

**Report on the Assessment of Student Learning
University of Kansas
May 23, 2014**

Background

The third goal of Foresight 2020 is to *Improve Economic Alignment*. The first aspiration under that goal is to “meet business and industry expectations for core workplace skills in mathematic/analytical reasoning, communication and problem solving.” The measure of that aspiration is a report on the assessment of student performance in the following three areas:

1. Mathematics/quantitative/analytical reasoning;
2. Written and oral communication; and
3. Critical thinking/problem solving.

System institutions use various mechanisms to assess the student learning in these three areas. These initial results will provide a baseline for annually reporting to the Board on each college and university’s assessment of the learning of its students.

KU Background

Student achievement at the University of Kansas is measured using locally developed mechanisms. Standardized national tests also have been piloted for possible use. All assessment activities provide the institution with performance information about one or more of the KU Core Goals.

| | KU Core Goals (adopted 2012) | Alignment to Regents Reports on the Assessment of Student Learning |
|--------------------------------|--|--|
| General Education Goals | Build core skills of Critical Thinking and Quantitative Literacy | <i>Mathematics/quantitative/analytical reasoning</i> <i>Critical thinking/problem solving</i> |
| | Strengthen Written and Oral Communication | <i>Written and oral communication</i> |
| | Develop a Background of Knowledge | |
| Advanced Education Goals | Respect Human Diversity and Expand Cultural Understanding and Global Awareness | |
| | Practice Social Responsibility and Demonstrate Ethical Behavior | |
| | Gain the Ability to Integrate Knowledge and Think Creatively | |

The historical assessment of General Education was a locally developed assessment activity that was conducted regularly between 1991 and 2012. Faculty members conducted interviews with graduating seniors to determine how the institution met the goals of general education. In addition, students completed a self-assessment in order to reflect on their experience with general education.

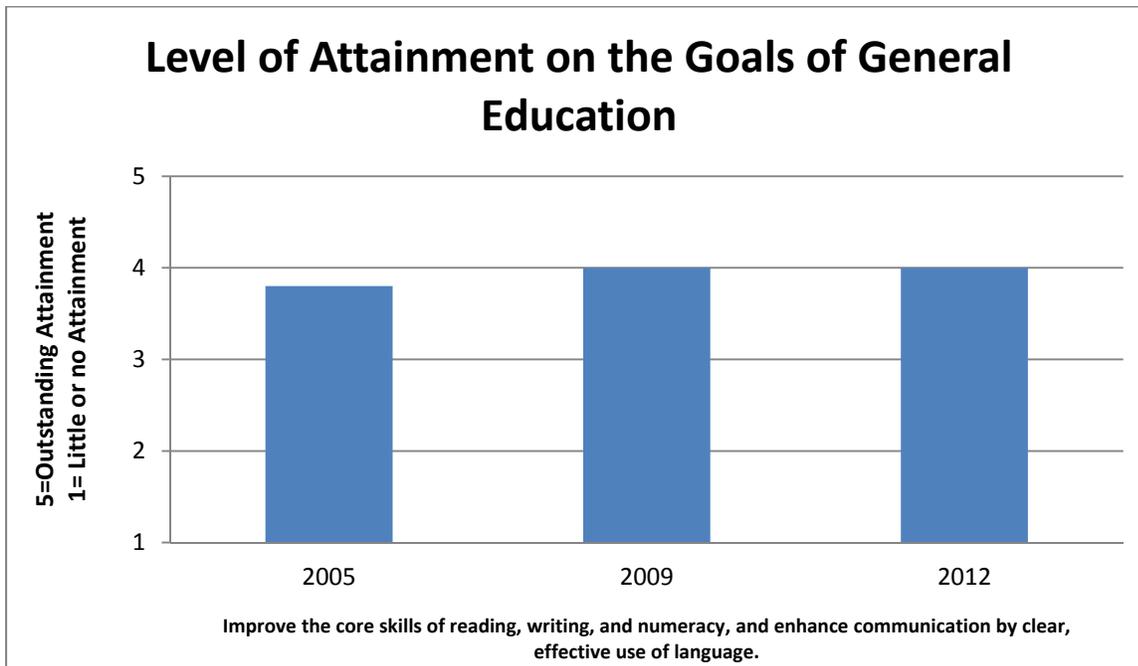
The findings of the Assessment of General Education provided the fundamental basis for the revision of KU's general education goals and the development of the KU Core. The KU Core is organized around the KU Core goals listed above and a curriculum to support the goals began in the Fall of 2013. Departments nominate courses that are designed to address the KU Core goals and the learning outcomes defined for each goal. For a course to be accepted into the KU Core, departments must provide assessment plans that clearly show how students will be assessed as meeting the KU Core goal.

KU Outcomes

The KU Senior Survey assesses the level of student satisfaction on a broad range of university experiences. The survey is administered to seniors during their spring term and has been conducted eleven times since 1977. The Senior Survey was developed as part of a project at the six Kansas Board of Regents universities to measure the level of student satisfaction with the university experience.

The Senior Survey specifically asks all graduating seniors about their level of attainment on the Goals of General Education. The chart below displays the data relative to the Goals of General Education that were adopted in 2004. In 2016, the Senior Survey will be updated to ask graduating seniors about their attainment of the KU Core Goals.

The Senior Survey was historically administered every four years. Starting in 2012, the Senior Survey is being administered every two years. Additional information about the Senior Survey can be found at <http://www.oirp.ku.edu/SeniorSurvey/ss2012/index.shtml>.

