Retention’s Up, Engagement’s Up, But Are They Really Learning?
Step Three in First-Year Experience Program Assessment

Nicole Henderson
Marianne Kennedy
Cynthia Stretch
FYE Program Components

- New student orientation
- Academic learning communities
- Inquiry 101 seminar
- Community involvement
- Comprehensive academic advisement and mentoring
- Academic tracking and early intervention
- Student success workshops
- Academic support workshops and study groups
- Faculty development summer FYE Academy
- Comprehensive program assessment
- FYE program office
- Peer mentoring program
- Freshmen common read
Measuring FYE Impact: Data Sources

- BCSSE
- NSSE
- New Student Orientation Surveys
- FYE Self-Assessments
- GPA; Retention/Persistence data
- Faculty feedback
- Student Learning Outcomes data
## Retention

<table>
<thead>
<tr>
<th>Freshmen Cohort</th>
<th>% Students</th>
<th>One Year Retention Rate</th>
<th>First Term GPA</th>
<th>Overall GPA</th>
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<tbody>
<tr>
<td>Fall 2006</td>
<td>FYE</td>
<td>0.0%</td>
<td>NA</td>
<td>NA</td>
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<tr>
<td></td>
<td>No FYE</td>
<td>100.0%</td>
<td>72.1%</td>
<td>2.39</td>
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<tr>
<td>Fall 2007</td>
<td>FYE</td>
<td>50.7%</td>
<td>80.0%</td>
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<td>No FYE</td>
<td>49.3%</td>
<td>74.7%</td>
<td>2.30</td>
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<tr>
<td>Fall 2008</td>
<td>FYE</td>
<td>97.3%</td>
<td>80.5%</td>
<td>2.68</td>
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<td>No FYE</td>
<td>2.7%</td>
<td>51.4%</td>
<td>1.94</td>
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Retention

Using predictive modeling, we anticipate 83.9% first-second year retention for 2009 cohort.
# Retention – Year 2 to Year 3

## Freshmen Cohort Table

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<thead>
<tr>
<th>Freshmen Cohort</th>
<th>% Students</th>
<th>Two Year Retention Rate</th>
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</thead>
<tbody>
<tr>
<td>Fall 2006</td>
<td>FYE</td>
<td>0.0%</td>
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Student Self-Assessments

Two surveys addressing

- Developing Academic Habits of Mind
- Developing Self-Advocacy
- College Success

Administered by INQ instructors
Results by class provided to instructors
Developing academic habits of mind

(Students “agreed” or “strongly agreed” with these statements)

- I am gaining knowledge to understand the research process and to use the resources available to me – 72%
- I am being taught to examine all sides of an argument before reaching a conclusion – 77%
- I am learning to identify problems, analyze them, and arrive at more than one possible solution – 72%
Developing Self-Advocacy:
(Student “agreed” or “strongly agreed” with these statements)

- I know where to find resources on campus for help – 71%
- I take the initiative to talk with my professors when an issue arises – 76%
- If I have some type of crisis, I know there is someone who will help me – 73%
College Success

(Students “agreed” or “strongly agreed” with these statements)

- I am able to spread out the work on a long assignment and not wait until the last minute to complete it – 45%
- As a result of being a student here, I now have a clearer sense of my most preferred learning style – 66%
- I settle for just passing courses – 13%
Predicting First Semester GPA

- SAT math scores
- “I study regularly and enough to be successful in college.”
- High school rank
- “My interactions with faculty members outside of the classrooms are generally positive.”
- “I organize my time well to complete my daily tasks.”
- “I believe having an entire freshman class read the same book at the start of a semester is beneficial to the group as a whole.”
- “I expect that I will graduate from Southern.”

A regression analysis was conducted with GPA as the outcome variable.
“SCSU is helping me to become a better student and has encouraged me to succeed when I was not sure I had it in me. My freshmen year has been great!”

A first-year student, spring 2009
“Throughout the past month that I have been taking INQ, my perception on the course has totally changed from when I first started. I came into this class thinking it wasn’t going to benefit me at all and I would forget the information the day after it was taught to me; however, I proved myself wrong. I actually find myself using some of the techniques that we learn in class outside of class. I have discovered many things about myself throughout the process of taking this class and it has opened me up to many opportunities. My perspective of never being able to use this class after my freshman year has totally changed. I definitely think that I will be able to use the skills I have learned in Inquiry all 4 years of school.”

