Syracuse University

Institutional Effectiveness and Assessment Ad Hoc Committee on Shared Competencies

effectiveness.syr.edu

provost.syr.edu/sharedcompetencies

Version 1: October 2019

## **Discovery Toolkit**

A guide for faculty to reflect on and map program student learning outcomes and courses to the Shared Competencies

## A Letter from your Colleagues

In December 2018, the University Senate approved six Shared Competencies and corresponding framing language to guide the undergraduate student learning experience in all University academic programs. These institutional learning goals will also help the University to meet the Middle States Commission on Higher Education accreditation standards.

The Ad Hoc Committee on Shared Competencies has reviewed several models for assessing institutional learning goals, consulted with national assessment experts, and attended conferences on general education reform. The committee concluded that an approach emphasizing faculty, staff, and student development; and utilizing existing assessment systems fits our campus best.

A key part of this implementation system involves mapping the current academic program student learning outcomes to the Shared Competencies. Institutional Effectiveness and Assessment (IEA) conducted a preliminary mapping exercise to provide programs with a draft alignment; this Toolkit elicits faculty participation in revising and/or approving how program student learning outcomes are mapped to the Shared Competencies. This Toolkit also presents faculty with a framework to reflect on how the Shared Competencies are integrated into their academic programs.

### Logistics

Please refer to the "Discovery Toolkit Checklist" on page 3 to help you navigate the Discovery Toolkit and Templates; in addition to this Discovery Toolkit, program contacts were provided with a digital Discovery Template in the form of an excel workbook. The deadline to complete steps 1 and 2 is May 1, 2020.

Note that there is an <u>optional</u> step 3 included in the Discovery Toolkit and Templates that encourages faculty to map individual courses to the Shared Competencies. We included this optional step because the long-term goal is to extend the mapping of the Shared Competencies to individual courses and communicate course taggings to students in the 2021-2022 course catalog and Degree Works. Therefore, we want to provide faculty with the opportunity to begin this process and conversation now. Ultimately, we hope to use course mapping information to guide those seeking courses that promote a specific competency. The deadline to complete step 3 is April 2, 2021.

If you have any questions or would like to meet and discuss the shared competencies toolkit, please contact us!

Anne Mosher, Ph.D. amosher@maxwell.syr.edu Chair, Ad Hoc Committee on Shared Competencies Mary Graham, Ph.D. <u>megraham@syr.edu</u> Provost Faculty Fellow Gerald Edmonds, Ph.D. gedmonds@syr.edu Sr. Assistant Provost

## **Shared Competencies**

Syracuse University prepares undergraduate students for professional and personal success through six learning goals called Shared Competencies. The competencies help faculty and students communicate the overall value of a Syracuse University education.

| Competency   | Framing Language  |  |  |  |  |  |  |
|--|---|--|--|--|--|--|--|
| Ethics, Integrity, and<br>Commitment to<br>Diversity and Inclusion | Reflection on the dynamic relationships among power, inequality,<br>identities, and social structures. Thoughtful engagement with one's<br>values, intersectional identities, experiences, and diverse<br>perspectives and people. Application of ethical and inclusive<br>decision-making in the context of personal, academic, professional,<br>and collaborative pursuits. |  |  |  |  |  |  |
| Critical and Creative<br>Thinking                                  | Exploration and synthesis of ideas, artifacts, issues, and events to<br>inform and evaluate arguments, develop new insights, and produce<br>creative work. Reflection on, and application of divergent modes of<br>inquiry, analysis, and innovation to research, knowledge, and artistic<br>creation.  |  |  |  |  |  |  |
| Scientific Inquiry<br>and Research Skills                          | Application of scientific inquiry and problem solving in various<br>contexts. Analysis of theories, replication of procedures, and<br>rethinking existing frameworks. Supporting arguments through<br>research, data, and quantitative and qualitative evidence that can<br>generate new knowledge.   |  |  |  |  |  |  |
| Civic and Global<br>Responsibility                                 | Knowledge, exploration, and analysis of the complexity surrounding<br>interdependent local, national, and global affairs. Engagement in<br>responsible, collaborative, and inclusive civic and cross-cultural<br>learning, with an emphasis on public, global, and historical issues.   |  |  |  |  |  |  |
| Communication Skills   | Effective individual, interpersonal, and collaborative presentation<br>and development of ideas through oral, written, and other forms of<br>expression to inform, persuade, or inspire.  |  |  |  |  |  |  |
| Information Literacy<br>and Technological<br>Agility               | Identification, collection, evaluation, and responsible use of<br>information. Effective, ethical, and critical application of various<br>technologies and media in academic, creative, personal, and<br>professional endeavors.  |  |  |  |  |  |  |

