General Education

Factbooks

Student Learning Assessment Information

AY 2011-12

Office of Institutional Research & Assessment
Division of Academic Affairs
**Introduction**

The purpose of this document is to compile a number of “Factbooks” in many of the general education areas of study at Binghamton University so that instructors, staff, and administrators can review strengths and weaknesses in student performance and discuss ways to enhance student learning.

You might wonder why we use the term “Factbook” in presenting the results of surveys, estimates of student learning gleaned from course portfolios, analyses of student work on papers using rubrics, and so forth. Truth be told, we struggled with what to call this document. The most popular term used at many universities is “dashboard,” but such a word implies that we focus only on quantitative information to display the quality of student learning at the university. Another term we thought about using was “Institutional Portfolio of Student Learning,” but this document is not intended to be a portfolio per se, but a means toward an end: To foster conversations about student learning and to brainstorm about ways we can address any weaknesses in student learning we discover through such conversations. So we settled on “Factbook” because the purpose of each document, divided by area of study in the university’s general education program of study, is to present facts gleaned from several assessments we gather, and to encourage everyone to have evidence-based conversations that lead to recommendations and then to enhancement of student learning. We hope you don’t mind the term “Factbook.” It just seems a more appropriate term to use.

Throughout the academic year, the Office of Institutional Research & Assessment will be conducting focus group discussions in many of these areas of study. In the meantime, we encourage you to review these Factbooks in whatever ways you might deem appropriate. Some suggestions:

- Refer to the general education area in which you teach a course (or courses) and review the assessment information (the Factbooks are arranged in alphabetical order). After your review, think of ways you might enhance student learning should you find any areas where you can do so.
- Attend one or several of the focus group discussions in each general education area of studies that we will be conducting this academic year. In each discussion, we will be reviewing the Factbook appropriate to each area (e.g., Humanities,
Composition, Global Interdependencies, etc.) and discussing what the information says about student learning. We will then talk about ways that instructors might address any weaknesses in student learning we discover. Meeting minutes will be taken at these discussions and shared with each Assessment Category Team (ACT), which review course portfolios and the assessments found in each Factbook for each general education area and writes a report. This report is then reviewed by the Provost and Faculty Senate committees for their review.

- Serve on an ACT to help improve each Factbook and to use student learning assessment information to recommend ways to improve student learning.

We hope you find the information in each Factbook meaningful and useful. Please do not hesitate to contact the Office of Institutional Research & Assessment should you have questions or comments about this document or about student learning assessment in general.

Sincerely,

Sean McKitrick
Assistant Provost & Director
Office of Institutional Research & Assessment
Binghamton University (State University of New York)
smckitri@binghamton.edu
(607) 777-6938
Factbooks Found in This Document
(Factbooks found in the document are organized in alphabetical order)

Aesthetics
Composition
Critical Thinking
Foreign Language
Global Interdependencies
Humanities
Laboratory Science
Mathematics-Reasoning
Oral Communication
Pluralism
Social Science
Aesthetics Assessment Factbook

This factbook is a dashboard containing assessment information for use by faculty, assessment category teams, staff, and administrators who wish to obtain information about the status of student learning in each area. The purpose of the factbook is to offer a snapshot of various assessments. Those who view the factbook are encouraged to review the varied information and to make conclusions with regard to how to enhance student learning. Throughout each year, the Office of Institutional Research & Assessment (OIRA) sponsors discussions with assessment category teams and groups of faculty to discuss what the information in the factbook means for student learning. If you would like to be included in such discussions (in case we missed you) please contact Sean McKitrick, Assistant Provost, at smckitri@binghamton.edu, or at x76938.

Variables and Information

Assessment Category Team Findings

Every three years, assessment category teams (ACTs) consider assessments in each general education area and write report. The text under this heading contains the findings of the latest assessment category team report.

Portfolio Percentages: Percent Achieving or Exceeding Outcomes

As part of the general education assessment process, instructors submit course portfolios, which include estimates of the percentage of students who exceed, meet, approach, and do not meet expectations. The percentages in this graph represent the proportion of students who met or exceeded expectations. The “Report Due” axis represents when the latest (or next) ACT is due.

Senior Survey Results

Graduating seniors complete this survey right before they graduate. For this area, they are asked how well the institution prepared them to appreciate the arts and to engage in creative thinking. The results represent how many seniors answered “extremely well” to “moderately well.”
Alumni Survey

Alumni who graduated three years ago complete this survey (therefore the year 2011 in the bottom axis graduated in 2008). The results represent the proportion of those alumni who report that they were anywhere from “moderately prepared” to “very well prepared.”

Faculty Survey

Faculty who teach courses in which 50% or more students are seniors are asked to complete this survey. Faculty are allowed to opt out of this question. The results represent the proportion of those faculty who report that students are anywhere from “moderately prepared” to “very well prepared.”
General Education Assessment Factbook in Aesthetics
Audit Category Team Report Findings

Assessments indicate that Binghamton University students are good at conceptualizing aesthetics and are exposed to a rich amount of subject matter in this area. Course portfolios demonstrate that aesthetics courses offer instruction in both technical aspects of aesthetics and the historical and social context within which the course subject matter concerns itself. In addition to developing a good sense of artistic judgment and understanding the role of imagination, students understand the importance of applying such knowledge in the aesthetics courses they take. Students engage well in artistic inquiry and are able to engage in aesthetic judgment both by gaining exposure to a wide variety of subject matter and by using information they acquire in courses such as studio art and technical production. After reviewing the portfolios, we note that students also learn that a substantial amount of labor is required to succeed in the study of aesthetics. The skills that students acquire in these courses go beyond the study of aesthetics—by learning that the successful study of aesthetics involves a great deal of hard work, students obtain a skill important to their future success in business, management, or other fields they might be employed in after graduation. A few limitations also become clear—students should be challenged to attend more performances, and it is not entirely clear from the course portfolios that faculty make the learning outcomes for aesthetics explicit to their students. As a result, some students may not understand what an education in aesthetics means. It is also not entirely clear that students with varying academic skill levels and cultural background are equally challenged.

