General Education
Learning Outcomes & Implementation Plan

General Education Revision Steering Committee
Final Report
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Definition

General education, according to the Association of American Colleges and Universities (AAC&U; http://www.aacu.org/leap/what_is_liberal_education.cfm), is defined as:

...an approach to learning that empowers individuals and prepares them to deal with complexity, diversity, and change. It provides students with broad knowledge of the wider world (e.g. science, culture, and society) as well as in-depth study in a specific area of interest. A liberal education helps students develop a sense of social responsibility, as well as strong and transferable intellectual and practical skills such as communication, analytical and problem-solving skills, and a demonstrated ability to apply knowledge and skills in real-world settings. The broad goals of liberal education have been enduring even as the courses and requirements that comprise a liberal education have changed over the years.

Our Committee’s working definition of General Education is as follows:

General Education provides a common intellectual experience for all university students. It is designed to give students a breadth and depth of knowledge and skills across the disciplines of social science, science, arts, humanities. It is designed to impart valuable skills such as oral and written communication, information literacy, and critical thinking, as well as an understanding of responsible citizenship including such areas as human diversity, economic literacy, personal health, and societal and environmental sustainability. General Education is the foundation of all our degree programs at The University of Akron.

Our Charge: Re-Vision General Education

A committee comprised of disciplinary experts from across the campus was directed in Fall 2011 to: (1) integrate General Education with degree program requirements, (2) reduce the number of General Education credits, (3) identify multiple pathways toward General Education course completion, (4) make greater use of minors, certificates and integrated interdisciplinary sequences of courses, as well as service and experiential learning, (5) focus on documentable excellence consistent with Higher Learning Commission expectations for The University of Akron.

General Education Revision Steering Committee Members

Linda Subich, Arts and Sciences (Chair), Janet Bean, Arts and Sciences, Constance Bouchard, Arts and Sciences, Alan Bowdler, Engineering & Board of Trustees, Thomas Calderon, Business, Irina Chernikova, Summit College, Mary Beth Clemons, Undergraduate Student Government, Beth Graham, Arts and Sciences, John Green, Arts and Sciences, Virginia Gunn, Arts and Sciences, Annie Hanson, Engineering, Jennifer Holz, Wayne College, Marlene Huff, Health Professions, Sukanya Kemp, Summit College, Tim Lillie, Education, Elizabeth Mancke, Arts and Sciences, David Perry, Arts and Sciences, Andrew Rancer, Arts and Sciences, Bill Rich, Law, Joe Salem, University Libraries, Linda Saliga, Arts and Sciences, Brooks Toliver, Arts and Sciences, Don Visco, Engineering, and Sheldon Wrice, Summit College.
General Education Learning Outcomes

Context

The proposed general education requirements for undergraduates are defined in terms of learning outcomes. These outcomes are set at the foundational level and their achievement is documented after specific general education courses or specified experiences are completed. More detail regarding these courses and experiences is offered in the proposed Implementation Plan. Institutional documentation of the achievement of these learning outcomes is accomplished via the proposed Assessment Plan.

It is intended that the specified learning outcomes will be expanded and built upon during the remainder of the student’s baccalaureate degree work, including the student’s major. A capstone experience of some type for all bachelor’s degrees is strongly recommended as a culmination of the educational process.

This proposal is a shift in approach for the university’s undergraduate curriculum. It proposes to ensure students have achieved foundational learning outcomes so that instruction in the major can focus on development of subject-specific and higher-order learning outcomes that are extensions of the foundational competencies.

Criteria for Learning Outcomes:

The learning outcomes
1. Must reflect the foundational skills and knowledge that the faculty actually want students to achieve.
2. Must be sufficiently broad to be achievable by a variety of means and disciplines.
3. Must be defined in terms that allow observation, evidence collection and eventually measurement.
4. Must reflect a high standard of expectation.

General Statements of Proposed Learning Outcomes:

Learning Outcome 1: Communication Skills and Information Literacy - Students will demonstrate foundational competency in written communication, oral communication and information literacy.

Learning Outcome 2: Critical Thinking and Complex Reasoning Skills - Students will demonstrate foundational competency in creating and evaluating reasoned arguments, and employing quantitative, qualitative, and normative information in such arguments.

