This report analyzes the Piedmont Works Adult Education Program (PW) at Piedmont Virginia Community College (PVCC) and compares PW students with regular students at the college. PW offers aid to students to attend PVCC. Those students follow the same scheduling and enrollment procedures as other PVCC students. The PW program helps fund educational classes for financially challenged older adults so they may gain more work-related skills and better income-earning opportunities. Report highlights include: (1) PW students were twice as likely to have earned the G.E.D.--10% of PW students entered with the G.E.D. in spring 2001, while 5% of regular students entered with the G.E.D.; (2) PW students were less likely to have graduated from high school recently--in spring 2001, 10% of regular students had graduated from high school within the last year, as compared with only 3% of PW students; (3) only 12% of PW students were between the ages of 18-21, compared with 29% of regular students; (4) 81% of PW students were female, compared with 59% of regular students; (5) PW students were also predominantly African American--57%, compared with 13% of the overall PVCC population; and (6) PW students were twice as likely as regular students to receive failing grades in their classes. This paper offers suggestions for improving PW student performance. (NB)
Piedmont Works and PVCC Students:
A Comparative Study

Research Report No. 11-2001
December 2001

Piedmont Virginia Community College
Charlottesville, Virginia

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Executive Summary

In the late summer and early fall of 2001, the author of this study, with the assistance of the Executive Director of Planning and Information Technology at Piedmont Virginia Community College (PVCC), analyzed data comparing demographic characteristics, enrollment patterns, grades, and other measures between students receiving assistance from the Piedmont Works Adult Education Program (PW) to attend classes at PVCC and other (regular) students attending classes. Major differences were found between the two groups. Some of these differences were profound, including educational background, number of developmental classes attended, age, and income. Piedmont Works student clients had lower GPA’s, and not only failed more classes but also received a higher percentage of Unsatisfactory and Re-enroll grades in their developmental classes. And finally, they withdraw from class more frequently.

Those students who withdraw from or fail their classes are less likely to graduate from PVCC. Also failure and withdrawal from classes jeopardizes financial aid that might otherwise be available, and without financial aid many students are unable to continue their college studies. Because of the differences in these two populations, one can safely say that PW students require more assistance than regular students, as well as an integrated support network, to succeed at PVCC. Based upon these differences, PW staff implemented a pilot project this fall to address issues related to the student success of PW students.

Results

In Spring 2001, 4,239 students attended PVCC. Ninety-one of these students received aid through the Piedmont Works Adult Education Program to attend classes at PVCC. All students receiving aid through the PW office for PVCC classes had to follow the same enrollment and scheduling procedures as the other PVCC students. The Piedmont Works Adult Program helps fund educational classes for financially challenged local adults in order that they may gain more work-related skills and better income earning opportunities. Clients most often come into the program either by referral from another related local agency, word-of-mouth, or by responding to an advertisement of offered services in the local media. In order to qualify for aid through the Piedmont Works Adult Program, a client must earn less than 200% of the Federal Poverty Guideline, attend classes at a certified institution, and abide by certain conditions (i.e. attend an employment related workshop, turn in attendance certificates for child care, etc). Clients may receive funding for tuition, books and materials, transportation and childcare.

One major difference between the regular students and the PW students was in their educational background. While percentage figures for in-state high school graduation were similar for PW students and regular students (67% of PW students were in-state graduates and 66.4% of regular students were), and while only a slightly higher percentage of PW students were graduates of high schools outside of Virginia (23% of
PW students; 28.9% of regular students), PW students were twice as likely to have earned the G.E.D. (high school General Equivalency Diploma). As can be seen in Figure 1, in Spring Semester 2001, 9.8% of PW students entered PVCC with the G.E.D., as compared to only 4.6% of regular students.

![Figure 1: Percentage of Students Entering PVCC with a G.E.D.](image)

Another way in which the educational background of PW students differs from that of regular students is that PW students are less likely to be recent high school graduates (remember that more than twice as many do NOT graduate from high school, but enter with a G.E.D). In the spring of 2001, 9.9% of regular students graduated from H.S. within the last year, as compared to only 3.3% of PW students (see Figure 2).

