

Chapter 5: Retention

I. Chapter 5 Highlights

A. T2S Year One Retention

- T2S participants had a higher retention from fall to spring than the control group students. (Control group: 83.8%; T2S participants: 95.3%).
- Retention from fall to fall showed no significant difference between participant and control groups.
- The average verbal SAT score for students who were retained to a second fall was lower than the average verbal SAT score for students who left after their first year. Further analysis of this finding with a larger sample is recommended.

B. T2S Year Two Retention

- T2S participants had a higher retention from fall to spring than the control group students. (Control group: 75.3%; T2S participants: 90.2%).
- Retention from fall of the first year to the second fall showed no significant difference between participant and control groups.
- Retention to a third fall was significantly higher for the T2S participants than the control group.
- Students who were retained to the second year had *higher* mean ratings than non-retained students in the following areas:
 - ◆ Stress about health and medical issues (fall quarter)
 - ◆ Stress about health or medical issues (winter quarter)
 - ◆ Stress about gaining the skills they need for their future (winter quarter)
 - ◆ Confidence about making class presentations (fall, winter, and spring)
 - ◆ Confidence about their academic skills overall (fall, winter, and spring)
 - ◆ Confidence in seminar participation (fall quarter)
 - ◆ Confidence that they have what it takes to succeed at Evergreen (fall quarter)
 - ◆ Connectedness to the Evergreen learning community (fall and spring quarters)
 - ◆ Progress in gaining a broad general education
 - ◆ Progress in writing clearly and effectively
 - ◆ Progress in understanding other people and how to get along with different kinds of people
 - ◆ Progress in ability to function as a team member
 - ◆ Progress in ability to learn on their own, pursue ideas and find information
 - ◆ Overall Life-long Learning Index Score
 - ◆ Satisfaction with opportunities for personal involvement in campus activities
- Students who were retained to the second year had *lower* mean ratings than non-retained students in the following areas:

- ◆ Stress in keeping up with academic responsibilities (fall quarter)
- ◆ Stress in participating in seminar (fall quarter)
- ◆ Stress on getting the information they needed (winter quarter)
- ◆ Stress about making new friends (spring quarter)
- Students who lived on campus their first year were retained to the second year at a higher rate than those living off campus. (On campus 73%; off campus 36%)

II. Fall-to-Fall Retention Overview

| Cohort Group | % Retained to second Fall | % Retained to third Fall |
|--|---------------------------|--------------------------|
| T2S Participants Year 1: 1999 (N=43) | 65% | 56% |
| T2S Control Group Year 1: 1999 (N=68*) | 66% | 60% |
| All First-time Freshmen Fall 1999 (N=462) | 70% | 55% |
| T2S Participants Year Two: 2000 (N=41) | 63% | 61% |
| T2S Control Group Year Two: 2000 (N=73*) | 60% | 37% |
| All First-time Freshmen Fall 2000 (N=483) | 69% | 58% |

* Control group size each year was adjusted from the original 75 students, since a few students who had registered at the time the sample was drawn did not actually attend classes fall quarter.

III. T2S Year One Retention

A. Fall-to-Spring Retention

The Transitions to Success participants showed higher retention from fall quarter to spring quarter than the control group students. This difference was notable, although the observed significance was borderline at $p=.08$ (92% confidence).

| Sample Group | Number and % of students enrolled spring quarter |
|--------------------------------|--|
| T2S Participants (N=43) | N=41 95.3% |
| Control Group (N=68) | N=57 83.8% |

B. Retention to Second Fall Quarter

Of the original forty-three participants from T2S 99-00, twenty-eight were registered for classes in Fall 2000. This is a 65.1% retention rate from Fall 1999 to Fall 2000 for the participant group. This rate does not significantly differ from the 66.2% freshman-to-sophomore retention rate for the control group of sixty-eight students.

C. Retention to Third Fall Quarter

Of the original forty-three participants from T2S 99-00, twenty-four were registered for classes in Fall 2001. This is a 55.8% retention rate from Fall 1999 to Fall 2001 for the participant group. Retention to third fall quarter does not significantly differ from the 60.3% freshmen-to-junior retention rate for the control group of sixty-eight students. Retention rates to the third fall included four students who stopped out of Evergreen for AY 00-01, but returned for fall 2001.

D. Relationship of Administrative Data Variables to Retention

A series of statistical tests were run using available administrative data variables of the Year One T2S participant group to search for relationships to fall-to-fall retention. Since there are only 43 students in the sample, the results of statistical tests should be viewed as preliminary findings that may not be generalizable to the broader Evergreen freshmen population.

