Achievement-Centered Education (ACE) was created and approved by UNL faculty in 2008 to offer all UNL students a general education program that answers the fundamental question, "What should all undergraduate students—irrespective of their majors and career aspirations—know or be able to do upon graduation?" Implemented in fall 2009, the ACE curriculum features 10 assessable student-learning outcomes designed to help students develop skills, build knowledge, exercise social responsibility, and integrate and apply these capabilities. ACE has made substantial progress toward fundamental goals of creating a curriculum that is coherent, transparent, flexible, and student-centered. In particular,

- ACE is transferable across all eight UNL undergraduate colleges.
- ACE course syllabi explicitly articulate expectations for learning outcomes and which assignments help them achieve mastery.
- ACE integrates general education courses with students' major interests, particularly with ACE 10, which requires a scholarly integrative project.

A second key feature of ACE is the assessment and recertification process for all ACE courses. These recertification and assessments processes are designed to ensure that the courses stay true to the outcomes for which they are certified and that they are continuously and intentionally examined to search for ways to improve student mastery of those outcomes. All units that propose and teach ACE courses commit to collecting and assessing student work produced in these courses. Instructors collect assessment data continuously and report on ACE course assessment every five years on a staggered, rotating schedule.

Organizationally, the ACE governing documents assign oversight responsibility for ACE curriculum and assessment to two groups: 1) the University Undergraduate Curriculum Committee (UCC), which is responsible for ACE course certification and recertification and 2) the University-wide Assessment Committee, which reviews department ACE assessment reports. As of spring 2014, UNL instructors completed four cycles of assessment representing 480 courses (some courses for two outcomes), completing the first full rotation of assessment for all ACE courses:

2011-12: Assessed 3 outcomes (ACE 1, 2, 3) representing 92 courses from 16 units
2012-13: Assessed 3 outcomes (ACE 4, 6 & 7) representing 165 courses from 42 units
2013-14: Assessed 2 outcomes (ACE 5 & 9) representing 223 courses from 35 units
2014-15: Assessed 2 outcomes (ACE 8 & 10) representing 210 courses from 89 units

The UCC has gathered feedback from faculty, including the Academic Senate, regarding the ACE 4 governing document, which outlines governing principles and procedures for assessment and recertification. As a result during AY 2013-14, the UCC reviewed and clarified expectations and guidelines for ACE assessment processes. These revisions were completed in May 2014 and shared with the University community.

UWAC members, charged by the ACE governing documents with setting the assessment schedule for general education, established that Year 5 of the assessment process (AY 2015-16) should focus on reviewing the ACE program. This penultimate evaluation year is critical because it helps answer faculty questions about the value of their efforts and provides direction for the future. Both the curriculum and the assessment processes have been reviewed. The purpose of this review is to learn what we can about the impact of ACE and use our understanding to improve opportunities for student learning. As part of this process, Undergraduate Education Programs (UEP) collected and examined data regarding the operational side of ACE courses and curriculum to answer the following questions:

Both curriculum and assessment processes have been reviewed. As part of this process, data regarding the operational side of ACE courses and curriculum were used to answer questions such as these:

- Which ACE courses are students using/not using? By outcome? Are they available?
- What are percentages of ACE credit hours offered by college and department?
- Are there differences in terms of students’ time to degree rates before/after ACE?
- How much general education credit is being transferred from external institutions?
Other work includes analyzing trends, themes, and issues raised from the four cycles of ACE assessment reporting. The “ACE Learning from Assessment: 2014 Update” (available at http://ace.unl.edu/ACE%20Report%202014%20.pdf) and content analyses of assessment reports form the core of this work.

In an effort look ahead and improve ACE, faculty groups formed around each of the 10 ACE outcomes to revise the wording of outcomes if necessary and to create rubrics that would help faculty in their assessment efforts.

ACE from an Institutional Perspective: 2009-2015

How much ACE credit does each college produce by course, by enrollment?