Learning Outcome 3: The Arts, Humanities, Natural Sciences, and Social Sciences - Students will demonstrate foundational competency in knowledge of representative content and methods of inquiry of the arts, humanities, natural sciences, and social sciences.

Learning Outcome 4: Responsible Citizenship in an Interconnected World - Students will demonstrate foundational competency in knowledge and skills that promote personal, social and environmental responsibility. This foundational competency shall include an understanding of diversity, systemic relationships, and collateral effects and consequences within and across systems.
Detailed Statements of Proposed Learning Outcomes

Learning Outcome 1: Communication Skills and Information Literacy - Students will demonstrate foundational competency in written communication, oral communication and information literacy.

a) As writer or speaker, students:
   i) Demonstrate an understanding of context, purpose, and audience.
   ii) Develop content using credible sources, as appropriate to the communication task.
   iii) Organize a presentation coherently and logically.
   iv) Use appropriate conventions.
      (1) Writing: Use style appropriate to genre and discipline.
      (2) Speaking: Use verbal and nonverbal conventions appropriate to audience and purpose of speech.
   v) Use appropriate syntax, grammar, and
      (1) Writing: punctuation and spelling.
      (2) Speaking: pauses, intonation, and pronunciation.

b) As writer, students:
   i) Collaborate with others to improve writing through feedback and revision.
   ii) Use writing for multiple purposes, such as improving learning, critical thinking, and reflection.

c) As speaker, students:
   i) Demonstrate behavioral flexibility in response to unexpected variations in audience or context.
   ii) Employ appropriate nonverbal behavior

d) As reader or listener, students:
   i) Identify a writer’s or a speaker’s purpose(s) and rhetorical technique(s).
   ii) Critically analyze claims, appeals, and evidence in arguments.

e) Students demonstrate information literacy by effectively, ethically, and responsibly using appropriate sources and technologies to accomplish an intended purpose.
   i) Use appropriate tools and technologies to identify, access, analyze, evaluate, and document information.
   ii) Use information effectively and appropriately to accomplish an intended purpose.
   iii) Access and use information responsibly, ethically, and legally in accordance with disciplinary standards.

Learning Outcome 2: Critical Thinking and Complex Reasoning Skills - Students will demonstrate foundational competency in creating and evaluating reasoned arguments, and employing quantitative, qualitative, and normative information in such arguments.

a) Students create reasoned arguments and evaluate the reasonableness of arguments. They
   i) State the nature of controversies as propositions, including fact (i.e., what is), value (i.e., what should be), and policy (i.e., what steps can be taken) propositions;
   ii) Recognize and choose the premises, purposes, audiences, and contexts of propositions;
   iii) Recognize and choose the appropriate logic to support propositions, including symbolic, deductive, and inductive logic;
   iv) Recognize and choose the appropriate information to support propositions, including the sources, authority, and biases of information;
   v) Recognize and be able to argue both sides of a proposition, and employ logic and information to challenge opposing propositions.
b) Students employ the appropriate analysis and application of
   i) Quantitative information, such that they:
      (1) Identify the value and limitations of magnitude (i.e., how large) and multitude (i.e., how many)
          measures;
      (2) Manipulate and express such measures with arithmetic, algebraic, geometric, and statistical methods;
      (3) Manipulate and express such measures with graphs, charts, and tables;
      (4) Manipulate and express such measures to solve practical and multistage problems;
   ii) Qualitative information, such that they:
      (1) Identify the value and limitations of character (i.e., the nature of a thing) and capacity (i.e., what a thing can do) assessments;
      (2) Interpret and express assessments with a contrary structure, such as truth versus falsehood or good versus evil;
      (3) Interpret and express assessments with a relational structure, such as the degree of beauty or the level of success;
      (4) Interpret and express assessments with a unique structure, such as cultural ethos or historical eras;
   iii) Normative information, such that they:
      (1) Identify the value and limitations of prescriptive (i.e., how things should be) and proscriptive (i.e., how things shouldn’t be) claims;
      (2) Acknowledge and express claims concerning personal behavior, such as honesty and virtue;
      (3) Acknowledge and express claims concerning social life, such as pluralism and justice;
      (4) Acknowledge and express claims concerning mental life, such as respect for evidence and open-mindedness;
      (5) Describe how such claims are used to make ethical decisions