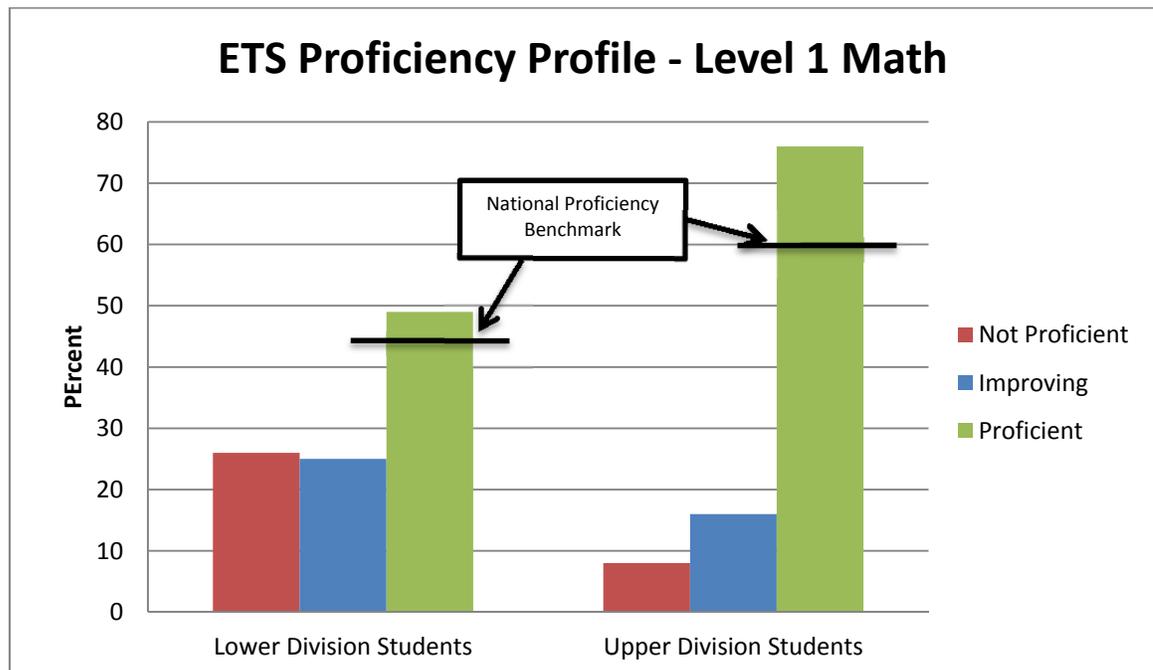


1. Mathematics/quantitative/analytical reasoning

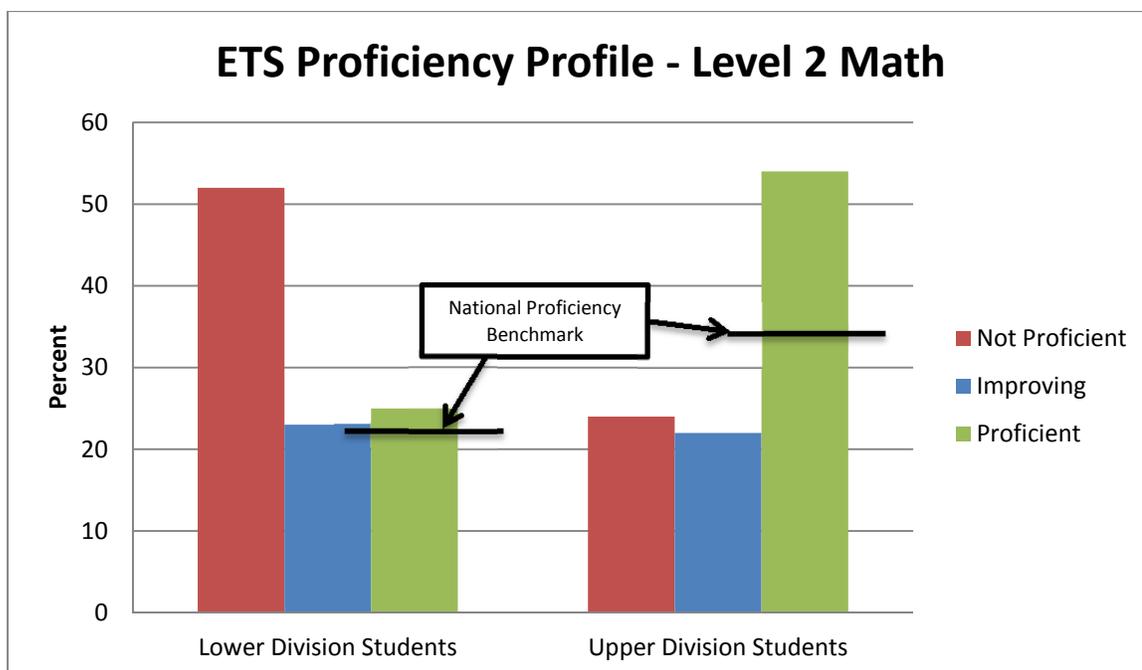
Assessment Mechanism(s): ETS Proficiency Profile Pilot

Commentary: The ETS Proficiency Profile (ETS PP) is a nationally-normed test that assesses student performance in four core skill areas – critical thinking, reading, writing, and mathematics. Over 500 institutions across the country participate in the test and performance can be compared to more than 550,000 students nationwide.

Student Learning Outcomes:



Note: For a description of the proficiency levels, see Appendix 1.



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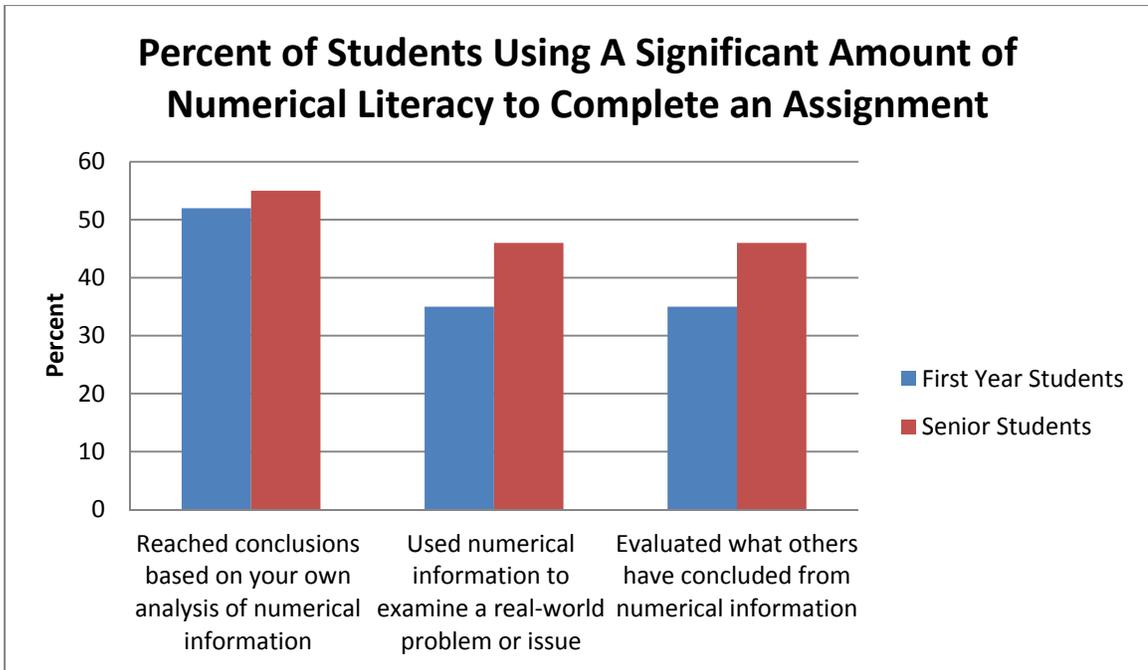
Approach & Timeline – To establish a baseline, senior students who participated in the Spring 2012 Assessment of General Education were also asked to complete ETS Proficiency Profile. Lower-division students, mostly freshmen and sophomores, were also asked to complete the ETS Proficiency Profile during a large section class.

Sampling – During the baseline study, approximately 100 senior students (upper division students) and ~200 freshmen and sophomores (lower division students) were assessed.

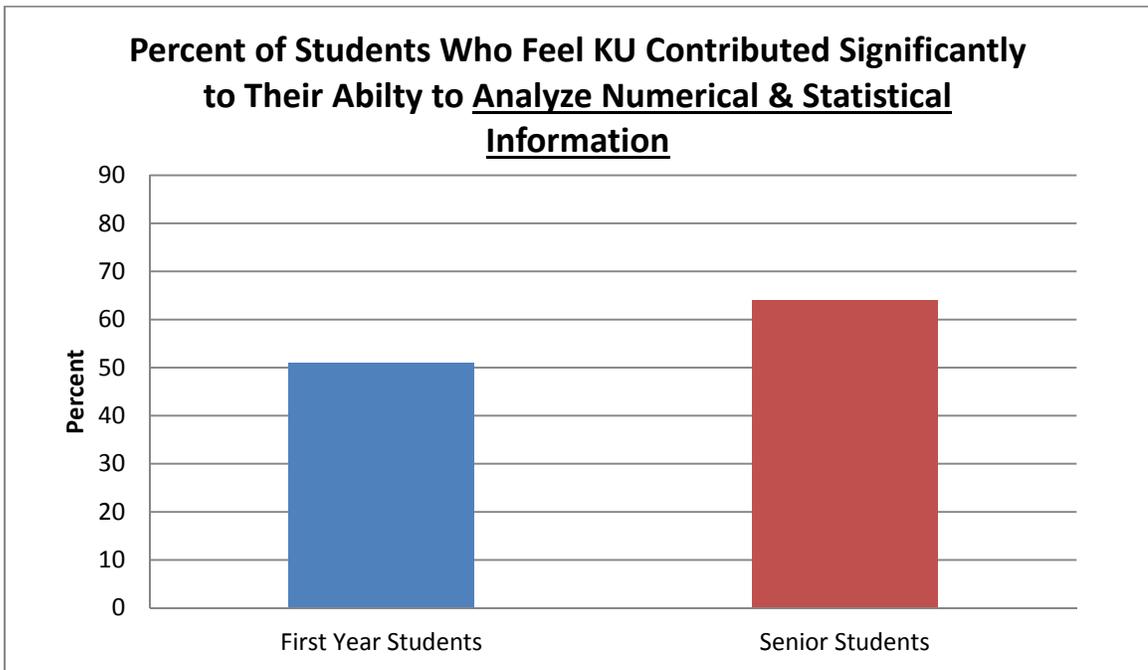
Next steps – Using the baseline data, it was determined that the ETS Proficiency Profile may not be well suited to assessing lower-division student achievement of general education outcomes since many lower-division students do not complete their Math-related studies in the first two years at KU. However, it may be appropriate to assess Math-related skills at the senior level.