A first-year student, fall 2008
Engagement

NSSE measures five broad dimensions of effective educational practice:

1. Level of Academic Challenge
2. Active and Collaborative Learning
3. Student-Faculty Interaction
4. Enriching Educational Experiences
5. Supportive Campus Environment
Level of Academic Challenge

- 2005: 49.8
- 2006: 50.7
- 2007: 51.2
- 2008: 51.2
- 2009: 56.2

[Chart showing the level of academic challenge for freshmen from 2005 to 2009, with a steady increase from 49.8 to 56.2.]
NSSE 2009 Benchmark Comparisons (LAC)

First-Year Senior

NSSE 2009 Benchmark Comparisons (LAC)

First-Year Senior

2-Tailed
* P > 0.05
** P > 0.01
*** P > 0.001
Active and Collaborative Learning

Freshmen

- 2005: 35.2
- 2006: 37.1
- 2007: 36.5
- 2008: 37.6
- 2009: 42.2
NSSE 2009 Benchmark Comparisons (ACL)

First-Year and Senior Comparisons:

- SCSU
- CSUS
- Carnegie Class
- NSSE 2009

2-Tailed
* P > 0.05
** P > 0.01
*** P > 0.001
NSSE 2009 Benchmark Comparisons (SFI)

- SCSU
- CSUS
- Carnegie Class
- NSSE 2009

2-Tailed
* P > 0.05
** P > 0.01
*** P > 0.001
Enriching Educational Experiences

- Freshmen

Data Points:
- 2005: 22.9
- 2006: 23.0
- 2007: 22.0
- 2008: 26.5
- 2009: 27.2
NSSE 2009 Benchmark Comparisons
(EEE)

2-Tailed
* P > 0.05
** P > 0.01
*** P > 0.001

- SCSU
- CSUS
- Carnegie Class
- NSSE 2009
Supportive Campus Environment

![Graph showing the trend of supportiveness in the campus environment from 2005 to 2009. The x-axis represents the years 2005 to 2009, and the y-axis represents the percentage supportiveness. The y-axis values range from 20 to 60. The graph shows a gradual increase in supportiveness from 54.3% in 2005 to 59.5% in 2009.](image)
NSSE 2009 Benchmark Comparisons (SCE)

2-Tailed
* P > 0.05
** P > 0.01
*** P > 0.001

First-Year
- SCSU
- CSUS
- Carnegie Class
- NSSE 2009

Senior
- SCSU
- CSUS
- Carnegie Class
- NSSE 2009
Discussed Ideas From Your Readings or Classes With Others Outside of Class (Students, Family Members, Co-Workers, etc.)

![Chart showing data points for discussed ideas from readings or classes with others outside of class from 2005 to 2009. The chart includes data points for FY and SR, with a trend line indicating an increase over time.](chart_image)
Applying Theories or Concepts to Practical Problems or in New Situations

![Graph showing the trend of applying theories or concepts over years from 2005 to 2009. The graph includes data points for the years 2005, 2006, 2007, 2008, and 2009. The values range from 61 to 76.]
Participate In a Learning Community or Some Other Formal Program
Where Groups of Students Take Two or More Classes Together
Examined the Strengths and Weaknesses of your Own Views on a Topic or Issue
Tried to Better Understand Someone Else's Views By Imagining How an Issue Looks from His or Her Perspective
So... Retention’s Up, Engagement’s Up, and they think they’re learning, but...

Are they really learning what we think they should be learning?
Step Three in FYE Program Assessment: Direct Assessment of Student Learning
Direct Assessment of student work from INQ 101: The Process

- Collection of student work (types)
- Creation of a direct assessment committee (faculty and students)
- Decisions about which outcome(s) to assess
- Creation of a rubric
- “Looking at” student work
- Recreation of the rubric
- “Looking at” student work
- Recreation of the rubric
- Etcetera....
Building a Rubric:
Again and again
…and again
Course Description

INQ 101 is a seminar designed to assist first-year students in becoming engaged members of the SCSU community. Seminars explore topics related to the meanings of higher education through a focus on the process of learning how to learn and cultivating the habits of mind for life-long achievement and success. Students will learn and practice the process of academic inquiry common to all university disciplines, while exploring their reasons for seeking a university education and the choices they make as first-year university students.
Outcomes for INQ 101

Effectively use inquiry-based learning and information resources to investigate issues related to education and/or learning, reflect upon them, and form and defend positions.

Use reading, writing, speaking, and listening as a way to develop critical thinking, as well as a way to effectively communicate ideas.

Become familiar with their own study and time management habits and build an effective plan for managing their time and improving their study habits.

Be able to identify their own learning styles, as well as the variety of learning and teaching styles of others, including peers and teachers by investigating theories of learning.

Begin to learn the connectedness between their general education courses, academic majors, and personal and professional development.

Learn how to navigate parts of the University and access both academic and social supports, as necessary.

Have the opportunity to participate in co-curricular, community-based opportunities offered by the University and gain an understanding of the importance of these opportunities in relation to their educational goals and personal development.
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INQ 101 Outcomes to Assess

1. Effectively use inquiry-based learning and information resources to investigate issues related to education and/or learning, reflect upon them, and form and defend positions.