Learning Outcome 3: The Arts, Humanities, Natural Sciences, and Social Sciences - Students will demonstrate foundational competency in knowledge of representative content and methods of inquiry of the arts, humanities, natural sciences, and social sciences.

a) Knowledge/Content competency
   i) Demonstrate knowledge of major concepts, findings, and historical perspectives in each disciplinary area
   ii) Find information resources in each disciplinary area and evaluate their reliability.
   iii) Articulate the role of ethics in each disciplinary area.
   iv) Demonstrate an understanding of scientific and technical issues at a functional level and articulate how they impact our society and economy.
   v) Demonstrate a basic knowledge of major cultures/societies of the world including their art, history, and geography

b) Methods of Inquiry competency
   i) Articulate the nature of the scientific method (in the natural and social sciences and humanities), apply it through hands-on laboratory experiments, and critically evaluate applications of the scientific method.
   ii) Solve quantitative and qualitative problems in the natural and social sciences
   iii) Use rhetorical skills in the analysis of creative works (arts and humanities) including their social, political, emotional and psychological components.
   iv) Demonstrate effective written and oral communication appropriate to each disciplinary area.
Learning Outcome 4: Responsible Citizenship in an Interconnected World - Students will demonstrate foundational competency in knowledge and skills that promote personal, social and environmental responsibility. This foundational competency shall include knowledge of diversity, systemic relationships, and collateral effects and consequences within and across systems.

a) Dimensions of US Domestic Diversity (broadly defined to include age, disability, gender, education, ethnicity, nationality, race, sexuality, social class, religion within the US). Students are able to:
   i) Identify multiple perspectives on cultural difference within the United States.
   ii) Articulate how dimensions of diversity such as race, ethnicity, gender and/or national origin are socially constructed.
   iii) Articulate how diversity impacts the creation, acquisition and application of knowledge.
   iv) Use knowledge of diverse perspectives to inform decisions and/or solve problems.
   v) Describe interrelationships of dimensions of diversity.

b) Dimensions of Global Diversity (focus is on global cultural awareness). Students are able to:
   i) Identify diverse perspectives within nations and/or across the globe.
   ii) Articulate how dimensions of diversity such as national origin are socially constructed.
   iii) Articulate how global diversity impacts the creation, acquisition and application of knowledge.
   iv) Use knowledge of diverse global perspectives to inform decisions and/or solve problems.
   v) Demonstrate knowledge of the interconnectedness of global histories, international governance, shifting geographies, and social policies.

c) Complex Systems Affecting Individuals in Society. Students apply an interdisciplinary perspective to the study of a particular social issue (e.g., climate change, relation of personal and societal health, alternative energy strategies, health disparity and healthcare reform, globalization, international trade liberalization, conflict/war, poverty, wealth and economic disparities), and demonstrate that they are able to:
   i) Recognize that complex systemic relationships impact social issues in general, and explain the importance of these systems to resolving the particular social issue.
   ii) Describe the individual and systemic (i.e., organizational and governmental) contributors to the particular social issue, and explain the short and long term impact of each.
   iii) Identify and articulate the social, technical, economic and scientific foundations of the social issue.
   iv) Distinguish the costs and benefits of solutions to the social issue.
General Education Learning Outcomes Implementation Plan

The proposed learning outcomes and the suggested course/credit hour implementation requirements noted below are conceptualized as falling into three distinct tiers. These tiers are foundational to baccalaureate education and are represented in relation to the whole of baccalaureate education in Figure 1. The tiers include:

- Academic Foundation
- Disciplinary Areas
- Tags

The Academic Foundation incorporates broad skills that are essential to success in a baccalaureate program. These are specified in our Learning Outcomes 1 and 2. The Disciplinary Areas represent the broad knowledge that is essential to a liberally educated individual and this knowledge is specified in our Learning Outcome 3. The learning outcomes identified in these two tiers consistently are endorsed by employers (Hart Research Associates, 2013) and faculty (http://www.aacu.org/leap/) as important and desirable for college graduates. The Tags represent knowledge and skills required of responsible citizens and they are specified in Learning Outcomes 2 and 4. Critical thinking, knowledge of US and global diversity, and the ability to apply an interdisciplinary perspective to the study of a particular social issue may be acquired via general coursework or major-specific coursework, but regardless of source are essential to the 21st century citizen.