Percentage Achieving or Exceeding Outcomes

Alumni Survey Results (Aesthetics)

Attends Artistic Events (NSSE): 0=Never 3=Often

 Faculty Survey Results (Aesthetics)
Composition Assessment Factbook

This factbook is a dashboard containing assessment information for use by faculty, assessment category teams, staff, and administrators who wish to obtain information about the status of student learning in each area. The purpose of the factbook is to offer a snapshot of various assessments. Those who view the factbook are encouraged to review the varied information and to make conclusions with regard to how to enhance student learning. Throughout each year, the Office of Institutional Research & Assessment (OIRA) sponsors discussions with assessment category teams and groups of faculty to discuss what the information in the factbook means for student learning. If you would like to be included in such discussions (in case we missed you) please contact Sean McKitrick, Assistant Provost, at smckitri@binghamton.edu, or at x76938.

Variables and Information

Assessment Category Team Findings

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Portfolio Percentages: Instructor Estimates of Students Achieving Outcomes

As part of the general education assessment process, instructors submit course portfolios, which include estimates of the percentage of students who exceed, meet, approach, and do not meet expectations. The percentages in this graph represent the proportion of students who met or exceeded expectations. The “Report Due” axis represents when the latest (or next) ACT is due.

Rubric Scores

An evaluation of student papers using a rubric developed by SUNY faculty was used in this evaluation. The range of responses was a score of 1 for low proficiency and (the highest) of 4 to high proficiency in each element of the rubric. In this factbook, there are a total of six graphs that represent evaluators’ ratings in 2008 and 2009: Thesis, Development, Use of Paragraphs, Sentence Usage, Relevance, and Style.
National Survey of Student Engagement (NSSE) Results

The NSSE is conducted once every three years. Students are asked the extent to which the institution they attended challenged them to write and revise written work and the range of responses are from ‘0’ for ‘Never’ and ‘3’ for ‘Always’.

Senior Survey

Graduating seniors complete this survey right before they graduate. For this area, they are asked how well the institution prepared them to write effectively and use grammar. The results represent the proportion of seniors who answered “extremely well” to “moderately well.”

Faculty Survey

Faculty who teach courses in which 50% or more students are seniors are asked to complete this survey. Faculty are allowed to opt out of this question. The results represent the proportion of those faculty who report that students are anywhere from “moderately prepared” to “very well prepared.”

Alumni Survey

Alumni who graduated three years ago complete this survey (therefore the year 2011 in the bottom axis graduated in 2008). The results represent the proportion of those alumni who report that they were anywhere from “moderately prepared” to “very well prepared.”

Educational Testing Service (ETS) Proficiency Profile ©

The Office of Institutional Research & Assessment administers this standardized exam to senior students who volunteer to take the test. The scaled score for Binghamton is compared to the scaled scores of all other seniors who took the test at other doctoral I and II institutions. The standard deviation was 2.30.
Assessment Category Team Report Findings

The results of the SCBA rubric evaluation of 100-level papers indicates that student performance with regard to thesis/purpose, development, paragraph writing, sentence structure, style, and mechanics meet expectations. The committee also reviewed alumni, senior, and NSSE survey data, and concluded that students' writing skills appear also to meet expectations. The alumni and senior evaluations indicate that alumni are less sanguine about how much the institution offered them opportunities to write, but the committee also concluded that student writing performance is satisfactory in all areas. One weakness, although not at critical levels, is that NSSE scores, faculty open-ended survey results, and the results of the rubric evaluation of critical thinking papers suggest that Binghamton University students might improve in the areas of formulating appropriate arguments, evaluating evidence, and synthesizing information, concerns which were also expressed in the Critical Thinking ACT report.

Portfolios: Instructor Estimates of Students Achieving Outcomes

Composition Rubric Scores: Use of Paragraphs

Composition Rubric Scores: Thesis

Composition Rubric Scores: Development

Composition Rubric Scores: Relevance
Composition Rubric Scores: Style

<table>
<thead>
<tr>
<th>Year</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>2.95</td>
</tr>
<tr>
<td>2009</td>
<td>2.99</td>
</tr>
</tbody>
</table>

Senior Survey Results (Composition)

<table>
<thead>
<tr>
<th>Year</th>
<th>Writing Effectively</th>
<th>Grammar Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0.87</td>
<td>0.80</td>
</tr>
<tr>
<td>2010</td>
<td>0.87</td>
<td>0.80</td>
</tr>
<tr>
<td>2011</td>
<td>0.87</td>
<td>0.80</td>
</tr>
</tbody>
</table>

NSSE Results (Composition)

<table>
<thead>
<tr>
<th>Year</th>
<th>Writing</th>
<th>Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.33</td>
<td>1.33</td>
</tr>
<tr>
<td>2009</td>
<td>1.33</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Alumni Survey Results (Composition)