1. Verbal SAT score

The T2S participants who were retained to a second fall came to Evergreen with a lower average SAT verbal score than those who left after their first year.

| Retention status to second fall | Average SAT Verbal Score at Entry |
|------------------------------------|-----------------------------------|
| Retained to second fall (N=25) | 555 |
| Not retained to second fall (N=13) | 605 |

p=.045, 95% confidence

This difference should be viewed with caution, since the number of students in the test group is so small. However, this finding is interesting in that it is counter-intuitive. One might have expected students with higher verbal ability to persist better at Evergreen, as opposed to this finding which suggests the opposite. Further exploration of the relationship of entrance SAT scores and first-year retention on an entire first-time, first-year class would be advised before drawing firm conclusions.

2. Variables That Showed No Difference in Retention

The following variables were tested, but showed no significant difference in fall-to-fall retention:

- Gender
- Application Type (High school direct vs. high school lag)
- Residency
- Ethnicity (students of color vs. white/unknown)
- Mean high school grade point average
- Mean SAT math score
- Completion of NSAS
- Earned full credit during first year

IV. Year Two Retention

A. Fall-to-Spring Retention

The Transitions to Success participants showed higher retention from fall quarter to spring quarter than the control group students. This difference was notable, with an observed significance of $p=.08$ (92% confidence).

| Sample Group | Number and % of students enrolled spring quarter |
|--------------------------------|--|
| T2S Participants (N=41) | N=37 90.2% |
| Control Group (N=73) | N=55 75.3% |

B. Retention to Second Fall Quarter

Of the original forty-one Year Two T2S participants, twenty-six were registered for classes in Fall 2001. This is a 63.4% retention rate from Fall 2000 to Fall 2001 for the participant group. This rate does not significantly differ from the 60.3% freshman-to-sophomore retention rate for the control group of seventy-three students.

C. Stressors and Retention

The T2S participants were divided into two groups based on whether they were retained to fall quarter of their second year or not. A series of tests were conducted to determine if mean scores on the stress inventory were different for students based on their retention status. Several items were found to be significantly different and they are presented in the next table; observed levels of significance are provided for each item.

Students who were not retained to their second year had higher stress in fall quarter regarding keeping up with academic responsibilities and seminar participation and lower stress about health issues. Those who weren't retained also had higher stress in winter quarter about getting needed information, but they had lower stress about health issues and gaining future skills. In spring quarter, students who were not retained reported higher stress about making new friends.

| Stress Inventory Item | Mean Score for T2S Students Retained to Fall 01 | Mean Score for T2S Students Not Retained to Fall 01 |
|--|--|--|
| Fall qtr: Keeping up with academic responsibilities (<i>p</i> =.080) | 2.27 | 2.87 |
| Fall qtr: Participating in seminar (<i>p</i> =.081) | 1.68 | 2.40 |
| Fall qtr: Student health or medical issues (<i>p</i> =.052) | 1.96 | 1.33 |
| Winter qtr: Getting information you need (<i>p</i> =.064) | 1.50 | 1.93 |
| Winter qtr: Student health or medical issues (<i>p</i> =.051) | 1.92 | 1.29 |
| Winter qtr: Gaining the skills you need for your future (<i>p</i> =.085) | 2.27 | 1.71 |
| Spring qtr: Making new friends (<i>p</i> =.034) | 1.27 | 1.91 |

* Level of stress was rated on a 5-point scale from 1=none to 5=a lot.

No significant differences were found for the following:

- Finances and budget
- Managing time
- Developing academic plan
- Love life, personal relationships
- Societal, environmental, political issues
- Developing career goals
- Family issues
- Employment
- Being evaluated by faculty
- Registration for upcoming quarter
- Finding sense of community
- Doing a self evaluation
- Roommate/housing

D. Confidence and Retention

Students retained to their second year had higher confidence throughout the year in their ability to give a class presentation and in fall showed higher confidence in their seminar participation. Both retained and non-retained students increased in confidence in giving presentations as the

year progressed. Despite this growth, non-retained students' confidence by spring quarter remained lower than the fall quarter confidence level of students who were retained. Students' higher confidence levels across all skill levels were also correlated positively with retention.

| Academic Skills Confidence Item | Mean Score for T2S Students Retained to Fall 01 | Mean Score for T2S Students Not Retained to Fall 01 |
|---|--|--|
| Fall qtr: Participation in seminar (<i>p</i> =.040) | 3.62 | 2.87 |
| Fall qtr: Ability to give a class presentation (<i>p</i> =.008) | 3.58 | 2.53 |
| Fall qtr: Student's Mean Across All Skills Areas (<i>p</i> =.016) | 3.41 | 2.97 |
| Winter qtr: Ability to give a class presentation (<i>p</i> =.001) | 3.81 | 2.57 |
| Winter qtr: Student's Mean Across All Skills Areas (<i>p</i> =.10) | 3.30 | 2.94 |
| Spring qtr: Ability to give a class presentation (<i>p</i> =.036) | 4.00 | 3.09 |
| Spring qtr: Student's Mean Across All Skills Areas (<i>p</i> =.047) | 3.61 | 3.14 |

* Confidence was rated on a 5-point scale from 1=not at all confident to 5=very confident.

