


## Institutional Research and Ability Based Education

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Over the course of ten years, Tunxis Community College has moved from a course and credit-based to an Ability-based, distributed model of General Education.

Two factors were important in this shift:


1. NEASC report critical of our assessment system, which was:
  - A. Sporadic
  - B. Unsystematic, though there were pockets of success
2. Our own need to ascertain how to improve teaching and learning practice at the College based on better-than-anecdotal analysis

### General Education Core (Course-based Model)

Composition (3 credits)  
 Humanities (3 credits)  
 Natural and Physical Sciences (3-4 credits)  
 Mathematics (3-4 credits)  
 Social Sciences (3 credits)  
 Fine Arts (3 credits)  
 Additional credits in the above 3 credits


Total 21-23 credits

# Old



### Ability Based Education

- Faculty concerns about use of the Collegiate Assessment of Academic Progress (CAAP)
- Choice to develop and use a faculty designed assessment system



## General Education: Ability-based Model

Ability Areas:

Communication  
Critical Thinking  
Information Literacy  
Technological Literacy  
Aesthetic Engagement  
World Cultures and Perspectives  
Scientific Method  
Quantitative Reasoning  
Citizenship, Values, and Ethics  
Interpersonal and Team Skills

# New

These areas are divided into sub-abilities and levels of mastery.

## Distributed Abilities: what does this mean?

Simply put:

1. A student is assessed in multiple areas of ability in a variety of courses
2. Sociology, for example, shares the Communication ability with Composition

Lordy, my writing is so poor.

Gee, didn't you take Biology?

## eLumen: a Brief narrative of assessment collection

## Faculty-entered list of individual assessments for a particular course and pre-linked abilities

ENG\*233 Shakespeare

| Owner         | Description  | Rubric                          | Magnitude | Specific Expectations |
|---------------|--|---------------------------------|-----------|-----------------------|
| Humanities    | Identifies and defines aesthetic elements and their descriptive terminology.                           | Literary Aesthetics 3.1 Level 1 | Level 1   |                       |
| Humanities    | Critically reflects on their reading of literature.  | Literary Analysis 5.1 Level 1   | Level 1   |                       |
| Humanities    | Evaluates the significance of specific literary passages using appropriate terminology.                | Literary Analysis 5.2 Level 1   | Level 1   |                       |
| Humanities    | Analyzes contribution of aesthetic elements to the overall effect of a work.                           | Literary Aesthetics 3.2 Level 2 | Level 2   |                       |
| Communication | Communicates (in writing) with sophistication and complexity in the context of an academic discipline. | Communication: Writing Level 2  | Level 2   |                       |

**Planned Assessments**  
Add Student Activity to be Assessed | Adjust Sequence | Copy to Clipboard

| Action  | Name                   | Description   | Achievement Areas  |
|---|------------------------|---|--|
| <a href="#">View, Scorecard Layout, Clone</a> | Analysis 1 Shakespeare | An analysis of Macbeth. Gets students into the habit of close reading.          | Communication, Critical Thinking, Literary Analysis                      |
| <a href="#">View, Scorecard Layout, Clone</a> | Sonnet Assessment      | An analysis of Shakespeare's sonnets, primarily concentrating on relationships. | Communication, Critical Thinking, Literary Aesthetics, Literary Analysis |

**Documents**  
[Attach a Document](#)  
Documents are not attached to this Course Offering. Click Add Document to attach.

A sample elumen scorecard, providing assessment space for individual abilities for Analysis 1.

Evaluation Scorecard

Select Term: 2008 Spring  
 Select a Section: ENG\*233 Sec: 1290  
 Select Assessment: Analysis 1 Shakespeare