Assessment Mechanism(s): National Survey of Student Engagement (NSSE)

Commentary: The NSSE annually collects information at hundreds of four-year colleges and universities about student participation in programs and activities that institutions provide for their learning and personal development. The results provide a self-reported estimate of how undergraduates spend their time and what they gain from attending college.



Note: For more detail, see Appendix 2.



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Approach and Timeline: The National Survey of Student Engagement has been administered at KU every three years since 2001. The Survey is administered in the Spring semester. KU was selected to participate in the DEEP project (2002-2003) that assembled case studies of 20 colleges and universities that had both higher-than-predicted scores on five benchmarks of effective educational practice and higher-than-expected graduation rates. The results of the

entire DEEP project are described in the book Student Success in College. Additional information about the NSSE can be found at <http://www.oirp.ku.edu/NSSE/index.shtml>.

Sampling – All first-year and senior students were asked to participate in the 2010 and 2013 administrations of the Survey. Over five administrations of the survey, the overall response rate has been approximately 25%.

Next Steps – KU is currently reviewing and sharing data from the 2013 administration cycle with departments across campus.

2. Written and oral communication

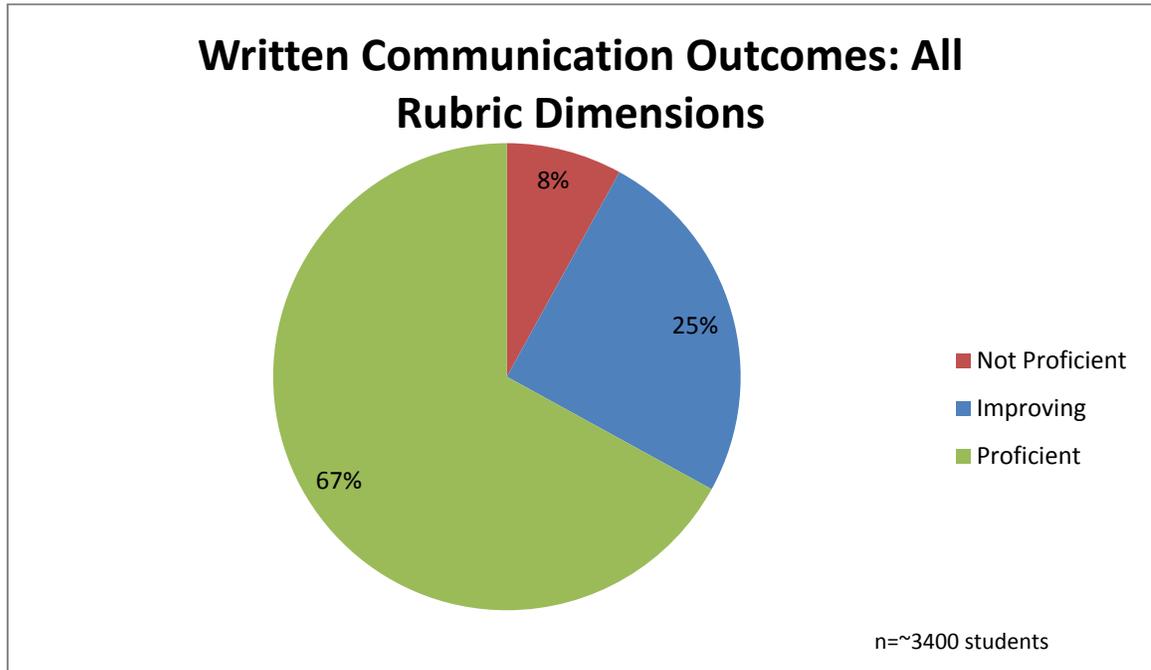
Written Communication

Assessment Mechanism(s): AAC&U Written Communication VALUE Rubrics

Commentary: Written communication is evaluated across all undergraduate departments. Student work is evaluated by faculty using VALUE Rubrics (Valid Assessment of Learning in Undergraduate Education) developed by the Association of American Colleges and Universities (AAC&U). The rubrics were developed nationally by diverse teams of faculty and other academic and student affairs professionals from a wide range of institutions. The assessment of written communication using the VALUE rubrics has been conducted since 2011. Sixty-four departments have participated in this process. First-year seminars also assess and provide feedback on student work using the AAC&U Written Communication VALUE Rubric. An example of the AAC&U VALUE Rubric can be found in Appendix 3.

Additionally, the ETS proficiency profile and the National Survey of Student Engagement (NSSE) collect information about written communication outcomes.

Student Learning Outcomes:



Note: The Written Communication VALUE Rubric can be found in Appendix 3.

Timeline – Assessment of Undergraduate Written Communication began in the Fall 2011.

Sampling – Each semester, large departments (those with 85 or more majors) were asked to identify two courses to participate in the assessment. Smaller departments (with 85 or fewer

majors) were asked to identify one course to participate. Regardless of the size of the course, a sampling of no more than 22 students per course is suggested.

Approach – In the fall of 2011, all departments offering undergraduate degrees were asked to develop a rubric to assess written communication. The AAC&U Written Communication VALUE Rubric was suggested as the model. About 60% of the departments used the AAC&U VALUE Rubric without making any changes or making only minor changes. The other 40% of departments developed their own rubrics for assessing written communication.

At the beginning of each semester, departments identify the courses to be assessed as well as a primary and secondary reader who will assess each student artifact. Departments are free to select a course(s) that they feel can provide an accurate representation of the impact of written communication instruction for the department. The department also chooses which assignment in a course to use for the assessment.

The primary and secondary readers read each student artifact and record their scores in an online system. Scores are aggregated and reported back to the department in order to make curricular changes.

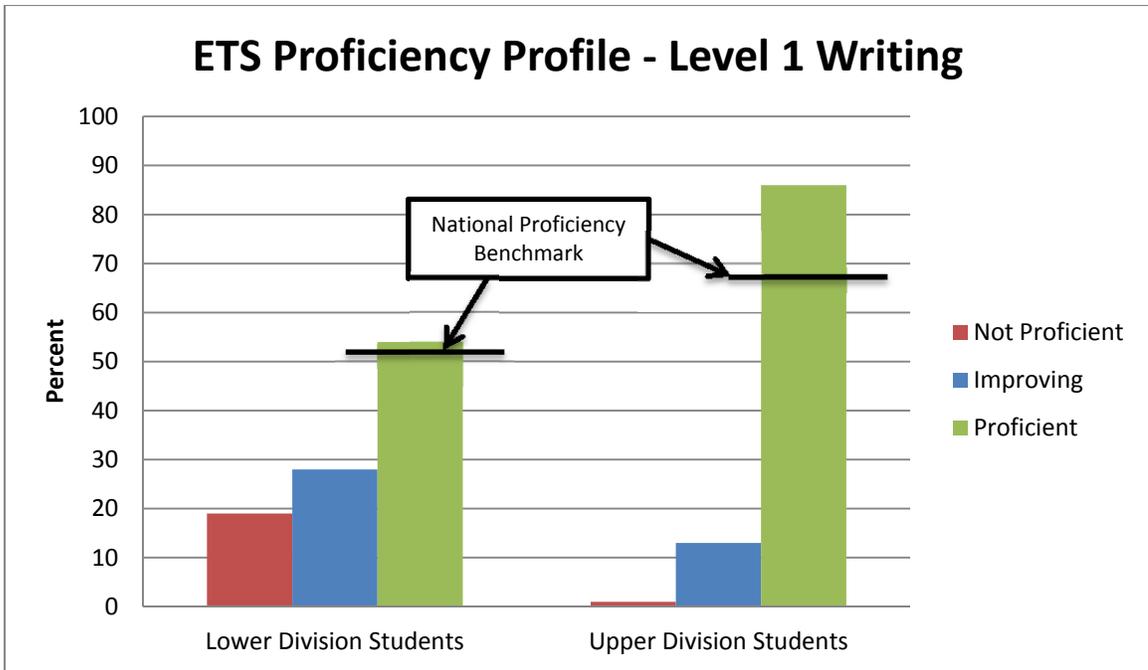
To date, there have been approximately 30,000 data elements collected about written communication.

