: Performance by Age Group — First Semester](image)

**Performance by Age Group – Second Semester**

Figure 7 presents the average cumulative GPA for each age group of students who enrolled in SDV 100 during their second semester and those who did not enroll in the course in their first year\(^8\). As the figure shows, the average GPA was higher for students who were enrolled in SDV 100 during their second semester than for students who were not enrolled in SDV 100. This was true for all age groups. Although these findings mirror the findings for first semester students shown above in Figure 6, the differences were less when comparing the average GPA for students taking SDV 100 in their second semester to those who were not. The differences in the average GPA were statistically significant for three of the age groups: 22 or younger, 23 to 29, and 30 to 44.

![Figure 7: Performance by Age Group — Second Semester](image)

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\(^7\) Grade point averages presented in Figures 6 through 11 are calculated by taking an average of the combined GPA of first-time students from three cohorts: Fall 2004, Fall 2005, and Fall 2006.

\(^8\) First-time students who took SDV 100 during their first semester are not included.
Performance by Number of Credits – First Semester

Figure 8 shows the average GPA of students by the number of credits for which they enrolled during their first semester. The average GPA of students who enrolled in SDV 100 is compared to the average GPA of students who did not enroll in that course. As shown below, the average GPA was higher for the two groups of students taking fewer than 18 credits and enrolled in SDV 100 in their first semester compared to students with the same course load who were not enrolled in SDV 100. The average GPA of students taking 18 or more credits was the same regardless of SDV 100 enrollment status. The differences in the average GPA for all groups based on their SDV 100 enrollment status were statistically significant.

Figure 8: Performance by Number of Credits — First Semester

<table>
<thead>
<tr>
<th>Credits</th>
<th>Enrolled in SDV 100</th>
<th>Not Enrolled in SDV 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer Than 12 Credits</td>
<td>2.1</td>
<td>1.9</td>
</tr>
<tr>
<td>12-17 Credits</td>
<td>2.2</td>
<td>1.8</td>
</tr>
<tr>
<td>18 or More Credits</td>
<td>2.4</td>
<td>2.4</td>
</tr>
</tbody>
</table>

Performance by Number of Credits – Second Semester

Figure 9 presents the average cumulative GPA of students by the number of credits for which they enrolled during their second semester and their SDV 100 status. Results varied for these groups. The average GPA was higher for part-time students (students taking fewer than 12 credits) who were not enrolled in SDV 100 in their second semester than for part-time students who were enrolled in the course. The reverse was true for students taking 12 to 17 credits. For students taking 18 or more credits, the average GPA rounded to 2.5 for both groups. When calculated to the hundredths place, the average GPA was higher for students taking 18 or more credits who were not enrolled in SDV 100 in their second semester (2.48) than for students with the same credit load who were enrolled in the course (2.46); this difference was statistically significant.

Figure 9: Performance by Number of Credits — Second Semester

<table>
<thead>
<tr>
<th>Credits</th>
<th>Enrolled in SDV 100</th>
<th>Not Enrolled in SDV 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer Than 12 Credits</td>
<td>2.3</td>
<td>2.4</td>
</tr>
<tr>
<td>12-17 Credits</td>
<td>2.4</td>
<td>2.2</td>
</tr>
<tr>
<td>18 or More Credits</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

9 First-time students who took SDV 100 during their first semester are not included.
Performance by Program Placement – First Semester

Figure 10 shows the average GPA of students who enrolled in SDV 100 and those who did not enroll in the course during their first semester based on program placement. As shown in the figure, the average GPA was higher for students who enrolled in SDV 100 compared to students who were not enrolled in SDV 100 in their first semester, regardless of program placement; these differences were statistically significant.

![Figure 10. Performance by Program Placement — First Semester](image)

Performance by Program Placement – Second Semester

Figure 11 shows the average cumulative GPA of students who enrolled in SDV 100 during their second semester and those who did not based on program placement. As shown below, the average GPA was higher for program-placed students who enrolled in SDV 100 in their second semester compared to program-placed students who were not enrolled in SDV 100. However, students who were not program-placed and did not enroll in SDV 100 in their second semester had a higher average GPA than non-program-placed students who were enrolled in SDV 100. The differences in the average GPA for both program-placed and non-program-placed students based on their SDV 100 enrollment status were statistically significant.

![Figure 11. Performance by Program Placement — Second Semester](image)

10 First-time students who took SDV 100 during their first semester are not included.
Summary

The first- and second-semester enrollment rates of first-time students taking Student Development 100 (SDV 100) were analyzed by cohort, age group, and credit load. A higher percentage of students in each of these categories enrolled in SDV 100 during their first semester.

The performance of first-time students enrolled in SDV 100 in their first or second semester was compared to the performance of first-time students not enrolled in the course in their first year. Performance was measured as the average of students’ cumulative GPA at the end of the semester during which they were enrolled in SDV 100; performance was analyzed by cohort, age group, credit load, and program placement. In nearly all categories reviewed, performance was better for students who enrolled in SDV 100 in either their first or second semester compared to those who did not enroll in SDV 100 in their first year. Based upon SDV 100 enrollment, the difference in average GPA between those enrolled and those not enrolled was greater for first-semester students than for second-semester students. Statistically significant differences in student performance are presented below.

Statistically Significant Differences in Performance

As noted in the text, the following differences in performance were statistically significant\(^{11}\). For all comparisons based on SDV 100 enrollment status in the first semester, differences were significant. However, only a subset of results was significant in the comparisons of students who enrolled in SDV 100 in their second semester with those who did not.

First Semester Results:

All Groups
- A higher GPA for all student groups analyzed who enrolled in SDV 100 in their first semester compared to all student groups who did not enroll in the course in their first semester.

Second Semester Results:

Fall 2004 Cohort
- A higher GPA for students who enrolled in SDV 100 in their second semester compared to students who did not enroll in the course in their first year.

Age
- A higher GPA for students aged 22 or younger who enrolled in SDV 100 in their second semester compared to students in that age group who did not enroll in the course in their first year.
- A higher GPA for students aged 23 to 29 who enrolled in SDV 100 in their second semester compared to students in that age group who did not enroll in the course in their first year.
- A higher GPA for students aged 30 to 44 who enrolled in SDV 100 in their second semester compared to students in that age group who did not enroll in the course in their first year.

\(^{11}\) Statistical significance was determined by t-Test comparisons.
Number of Credits
- A higher GPA for student taking 18 or more credits who did not enroll in SDV 100 in their first year compared to students with the same credit load who enrolled in the course in their second semester\textsuperscript{12}.

Program Placement
- A higher GPA for program-placed students who enrolled in SDV 100 in their second semester compared to program-placed students who did not enroll in the course in their first year.
- A higher GPA for non-program-placed students who did not enroll in SDV 100 in their first year compared to non-program-placed students who enrolled in the course in their second semester.

\textsuperscript{12} The difference in performance of students taking 18 or more credits based on SDV 100 enrollment status appears when average GPA is calculated to the hundredths place. The average GPA of students with 18 or more credits who did not enroll in SDV 100 in their second semester was 2.48, compared to an average GPA of 2.46 for students with the same credit load who enrolled in SDV 100 in that semester.