

**College of Liberal Arts and Sciences**  
**Student Outcomes Assessment Report for HLC**

The College of Liberal Arts and Sciences works with Student Learning Outcomes and Assessment at four levels:

- I. General Education Goals
- II. Outcomes of Majors
- III. Course Level Learning Outcomes
- IV. Success After ISU

**I. LAS Learning Goals in General Education**

Students graduating from majors within the LAS College meet the central university graduation requirements: Communication proficiency, Information Literacy, International Perspectives and U.S. Diversity. LAS students must also satisfy a foreign language requirement and complete 45 credits at the 300 level or above. [<http://www.las.iastate.edu/students/academic-services/learning-goals/> ] In addition, consistent with the University's promise that students will build their own intellectual adventure at ISU, the college has a distributed general education model designed to allow students to experience the habits of mind and ways of approaching intellectual tasks that are distinctive within the Arts and Humanities, Mathematical and Natural Science Disciplines and the Social Sciences.

Area I. Arts and Humanities (Minimum 12 credits)

Learning Goals

- To develop an understanding of human cultural heritage and history
- To develop an appreciation of reasoning
- To develop an appreciation of the aesthetic value of human creativity

Area II. Mathematical and Natural Science Disciplines (Minimum 11 credits: 3 Math, 8 Natural Science)

Learning Goals

- To experience science as a rational search for understanding the structure and behavior of the natural world
- To appreciate mathematics as a valuable tool of the sciences
- To appreciate mathematics as an important way of thinking

Area III. Social Sciences (Minimum 9 credits)

Learning Goals

- To develop an appreciation of the principal methods of studying human behavior
- To develop an understanding of the structure and functioning of institutions

The learning goals within each of the distributed areas are appropriately broad given the intention of the distributed coursework that students develop and appreciate the ways of framing and solving problems within these broad disciplinary areas. Programs who seek to have courses approved for any of the distributed areas on the list, request a review of the syllabus, including course outcomes, by the College Curriculum Committee. This nine-person committee made up of representatives from all areas

of the college is the hub for curricular activity at the College. Members serve 6 year renewable terms and function as stewards of the college curriculum, requirements and general education goals.

Current assessment practices touching on the general education learning outcomes involve both continuous improvement course-based assessment models and broader programmatic assessment based on national best practices.

### **General Education Course Assessment**

While students have many course options within each of these general areas of study, analysis of enrollment patterns makes it clear that a key set of courses provide this intellectual breadth to a large number of ISU students. [This report](#), includes details about some of those larger enrollment courses within each area of learning goals and notes a current assessment project within each course. In the detailed versions of these reports, faculty also list the ways these results will inform future course development. For example, the department of History has been noting the challenges students have faced in fanning historical arguments that has compromised their ability to succeed in upper division writing-intensive courses. Part of their response to this challenge has been to establish a new course, HIST 195, which is now providing students with, not only an orientation to the paths to success at the university and in the major, but also an orientation to what it means to write like a historian.

### **Programmatic Assessment in Key General Education Areas**

Programmatic assessment and transformation is the other key use of assessment for these breadth courses. Of particular significance is the work going on related to the University Communication Proficiency requirement, the pedagogical redesign of science labs and curricular assessment and change in mathematics.

ISUComm is Iowa State's university-wide program that leads efforts in the teaching and assessment of the University's Communication Proficiency requirement. The Foundation Communication courses, taught in the Department of English, are of particular interest to the LAS College. The courses, ENGL 150 and 250, use a WOVE Pedagogy (Written, Oral, Visual and Electronic) to prepare twenty-first century communicators. The course uses rubrics to support students and the faculty who work with them to focus on the core communication competencies of multi-modal communication. Students create ePortfolios in the course. Here is [the current assessment report](#) for the English 150 and 250 courses.