See graphs below
By course:

When the ACE program was developed, a key component was that any department could offer any ACE course as long as it met the outcome. Previously, the College of Arts & Sciences (CAS) contributed the most courses to the comprehensive education program. CAS still provides the bulk of the ACE general education courses. The College of Arts & Sciences produces more than half of the courses for ACE, with other colleges sharing the load. The percentages of courses offered by each college have remained stable since 2010.
By enrollment:

Recognizing that simply looking at the number of courses could mask the impact of ACE as some large courses could contribute significantly to enrollment. For example, a large course with an enrollment of 200 would have more impact than a smaller ACE course with 20 students. An analysis of ACE credit by enrollment, also shows students take more ACE credit in the College of Arts & Sciences than other colleges. Tracking enrollment over time show that the percentage of students in ACE courses by college varies some from year to year, but overall, the numbers are relatively unchanged.
Does ACE impact time to graduation?

According to the UNL Fact Book 2015-16, student graduation rates of first-time, full-time freshmen have risen since ACE was instituted (four-year rate rose from 33.0 in 2009 to 38.8% for the first year cohort of 2011; five-year rate rose from 61.6 in 2009 to 62.2% in 2010; six-year rates are at 67%, the highest they’ve ever been). While ACE may have contributed to this rise, it is not possible to assign causality as other factors may have also contributed (i.e., Board of Regents mandated a maximum 120-hour credit for degrees; UNL offered 4-year plans in the Undergraduate Bulletin; advising efforts around this issue intensified).

What ACE courses are being used most/ least by students?

This information is being distributed to associate deans of their respective colleges to share with departments and help them in their planning and decision-making.

What ACE courses do first time freshman transfer when they enter?

Transfer credit is an important issue on our campus. Data are complicated to extract (e.g., defining transfer, which course fulfills ACE requirement, etc.) At present, it appears that almost half (44.6%) of first-time freshmen (4,628) enter with some ACE transfer credit. About 14.7% of first-time freshmen transfer AP/IB credit to UNL that fulfills an ACE requirement. Nearly a third of students (29.9%) present other credit for transfer (including dual credit courses that were taken through other institutions during high school and credits earned at community colleges). Further analysis is ongoing.

Are ACE courses available when needed? (NSE and beyond)

At this time we have no good way to match the student preferences for ACE courses with the actual enrollment. Office of the University Registrar has created course demand reports and communicates with associate deans regularly. Pat McBride and Jenni Brost from NSE monitor course availability closely and do not report any systemic, on-going problems. James Volkmer in Academic Services and Enrollment Management, also tracks availability of all courses, including ACE in his demand analysis reports.

Key Findings from the 5-Year Review Using Institutional Data

- The College of Arts & Sciences has the most ACE courses produces the most credit hours. All other colleges participate. The numbers have stayed relatively stable over time.
- Students are able to fulfill requirements, but we’re not sure if they enroll in the classes they want.
- ACE is probably a contributing factor to reducing time to degree; however, other factors such as a mandatory 120 credit-hour degree went into effect at the same time, making it difficult to assign causality.
- Transfer credit is an important issue on our campus. Almost half (44.6%) of first-time freshmen (4,628) enter with some ACE transfer credit.

Key Findings Related to Course Assessment

Assessment efforts have lead to curricular and program changes. Across the institution, faculty found weaknesses to address, particularly in writing and research skills. These areas will be addressed in the future. They also found strengths, particularly evidence that students were meeting parts or the entire outcome being assessed. Instructors value the opportunity to share findings and best practices and involve communities of support. One example, a department established a system-wide collaboration with UNO to offer a joint exhibition. Assessments reports were not always focused on the ACE outcome, even though faculty members were doing some evaluation. Confusion about the differences between recertification and assessment called for simplification to the processes that had been established when ACE was initially implemented.
### Changes Implemented to ACE

- Simplified recertification process to dispel confusion about reporting and enhance the focus on assessment of learning
- Organized faculty teams to review the language for each outcome and recommend any changes to University Curriculum Committee’s ACE subcommittee. The faculty teams also created rubrics to help faculty know what criteria to focus on when they are doing assessment and make assessment more meaningful.
- Implementing new software, Tk20, which should make assessment easier for faculty. Tk20 will allow faculty to identify student work and use the rubrics faculty teams developed for each ACE outcome to gauge student progress toward learning toward the outcome. It will also facilitate reporting as student work can be used for multiple assessment purposes (course, program, professional accreditation). Faculty will be offered opportunities to learn this software in April 2016.
- Revising ACE and assessment websites
- Set schedule for course program assessment with the University-wide Assessment Committee

