



Antelope Valley College

Institutional Effectiveness, Research, and Planning

Collaborations and Partnerships for Student Success

2011-2012 Mid-Year SmartThinking Report

Provided by AVC Department of Effectiveness, Research and Planning

Objective:

The following report presents the impact of the SmartThinking (ST) online tutoring tool on success, retention and persistence for students enrolled in an English (ENGL) 095, 097, and 099 courses during the 2010-2011 academic year.

The data on ST users was gathered through student usage reports obtained from the ST website. The data was matched to students who were enrolled during the 2010-2011 academic year. Term code variables were linked to ensure the students participated in ST during the term of the ENGL 095, 097 or 099 course enrollments. Additionally, an analysis was conducted to determine if ST influenced success, retention and persistence. The data was split into three ENGL groups (e.g., 095, 097, and 099) in order to identify the impact at each level.

Definitions:

Success is defined as a student receiving a letter grade of A, B, C, CR (credit), P (pass). If the student did not receive any of the grades indicated, they were deemed unsuccessful. To increase the accuracy of the study, RD (no record) grades were removed. RD codes indicate a grade was not entered and therefore cannot be determined.

Retention is defined as students who earned a grade other than W (withdraw). To increase the accuracy of the study, RD (no record) grades were removed. RD codes indicate a grade was not entered and therefore cannot be determined.

Persistence is defined as students who enrolled in the fall term and subsequently enrolled in the spring term.

The following table presents the population of students enrolled in basic skills ENGL courses for the 2010-2011 academic year. The data suggest that close to 15% of basic skills ENGL students utilized ST.

| TABLE 1 | Summer 2010 | | Fall 2010 | | Summer 2011 | | Fall 2011 | |
|-------------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|
| Population | Non-ST users | ST users |
| ENGL 099 | 107 | 38 | 523 | 101 | 26 | 16 | 526 | 59 |
| ENGL 097 | 72 | 26 | 384 | 129 | 48 | 7 | 319 | 28 |
| ENGL 095 | 22 | 12 | 173 | 32 | | | 230 | 1 |
| TOTAL | 201 | 76 | 1080 | 262 | 74 | 23 | 1075 | 88 |

Results:

Success

The following table presents a comparison of success for students who utilized ST in comparison with non-users. The comparisons shows a strong impact on student success during fall term with ENGL 095 and ENGL 099 having over a 10% higher rate of success.

| TABLE 2 | Summer 2010 | | Fall 2010 | | Summer 2011 | | Fall 2011 | |
|----------|--------------|----------|--------------|----------|--------------|----------|--------------|----------|
| Success | Non-ST users | ST users |
| ENGL 099 | 50.7% | 71.1% | 51.7% | 67.3% | 76.9% | 62.5% | 58.0% | 78.0% |
| ENGL 097 | 52.2% | 69.2% | 51.8% | 71.3% | 54.2% | 71.4% | 63.6% | 60.7% |
| ENGL 095 | 70.0% | 83.3% | 53.2% | 84.4% | | | 59.6% | 100.0% |

ST influence on Success

An additional statistical analysis was conducted in order to determine if success in basic skills ENGL was dependent upon ST participation. The results of the Chi-squared analysis, utilized for determining such a relationship, confirmed that success in basic skills ENGL is in fact dependent upon participation in ST.

Retention

The following table presents a comparison of success for students who utilized the ST tool in comparison with non-users. The results indicate a higher rate of retention for students utilizing ST.

| TABLE 2 | Summer 2010 | | Fall 2010 | | Summer 2011 | | Fall 2011 | |
|-----------|--------------|----------|--------------|----------|--------------|----------|--------------|----------|
| Retention | Non-ST users | ST users |
| ENGL 099 | 88.4% | 100.0% | 80.1% | 93.1% | 96.2% | 100.0% | 86.5% | 93.2% |
| ENGL 097 | 73.9% | 80.8% | 79.6% | 93.0% | 81.3% | 100.0% | 87.5% | 89.3% |
| ENGL 095 | 90.0% | 100.0% | 79.4% | 90.6% | | | 87.8% | 100.0% |

ST influence on Retention

An additional statistical analysis was conducted in order to determine if retention in basic skills ENGL was dependent upon ST participation. The results of the Chi-squared analysis, utilized for determining such a relationship, confirmed that retention in basic skills ENGL is in fact dependent upon participation in ST.

Persistence

*Persistence data is unavailable as spring 2012 term is not finished the enrollment process.

Below is fall to spring 2010-2011 data.

The following table presents a comparison of success for students who utilized the ST tool in comparison with non-users. The results suggest ST participants have a 5% higher rate of persistence in ENGL 095; nearly 13% higher rate of persistence in ENGL 097 and nearly a 6% higher rate of persistence in ENGL 099.

| TABLE 4 | Fall 2010 to Spring 2011 | |
|-------------|--------------------------|----------|
| Persistence | Non-ST users | ST users |
| ENGL 099 | 82.5% | 88.1% |
| ENGL 097 | 73.3% | 86.0% |
| ENGL 095 | 73.0% | 78.1% |

ST influence on Persistence

*Persistence data is unavailable as spring 2012 term is not finished the enrollment process.
Below is fall to spring 2010-2011 data.

An additional statistical analysis was conducted in order to determine if retention in ENGL 095, 097 and 099 was dependent upon ST participation. The results of the Chi-squared analysis, utilized for determining such a relationship, confirmed that retention in ENGL 097 and 099 is in fact dependent upon participation in ST. The analysis also suggests that persistence in ENGL 095 is not dependent on the use of ST.