<table>
<thead>
<tr>
<th>Year</th>
<th>Writing Effectively</th>
<th>Grammar Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>0.87</td>
<td>0.89</td>
</tr>
<tr>
<td>2010</td>
<td>0.87</td>
<td>0.90</td>
</tr>
<tr>
<td>2011</td>
<td>0.87</td>
<td>0.91</td>
</tr>
</tbody>
</table>

Faculty Survey Results (Composition)

<table>
<thead>
<tr>
<th>Year</th>
<th>Grammar</th>
<th>Organizing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0.79</td>
<td>0.79</td>
</tr>
<tr>
<td>2011</td>
<td>0.79</td>
<td>0.79</td>
</tr>
</tbody>
</table>

ETS Proficiency Profile Results (Writing)--Scaled Score

<table>
<thead>
<tr>
<th>Institution</th>
<th>Score Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binghamton</td>
<td>118.03</td>
</tr>
<tr>
<td>Other_Doctoral</td>
<td>114.77</td>
</tr>
</tbody>
</table>
Critical Thinking Assessment Factbook

This factbook is a dashboard containing assessment information for use by faculty, assessment category teams, staff, and administrators who wish to obtain information about the status of student learning in each area. The purpose of the factbook is to offer a snapshot of various assessments. Those who view the factbook are encouraged to review the varied information and to make conclusions with regard to how to enhance student learning. Throughout each year, the Office of Institutional Research & Assessment (OIRA) sponsors discussions with assessment category teams and groups of faculty to discuss what the information in the factbook means for student learning. If you would like to be included in such discussions (in case we missed you) please contact Sean McKitrick, Assistant Provost, at smckitri@binghamton.edu, or at x76938.

Variables

Rubric Scores

An evaluation of student papers using a rubric developed by SUNY faculty was used in this evaluation. The range of responses was a score of 1 for low proficiency and (the highest) of 4 to high proficiency. The graphs on the Factbook represent the results of the rubric assessment for 2007 and 2010 in the following areas: Target argument, appropriate conclusions, use of logic, use of reasoning, and argument development.

Senior Survey

Graduating seniors complete this survey right before they graduate. For this area, they are asked how well the institution prepared them to gathering and analyzing information. The results represent the proportion of seniors who answered “extremely well” to “moderately well.”

Faculty Survey

Faculty who teach courses in which 50% or more students are seniors are asked to complete this survey. Faculty are allowed to opt out of this question. The results represent the proportion of those faculty who report that students are anywhere from “moderately prepared” to “very


well prepared” on questions asking them to rate how well the institution taught them to gather and analyze information.

**Alumni Survey**

Alumni who graduated three years ago complete this survey (therefore the year 2011 in the bottom axis graduated in 2008). The results represent the proportion of those alumni who report that they were anywhere from “moderately prepared” to “very well prepared” on questions asking them to rate how well the institution taught them to gather and analyze information.

**Educational Testing Service (ETS) Proficiency Profile ©**

The Office of Institutional Research & Assessment administers this standardized exam to senior students who volunteer to take the test. The scaled score for Binghamton is compared to the scaled scores of all other seniors who took the test at other doctoral I and II institutions. The standard deviation was 2.30.
A review of the assessments provided by OIRA indicates that students, alumni, and internship supervisors generally agree that students receive an appropriate education in the areas of gathering, analyzing, and synthesizing information, and there is no doubt from these assessments that students are able to use information technology effectively. However, we note that faculty are not as satisfied with student performance in students' abilities to gather and analyze information. While students' thesis statements in papers appear to be satisfactory, we also note that some students might improve in organizing their papers. In broader perspective, it is unclear to us whether faculty clearly understand or are even aware of, the learning goals in critical thinking. It is also unclear to us if students have a general understanding of common reasoning errors.

**Critical Thinking Rubric Scores: Target Argument**

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>3.02</td>
<td>2.83</td>
</tr>
</tbody>
</table>

**Critical Thinking Rubric Scores: Use of Reasoning**

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>3.02</td>
<td>2.55</td>
</tr>
</tbody>
</table>

**Critical Thinking Rubric Scores: Appropriate Conclusions**

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>2.89</td>
<td>2.74</td>
</tr>
</tbody>
</table>

**Critical Thinking Rubric Scores: Use of Logic**

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>2.95</td>
<td>2.69</td>
</tr>
</tbody>
</table>

**Critical Thinking Rubric Scores: Argument Development**

<table>
<thead>
<tr>
<th>Year</th>
<th>2007</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>3.04</td>
<td>3.04</td>
</tr>
</tbody>
</table>

**Senior Survey Results: Gathering and Analyzing Information**

- Gather: 0.80, 0.82, 0.84, 0.86, 0.88, 0.90, 0.92, 0.94, 0.96, 0.98, 1.0
- Analyze: 0.80, 0.82, 0.84, 0.86, 0.88, 0.90, 0.92, 0.94, 0.96, 0.98, 1.0

General Education Assessment Factbook in Critical Thinking

Faculty Survey Results (Critical Thinking)

Year | Score
--- | ---
2010 | 75
2010 | 77
2011 | 79
2011 | 81
2011 | 83
2011 | 85

Academic Year | Score
--- | ---
2010 | 81
2010 | 83
2011 | 85
2011 | 87
2011 | 89
2011 | 91
2011 | 93
2011 | 95

Alumni Survey Results (Critical Thinking)