ENG\*233 Shakespeare

All Students Save | Reset All Display as PDF

|   | 0                     | 1                                | 2                     | 3                     | N/A                   |
|---|-----------------------|----------------------------------|-----------------------|-----------------------|-----------------------|
| Critically reflects on their reading of literature. Rubric RW, 1 *  | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Evaluates the significance of specific literary passages using appropriate terminology. Rubric RW, 1 *                | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Communicates (in writing) with sophistication and complexity in the context of an academic discipline. Rubric RW, 1 * | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Supports conclusions with adequate and persuasive evidence. Rubric RW, 1 *  | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <b>0</b> <b>1</b> <b>2</b> <b>3</b> <b>N/A</b>  |                       |                                  |                       |                       |                       |
| Critically reflects on their reading of literature. Rubric RW, 1 *  | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Evaluates the significance of specific literary passages using appropriate terminology. Rubric RW, 1 *                | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Communicates (in writing) with sophistication and complexity in the context of an academic discipline. Rubric RW, 1 * | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Supports conclusions with adequate and persuasive evidence. Rubric RW, 1 *  | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <b>0</b> <b>1</b> <b>2</b> <b>3</b> <b>N/A</b>  |                       |                                  |                       |                       |                       |
| Critically reflects on their reading of literature. Rubric RW, 1 *  | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Evaluates the significance of specific literary passages using appropriate terminology. Rubric RW, 1 *                | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
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| Supports conclusions with adequate and persuasive evidence. Rubric RW, 1 *  | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <b>0</b> <b>1</b> <b>2</b> <b>3</b> <b>N/A</b>  |                       |                                  |                       |                       |                       |
| Critically reflects on their reading of literature. Rubric RW, 1 *  | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Evaluates the significance of specific literary passages using appropriate terminology. Rubric RW, 1 *                | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| Communicates (in writing) with sophistication and complexity in the context of an academic discipline. Rubric RW, 1 * | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

An achievement report for each assessment in a particular course. Shows percentages per ability and rubric scale.

Class Achievement Report

Select Term: 2008 Spring  
 Select a Section: ENG\*233 Sec: 1290  
 Indicate how you would prefer to see the scores: Actual Percentages  
 Report

ENG\*233 Shakespeare

2008 Spring ENG\*233 Sec: 1290 Show results as: Percentages Explanation Display as PDF

| Assessment: Analyze 1 Shakespeare - An analysis of Macbeth. Give students into the habit of close reading.                    | Assessment Results By Level |          |          |          |          | Total        |
|---|-----------------------------|----------|----------|----------|----------|--------------|
|   | NS                          | 0        | 1        | 2        | 3        |              |
| Critical Thinking - Level 3 Supports conclusions with adequate and persuasive evidence  | 6.2%                        | 0.0%     | 46.7%    | 33.3%    | 0.0%     | 100%         |
| Communication - Level 2 Communicates (in writing) with sophistication and complexity in the context of an academic discipline | 6.2%                        | 0.0%     | 60.0%    | 33.3%    | 4.7%     | 100%         |
| Literary Analysis - Level 1 Critically reflects on their reading of literature.   | 6.2%                        | 0.0%     | 66.7%    | 23.3%    | 0.0%     | 100%         |
| Literary Analysis - Level 1 Evaluates the significance of specific literary passages using appropriate terminology.           | 6.2%                        | 0.0%     | 73.3%    | 20.7%    | 0.0%     | 100%         |
| <b>Assessment: Sonnet Assessment - An analysis of Shakespeare's sonnets, primarily concentrating on relationships.</b>        | <b>NS</b>                   | <b>0</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>Total</b> |
| Critical Thinking - Level 3 Assesses and explains the significance of each element of the relationship to the whole           | 6.2%                        | 13.3%    | 13.3%    | 60.0%    | 13.3%    | 100%         |
| Critical Thinking - Level 3 Supports conclusions with adequate and persuasive evidence  | 6.2%                        | 13.3%    | 13.3%    | 60.0%    | 13.3%    | 100%         |
| Communication - Level 2 Communicates (in writing) with sophistication and complexity in the context of an academic discipline | 6.2%                        | 13.3%    | 26.7%    | 46.7%    | 13.3%    | 100%         |
| Literary Aesthetics - Level 1 Identifies and defines aesthetic elements and their descriptive terminology                     | 6.2%                        | 13.3%    | 20.0%    | 53.3%    | 13.3%    | 100%         |
| Literary Analysis - Level 1 Critically reflects on their reading of literature.   | 6.2%                        | 13.3%    | 6.7%     | 66.7%    | 13.3%    | 100%         |
| Literary Analysis - Level 1 Evaluates the significance of specific literary passages using appropriate terminology.           | 6.2%                        | 13.3%    | 6.7%     | 60.0%    | 20.0%    | 100%         |

A comparative report from elumen showing multiple section and multiple course assessment results per ability and rubric scale: NS = not scored and typifies students who have either dropped a course or did not participate in an assessment. Course is Shakespeare.