![Figure 2: Percentage of Students Entering PVCC Within One Year of High School Graduation](image)
Previous performance in secondary education is a time-validated tool for predicting future academic success. For the PW students attending PVCC in Spring 2001, it was difficult to compile complete information on high school performance. The college does not require students to provide their high school GPA during admission, so data were available for only 21% of PVCC students and 24% of PW students. While the sample was perhaps too small to be statistically valid, results suggest that PW students have weaker academic backgrounds than other PVCC students. The average high school GPA for PVCC students was 2.775, while the average high school GPA for PW students was 2.396. This difference of 0.379 between the high school GPA's of the two groups appears to bear a strong relationship to the difference of 0.43 between the two group's spring PVCC GPA.

Besides differing in educational background from the average PVCC student, PW students differed considerably in age and gender, factors important to classroom consideration. As one might expect (based upon the fact that PW students are less likely to be recent high school graduates), PW students were older than regular students, with a mode age of 22, compared to a mode age of 20 for regular students. Only 12% were between the ages of 18-21 (the largest age group at most colleges), as compared to 29% of regular students. The largest age group for PW students was that between the ages of 25-34.

PW students this past spring received grant funds from one of two fund sources. One of these funds is Education for Independence, with a target population of single parent and dislocated workers. Most single parents are women, and thus it is not surprising that 81.3% of the surveyed PW students were female, compared to only 58.9% of regular students.

PVCC serves the City of Charlottesville and the counties of Albemarle, Buckingham, Fluvanna, Greene, Louisa, and Nelson. Census Bureau data from 2000 shows Charlottesville as being 69.6% Caucasian, Albemarle 85.2%, Fluvana 79.4% and Greene 91%. Charlottesville is 22.2% African-American, Albemarle 9.7%, Fluvana 18.4%, and Greene 6.4%. A fairly representational sample attended PVCC in Spring 2001, as demonstrated by the racial makeup of the regular students. Eighty-one percent were Caucasian and 12.6% African-American. Other races are shown in the table below. On the other hand, PW students were predominantly African-American (57.1%), with 39.5% Caucasian, and 3.4% other race (see Table 1). This was expected, considering that local wage data for African-Americans shows that as a group their average wages are lower than Caucasians, and low-income is among the criteria for admission to Piedmont Works.

Table 1: PW and PVCC Students by Race

<table>
<thead>
<tr>
<th>Race</th>
<th>PW students %</th>
<th>PVCC students %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>39.5</td>
<td>81.0</td>
</tr>
<tr>
<td>African - American</td>
<td>57.1</td>
<td>12.6</td>
</tr>
<tr>
<td>Asian</td>
<td>0.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Native American</td>
<td>0.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Other</td>
<td>2.2</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Classroom performance was another area where the difference between the two groups was quite apparent. On almost any barometric predictor of future success one can see linked a person's success in the classroom, and PW students trailed their regular PVCC student counterparts in almost every indicator of classroom performance. The results are summarized in the charts below, but some notable results are:

- **PW students were three times as likely to be enrolled in developmental classes as regular students.** Thirty-seven per cent (37.4%) of PW students took developmental level classes, compared to only 11.5% of regular students (see Figure 3). Even successful completion of several of these classes before a student is allowed to take credit classes adds to time toward degree, and this in turn, increases the chances for dropout. Studies that measure satisfaction have pointed out that individuals who achieve a degree have a higher degree of self-satisfaction than those that have not.

- **PW students were twice as likely to receive failing grades in their classes** (see Table 2). Ten percent (10.4%) of PW students received grades of "F" in their classes, as compared to 5.1% of regular students. Failure can be disheartening and can lead to the loss of financial aid. Students at PVCC must maintain satisfactory progress in order to receive aid through the Financial Aid Office. Any student who fails a course or falls beneath a 2.0 GPA for any semester receives an Academic Warning. Those who fall beneath a 1.5 GPA are placed on Academic Probation, which is noted on the student's permanent record.

- **PW students had lower GPA's.** PW students had a mean GPA of 2.62, compared to the regular college mean GPA of 3.05. Numerous studies attest to the correlation between academic success and income earned after attending college.