Year | Score
--- | ---
2010 | 90
2010 | 91
2011 | 92
2011 | 93
2011 | 94
2011 | 95

Academic Year | Score
--- | ---
2010 | 91
2010 | 93
2011 | 92
2011 | 94
2011 | 95
2011 | 97
2011 | 99

ETS Proficiency Profile (Critical Thinking)—Scaled Score

Institution | Score MEAN
--- | ---
Binghamton | 115.14
Other_Doctoral | 112.88
Foreign Language Assessment Factbook

This factbook is a dashboard containing assessment information for use by faculty, assessment category teams, staff, and administrators who wish to obtain information about the status of student learning in each area. The purpose of the factbook is to offer a snapshot of various assessments. Those who view the factbook are encouraged to review the varied information and to make conclusions with regard to how to enhance student learning. Throughout each year, the Office of Institutional Research & Assessment (OIRA) sponsors discussions with assessment category teams and groups of faculty to discuss what the information in the factbook means for student learning. If you would like to be included in such discussions (in case we missed you) please contact Sean McKitrick, Assistant Provost, at smckitri@binghamton.edu, or at x76938.

Variables and Information

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Portfolio Percentages: Percent Achieving or Exceeding Outcomes

As part of the general education assessment process, instructors submit course portfolios, which include estimates of the percentage of students who exceed, meet, approach, and do not meet expectations. The percentages in this graph represent the proportion of students who met or exceeded expectations. The “Report Due” axis represents when the latest (or next) ACT is due.

National Survey of Student Engagement

The NSSE is conducted once every three years. Students are asked whether or not they completed foreign language coursework. The results on the Factbook graph represent the proportion of seniors who have done so.
Senior Survey

Graduating seniors complete this survey right before they graduate. For this area, they are asked how well the institution prepared them to acquire basic proficiency in a foreign language. The results represent how many seniors answered “extremely well” to “moderately well” with regard to acquiring basic proficiency in a foreign language.

Faculty Survey

Faculty who teach courses in which 50% or more students are seniors are asked to complete this survey. Faculty are allowed to opt out of this question. The results represent the proportion of those faculty who report that students are anywhere from “moderately prepared” to “very well prepared” with regard to acquiring basic proficiency in a foreign language.

Alumni Survey

Alumni who graduated three years ago complete this survey (therefore the year 2011 in the bottom axis graduated in 2008). The results represent the proportion of those alumni who report that they were anywhere from “moderately prepared” to “very well prepared” with regard to acquiring basic proficiency in a foreign language.
...Submitted course syllabi show that these courses adopt standard language textbooks that are designed to guide students in the acquisition of basic proficiency in one year. Most syllabi demonstrate that instructors have a solid grasp of current practice in communicative language teaching and are aware of the various methodologies needed to assist students in meeting the learning goals. Students are given varied opportunities to meet these goals through a wide range of activities. Most instructors mention the following areas as problems for their teaching and for their students' learning: class sizes that are too large; the lack of comprehensive placement exams to evaluate students’ language proficiency and ensure that students are placed in the appropriate courses; the difficulty of working with heritage learners and disparate levels of preparation in the same class; problems with student preparation in the fundamentals of English grammar; and, the lack of a language lab on campus.

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**Percentage Achieving or Exceeding Outcomes**

- 2006: 75.33%
- 2009: 85.56%
- 2012: 86.27%

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**Alumni Survey Results: Language Proficiency**

- 2010: 0.64
- 2011: 0.49

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**Completed Foreign Language Coursework (NSSE)**

- 2007: 0.433
- 2008: 0.456

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**Faculty Survey Results: Language Proficiency**

- 2010: 0.64
- 2011: 0.49

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**Senior Survey Results: Language Proficiency**

- 2008: 37
- 2009: 49
- 2010: 44
- 2011: 60

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**Survey Year**

2006 2009 2012

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**Report Due**

2006 2009 2012
Global Interdependencies Assessment Factbook

This factbook is a dashboard containing assessment information for use by faculty, assessment category teams, staff, and administrators who wish to obtain information about the status of student learning in each area. The purpose of the factbook is to offer a snapshot of various assessments. Those who view the factbook are encouraged to review the varied information and to make conclusions with regard to how to enhance student learning. Throughout each year, the Office of Institutional Research & Assessment (OIRA) sponsors discussions with assessment category teams and groups of faculty to discuss what the information in the factbook means for student learning. If you would like to be included in such discussions (in case we missed you) please contact Sean McKitrick, Assistant Provost, at smckitri@binghamton.edu, or at x76938.

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Global Interdependencies (G) courses succeed in delivering the student learning outcomes for this general education category in varying degrees. There are broad spectra of subject matter, but a review of some syllabi suggests that a few instructors may not know what the student learning outcomes are for global interdependencies. Of the 13 course portfolios reviewed, about 2 to 3 contained syllabi that are quite explicit about how they address the student learning outcomes for global interdependencies (and in fact contain the student learning outcomes themselves), but 2 or 3 do not state the student learning outcomes at all. The remaining courses vary in their clarity with regard to explicitly stating the student learning outcomes for global interdependencies. Some courses address student learning with regard to students’ obtaining a knowledge of western and non-western societies, and others go beyond that and challenge students not only to “know” about western and non-western societies, but also to understand inter-relationships among such societies. We suspect that a few instructors who teach G courses believe that they need only address 1 or 2 of the student learning outcomes, instead of all of them, which is required of G courses. In general, student performance is satisfactory. A review of the syllabi and samples of student work found in the portfolios reveal that some courses challenge students to move beyond mere knowledge, yet a few courses do not appear to do this as much. It is also clear from a review of the syllabi that faculty teaching G courses want students taking these courses to move beyond the acquisition of subject mastery; faculty also want students to engage and grapple with issues having to do with interdependencies on a global scale—to negotiate the complexities of considering different points of view. This is a compliment to instructors teaching these courses at Binghamton University—instructors want students to move beyond the mere assemblage of knowledge, and to acquire an ability to critically engage issues having to do with the global interdependencies student learning outcomes.