Next Steps – With the implementation of the KU Core, courses identified to meet the Written Communication Learning Outcome will primarily be responsible for assessing written communication. Departments will still be encouraged to assess written communication at the major level (i.e., in upper-division courses) as a part of their degree-level assessment plans.

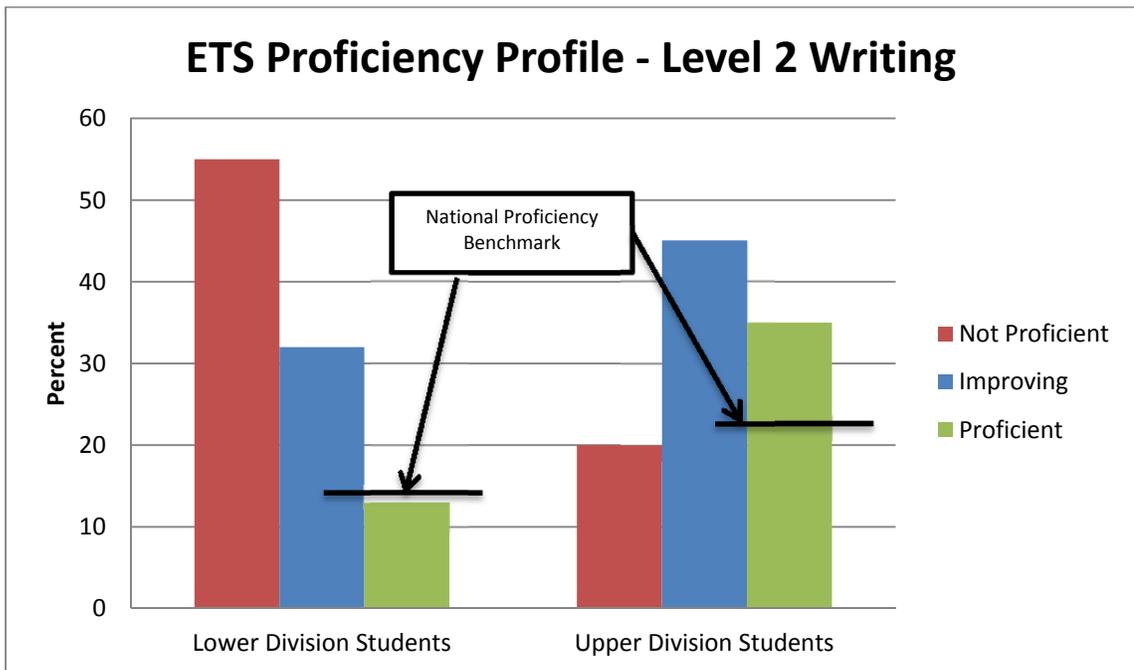
Each department has a “departmental assessment dashboard” that provides real-time access to their results. This encourages one of the best practices of assessment of student learning — that faculty use the assessment information to consider curricular changes that will improve student learning.

Assessment Mechanism(s): ETS Proficiency Profile

Commentary: The ETS Proficiency Profile (ETS PP) is a nationally-normed test that assesses student performance in four core skill areas – critical thinking, reading, writing, and mathematics. Over 500 institutions across the country participate in the test and performance can be compared to more than 550,000 students nationwide.



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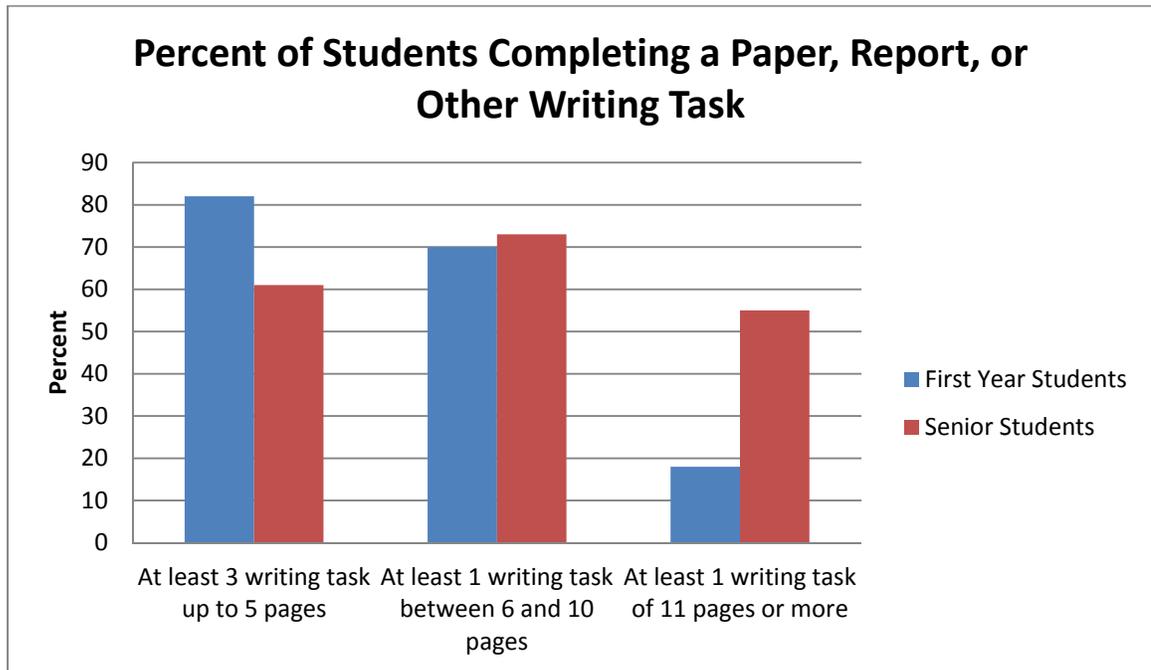
Approach & Timeline – To establish a baseline, senior students who participated in the Spring 2012 Assessment of General Education were also asked to complete ETS Proficiency Profile. Lower-division students, mostly freshmen and sophomores, were also asked to complete the ETS Proficiency Profile during a large section class.

Sampling – During the baseline study, approximately 100 senior students (upper division students) and ~200 freshmen and sophomores (lower division students) were assessed.

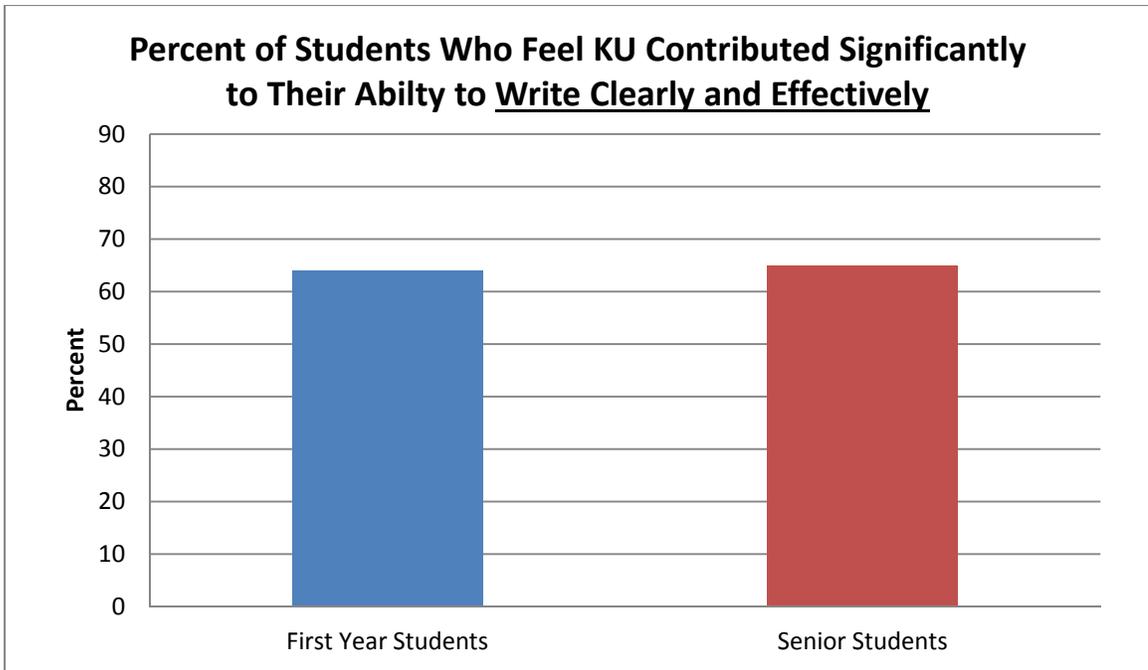
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Commentary: The NSSE annually collects information at hundreds of four-year colleges and universities about student participation in programs and activities that institutions provide for their learning and personal development. The results provide an estimate of how undergraduates spend their time and what they gain from attending college.