| All sections for this course/term   | NS        | 0        | 1        | 2        | 3        | Total        |
|---|-----------|----------|----------|----------|----------|--------------|
| Critical Thinking - Level 3 Supports conclusions with adequate and persuasive evidence  | 6.2%      | 6.7%     | 40.0%    | 46.7%    | 6.7%     | 100%         |
| Communication - Level 2 Communicates (in writing) with sophistication and complexity in the context of an academic discipline | 6.2%      | 6.7%     | 43.3%    | 40.0%    | 10.0%    | 100%         |
| Literary Analysis - Level 1 Critically reflects on their reading of literature.   | 6.2%      | 6.7%     | 36.7%    | 50.0%    | 6.7%     | 100%         |
| Literary Analysis - Level 1 Evaluates the significance of specific literary passages using appropriate terminology.           | 6.2%      | 6.7%     | 40.0%    | 43.3%    | 10.0%    | 100%         |
| Critical Thinking - Level 3 Assesses and explains the significance of each element of the relationship to the whole           | 6.2%      | 13.3%    | 13.3%    | 60.0%    | 13.3%    | 100%         |
| Literary Aesthetics - Level 1 Identifies and defines aesthetic elements and their descriptive terminology.                    | 6.2%      | 13.3%    | 20.0%    | 53.3%    | 13.3%    | 100%         |
| <b>All courses this term</b>  | <b>NS</b> | <b>0</b> | <b>1</b> | <b>2</b> | <b>3</b> | <b>Total</b> |
| Critical Thinking - Level 3 Supports conclusions with adequate and persuasive evidence  | 41.4%     | 7.3%     | 48.8%    | 39.0%    | 4.9%     | 100%         |
| Communication - Level 2 Communicates (in writing) with sophistication and complexity in the context of an academic discipline | 39.5%     | 10.9%    | 52.2%    | 30.4%    | 6.5%     | 100%         |
| Literary Analysis - Level 1 Critically reflects on their reading of literature.   | 41.4%     | 9.8%     | 43.9%    | 41.5%    | 4.9%     | 100%         |
| Literary Analysis - Level 1 Evaluates the significance of specific literary passages using appropriate terminology.           | 36.5%     | 7.5%     | 45.0%    | 35.0%    | 12.5%    | 100%         |
| Critical Thinking - Level 3 Assesses and explains the significance of each element of the relationship to the whole           | 51.8%     | 11.5%    | 38.5%    | 42.3%    | 7.7%     | 100%         |
| Literary Aesthetics - Level 1 Identifies and defines aesthetic elements and their descriptive terminology.                    | 51.8%     | 7.7%     | 38.5%    | 46.2%    | 7.7%     | 100%         |

## Ability Based Education



➤ Review results and calibrate/revise assessments and/or curriculum as appropriate

- What can be done to better develop the abilities with which students are struggling?
- Is there consistency in the assessments across departments and courses?
- What % of graduates meet standards on all abilities?



## Institutional Research



| Ability | GRADE   |       |       |       |       |       |      | Total |
|---------|---------|-------|-------|-------|-------|-------|------|-------|
| Score   | A       | B     | C     | D     | F     | W     |      |       |
| 0.0     | # 42    | 27    | 56    | 160   | 495   | 130   | 910  |       |
|         | % 4.6%  | 3.0%  | 6.2%  | 17.6% | 54.4% | 14.3% | 100% |       |
| 1.0     | # 65    | 303   | 645   | 459   | 127   | 75    | 1674 |       |
|         | % 3.9%  | 18.1% | 38.5% | 27.4% | 7.6%  | 4.5%  | 100% |       |
| 2.0     | # 536   | 1621  | 1100  | 201   | 55    | 28    | 3541 |       |
|         | % 15.1% | 45.8% | 31.1% | 5.7%  | 1.6%  | 0.8%  | 100% |       |
| 3.0     | # 854   | 312   | 87    | 27    | 10    | 9     | 1299 |       |
|         | % 65.7% | 24.0% | 6.7%  | 2.1%  | 0.8%  | 0.7%  | 100% |       |
| Total   | # 1497  | 2263  | 1888  | 847   | 687   | 242   | 7424 |       |
|         | % 20.2% | 30.5% | 25.4% | 11.4% | 9.3%  | 3.3%  | 100% |       |



## Institutional Research



- Set-up and maintenance of networked software (eLumen) for faculty to enter learning outcome assessment data.
- Extraction and analysis of learning outcome assessment data; guidance on validity of data.
- Creation of on-line database to track embedding of ability assessment in courses and degree plans.



## Institutional Research



- Rapid response to faculty data requests, such as student progression through sequence of courses, identification of at-risk students for early intervention, retention rates by program, course completion rates, etc.
- Compilation and analysis of institutional and program outcomes, such as graduation, transfer, and retention, student satisfaction, job placement of graduates, labor market information, advisory committee surveys, etc.



## Institutional Research



- Director serves on Ability Group Chairs Committee and Communication Ability Group; Research Specialist serves on Aesthetic Engagement and Creative Expression Ability Group.
- Institutional Research Secretary provides logistical support, such as room scheduling, routine paperwork, etc.
- Financial support through special Strategic Initiative Funding.