2. Use reading, writing, speaking, and listening as a way to develop critical thinking, as well as a way to effectively communicate ideas.
Operationalizing the outcomes

1. Effectively use inquiry-based learning and information resources to investigate issues related to education and/or learning, reflect upon them, and form and defend positions.

2. Use reading, writing, speaking, and listening as a way to develop critical thinking, as well as a way to effectively communicate ideas.
Effectively use inquiry-based learning and information resources to investigate issues related to education and/or learning, reflect upon them, and form and defend positions.
Use reading, writing, speaking, and listening as a way to develop critical thinking, as well as a way to effectively communicate ideas.
Effectively use **inquiry-based learning** in order to **identify** issues, **think critically** about them, and **form and defend positions**.
**Elements of Inquiry-Based Learning**

<table>
<thead>
<tr>
<th>Focuses on problem, issue, or question</th>
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<tbody>
<tr>
<td>Defines or clarifies necessary terms</td>
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<tr>
<td>Limits in terms of scope</td>
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<tr>
<td>Indicates significance</td>
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<tr>
<td>Provides context</td>
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<tr>
<td>Summarizes problem, issue or question</td>
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<tr>
<td>Considers more than one perspective</td>
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<tr>
<td>Examines, assesses, analyzes or evaluates</td>
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<td>Synthesizes and balances ideas and perspectives for importance and impact</td>
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<td>States a position, claim, hypothesis or conclusion</td>
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<td>Develops the position using supportive evidence and logical thought</td>
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### Learning Continuum

<table>
<thead>
<tr>
<th>Absent</th>
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<th>Developing</th>
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Source: Washington State University, 2009, Critical Thinking Rubric
https://my.wsu.edu/pls/portal/docs/PAGE/CTLT/CITRUBRIC/CIT%20RUBRIC%202009%20WITH%20RATIO%20SCALE%202009%20FINAL.PDF
Learning Continuum for First-Year Students

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[Table with stages of learning progress from Absent to Beyond FY]
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Totals in each category (one point for each)
Lessons Learned

- Institutional focus and program focus may be different but intertwined
- Need for multiple assessment tools
- Don’t neglect direct assessment because it’s messy
- Embrace the process
- You won’t get it right the first time
- Don’t reinvent the wheel, but do tweak it
Good Assessment is messy
Evolution of Assessing the FYEP

- Retention
- Retention & Achievement
- Retention, Achievement, & Engagement
- Retention, Achievement, Engagement, & Direct Measures
Thank you to our colleagues and contributors

Michael Ben-Avie
Richard Riccardi
Jennifer Guarino
Joshua Fairchild
Alison Regan
Thank you!
For more information:
www.southernct.edu/academics/academicaffairs/assess/

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Assessment is concerned with existence and complicatedness of inquiry-learning “moves” students make, rather than the clear communication or presentation of those moves to others. It is acknowledged that clarity in presentation is often positively correlated with successful move-making; however, in some instances (esp. in the first-year), students may be making these moves in places and ways not yet effective for an audience or reader, but very effective for their own learning processes.

In fact, it is often true that in order for a first-year student to take the risks necessary to make new moves, he or she must be willing to sacrifice clear communication in early drafts, even perhaps encouraged to do so. Students who are too focused on clarity will most often be unable to take the risks necessary to develop their discovery processes. Because of this, it is our responsibility to search for these moves in unusual places, orders, or ways, and acknowledge their existence, so that the student can begin to discover new learning in his or her own work.

This rubric and way of making knowledge is ordered and imagined through a “writing-to-learn” perspective. Often, when students are “writing-to-learn” rather than “writing-to-communicate-to-others,” positions are arrived at in concluding paragraphs or random developing paragraphs, and their presentation of ideas mimics their own discovery process. This does not need to be seen as a failure for a first-year student, but as a stage in their learning. Once a discovery process is sufficiently complex, a student can more easily be taught to communicate this complexity to an audience or reader. Though some students will develop competencies in both discovery and communication simultaneously, many first-year students will not. For this reason, it is often best to focus on discovery as separate from effective communication of their discoveries.

This separation will also allow instructors to better determine what the problems are in student work. Are they problems of identification, exploration, discovery, and positioning, or are they problems of clearly communicating ideas arrived in these processes to an audience or reader? There will, of course, be problems with both. However, problems with discovery are often mistakenly identified as problems with communication, and vice versa. We need to learn to recognize this distinction, so that we can teach it to our students.

Frustration with student work has often led instructors to reduce expectations by creating assignments that call for discovery processes simple enough for students to clearly communicate to an audience or reader. This is a mistake – not only because it does not propel them into new discovery processes, but because new and more complex discovery processes are actually necessary in order to them to develop new and more complex communication processes.

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Cindy Stretch (stretchc1@southernct.edu)

Presented at the 29th Annual Conference on the First-Year Experience, 2010
# Inquiry-Based Learning: Rater Form

First-Year Experience Program  
Southern Connecticut State University, 2010

<table>
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