Percentage Achieving or Exceeding Outcomes
Humanities Assessment Factbook

This factbook is a dashboard containing assessment information for use by faculty, assessment category teams, staff, and administrators who wish to obtain information about the status of student learning in each area. The purpose of the factbook is to offer a snapshot of various assessments. Those who view the factbook are encouraged to review the varied information and to make conclusions with regard to how to enhance student learning. Throughout each year, the Office of Institutional Research & Assessment (OIRA) sponsors discussions with assessment category teams and groups of faculty to discuss what the information in the factbook means for student learning. If you would like to be included in such discussions (in case we missed you) please contact Sean McKitrick, Assistant Provost, at smckitri@binghamton.edu, or at x76938.

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Senior Survey Results

Graduating seniors complete this survey right before they graduate. For this area, they are asked how well the institution prepared them to learn more about the human experience. The results represent how many seniors answered “extremely well” to “moderately well.”
Alumni Survey

Alumni who graduated three years ago complete this survey (therefore the year 2011 in the bottom axis graduated in 2008). The results represent the proportion of those alumni who report that they were anywhere from “moderately prepared” to “very well prepared.”

Faculty Survey

Faculty who teach courses in which 50% or more students are seniors are asked to complete this survey. Faculty are allowed to opt out of this question. The results represent the proportion of those faculty who report that students are anywhere from “moderately prepared” to “very well prepared.”

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The Office of Institutional Research & Assessment administers this standardized exam to senior students who volunteer to take the test. The scaled score for Binghamton is compared to the scaled scores of all other seniors who took the test at other doctoral I and II institutions. The standard deviation was 2.30.
In general, the portfolios demonstrate that a diverse range of courses are offered that fulfill the general education ‘H’/Humanities requirement. These courses provide students with an opportunity to engage with a variety of discourses in the humanities (primarily literature and philosophy according to the requirement description, which states: “Students in H courses will demonstrate an understanding of human experience through the study of literature or philosophy.”) at various levels of rigor, through different instructional styles, teaching methods and evaluative mechanisms (class discussions, homework assignments, essays, examinations). This is so, because the ‘H’ general education requirement allows for a diversity of intellectual pursuit on the campus. The very openness of the ‘H’ requirement is appropriate for the kinds of learning outcomes that studies in the humanities aim to achieve, chief among these the development of habits of mind that lead to intellectual reflection and conversation and to a critical engagement with cultural production that emerge from the great range and diversity of human experience.

### Percentage Achieving or Exceeding Outcomes

![Percentage Achieving or Exceeding Outcomes](image1)

### Faculty Survey Results: Human Experience

![Faculty Survey Results: Human Experience](image2)

### Senior Survey Results: Human Experience

![Senior Survey Results: Human Experience](image3)

### Alumni Survey Results: Human Experience

![Alumni Survey Results: Human Experience](image4)

### ETS Proficiency Profile Results--Scaled Scores

![ETS Proficiency Profile Results--Scaled Scores](image5)
Laboratory Science Assessment Factbook

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Every three years, assessment category teams (ACTs) consider assessments in each general education area and write report. The text under this heading contains the findings of the latest assessment category team report.

Portfolio Percentages: Percentage Achieving or Exceeding Expectations

As part of the general education assessment process, instructors submit course portfolios, which include estimates of the percentage of students who exceed, meet, approach, and do not meet expectations. The percentages in this graph represent the proportion of students who met or exceeded expectations. The “Report Due” axis represents when the latest (or next) ACT is due.

Senior Survey

Graduating seniors complete this survey right before they graduate. For this area, they are asked how well the institution prepared them use methods taught in the physical and biological sciences. The results represent how many seniors answered “extremely well” to “moderately well.”
Faculty Survey

Faculty who teach courses in which 50% or more students are seniors are asked to complete this survey. Faculty are allowed to opt out of this question. The results represent the proportion of those faculty who report that students are anywhere from “moderately prepared” to “very well prepared” prepared them use methods taught in the physical and biological sciences.

Alumni Survey

Alumni who graduated three years ago complete this survey (therefore the year 2011 in the bottom axis graduated in 2008). The results represent the proportion of those alumni who report that they were anywhere from “moderately prepared” to “very well prepared” with regard to how Binghamton prepared them use methods taught in the physical and biological sciences and to acquire knowledge about concepts in the physical and biological sciences.