- **PW students were twice as likely to receive either Unsatisfactory or Re-enroll grades** (Table 2). Pass, Satisfactory, Unsatisfactory, Re-enroll, and Incomplete are non-grade point credit results in developmental classes. This past spring, 1.9% of PW students received Unsatisfactory marks compared to 1.0% of regular students. Nearly

\[2\] See for example, Daniel Hecker, "Occupations and Earnings of Workers with Some College But No Degree." *Occupational Outlook Quarterly* (Summer 1998: v42 n2 p. 29(11)).
four percent (3.9%) of PW students received Re-enroll grades, as compared to 1.8% of regular students.

- **PW students were more likely to withdraw from their classes than regularly enrolled students** (see Table 2). Nearly twelve percent (11.9%) of PW students received “W” grades, as compared to 9.2% of regularly enrolled students. Students who withdraw from a class after the last day to withdraw without a grade penalty receive a W on their academic record. Prior to that date—usually about 9-10 weeks into the semester—students may withdraw without receiving a W. It is likely that a high percentage of PW students also withdraw from classes prior to the withdrawal date, but data were not available to confirm this assumption.

![Figure 3: Percentage of Students taking Developmental Classes](image)

**Table 2: Non-Credit Grades of PW and PVCC Students**

<table>
<thead>
<tr>
<th>Grades</th>
<th>PW students %</th>
<th>PVCC students %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fail</td>
<td>10.4</td>
<td>5.1</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>1.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Re-enroll</td>
<td>3.9</td>
<td>1.8</td>
</tr>
<tr>
<td>Withdraw</td>
<td>11.9</td>
<td>9.2</td>
</tr>
<tr>
<td>Other Grades</td>
<td>71.9</td>
<td>82.9</td>
</tr>
</tbody>
</table>

In summary, PW students were more likely than regular PVCC students to have a G.E.D instead of a high school diploma, to not have attended high school classes within the last year before they entered PVCC, to have performed academically more poorly in high school, to be older, to be African-American, and to be female. They were more likely to fail or withdraw from class, have a lower mean GPA, be enrolled in one or more developmental courses, and receive Unsatisfactory or Re-enroll grades in those courses.
Follow-Up

The question raised by these finds is how the college can help these clients succeed at the same level as regular students. What services can be offered to sensitively and successfully address the complex issues leading to poor performance by PW students? Piedmont Works staff analyzed the data and considered the problems. A pilot program addressing these issues has been implemented and includes the following:

1. **Greatly increased case management.** As part of the new program, clients shall receive weekly communication from Piedmont Works Adult Education program staff or interns. This communication may take the form of phone, face-to-face meeting, or email. These “check-ins” will track class status, recent test scores, employment status, and relevant developments or concerns. Results will be tracked in each client’s file. This will allow PW staff to stay abreast or ahead of each student’s academic performance, and be knowledgeable about life factors that affect that performance.

2. **Facilitate teacher – student communication.** At the beginning of the semester, each student will fill out a form that includes who their instructor(s) is (are), and the office number or email address at which the instructor can be reached. It will be a requirement of the program that the student meet with the instructor during their office hours at least once during the semester. Program staff will accompany students who may be uncomfortable approaching their instructor on a one-to-one basis.

3. **Early warning system.** Instructors will be informed that they have a Piedmont Works student(s) in their class and will be encouraged to notify the Piedmont Works Adult Education office if a student is in difficulty. They will be called quarterly throughout the semester to check on the student’s progress (email will be used if preferable).

4. **PVCC database patrol.** Often in the past, the only notice of a student’s withdrawal from class has been when Piedmont Works staff noticed in the PVCC database that the student had a “W” next to their course. Staff will now check each student’s course record in the database every two weeks.

5. **Learning to learn.** Before each semester begins, students selected to receive intensive services will attend a workshop that includes topics such as test-taking strategies, cognitive processing, and memory techniques.

While the projected strategies and new pilot program represent a large increase in the amount of staff time devoted to clientele and require further investment, the potential benefits are enormous. As shown, students with higher performance in college classes who obtain advanced degrees have much greater employment opportunities. This in turn may relieve the state from having to support these individuals and their families at a later date, while also broadening the local tax base. A program like this is reproducible and applicable to almost any institution of higher learning, and PW staff look forward to publishing further results and subsequent expansion and reproduction of the program.
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