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Approach & Timeline – The National Survey of Student Engagement is administered to first year and senior students every three years. The survey is deployed in the spring semester and asks students to reflect on their experience in that academic year.

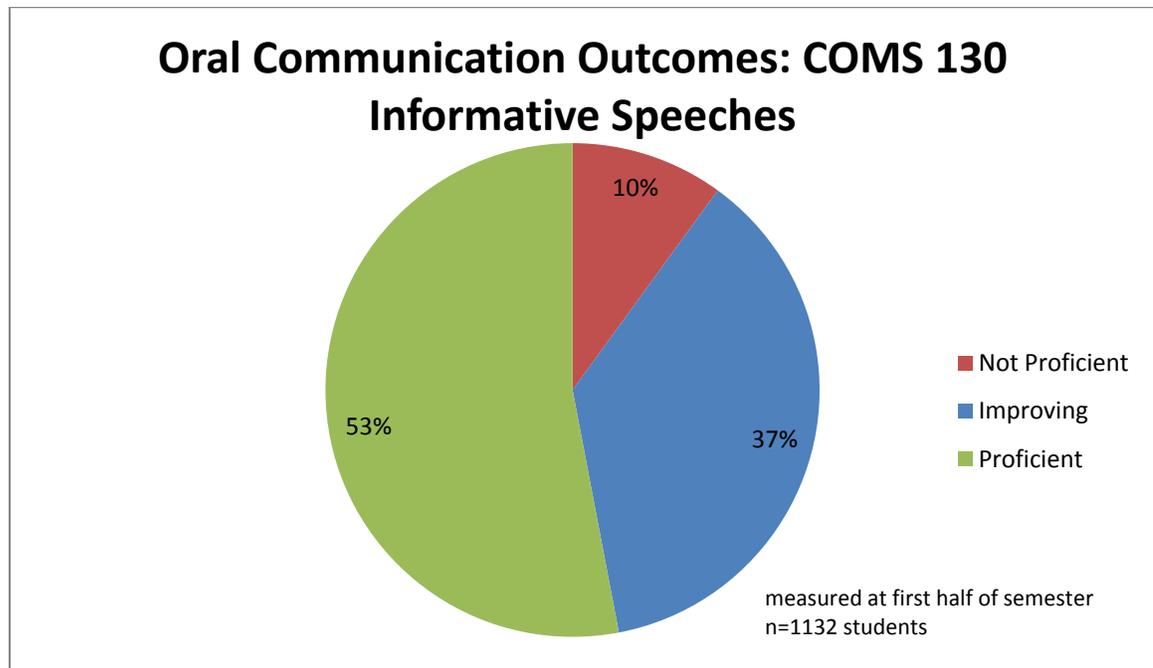
Sampling – As of 2010, all first year and senior students are asked to participate. Over five administrations of the survey, the overall response rate has been approximately 25%.

Oral Communication

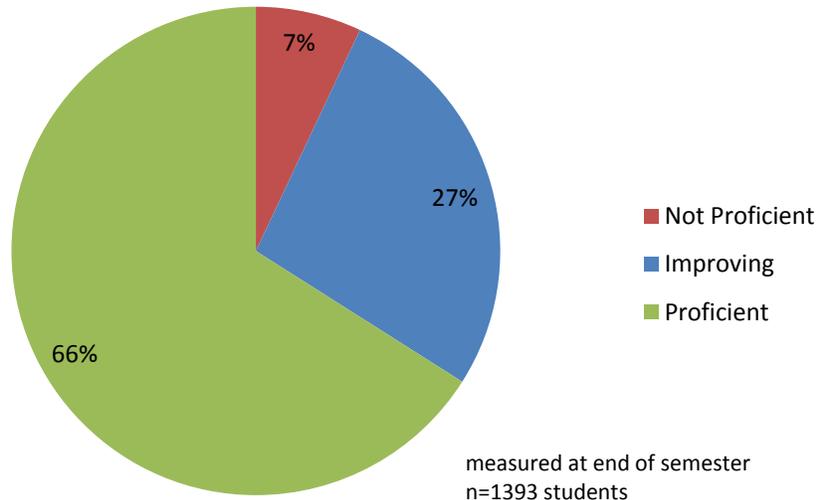
Assessment Mechanism(s): Locally developed rubrics for Oral Communication

Commentary: Oral communication is evaluated by faculty in the Communications Studies department. Throughout the semester, student speeches are assessed using a rubric developed by faculty members in the department. The rubrics are used to provide feedback to the individual students to improve their oral communication abilities as well as to collect aggregate data about the effectiveness of oral communication at the institution. To date, two semesters of students who have taken COMS 130 have been evaluated using this assessment process – that equates to over 1200 students and over 2500 student artifacts that have been assessed.

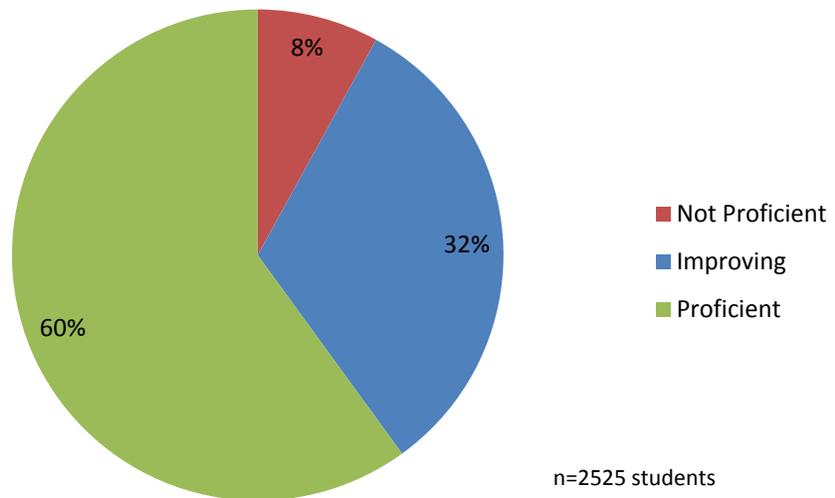
Student Learning Outcomes:



Oral Communication Outcomes: COMS 130 Persuasive Speeches



Oral Communication Outcomes: COMS 130 Overall



Timeline – Each semester since Fall 2012, two speeches from students taking Communication Studies 130, Speaker-Audience Communication are assessed. COMS 130 is one of several courses that meets the KU Core’s Oral Communication Learning Outcome. The vast majority of students meet the Oral Communication Learning Outcome of the KU Core by taking and passing COMS 130.

Sampling – All students who enroll in COMS 130 are involved in the assessment of Oral Communication. Each student must present five speeches during the course, but only two speeches, the second and the fifth speech, are included in the assessment.