Large-scale reform within the natural sciences was driven by assessment and continues to improve our regular practice of assessment of student learning and success in the sciences. Most striking has been the transformation of science labs from "recipe labs" to inquiry labs. Assessment has been conducted with a variety of data ( for links to a wide range of details about the program see <http://www.engage.iastate.edu/educational-impact-> ). Among the most important assessments for the college, in terms of general education, is the documented improvement of students on the Student Understanding of Science and Scientific Inquiry (SUSSI) instrument that is the tool used to assess students' conceptions of the Nature of Science. In courses on the general education list, such as Astro 250, Biol 256, Geol 100L, and Chem 201L, there is clear evidence that students are making true gains. Inquiry labs and improving student understanding of the nature of science is a key part of the overall LAS goal that students experience and appreciate scientific and mathematical ways of thinking and generating knowledge. A recent summary of this assessment can be viewed here: <https://iastate.box.com/s/z0gl9o0fyf0p9byvcpsnleh3mf0zzk08>

Mathematics is another area where assessment has been a key part of curricular transformation. As a provider of general education and required coursework for many programs on campus, the Mathematics department has been focused on identifying pathways to student success. Assessment work in mathematics has led to revision of the ALEKS scores required to be placed in the appropriate math course. Assessment also led to course redesigns for the Math 142 Trigonometry course. The first level of redesign resulted in the D/F/withdraw rate for the course dropping from 58.6% in Fall 2011 to 34.5% in Fall 2012. In 2014 two new courses based on student learning needs replaced Math 142. Math 143X Prep for Calculus serves students who need trigonometry as a pre-calculus preparation course. Math 145X Applied Trigonometry meets the learning outcomes for students in majors such as Architecture who need a strong trigonometry course but who won't be moving on to the college calculus course. [This report](#) has a brief summary of curricular innovations in Mathematics that have grown out of assessment work in the department.

## II. LAS Learning Outcomes of Majors

Each program in the college has identified its learning outcomes for majors and established ways to assess student success. Learning outcomes within programs are made visible through the college website: <http://www.las.iastate.edu/students/academic-services/outcomes/>. The level of engagement with formal programmatic assessment varies from program to program; every program has faculty who are committed to supporting and understanding student success in their major. Curricula in the college, whether it be the required internship in Journalism, the capstone research course in Communication Studies, student teaching in English Education, or the senior seminar in Mathematics, provide a space for faculty to engage their students near graduation and witness their strengths and weaknesses. The culture of assessment is rapidly growing in programs throughout the college as every department, in addition to working toward regular program reviews, is implementing assessment plans for courses through the Continuous Improvement initiative described in Section III below.

### **Highlights of assessment work of some departments in the college:**

The Greenlee School of Journalism in keeping with the expectations of the Accrediting Council on Education in Journalism and Mass Communications (ACEJMC) has fully developed outcomes assessment plan: <https://iastate.box.com/s/eyg9fqkddb3uyhcrkx35wtt232jwzi7a> . The school also annually posts results of its direct and indirect measures on its public website:

<http://www.jlmc.iastate.edu/about/outcomes-assessment> . Among the high-impact learning practices in the Greenlee School is a required Internship program. This signature requirement is assessed via ratings of student competencies by internship supervisors as well as student self-evaluations; students also complete an exit interview at the end of their internship. Data from these evaluations is collected and used to inform curricular development. [ To see a recent sample data sheet visit:

<https://iastate.box.com/s/6sqhngmr0osut5g894g1shb04wzp9vr0> ]

The Department of World Languages and Cultures has several programs within its purview. All of the programs are guided by the Standards for Foreign Language Learning. On its website each language area shares the programmatic alignment to the standards and the assignments that are used in their assessment of student learning. <http://language.iastate.edu/departmental-programmatic-outcomes/> (For an example of the programmatic alignment of course outcomes for Spanish 101 and 102 visit <http://wlc-lwh-01.lang.iastate.edu/wp/wp-content/uploads/2014/09/SPAN101-102.pdf> ).

The Computer Science department, like the math department, has used assessment work to improve and redesign course offerings particularly for courses that are taken by many departments around the university. It also recently completed an assessment report for its majors detailing the multiple approaches to assess student learning and improve the curriculum. Computer Science is one of the most rapidly growing majors in the College of Liberal Arts and Sciences. We look forward to an accreditation visit from ABET in Fall 2015 to further clarify areas of strength and challenge for the program and for student success in the major. The recent report of Computer Science assessment activities can be found here: <https://iastate.box.com/s/vndpeour96rjhq8bhxoaz5rgqpwxqg6> .