## **Discovery Toolkit Checklist**

Faculty can utilize this checklist to navigate the Discovery Toolkit and Templates to map student learning outcomes and courses (optional) to the Shared Competencies.

| Step 1: Engage faculty in a reflective and collaborative discussion |   |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
|   | Provide program faculty with a copy of the Discovery Toolkit, current student learning outcomes, and current curriculum map showing major required courses.   |  |  |  |  |  |  |
|   | Schedule a time to discuss the Discovery Toolkit and mapping process with program faculty (e.g., faculty or department meeting).  |  |  |  |  |  |  |
|   | Identify a faculty member to facilitate the conversation and take meeting minutes to keep a record of faculty ideas, critiques, and contributions.  |  |  |  |  |  |  |
| Step 2: Map student learning outcomes to the Shared Competencies    |   |  |  |  |  |  |  |
|   | Open the "Discovery Template" excel file to review and edit the draft map prepared by Institutional Effectiveness and Assessment (IEA). The draft map is the first tab of the excel file: "1_Learning Outcome Mapping."                                   |  |  |  |  |  |  |
|   | Please note: IEA mapped outcomes to a maximum of two competencies to capture the primary intent of the outcome. Please consider the primary intent of the outcome and <u>map outcomes to no more than two competencies.</u>                               |  |  |  |  |  |  |
|   | Turn to page 8 to review a completed example.   |  |  |  |  |  |  |
|   | Utilize the Shared Competency Guiding Framework on page 4 to discuss each student learning outcome in relation to the Shared Competencies.  |  |  |  |  |  |  |
|   | If faculty agree with the draft map, send an acknowledgement e-mail to <u>iea@syr.edu</u> by May 1, 2020.   |  |  |  |  |  |  |
|   | If faculty make changes to the draft map, update the excel file and provide a rationale for changes in the template for each learning outcome where changes were made and send the revised map to <u>iea@syr.edu</u> by May 1, 2020.                      |  |  |  |  |  |  |
|   | Optional Step 3: Map courses to the Shared Competencies   |  |  |  |  |  |  |
|   | To get a jumpstart on tagging courses in the course catalog and Degree Works, faculty may want to begin the course mapping process at this time. Schedule a time to discuss each required course in relation to the Shared Competencies.                  |  |  |  |  |  |  |
|   | Utilize the "Course Mapping Decision Tree" on page 6 to discuss each required course associated with the program.   |  |  |  |  |  |  |
|   | Open the "Discovery Template" excel file and select tab two "2_Optional Course Mapping" to list the required active courses faculty want tagged. Required active courses are courses that are offered to students at least once in a four-year timeframe. |  |  |  |  |  |  |
|   | For each required course listed, provide the requested parameters and indicate alignment to <u>one</u> Shared Competency. Consider the High Impact Practices listed on page 7 when identifying assignments.   |  |  |  |  |  |  |
|   | If a course is required for multiple academic programs within a school/college (for instance, ECS101 is required for all engineering majors) consult with your associate dean to determine how it should be mapped for the school/college.                |  |  |  |  |  |  |
|   | Send the excel file which includes tab 1 and tab 2 updates to <u>iea@syr.edu</u> . The deadline for step 3 is April 2, 2021.  |  |  |  |  |  |  |

## Shared Competencies Guiding Framework

The following framework can aid faculty in mapping program student learning outcomes to the Shared Competencies. IEA has prepared a draft mapping for the program faculty to review, revise, and approve. This mapping will allow IEA to utilize a program's Annual Progress Report (APR) as a measure to assess a competency.