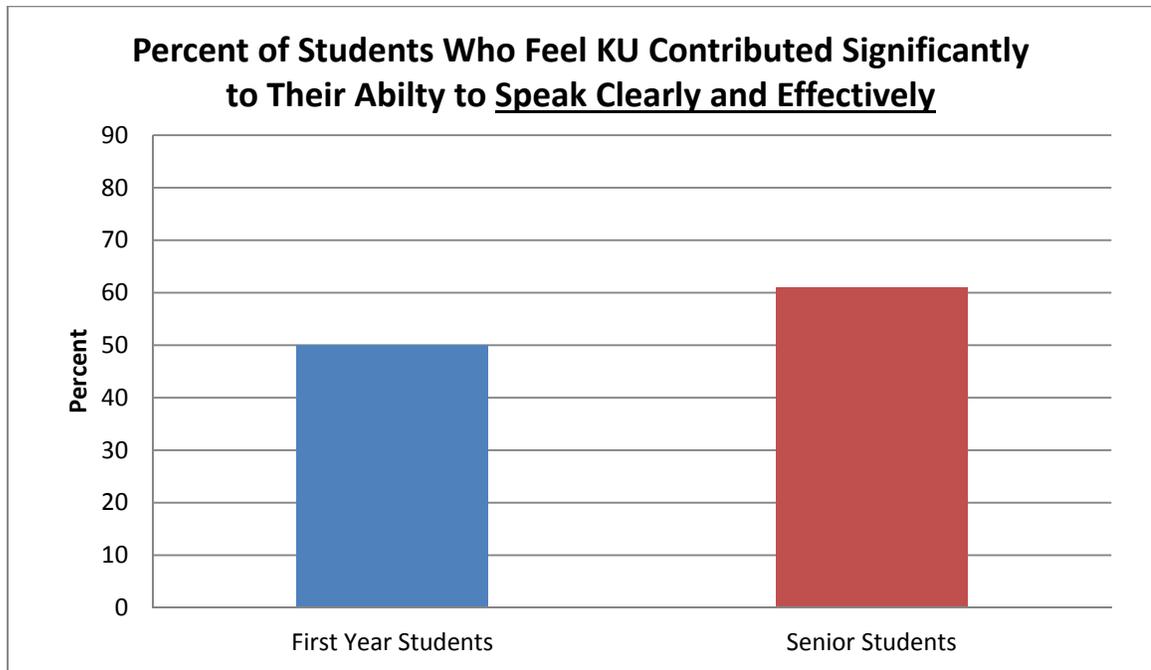
Approach – The Communication Studies Department developed the Oral Communication Rubrics to assess student performance on a variety of speeches that are required of students enrolled in COMS 130. The second speech given by students, an informative speech, and the fifth speech, a persuasive speech, are assessed using the rubric.

Each semester, the rubrics are aggregated and the department uses the aggregate score to evaluate its performance and make any necessary changes to improve instruction in order to meet the department’s goals

Next steps – The assessment of oral communication in COMS 130 is an ongoing process. Additional data are collected on student assignments are collected semester and are shared with the department to improve the curriculum and the classroom experience.

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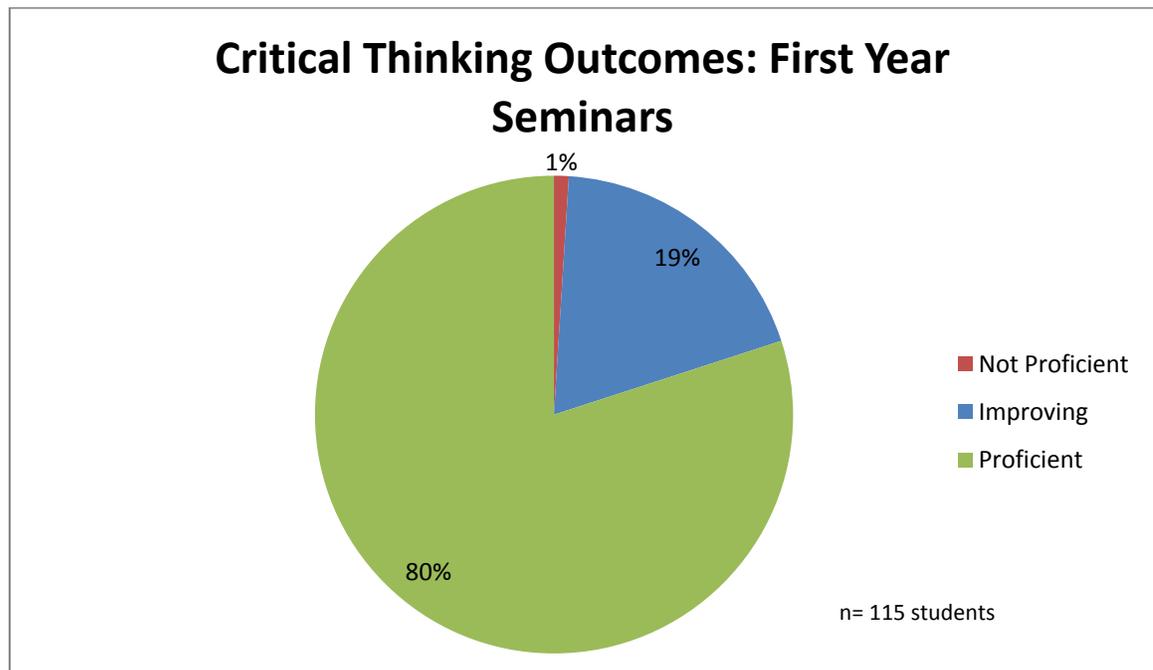
Sampling – As of 2010, all first year and senior students are asked to participate. Over five administrations of the survey, the overall response rate has been approximately 25%.

3. Critical thinking/problem solving.

Assessment Mechanism(s): AAC&U VALUE Critical Thinking Rubric - administered in all First-Year Seminars (FYS)

Commentary: First year seminar courses use the AAC&U VALUE critical thinking rubric to assess critical thinking and written communication. Students in those courses submit an assignment for review using the rubrics and received feedback in order to improve. The data from those evaluations is aggregated and used to improve the first year seminar curriculum. The assessment of students in first year seminar programs is starting its second year.

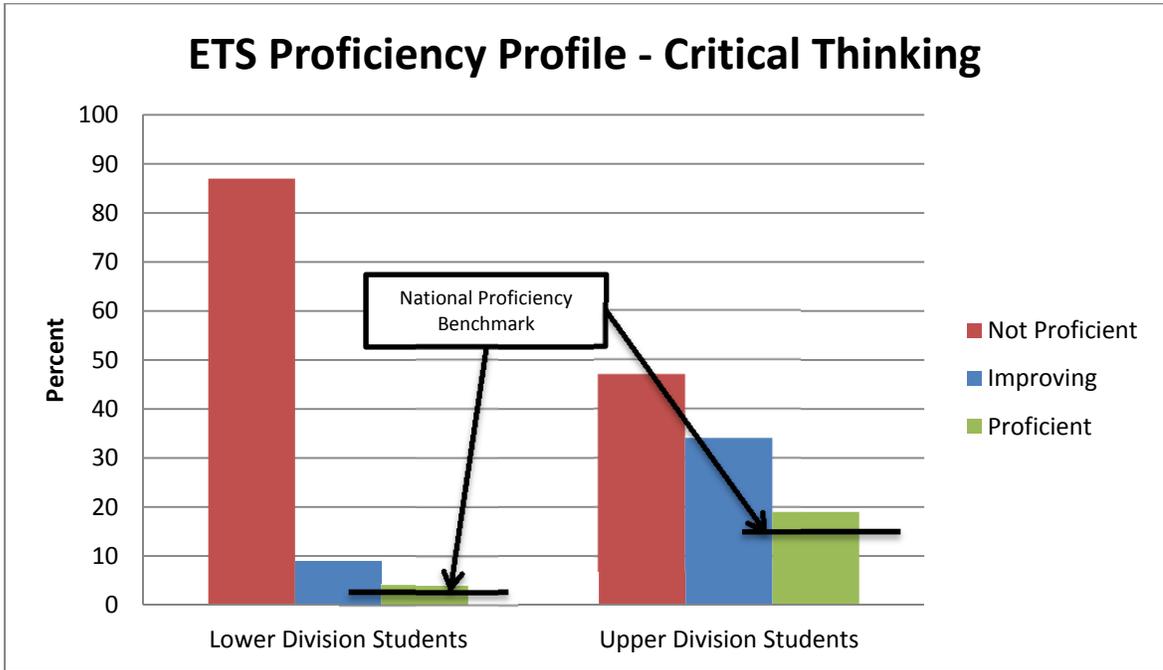
Student Learning Outcomes:



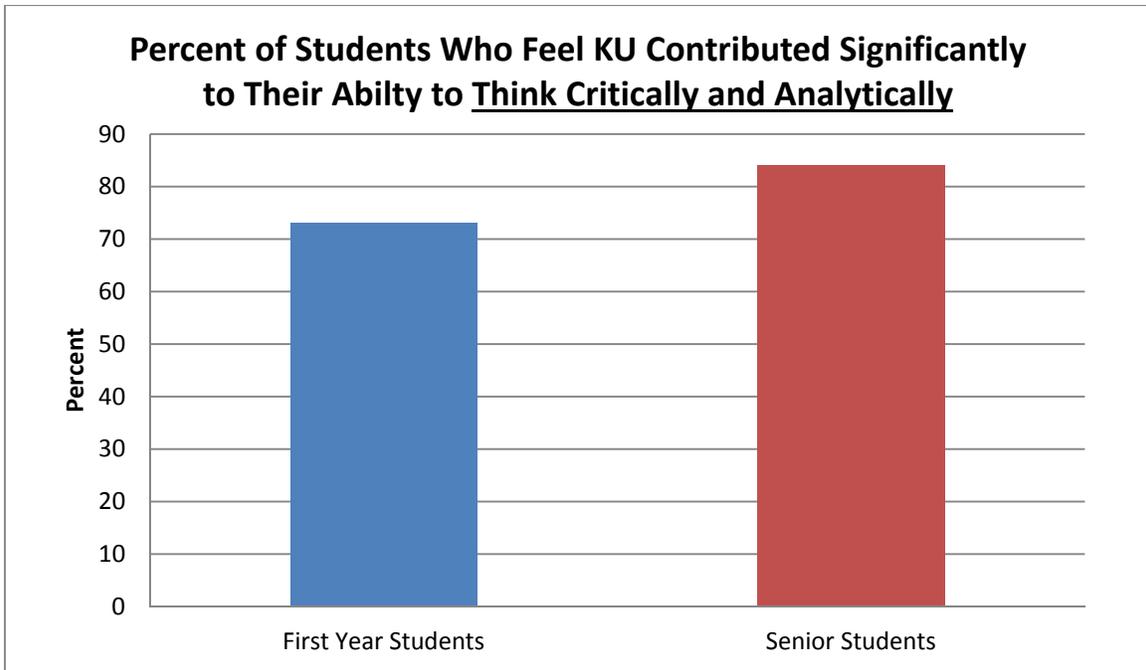
Note: For more details, see Appendix 4.

Assessment Mechanism(s): ETS Proficiency Profile

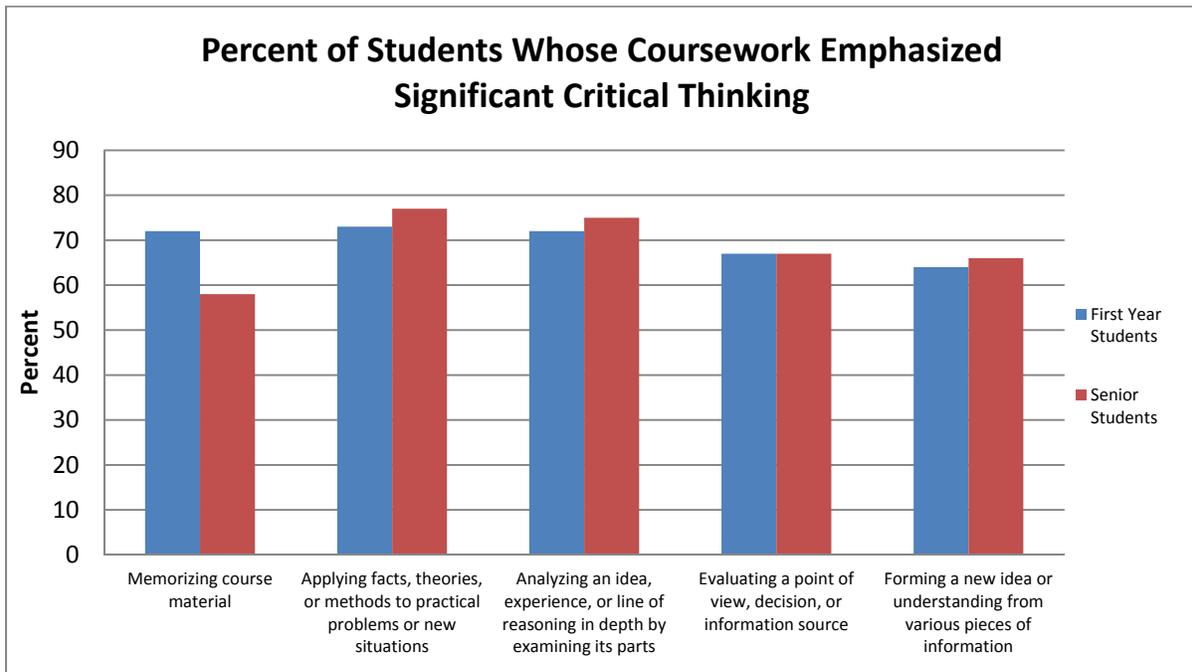
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Appendix 1

Description of ETS® Proficiency Profile Proficiency Levels

Source: https://www.ets.org/proficiencyprofile/scores/proficiency_classifications/levels

Reading and Critical Thinking

Level 1

To be considered proficient at Level 1, students should be able to:

- recognize factual material explicitly presented in a reading passage
- understand the meaning of particular words or phrases in the context of a reading passage

Level 2

To be considered proficient at Level 2, students should be able to:

- synthesize material from different sections of a passage
- recognize valid inferences derived from material in the passage
- identify accurate summaries of a passage or of significant sections of the passage
- understand and interpret figurative language
- discern the main idea, purpose or focus of a passage or a significant portion of the passage

Level 3/Critical Thinking

To be considered proficient at Level 3, students should be able to:

- evaluate competing causal explanations
- evaluate hypotheses for consistency with known facts
- determine the relevance of information for evaluating an argument or conclusion
- determine whether an artistic interpretation is supported by evidence contained in a work
- evaluate the appropriateness of procedures for investigating a question of causation
- evaluate data for consistency with known facts, hypotheses or methods
- recognize flaws and inconsistencies in an argument

Writing

Level 1

To be considered proficient at Level 1, students should be able to:

- recognize agreement among basic grammatical elements (e.g., nouns, verbs, pronouns and conjunctions)
- recognize appropriate transition words

- recognize incorrect word choice
- order sentences in a paragraph
- order elements in an outline

Level 2

To be considered proficient at Level 2, students should be able to:

- incorporate new material into a passage
- recognize agreement among basic grammatical elements (e.g., nouns, verbs, pronouns and conjunctions) when these elements are complicated by intervening words or phrases
- combine simple clauses into single, more complex combinations
- recast existing sentences into new syntactic combinations

Mathematics

Level 1

To be considered proficient at Level 1, students should be able to:

- solve word problems that would most likely be solved by arithmetic and do not involve conversion of units or proportionality. These problems can be multistep if the steps are repeated rather than embedded.
- solve problems involving the informal properties of numbers and operations, often involving the Number Line, including positive and negative numbers, whole numbers and fractions (including conversions of common fractions to percent, such as converting "1/4" to 25 percent).
- solve problems requiring a general understanding of square roots and the squares of numbers.
- solve a simple equation or substitute numbers into an algebraic expression.
- find information from a graph. This task may involve finding a specified piece of information in a graph that also contains other information.