Educational Testing Service (ETS) Proficiency Profile ©

The Office of Institutional Research & Assessment administers this standardized exam to senior students who volunteer to take the test. The scaled score for Binghamton is compared to the scaled scores of all other seniors who took the test at other doctoral I and II institutions. The standard deviation was 2.30.
After reviewing the syllabi, samples of student work, and other information, it is clear that L courses are geared toward teaching students the concepts and models specific to the science disciplines they are taking courses in, a specific strength that the ACT hopes will continue. A review of the portfolios and additional information also revealed the following in the opinion of the ACT: 1. There is a need for students to learn to think scientifically through revision; students need more practice using the scientific method and learning to write like scientists. Some students do not like being told that they have to revise the way they think (e.g., thinking through “scientific lenses,” through which they must evaluate information objectively), but L courses should continue to train students to do so; 2. There appears to be a general lack of preparedness in mathematics; 3. Students are acquiring an understanding of basic concepts and models in the sciences; 4. In many cases, students tend not to be prepared for labs, taking time away from essential instruction.
Mathematics-Reasoning Assessment Factbook

This factbook is a dashboard containing assessment information for use by faculty, assessment category teams, staff, and administrators who wish to obtain information about the status of student learning in each area. The purpose of the factbook is to offer a snapshot of various assessments. Those who view the factbook are encouraged to review the varied information and to make conclusions with regard to how to enhance student learning. Throughout each year, the Office of Institutional Research & Assessment (OIRA) sponsors discussions with assessment category teams and groups of faculty to discuss what the information in the factbook means for student learning. If you would like to be included in such discussions (in case we missed you) please contact Sean McKitrick, Assistant Provost, at smckitri@binghamton.edu, or at x76938.

Variables and Information

Assessment Category Team Findings

Every three years, assessment category teams (ACTs) consider assessments in each general education area and write report. The text under this heading contains the findings of the latest assessment category team report.

Portfolio Percentages: Instructor Estimates of Students Achieving Outcomes

As part of the general education assessment process, instructors submit course portfolios, which include estimates of the percentage of students who exceed, meet, approach, and do not meet expectations. The percentages in this graph represent the proportion of students who met or exceeded expectations. The “Report Due” axis represents when the latest (or next) ACT is due.

Rubric Scores

An evaluation of student papers using a rubric developed by SUNY faculty was used in this evaluation. The range of responses was a score of 1 for low proficiency and (the highest) of 4 to high proficiency. The graphs on the Factbook represent the various elements evaluated on the rubric: Interpreting information, representing information, employing methods, checking work, and recognizing limits.
National Survey of Student Engagement (NSSE) Results

The NSSE is applied once every three years. Students are asked the extent to which the institution they attended challenged them to analyzing quantitative information. The scale for this question is ‘0’ for ‘Very Little’ to ‘3’ for ‘Very much’.

Senior Survey

Graduating seniors complete this survey right before they graduate. For this area, they are asked how well the institution prepared them to applying mathematical information. The results represent the proportion of seniors who answered “extremely well” to “moderately well” to this question.

Faculty Survey

Faculty who teach courses in which 50% or more students are seniors are asked to complete this survey. Faculty are allowed to opt out of this question. The results represent the proportion of those faculty who report that students are anywhere from “moderately prepared” to “very well prepared” on a question about applying mathematical information.

Alumni Survey

Alumni who graduated three years ago complete this survey (therefore the year 2011 in the bottom axis graduated in 2008). The results represent the proportion of those alumni who report that they were anywhere from “moderately prepared” to “very well prepared” with regard to applying mathematical information.

Educational Testing Service (ETS) Proficiency Profile ©

The Office of Institutional Research & Assessment administers this standardized exam to senior students who volunteer to take the test. The scaled score for Binghamton is compared to the scaled scores of all other seniors who took the test at other doctoral I and II institutions. The standard deviation was 2.30.
For the most part, student learning appears appropriate to the student learning outcome in math/reasoning. Students also appear to achieve a level of competence for the many areas represented in the M general education category. 2007 and 2008 National Survey of Student Engagement (NSSE) data, faculty (open ended) survey information, portfolio reflective statements, and other survey data suggest that students are acquiring competence in these areas. However, a review of the samples of student work and instructor narrative statement found in the portfolios indicates that a significant minority of students need to improve their basic knowledge of algebra and trigonometry.

### Portfolios: Instructor Estimates of Students Achieving Outcomes

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2008</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>80.00</td>
<td>57.31</td>
<td>66.31</td>
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</table>

### Math Reasoning Rubric Scores: Employing Methods

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2010</th>
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<tbody>
<tr>
<td>Average</td>
<td>2.83</td>
<td>2.89</td>
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</table>

### Math Reasoning Rubric Scores: Interpreting Information

<table>
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<tr>
<th>Year</th>
<th>2008</th>
<th>2010</th>
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</thead>
<tbody>
<tr>
<td>Average</td>
<td>3.90</td>
<td>2.65</td>
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</table>

### Math Reasoning Rubric Scores: Representing

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>3.63</td>
<td>2.78</td>
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</table>

### Math Reasoning Rubric Scores: Checking Work

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>2.63</td>
<td>2.98</td>
</tr>
</tbody>
</table>

### Math Reasoning Rubric Scores: Recognizing Limits

<table>
<thead>
<tr>
<th>Year</th>
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</thead>
<tbody>
<tr>
<td>Average</td>
<td>2.17</td>
<td>3.14</td>
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</table>
NSSE Results (Math Reasoning)

ETS Proficiency Profile Results--Scaled Scores

Senior Survey Results (Math Reasoning)

Faculty Survey Results (Math Reasoning)

Alumni Survey Results (Math Reasoning)
Oral Communications Assessment Factbook

This factbook is a dashboard containing assessment information for use by faculty, assessment category teams, staff, and administrators who wish to obtain information about the status of student learning in each area. The purpose of the factbook is to offer a snapshot of various assessments. Those who view the factbook are encouraged to review the varied information and to make conclusions with regard to how to enhance student learning. Throughout each year, the Office of Institutional Research & Assessment (OIRA) sponsors discussions with assessment category teams and groups of faculty to discuss what the information in the factbook means for student learning. If you would like to be included in such discussions (in case we missed you) please contact Sean McKitrick, Assistant Provost, at smckitri@binghamton.edu, or at x76938.