Implementation Plan

The following distribution of courses is recommended to operationalize the proposed General Education Learning Outcomes for the Academic Foundation and Disciplinary Areas (note that a course was assumed to default to a minimum of 3 credit hours):

- **Academic Foundation**
  - Writing—2 courses (min. 6 hours)
  - Speaking—1 course (min. 3 hours)
  - Quantitative reasoning—1 course (min. 3 hours)

- **Disciplinary Areas**
  - Natural science—2 courses with 1 lab (min. 7 hours)
  - Social science—2 courses (min. 6 hours)
  - Humanities—1 course) (min. 3 hours)
  - Arts—1 course (min. 3 hours)
  - Humanities or Arts—1 course (min. 3 hours)

This plan includes a total of 11 courses that comprise a minimum of 34 hours. No restrictions are assumed in terms of overlap of these courses with a student’s major coursework as integration of General Education with majors was a goal of the revision. In the Disciplinary Areas, no constraints were assumed for the distribution of multiple courses in a subject area as flexibility in student choices was intended. Students are encouraged to select courses so as to create a firm foundation for their intended degree program.
The remaining Learning Outcomes are achieved not with freestanding course requirements as is the case for the Academic Foundation and Disciplinary Areas, but through courses taken to fulfill a General Education Disciplinary Area, requirements of a student’s major or minor, elective coursework, or through experiential learning such as study abroad. These are the Tags, and students are required to obtain at some point in their academic career four “tagged” courses to meet:

1) the critical thinking/reasoning learning outcomes identified in Learning Outcome 2
2) the US/domestic diversity learning outcomes identified in Learning Outcome 4
3) the global diversity learning outcomes identified in Learning Outcome 4
4) the complex systems affecting social issues learning outcomes identified in Learning Outcome 4

A course may receive only one “tag” and it is assumed that many of the “tagged” courses meeting Learning Outcome 4 will be at the 200 level or higher due to the interdisciplinary nature of the knowledge required. These Tags do not represent additional hours for a student as “tagged” courses are expected in most cases to be courses the student uses to meet a Disciplinary Area in the General Education requirements or a major or minor requirement.

Figure 1. General Education: A Foundation for Baccalaureate Education
Process

It is suggested that identification of courses eligible to be included in the *Academic Foundation* and *Disciplinary Areas* or to have a *Tag* be done via a campus-level course approval process directed by the Faculty Senate. In this process, teams of faculty who are disciplinary or content experts would evaluate proposed General Education courses or course “tags” to determine whether the course meets the stated learning outcomes for the General Education requirement to which each proposed course is intended to apply. Also evaluated would be whether there is a stated commitment and plan for assessment of those learning outcomes that is articulated by the proposer.
Assessment Plan

Assessment of learning outcomes is an essential component of this proposal for a revision of the General Education program. Assessment refers to the process of using students’ work to verify that learning outcomes desired by the faculty and institution are being achieved and that appropriate action is being taken to assure continuous improvement. Each of the four learning outcomes is demonstrated by means of formal student expression; this may be written, oral, artistic, ASL, or Braille as appropriate.

All students who have completed successfully their general education requirements will be deemed to have the knowledge and skills described in the learning outcomes and able to apply those skills to coursework within the major.

To facilitate institutional level assessment, student products will be kept in a centralized (electronic) university repository. The products submitted to the repository will be identified during the course or “tag” approval process and may be work used by the instructor as part of a grading scheme. The products will be sampled by the institution for institutional level assessment according to a regular schedule. Such assessment will be shared with the campus as a whole to inform subsequent practice.

Implementation of Assessment Plan

- All approved General Education courses will collect predetermined, course embedded learning artifacts. These must be specified and commitment to assessment must be declared at the time a course is reviewed for inclusion as a General Education course or “tag.”

- Samples of artifacts will be evaluated by faculty experts who will use agreed upon rubrics. The General Education Revision Steering Committee has identified potential types of artifacts and created/adapted rubrics for most Learning Outcomes.

- After evaluation of sampled artifacts, a summary of findings will be shared by the faculty review committee with the campus for consideration and action.

- There will be a regular schedule of assessment and feedback for each Learning Outcome. The General Education Revision Steering Committee suggests a four year cycle whereby each Learning Outcome is evaluated every four years. The review cycle should commence a year after implementation of the General Education revision.