Using WNSLAE Data to Understand Retention at Hampshire College

Carol Trosset, PhD
Hampshire College
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# Hampshire Retention Rates

<table>
<thead>
<tr>
<th>Fall Entry Cohort</th>
<th>Returned for 2\textsuperscript{nd} Year</th>
<th>Graduated in 4 Years</th>
<th>Graduated in 6 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall 2002</td>
<td>79%</td>
<td>53%</td>
<td>67%</td>
</tr>
<tr>
<td>Fall 2003</td>
<td>79%</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>Fall 2004</td>
<td>82%</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td>Fall 2005</td>
<td>79%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2006</td>
<td>78%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fall 2007</td>
<td>79%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Many Retention Task Forces

- 5-cohort quantitative analysis in 2007
- Many problems – same ones every time
- Some leave more for academic reasons, some more for social reasons
- No actions taken
A Rich New Data Set

- Admission office only stores traditional info
- Wabash Study measures more things
- Every semester I send data to ACT to link

- Admission data
- Retention data
- Academic performance data
What Predicts Attrition?

• Only one input quality measured by the Wabash Study – Environmental Mastery
• Threshold effect for Admission Reader Score – A/A+ more likely to graduate
• Threshold effect for HS class rank – in top 30% more likely to graduate
• Experiences, not inputs, are making most of the difference
5 Wabash Study mega-scales:
- Good Teaching
- High-order Academic Experiences
- Diversity Experiences
- Interactions with Peers
- Frequency of Interacting with Others
Logistic Regression to Predict Retention says:

5 mega-scales:
- Good Teaching
- High-order Academic Experiences
- Diversity Experiences
- Interactions with Peers
- Frequency of Interacting with Others
Which Categories?

Good Teaching:
• Faculty Interest in Teaching
• Prompt Feedback
• Teaching Clarity and Organization
• Non-Classroom Faculty/Student Contact

Interaction with Peers:
• Peer Relationships
• Co-curricular Activities
Implications for Action

• General sense of the problem doesn’t tell individuals what to do about it
• Lots of “dodges” – not me, not my students, invalid data, blame the students, blame the admission office, etc
• Need more specific information about particular things that need to be different
Faculty Interest in Teaching

Most faculty with whom student had contact are
- genuinely interested in students.
- interested in helping students grow in more than just academic areas.
- outstanding teachers.
- genuinely interested in teaching.
- willing to spend time outside of class to discuss issues of interest and importance to students.

Overall quality of academic advising student has received.
Extent to which student felt challenged to do his/her best work.
Prompt Feedback

- How often faculty informed student of his/her level of performance in a timely manner
- How often student has received prompt written or oral feedback from faculty on his/her academic performance
- How often faculty checked to see if student had learned the material before going on to new material
Teaching Clarity and Organization

Frequency that faculty:
• Gave clear explanations
• Made good use of examples to explain difficult points
• Effectively reviewed and summarized the material
• Interpreted abstract ideas and theories clearly
• Gave assignments that helped in learning the material
• Were well prepared for class

Frequency that:
• Presentation of material was well organized.
• Class time was used effectively
• Course goals and requirements were clearly explained
• Faculty had a good command of what they were teaching
Quality of Non-classroom Student-Faculty Contact

Non-classroom interactions with faculty have had a positive influence:
• On student’s personal growth, values, and attitudes
• On student’s intellectual growth and interest in ideas
• On student’s career goals and aspirations

Student has developed a close personal relationship with at least one faculty member.
Student is satisfied with opportunities to meet and interact informally with faculty members.
Positive Peer Interactions

• Student has developed close personal relationships with other students.
• Student friendships have been personally satisfying.
• Relationships with other students have had a positive influence on student’s personal growth, values, and attitudes.
• Relationships with other students have had a positive influence on student’s intellectual growth and interest in ideas.
• Quality of relationships with other students.
• It has been easy for student to meet and make friends with other students.
• Most other students would be willing to listen to and help this student with a problem.
• Most students here have values and attitudes similar to this student.
What Predicts Having Good Experiences?

- Nothing demographic
- High Environmental Mastery
- High Purpose in Life
- Low Autonomy
Fall 2006 Cohort Analysis

• 391 first-time full-time first-year students
• This was their 6th semester
• 118 (30%) have withdrawn

• Assembled everything we know about them in one spreadsheet
• Now I have new things to link via ACT
Attrition Groups using Wabash Study Data