| Does the learning outcome promote a student's ability to:   |     | No | If yes, consider the following:   |  |  |
|---|-----|----|---|--|--|
| Reflect on power, inequality, identities, and<br>social structures?<br>Make ethical and inclusive decisions in their<br>personal, academic, and professional life?  |     |    | The outcome may map to Ethics, Integrity, and Commitment to<br>Diversity. Common elements across all undergraduate learning<br>outcomes included professional ethics and behavior, influencing<br>policy, managing diverse groups, and engaging with and<br>supporting people from diverse backgrounds. |  |  |
| Explore and synthesize ideas, events, and<br>creative work?<br>Reflect and apply inquiry, analysis, knowledge,<br>and artistic creation?  |     |    | The outcome may map to Critical and Creative Thinking.<br>Common elements across all undergraduate learning outcomes<br>included the application of knowledge, the ability to design,<br>produce, adapt, or create, and the ability to critically reflect,<br>think, or illustrate.                     |  |  |
| Apply scientific inquiry and problem solving in<br>various context?<br>Support arguments through research, data,<br>quantitative and qualitative evidence?  |     |    | The outcome may map to Scientific Inquiry and Research Skills.<br>Common elements across all undergraduate learning outcomes<br>included the ability to conduct research, experimental design,<br>data analysis, utilizing scientific or industry tools to interpret<br>results and draw conclusions.   |  |  |
| Gain knowledge, explore, and analyze the<br>complexities surrounding interdependent<br>local, national, and global affairs?<br>Engage in responsible, collaborative, and<br>inclusive civic and cross-cultural learning, with<br>an emphasis on public, global, and historical<br>issues? |     |    | The outcome may map to Civic and Global Responsibility.<br>Common elements across all undergraduate learning outcome<br>included the ability to study social, cultural, environmental, an<br>political impacts on society, and comparing local, regional,<br>national, and global policies.             |  |  |
| Conduct individual, interpersonal, and<br>collaborative presentations?<br>Develop ideas through oral, written, and other<br>forms of expression to inform, persuade, or<br>inspire?   |     |    | The outcome may map to Communication Skills. Common<br>elements across all undergraduate learning outcomes included<br>the ability to speak, write, read, listen, and express ideas through<br>physical and creative expression.  |  |  |
| Identify, collect, evaluate, and responsibly use<br>information?<br>Apply various technologies and media in<br>academic, creative, personal, and professional<br>endeavors?   |     |    | The outcome may map to Information Literacy and<br>Technological Agility. Common elements across all<br>undergraduate learning outcomes included the ability to collect<br>information; utilize technology, various forms of media and<br>interfaces; and evaluate sources, data, and text.             |  |  |
| Questions:  | Yes | No | If yes, consider the following:   |  |  |
| Does your program have a set of shared<br>learning outcomes with other undergraduate<br>programs in your school/college?  |     |    | Discuss the shared outcomes with other program faculty to<br>ensure that these outcomes are mapped consistently across<br>programs.   |  |  |
| Are you mapping a student learning outcome to three or more competencies?   |     |    | Your learning outcome may be a "bundled" statement which<br>contains too many elements. Consider splitting the outcome into<br>two distinct statements. The questions on page 5 will guide you<br>to reflect on your learning outcomes.   |  |  |

## Student Learning Outcomes Guiding Framework

Student Learning Outcomes (SLOs) are statements describing specific student behaviors that evidence the acquisition of desired knowledge, skills, abilities, capacities, attitudes, or dispositions. They should be written using active verbs that describe what students should be able to do, know, or produce over time as a result of their participation in the program.

| Questions:   | Yes | No | If No, consider the following:   |  |  |
|--|-----|----|--|--|--|
| Is the learning outcome specific<br>and well defined?<br>Does the outcome clearly<br>describe and define the expected<br>abilities, knowledge, values, and<br>attitudes of graduates of the<br>program?  |     |    | <ul> <li>The basis for assessment of student learning is learning outcome statements that clearly indicate and define the learning outcomes. Therefore, it is extremely important to correctly identify, develop and define the learning outcomes. A well-defined student learning outcome includes the following information:</li> <li>✓ Areas / fields that are the focus of the assessment.</li> <li>✓ Knowledge, abilities, values, and attitudes that a student in your program is expected to have within that area / field by the time they complete the program.</li> <li>✓ Depth of the knowledge, abilities, values, and attitudes and attitudes expected of a student in your program.</li> </ul>   |  |  |
| Is the learning outcome<br>measurable?<br>Is the outcome written using<br>action verbs?<br>Does the outcome avoid using<br>vague language such as<br>"understand"?<br>Is it possible to collect accurate<br>and reliable data for each<br>outcome? |     |    | <ul> <li>Useful outcome statements are clear and simple declarative sentences.</li> <li>Check if your outcome statement is bundled, as it would likely require two methods of assessment.</li> <li>Example of a "bundled" statement:<br/>Students should be able to independently design, carry out experimental and correlational research that yields valid results, and gain competency in such basic skills as writing reports, communicating research ideas and oral presentations.</li> <li>Example of a simple statement:<br/>Students should be able to independently design and carry out experimental and correlational research that yields valid results.</li> <li>Consider your available resources (staff, technology, assessment support, and institutional level surveys etc.). Include more than one measurement method (see appendix c) to demonstrate that a student in a particular program has achieved the expected outcomes of that program.</li> </ul> |  |  |
| Does the learning outcome rely<br>on active verbs in the present<br>tense?<br>Are the outcomes written using<br>single action verbs to specify<br>definite, observable behaviors?  |     |    | Use the list of <u>action verbs</u> for each of the three domains of educational objectives/ outcomes. These lists of <u>action verbs</u> will help you in writing clear, specific, and measurable learning outcome.   |  |  |
| Does the learning outcome<br>focus on learning products and<br>not learning processes?   |     |    | Learning outcomes should be stated in terms of expected student<br>performance and not on what faculty intend to do during instruction. The<br>focus should be on the students and what they should be able to demonstrate<br>or produce upon completion of the program. For example, the learning<br>outcome "Introduces mathematical applications" is not appropriate because<br>its focus is on instruction (the process) and not on the results of instruction<br>(the product).   |  |  |

## **Course Mapping Decision Tree**

To communicate courses that promote the acquisition and demonstration of a specific competency, courses that are mapped to a specific competency will be tagged in the course catalog and Degree Works so faculty, students, and advisors can discuss and plan a student's degree path.