Variables and Information

Assessment Category Team Findings

Every three years, assessment category teams (ACTs) consider assessments in each general education area and write a report. The text under this heading contains the findings of the latest assessment category team report.

Portfolio Percentages: Percent Achieving or Exceeding Outcomes

As part of the general education assessment process, instructors submit course portfolios, which include estimates of the percentage of students who exceed, meet, approach, and do not meet expectations. The percentages in this graph represent the proportion of students who met or exceeded expectations. The “Report Due” axis represents when the latest (or next) ACT is due.

National Survey of Student Engagement

The NSSE is conducted once every three years. Students are asked the extent to which the institution they contributed to their ability to speak clearly and effectively. The range of responses are from ‘1’ for ‘Very Little’ and ‘4’ for ‘Very Much’.
Senior Survey

Graduating seniors complete this survey right before they graduate. For this area, they are asked how well the institution prepared them to communicate orally. The results represent the proportion of seniors who answered “extremely well” to “moderately well.”

Faculty Survey

Faculty who teach courses in which 50% or more students are seniors are asked to complete this survey. Faculty are allowed to opt out of this question. The results represent the proportion of those faculty who report that students are anywhere from “moderately prepared” to “very well prepared.”

Alumni Survey

Alumni who graduated three years ago complete this survey (therefore the year 2011 in the bottom axis graduated in 2008). The results represent the proportion of those alumni who report that they were anywhere from “moderately prepared” to “very well prepared.”
Overall, the assessment information supplied to the ACT in oral communication indicates that students are obtaining oral communication skills as a result of taking O courses as part of their general education course of study at Binghamton University. Data from the National Survey of Student Engagement (especially data from seniors, with transfer students excluded from the analysis) indicates that over 50% of students are of the opinion that the institution does well in its efforts to teach them oral communication skills, and less than 10% of students are critical of the university’s efforts to teach them these skills. When compared to other state-sponsored institutions that participated in the 2008 NSSE, no difference is noted in student ratings of Binghamton University’s offering them opportunities to practice and perfect their oral communication skills. Data from the internship supervisor survey indicates that students perform well, although further analysis of these surveys reveals that student interns may be sensitive (even defensive) when their oral communication skills are critiqued. Information from the open-ended faculty surveys also indicates that faculty feel that students are obtaining oral communication skills as a result of taking O courses in their general education courses of study at the university. However, it is clear from a review of the course portfolios that students’ use of content in their oral presentations needs some improvement—a natural consequence when the delivery of the oral communication student learning outcomes is an afterthought. Students need more opportunities to self-critique, and to critique one another’s presentations. The data from the internship supervisor surveys, suggesting that students are sensitive about receiving such critiques from their supervisors, is symptomatic of this issue.

### Percentage Achieving or Exceeding Outcomes

<table>
<thead>
<tr>
<th>Year</th>
<th>Average</th>
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</thead>
<tbody>
<tr>
<td>2005</td>
<td>91.43</td>
</tr>
<tr>
<td>2008</td>
<td>84.08</td>
</tr>
<tr>
<td>2011</td>
<td>83.20</td>
</tr>
</tbody>
</table>

### Alumni Survey Results: Communication and Critique

<table>
<thead>
<tr>
<th>Year</th>
<th>Oral Comm</th>
<th>Critiquing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td>2011</td>
<td>89</td>
<td>88</td>
</tr>
</tbody>
</table>

### Speaking Clearly and Effectively (NSSE)

<table>
<thead>
<tr>
<th>Year</th>
<th>Speaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2.93</td>
</tr>
<tr>
<td>2008</td>
<td>2.93</td>
</tr>
</tbody>
</table>

### Faculty Survey Results: Oral Communication

<table>
<thead>
<tr>
<th>Year</th>
<th>Oral Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>.78</td>
</tr>
<tr>
<td>2011</td>
<td>.79</td>
</tr>
</tbody>
</table>

### Senior Survey Results: Communicating Orally

<table>
<thead>
<tr>
<th>Year</th>
<th>Oral Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>.94</td>
</tr>
<tr>
<td>2009</td>
<td>.84</td>
</tr>
<tr>
<td>2010</td>
<td>.87</td>
</tr>
<tr>
<td>2011</td>
<td>.94</td>
</tr>
</tbody>
</table>
Pluralism Assessment Factbook

This factbook is a dashboard containing assessment information for use by faculty, assessment category teams, staff, and administrators who wish to obtain information about the status of student learning in each area. The purpose of the factbook is to offer a snapshot of various assessments. Those who view the factbook are encouraged to review the varied information and to make conclusions with regard to how to enhance student learning. Throughout each year, the Office of Institutional Research & Assessment (OIRA) sponsors discussions with assessment category teams and groups of faculty to discuss what the information in the factbook means for student learning. If you would like to be included in such discussions (in case we missed you) please contact Sean McKitrick, Assistant Provost, at smckitri@binghamton.edu, or at x76938.