The following academic skills areas did not differ based on retention status:

- Writing ability
- Keeping up with reading
- Computer skills
- Completing research project
- Mathematics

Students who were retained to their second year had a higher average rating of their own confidence to succeed at Evergreen during their first fall than those who were not retained to their second year. The difference was only statistically significant for their first fall quarter ratings.

| Confidence That Student Has What It Takes to Succeed at Evergreen | Mean Score for T2S Students Retained to Fall 01 | Mean Score for T2S Students Not Retained to Fall 01 |
|--|--|--|
| Fall quarter rating (<i>p</i> =.064) | 5.85 | 5.27 |

There was no significant difference in student ratings of institutional confidence based on their retention status to their second year.

E. Connectedness and Retention

Students who returned for a second year at Evergreen felt significantly more connected to the community.

| Level of Connectedness to the Evergreen Learning Community | Mean Score for T2S Students Retained to Fall 01 | Mean Score for T2S Students Not Retained to Fall 01 |
|--|---|---|
| Fall quarter rating ($p=.010$) | 4.39 | 3.53 |
| Spring quarter rating ($p=.001$) | 5.08 | 3.79 |

* Connectedness was rated on a 7-point scale where 1=not at all, 4=moderately, and 7=extremely.

F. Learning Gains and Retention

There was a positive correlation between retention and those students with higher learning gains scores in several items on the CSEQ life-long learning index. The effects were strongest for gaining a broad general education and ability to function as part of a team.

| Learning Gains Item (CSEQ) | Mean Score for T2S Students Retained to Fall 01 | Mean Score for T2S Students Not Retained to Fall 01 |
|---|---|---|
| Gaining a broad general education about different fields of knowledge ($p=.000$) | 2.92 | 2.21 |
| Writing clearly and effectively ($p=.019$) | 2.68 | 2.07 |
| Understanding other people and how to get along with different kinds of people ($p=.026$) | 3.20 | 2.64 |
| Ability to function as a team member ($p=.000$) | 2.96 | 2.14 |
| Ability to learn on your own, pursue ideas, and find information you need ($p=.079$) | 3.16 | 2.71 |
| Life-long Learning Index score ($p=.062$) <i>This is the sum of each student's ratings for the 11 individual items</i> | 28.6 | 25.2 |

* Learning gains were reported on a 4-point scale from 1=very little to 4=very much.

Learning gains items that showed no significant difference in the context of retention:

- Background and specialization for further education
- Familiarity with the use of computers
- Understand new scientific and technical developments
- Thinking analytically and logically
- Quantitative thinking
- Ability to put ideas together and see relationships

G. Satisfaction with Evergreen Experience

The only item from the Evergreen specific satisfaction survey that was significant for retention was satisfaction with opportunities for involvement in campus activities.

| Evergreen Experience Item | Mean Score for T2S Students Retained to Fall 01 | Mean Score for T2S Students Not Retained to Fall 01 |
|--|---|---|
| Opportunities for personal involvement in campus activities ($p=.012$) | 3.42 | 2.79 |

* Satisfaction was rated on a 4-point scale from 1=very dissatisfied to 4=very satisfied.

Evergreen specific satisfaction survey items that showed no significant difference for retention included:

- Attitude of faculty
- Interactions with faculty
- Evaluation system
- Availability of programs/courses
- Quality of instruction
- Overall quality of programs/courses
- Ability to enroll in offerings that match interests
- Variety of programs
- Respect for various sexual orientations
- Respect for the opposite sex
- Respect for various religious beliefs
- Racial/ethnic relations
- Political freedom
- Personal safety
- Attitude of staff
- Accuracy of college information before enrollment
- Admission procedures
- Registration procedures
- Study areas
- Food services
- Transportation/parking
- Availability of housing
- College social activities

H. Academic Program Variables and Retention

No significant differences were revealed between the retained and non-retained groups based on whether they were in their first choice program, planned to continue in the same program for multiple quarters, or whether they were in a Core vs. non-Core program.

I. Demographic Variables and Retention

Statistical comparisons of T2S students who were retained and those that were not showed no evidence of difference based on SAT scores, high school grade point average, employment status, gender, residency, or earning full credit during their first year.

Some evidence of improved retention was noted for students living on campus versus off campus during their first year, although the sample size was too small for statistical analysis on this measure. The retention rate to a second year at Evergreen for students who lived on campus during their first fall quarter was 73% versus 36% retention for students who lived off campus.

J. Retention to Third Fall Quarter

Of the original forty-one Year Two T2S participants, twenty-five were enrolled in Fall 2002. This retention rate of 61.0% is significantly higher than the control group retention rate of 37.0% ($p=.019$, 98% confidence). The T2S participant group retention rate to the third year was bolstered by the return of five students who had stopped out of the college during AY 01-02.