### **III. Course Level Learning Outcomes**

In Spring 2013 the LAS College began work to implement a Continuous Improvement initiative that asks high impact courses to regularly report on the results of assessment in those classes. These efforts created the opportunity for faculty in all departments to review and update course level learning outcomes, identify measurable learning objectives based on those outcomes, report levels of student achievement and consider changes to make the next time they teach the course based on the data they review. Faculty reporters also had the opportunity to indicate what if anything outside their control was needed in order to improve student learning in their courses. For background information on this initiative in the LAS College Context see <https://www.las.iastate.edu/in-second-year-continuous-improvement-planning-working-in-las/>.

In June 2014, 103 LAS courses filed continuous improvement reports with the Provost Office. In June 2015, 150 LAS courses will report, and in June 2016 the assessment reporting system will be fully implemented with over 250 LAS courses making regular reports. The LAS College has offered faculty development workshops, shared resources in CYBox and established a clear process to support faculty work for course assessment. For each course, departments identify a course reporter who coordinates the efforts in the department. Course reporters are encouraged to participate in training and have access to assessment materials not only from the college, but also through ISU's Center for Excellence in Learning and Teaching. Each Fall the college collects the assessment plan for each course. [See an example of an assessment plan worksheet departments can use:

<https://iastate.box.com/s/8yi55yhu10ii40xoaymo64a1jfbcgss9> ] Course reporters give their assessment data and course improvements to the Provost Office. LAS shares the assessment report filed by each course with the departments so that data is available to department assessment or curriculum committees. An abbreviated summary of the College LAS data was shared at a Dean's Cabinet meeting; slides from that discussion are available here:

<https://iastate.box.com/s/h3ggzgfotq0zcxpntm7by79vd5y819h>

Course level assessment is a practice in which our faculty have always engaged. This initiative has made this work more systematic; it has enhanced standardization across sections of the same course, identified areas for improvement and improved the use of targeted assessment strategies rather than course grades as the basis for meaningful assessment of student learning. The continuous improvement program has also enhanced the culture of assessment within the college, by creating opportunities for regular conversations about assessment and increasing the number of faculty explicitly engaged in assessment efforts.

#### **IV. Success After ISU**

Among the most important outcomes of a university is the success of students after graduation. The strongest feature of the College of Liberal Arts and Sciences assessment of student outcomes is made visible in its annual survey of students six months after graduation. So important is this initiative that the placement survey stands in as the example of the LAS College outcomes process on the Provost website <http://www.provost.iastate.edu/help/student-outcomes/las> .

Through electronic surveys, emails and phone interviews, this annual outreach to students is regularly completed by 85 to 89 percent of the ~1500 students who graduate from LAS each year. Within six months of graduation students ~93% of students report being occupied (employed, in school, military service or not seeking employment).

This data is publicly available through the LAS College Career Services website:

<http://www.las.iastate.edu/career-services/outcomes/>. LAS reports contain overall college statistics as well as placement data from individual majors. In addition, each major can see a list of recent employers of graduates from their program. This snapshot data is used by departments for a wide range of purposes including allowing programs to see trends in the number of students going on to graduate school—information that has clear implications for departmental curricula. Employer data also helps departments follow up with employer surveys and establish new internship opportunities for current students. A five year rolling average report is also available to help smooth out information gathered from some of our smaller majors: <https://iastate.app.box.com/s/vl0zs6y54sfs8b48kujt> .

#### **Summary**

The College of Liberal Arts and Sciences works with student learning outcomes and assessment within four different areas: general education goals, outcomes for departmental majors, course level learning outcomes and tracking student success after graduating from ISU. During the past several years student learning outcomes and assessment practices have continued to mature all around the College of Liberal Arts and Sciences. Faculty in many parts of the college are beginning to see formal assessment not as an additional duty to be undertaken only when required, but as a way of improving the way we do our jobs. Student success matters at ISU and assessment is one path to helping us support that success.