### Assessment Schedule

<table>
<thead>
<tr>
<th>ACE Assessment Year</th>
<th>Biennial Program Assessment Year</th>
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<tbody>
<tr>
<td>1, 2, 3</td>
<td>2016-17</td>
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<tr>
<td>10</td>
<td>2019-20</td>
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<tr>
<td>ACE PROGRAM REVIEW</td>
<td>2020-21</td>
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<td>2021-22</td>
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Approved by University-wide Assessment Committee Jan. 27, 2016

- Content analysis of ACE 10 assessment reports indicates that across the institution our students struggle with writing and research. Making recommendations for university discussion
- University Curriculum ACE Subcommittee reviewed and made recommendations (as needed) to processes and assessment for Honors Program courses; and co-curricular, Education Abroad and Veterans options for ACE credit.
- Analyzed ACE data to see what impact ACE has had. Will share with Faculty Senate Feb. 2 and campus via web and report
- Obtaining feedback from students and advisors and will develop recommendations from this process. (Spring 2016)

### ACE Outcomes (Current and Revised)

**ACE 1** Write texts, in various forms, with an identified purpose, that respond to specific audience needs, incorporate research or existing knowledge, and use applicable documentation and appropriate conventions of format and structure.

**ACE 1 (Revised)** - Write texts, in various forms, with an identified purpose, that respond to specific audience needs, integrate research or existing knowledge, and use applicable documentation and appropriate conventions of format and structure.

**ACE 2 (Current)** - Demonstrate communication competence in one or more of the following ways:

- by making oral presentations with supporting materials,
- by leading and participating in problem-solving teams,
- by employing a repertoire of communication skills for developing and maintaining professional and personal relationships, or
- by creating and interpreting visual information.

**ACE 2 (Revised)** - Demonstrate competence in communication skills in one or more of the following ways:

- by making oral presentations with supporting materials,
- by leading and participating in problem-solving teams,
c. by employing communication skills for developing and maintaining professional and personal relationships, or
d. by producing and/or interpreting visual information.

ACE 3 (Current) - Use mathematical, computational, statistical, or formal reasoning (including reasoning based on principles of logic) to solve problems, draw inferences, and determine reasonableness.

ACE 3 (Revised) - Use mathematical, computational, statistical, logical, or other formal reasoning to solve problems, draw inferences, justify conclusions, and determine reasonableness.

ACE 4 (Current) - Use scientific methods and knowledge of the natural and physical world to address problems through inquiry, interpretation, analysis, and the making of inferences from data, to determine whether conclusions or solutions are reasonable.

ACE 4 (Revised) - Use scientific methods and knowledge to pose questions, frame hypotheses, interpret data, and evaluate whether conclusions about the natural and physical world are reasonable.

ACE 5 (No change) - Use knowledge, historical perspectives, analysis, interpretation, critical evaluation, and the standards of evidence appropriate to the humanities to address problems and issues.

ACE 6 (Current) - Use knowledge, theories, methods, and historical perspectives appropriate to the social sciences to understand and evaluate human behavior.

ACE 6 (Proposed) - Use knowledge, theories, and research perspectives, such as statistical methods or observational accounts, appropriate to the social sciences to understand and evaluate social systems or human behaviors.

ACE 6 (Revised) - Use knowledge, theories, and research methods appropriate to the social sciences to understand and evaluate social systems or human behaviors.

ACE 7 (No Change) – Use knowledge, theories, or methods appropriate to the arts to understand their context and significance.

ACE 8 (Current) - Explain ethical principles, civics, and stewardship, and their importance in society.

ACE 8 (Revised) Use knowledge, theories and analysis to explain ethical principles and their importance in society.

ACE 9 (Current) - Exhibit global awareness or knowledge of human diversity through analysis of an issue.

ACE 9 (Revised) - Demonstrate knowledge of human or global diversity through analysis of an issue.

ACE 10 (No Change) - Generate a creative or scholarly product that requires broad knowledge, appropriate technical proficiency, information collection, synthesis, interpretation, presentation, and reflection.

ACE outcomes reviewed and approved by ACE faculty review groups, University Curriculum Committee, and University-wide Assessment Committee January 29, 2016

Feb. 16, 2016