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Portfolio Percentages: Percent Achieving or Exceeding Outcomes

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Senior Survey

Graduating seniors complete this survey right before they graduate. For this area, they are asked how well the institution prepared them to understand content specific to pluralism and how well the institution prepared them to work with others who are different than they are and acquiring a knowledge of other cultures. The results represent how many seniors answered “extremely well” to “moderately well.”
Faculty Survey

Faculty who teach courses in which 50% or more students are seniors are asked to complete this survey. Faculty are allowed to opt out of this question. The results represent the proportion of those faculty who report that students are anywhere from “moderately prepared” to “very well prepared” on two questions: Developing a respect for other cultures and working with others who are different than they are.

National Survey of Student Engagement (NSSE) Results

The NSSE is applied once every three years. Students are asked the extent to which the institution they attended enabled them to have conversations with students who are different than they are. The results on this graph are the results for senior students. The scale ranges from 0 for “Never” to 3 for “Always.”

Alumni Survey

Alumni who graduated three years ago complete this survey (therefore the year 2011 in the bottom axis graduated in 2008). The results represent the proportion of those alumni who report that they were anywhere from “moderately prepared” to “very well prepared” with regard to working with others who are different than they are.
Office of Institutional Research & Assessment

General Education Assessment Factbook in Pluralism

Assessment Category Team Report Findings

...The course portfolios indicate that students appear to gain exposure to different points of view. The 2007 and 2008 senior results of the National Survey of Student Engagement (NSSE) demonstrate that senior students are receiving exposure to different points of view—in fact the 2008 results indicate that the results for questions items 1u, "had serious conversations with students of a different race or ethnicity than your own," and 1v, "had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values," are significantly higher than seniors at other geographical peers, BU peers, and all other institutions that participated in the 2008 NSSE. For first-year students, the 2008 NSSE results on the above-stated questions indicate good performance, but on question 10(c), "encouraging contact among students from different economic, social, and ethnic backgrounds," first-year students at Binghamton tend to score lower than first-year students of BU’s geographical peers, Binghamton University peers, national peers, but this may be due to the geographical nature of students who attend Binghamton for the first time. ACT members were somewhat concerned that the student learning outcomes for pluralism might be increasingly difficult to achieve if student-faculty ratios increase, and as the university takes in more international students. As student-faculty ratios increase in the future, there is some concern that fewer seats might be available in P courses given the demands to meet both general education and major requirements. Fewer faculty might also translate into a less diverse faculty whose research interests might lend themselves to pluralism-like courses. In future years, it will be important to pay attention not only to supporting the language needs of international students (who will continue to lend a great deal of diversity to the campus in their own right), but also to pay attention to the number and quality of P courses offered to students so that the average Binghamton University can continue to obtain higher levels of cultural fluency.

Percentage Achieving or Exceeding Outcomes

Alumni Survey Results: Pluralism and Working with Others

Faculty Survey Results: Cultural Respect and Working with Others

Senior Survey Results: Pluralism and Working with Others
Social Science Assessment Factbook

This factbook is a dashboard containing assessment information for use by faculty, assessment category teams, staff, and administrators who wish to obtain information about the status of student learning in each area. The purpose of the factbook is to offer a snapshot of various assessments. Those who view the factbook are encouraged to review the varied information and to make conclusions with regard to how to enhance student learning. Throughout each year, the Office of Institutional Research & Assessment (OIRA) sponsors discussions with assessment category teams and groups of faculty to discuss what the information in the factbook means for student learning. If you would like to be included in such discussions (in case we missed you) please contact Sean McKitrick, Assistant Provost, at smckitri@binghamton.edu, or at x76938.

Variables and Information

Assessment Category Team Findings

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Portfolio Percentages: Percentage Achieving or Exceeding Outcomes

As part of the general education assessment process, instructors submit course portfolios, which include estimates of the percentage of students who exceed, meet, approach, and do not meet expectations. The percentages in this graph represent the proportion of students who met or exceeded expectations. The “Report Due” axis represents when the latest (or next) ACT is due.

Alumni Survey

Alumni who graduated three years ago complete this survey (therefore the year 2011 in the bottom axis graduated in 2008). The results represent the proportion of those alumni who report that they were anywhere from “moderately prepared” to “very well prepared.”
Educational Testing Service (ETS) Proficiency Profile ©

The Office of Institutional Research & Assessment administers this standardized exam to senior students who volunteer to take the test. The scaled score for Binghamton is compared to the scaled scores of all other seniors who took the test at other doctoral I and II institutions. The standard deviation was 2.30.
...Students taking social science courses as a consequence of the university’s social science requirement are clearly being challenged to link concepts to evidence. This linkage is part of the university’s learning outcomes relating to critical thinking, and we are pleased to note that social science courses are facilitating students’ achieving those outcomes. A deeper issue pertains to students’ acquiring a level of confidence that enables them to continue to link concepts to evidence in ways that are appropriate to what we expect good critical thinkers to do—evaluating various (sometimes competing) arguments, recognizing limitations in their own and others’, arguments, etc. As we stress above, students are achieving the two learning goals in the social sciences, but the university might want to continue stressing connections between the social science and critical thinking student learning outcomes. We express some concern about an apparent difference in the abilities of native and non-native English speakers in social science courses. University staff, faculty, and administrators might want to continue looking into the issue, as we recognize that some efforts are already underway to do so.

Percentage Achieving or Exceeding Outcomes

Alumni Survey: Methods and Content

ETS Proficiency Profile Results--Scaled Scores