• 42 F06 cohort attrits participated in the Wabash study
• Cluster analysis used only three variables: the mega-scales for good teaching and peer interactions, and how long they stayed at Hampshire
• The students fell into 4 clusters based on their different experiences of Hampshire
<table>
<thead>
<tr>
<th></th>
<th>Cluster A</th>
<th>Cluster B</th>
<th>Cluster C</th>
<th>Cluster D</th>
</tr>
</thead>
<tbody>
<tr>
<td># students</td>
<td>24 (most F)</td>
<td>10</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Academic</td>
<td>Slightly Below Average (-.1)</td>
<td>Neutral (-.2)</td>
<td>Bad (-1.0)</td>
<td>Bad (-1.5)</td>
</tr>
<tr>
<td>Social</td>
<td>Neutral (-.1)</td>
<td>Bad (-1.7)</td>
<td>Bad (-0.9)</td>
<td>Bad (-2.6)</td>
</tr>
<tr>
<td>When left</td>
<td>1st-2nd year</td>
<td>1st year</td>
<td>1st year</td>
<td>1st-2nd year</td>
</tr>
<tr>
<td>WNSLAE changes</td>
<td>minor</td>
<td>positive</td>
<td>negative</td>
<td>negative</td>
</tr>
<tr>
<td>Admission ratings</td>
<td>B+</td>
<td>B, B+</td>
<td>A-, A+</td>
<td>B+, A-</td>
</tr>
<tr>
<td>Poor classroom behavior</td>
<td>Studied most</td>
<td>Lower SES</td>
<td>+ Environ. mastery</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most campus activities, + Relations with others</td>
<td>Socialized least</td>
<td>- Relations w/others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>Did not drink</td>
<td></td>
<td>Alcohol</td>
<td></td>
</tr>
</tbody>
</table>
# The Biggest Red Flag

<table>
<thead>
<tr>
<th></th>
<th>How many F06 students did this</th>
<th>How many of these withdraw</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pass &lt;4 courses in 1\textsuperscript{st} semester</td>
<td>92 = 24% of entering class</td>
<td>43% of these withdraw, compared to 26% of students who do pass 4 courses</td>
</tr>
<tr>
<td>Pass &lt;8 courses in 1\textsuperscript{st} year</td>
<td>138 = 35% of entering class</td>
<td>51% of these withdraw, compared to 19% of students who do pass 8 courses</td>
</tr>
<tr>
<td>Pass &lt;4 courses in 1\textsuperscript{st} semester AND pass &lt;8 courses in 1\textsuperscript{st} year</td>
<td>71 = 18% of entering class</td>
<td>55% of these withdraw, compared to 21% of students who pass both 4 and 8</td>
</tr>
</tbody>
</table>
Attrition Groups by Academic Progress

• 9% (36) failed to complete 4 courses in 1\textsuperscript{st} semester, and have withdrawn

• 9% (35) passed 4 courses in 1\textsuperscript{st} semester but failed to complete 8 in 1\textsuperscript{st} year, and have withdrawn

• 7% (28) passed 8 courses in 1\textsuperscript{st} year but withdrew without passing Division I.

• 5% (19) passed Division I but withdrew without filing Division II.

• 5% (18) are still enrolled (in the 6\textsuperscript{th} semester), but have not yet filed Division II.
What Should We Do?
Sources of Suggestions

- Steve Weisler headed a new task force – faculty, staff, one student (all hand-picked)
- They read all the previous reports
- Formed three subcommittees – academic, social, and “navigating the college”
- Each group made recommendations
- We added all recommendations from previous reports
- This resulted in over 360 action items
Clusters of Problems

- Teaching and Advising (Emphasis on and Quality of)
- Prompt Academic Feedback to Students
- Non-classroom Interaction with Faculty
- Peer Interaction
- Navigating the College / Environmental Mastery
Categories of Recommendations

**Teaching and Advising**
- Academic standards
- Classroom standards
- Faculty development
- Faculty responsibilities
- Evaluation of teaching
- Evaluation of advising

**Feedback to Students**
- Academic standards
- Classroom standards
- Evaluation of students
- Rewarding high achievement
- Faculty responsibilities
- Evaluation of faculty
Recommendations, continued

Non-classroom Interaction
- Academic
- Social
- Faculty help with programming

Environmental Mastery
- Improve information flow
- Clarify and simplify procedures
- Intervene when students have trouble

Peer Interaction
- Academic
- Ease of interaction
- Facilities
- Programming
Move from Problems to Actions

### Teaching and Advising
- Academic standards
- Classroom standards
- Faculty development
- Faculty responsibilities
- Evaluation of teaching
- Evaluation of advising

### Feedback to Students
- Academic standards
- Classroom standards
- Evaluation of students
- Rewarding high achievement
- Faculty responsibilities
- Evaluation of faculty
## Move from Problems to Actions

### Non-classroom Interaction
- **Academic**
- **Social**
- **Faculty help with programming**

### Environmental Mastery
- **Improve information flow**
- **Clarify and simplify procedures**
- **Intervene when students have trouble**

### Peer Interaction
- **Academic**
- **Ease of interaction**
- **Facilities**
- **Programming**
Recommended Actions

Feedback to Students
• Clarify academic standards – for assignments, courses, and divisional work
• Improve feedback to students – in courses, for divisional work, by rewarding high-quality work, and by intervening when students have difficulty

Teaching and Advising
• Clarify faculty responsibilities for teaching and advising
• Evaluate faculty more systematically – classroom teaching, advising, classroom and divisional feedback to students

Environmental Mastery
• Improve information flow
• Clarify and simplify policies

Social Interaction with Peers and with Faculty
• Increase non-classroom student/faculty interaction ($)
• Increase/facilitate student peer interactions ($)
• Improve facilities used for student social interaction ($$)