Level 2

To be considered proficient at Level 2, students should be able to:

- solve arithmetic problems with some complications, such as complex wording, maximizing or minimizing and embedded ratios. These problems include algebra problems that can be solved by arithmetic (the answer choices are numeric).
- simplify algebraic expressions, perform basic translations, and draw conclusions from algebraic equations and inequalities. These tasks are more complicated than solving a simple equation, though they may be approached arithmetically by substituting numbers.
- interpret a trend represented in a graph, or choose a graph that reflects a trend.
- solve problems involving sets; problems have numeric answer choices.

Appendix 2

Selected Data Detail from the 2013 Administration of the National Survey of Student Engagement (NSSE) by Assessment Category

Critical Thinking Measures:

During the current school year, how much has your coursework emphasized the following?

Memorizing course material

| | First Year Students | Senior Students |
|-------------|---------------------|-----------------|
| Very little | 4% | 9% |
| Some | 25% | 32% |
| Quite a bit | 44% | 34% |
| Very much | 28% | 24% |

Applying facts, theories, or methods to practical problems or new situations

| | First Year Students | Senior Students |
|-------------|---------------------|-----------------|
| Very little | 3% | 3% |
| Some | 24% | 19% |
| Quite a bit | 46% | 40% |
| Very much | 27% | 37% |

Analyzing an idea, experience, or line of reasoning in depth by examining its parts

| | First Year Students | Senior Students |
|-------------|---------------------|-----------------|
| Very little | 4% | 4% |
| Some | 24% | 20% |
| Quite a bit | 45% | 37% |
| Very much | 27% | 38% |

Evaluating a point of view, decision, or information source

| | First Year Students | Senior Students |
|-------------|---------------------|-----------------|
| Very little | 6% | 7% |
| Some | 28% | 26% |
| Quite a bit | 45% | 39% |
| Very much | 22% | 28% |

Forming a new idea or understanding from various pieces of information

| | First Year Students | Senior Students |
|-------------|---------------------|-----------------|
| Very little | 6% | 5% |
| Some | 30% | 28% |
| Quite a bit | 43% | 37% |
| Very much | 21% | 29% |

Numerical Literacy Measures:

During the current school year, about how often have you done the following?

Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.)

| | First Year Students | Senior Students |
|------------|---------------------|-----------------|
| Never | 13% | 13% |
| Sometimes | 35% | 32% |
| Often | 38% | 32% |
| Very often | 14% | 23% |

Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.)

| | First Year Students | Senior Students |
|------------|---------------------|-----------------|
| Never | 26% | 21% |
| Sometimes | 39% | 32% |
| Often | 26% | 28% |
| Very often | 9% | 18% |

Evaluated what others have concluded from numerical information

| | First Year Students | Senior Students |
|------------|---------------------|-----------------|
| Never | 20% | 17% |
| Sometimes | 45% | 37% |
| Often | 26% | 29% |
| Very often | 9% | 17% |

Written Communication Measures:

During the current school year, about how many papers, reports, or other writing tasks of the following length have you been assigned? (Include those not yet completed.)

Up to 5 pages

| | First Year Students | Senior Students |
|--------------|---------------------|-----------------|
| None | 3% | 7% |
| 1-2 | 15% | 21% |
| 3-5 | 34% | 27% |
| 6-10 | 27% | 20% |
| 11-15 | 12% | 12% |
| 16-20 | 5% | 5% |
| More than 20 | 4% | 7% |

Between 6 and 10 pages

| | First Year Students | Senior Students |
|--------------|---------------------|-----------------|
| None | 29% | 27% |
| 1-2 | 44% | 32% |
| 3-5 | 17% | 25% |
| 6-10 | 7% | 11% |
| 11-15 | 2% | 3% |
| 16-20 | 0% | 1% |
| More than 20 | 0% | 1% |

11 pages or more

| | First Year Students | Senior Students |
|--------------|---------------------|-----------------|
| None | 82% | 45% |
| 1-2 | 10% | 37% |
| 3-5 | 2% | 12% |
| 6-10 | 2% | 3% |
| 11-15 | 2% | 1% |
| 16-20 | 1% | 1% |
| More than 20 | 1% | 1% |

KU's Contribution Measures:

How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?

Writing clearly and effectively

| | First Year Students | Senior Students |
|-------------|---------------------|-----------------|
| Very Little | 8% | 9% |
| Some | 28% | 25% |
| Quite a bit | 40% | 36% |
| Very Much | 24% | 29% |

Speaking clearly and effectively

| | First Year Students | Senior Students |
|-------------|---------------------|-----------------|
| Very Little | 12% | 11% |
| Some | 38% | 27% |
| Quite a bit | 32% | 35% |
| Very Much | 18% | 26% |

Thinking critically and analytically

| | First Year Students | Senior Students |
|-------------|---------------------|-----------------|
| Very Little | 3% | 3% |
| Some | 24% | 13% |
| Quite a bit | 41% | 37% |
| Very Much | 32% | 47% |

Analyzing numerical and statistical information

| | First Year Students | Senior Students |
|-------------|---------------------|-----------------|
| Very Little | 12% | 12% |
| Some | 37% | 24% |
| Quite a bit | 32% | 32% |
| Very Much | 19% | 32% |

Appendix 3

AAC&U Written Communication VALUE Rubric

Source: <http://www.aacu.org/value/rubrics/WrittenCommunication.cfm>

WRITTEN COMMUNICATION VALUE RUBRIC

for more information, please contact value@aacu.org



Definition

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

| | Capstone 4 | 3 | Milestones 2 | Benchmark 1 |
|--|--|---|--|---|
| Context of and Purpose for Writing <i>Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).</i> | Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work. | Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context). | Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions). | Demonstrates minimal attention to context, audience, purpose, and to the assigned tasks(s) (e.g., expectation of instructor or self as audience). |
| Content Development | Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work. | Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work. | Uses appropriate and relevant content to develop and explore ideas through most of the work. | Uses appropriate and relevant content to develop simple ideas in some parts of the work. |
| Genre and Disciplinary Conventions <i>Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).</i> | Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task(s) including organization, content, presentation, formatting, and stylistic choices | Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices | Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation | Attempts to use a consistent system for basic organization and presentation. |
| Sources and Evidence | Demonstrates skillful use of high-quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing | Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing. | Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing. | Demonstrates an attempt to use sources to support ideas in the writing. |
| Control of Syntax and Mechanics | Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free. | Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors. | Uses language that generally conveys meaning to readers with clarity, although writing may include some errors. | Uses language that sometimes impedes meaning because of errors in usage. |

Appendix 4

AAC&U Critical Thinking VLAUE Rubric

Source: <http://www.aacu.org/value/rubrics/CriticalThinking.cfm>

CRITICAL THINKING VALUE RUBRIC

for more information, please contact values@aacu.org



Definition

Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion.

Evaluators are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (cell one) level performance.

| | Capstone 4 | Milestones | | Benchmark 1 |
|--|---|---|---|---|
| | | 3 | 2 | |
| Explanation of issues | Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding. | Issue/problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions. | Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown. | Issue/problem to be considered critically is stated without clarification or description. |
| Evidence <i>Selecting and using information to investigate a point of view or conclusion</i> | Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly. | Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis. Viewpoints of experts are subject to questioning. | Information is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis. Viewpoints of experts are taken as mostly fact, with little questioning. | Information is taken from source(s) without any interpretation/evaluation. Viewpoints of experts are taken as fact, without question. |
| Influence of context and assumptions | Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position. | Identifies own and others' assumptions and several relevant contexts when presenting a position. | Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa). | Shows an emerging awareness of present assumptions (sometimes labels assertions as assumptions). Begins to identify some contexts when presenting a position. |
| Student's position (perspective, thesis/hypothesis) | Specific position (perspective, thesis/hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis). | Specific position (perspective, thesis/hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/hypothesis). | Specific position (perspective, thesis/hypothesis) acknowledges different sides of an issue. | Specific position (perspective, thesis/hypothesis) is stated, but is simplistic and obvious. |
| Conclusions and related outcomes (implications and consequences) | Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order. | Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly. | Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly. | Conclusion is inconsistently tied to some of the information discussed; related outcomes (consequences and implications) are oversimplified. |