Identification, collection, evaluation, and responsible use of information. Effective, ethical, and critical application of various technologies and media in academic, creative, personal, and professional endeavors.

# High-Impact Educational Practices

#### **First-Year Seminars and Experiences**

Many schools now build into the curriculum first-year seminars or other programs that bring small groups of students together with faculty or staff on a regular basis. The highest-quality first-year experiences place a strong emphasis on critical inquiry, frequent writing, information literacy, collaborative learning, and other skills that develop students' intellectual and practical competencies. First-year seminars can also involve students with cutting-edge questions in scholarship and with faculty members' own research.

#### **Common Intellectual Experiences**

The older idea of a "core" curriculum has evolved into a variety of modern forms, such as a set of required common courses or a vertically organized general education program that includes advanced integrative studies and/or required participation in a learning community (see below). These programs often combine broad themes—e.g., technology and society, global interdependence—with a variety of curricular and cocurricular options for students.

#### **Learning Communities**

The key goals for learning communities are to encourage integration of learning across courses and to involve students with "big questions" that matter beyond the classroom. Students take two or more linked courses as a group and work closely with one another and with their professors. Many learning communities explore a common topic and/or common readings through the lenses of different disciplines. Some deliberately link "liberal arts" and "professional courses"; others feature service learning.

#### **Writing-Intensive Courses**

These courses emphasize writing at all levels of instruction and across the curriculum, including final-year projects. Students are encouraged to produce and revise various forms of writing for different audiences in different disciplines. The effectiveness of this repeated practice "across the curriculum" has led to parallel efforts in such areas as quantitative reasoning, oral communication, information literacy, and, on some campuses, ethical inquiry.

#### **Collaborative Assignments and Projects**

Collaborative learning combines two key goals: learning to work and solve problems in the company of others, and sharpening one's own understanding by listening seriously to the insights of others, especially those with different backgrounds and life experiences. Approaches range from study groups within a course, to team-based assignments and writing, to cooperative projects and research.

#### **Undergraduate Research**

Many colleges and universities are now providing research experiences for students in all disciplines. Undergraduate research, however, has been most prominently used in science disciplines. With strong support from the National Science Foundation and the research community, scientists are reshaping their courses to connect key concepts and questions with students' early and active involvement in systematic investigation and research. The goal is to involve students with actively contested questions, empirical observation, cutting-edge technologies, and the sense of excitement that comes from working to answer important questions.

#### **Diversity/Global Learning**

Many colleges and universities now emphasize courses and programs that help students explore cultures, life experiences, and worldviews different from their own. These studies—which may address U.S. diversity, world cultures, or both—often explore "difficult differences" such as racial, ethnic, and gender inequality, or continuing struggles around the globe for human rights, freedom, and power. Frequently, intercultural studies are augmented by experiential learning in the community and/or by study abroad.

#### ePortfolios

ePortfolios are the latest addition to AAC&U's list of high-impact educational practices, and higher education has developed a range of ways to implement them for teaching and learning, programmatic assessment, and career development. ePortfolios enable students to electronically collect their work over time, reflect upon their personal and academic growth, and then share selected items with others, such as professors, advisors, and potential employers. Because collection over time is a key element of the ePortfolio process, employing ePortfolios in collaboration with other high-impact practices provides opportunities for students to make connections between various educational experiences.

#### Service Learning, Community-Based Learning

In these programs, field-based "experiential learning" with community partners is an instructional strategy—and often a required part of the course. The idea is to give students direct experience with issues they are studying in the curriculum and with ongoing efforts to analyze and solve problems in the community. A key element in these programs is the opportunity students have to both *apply* what they are learning in real-world settings and *reflect* in a classroom setting on their service experiences. These programs model the idea that giving something back to the community is an important college outcome, and that working with community partners is good preparation for citizenship, work, and life.

#### Internships

Internships are another increasingly common form of experiential learning. The idea is to provide students with direct experience in a work setting—usually related to their career interests—and to give them the benefit of supervision and coaching from professionals in the field. If the internship is taken for course credit, students complete a project or paper that is approved by a faculty member.

#### **Capstone Courses and Projects**

Whether they're called "senior capstones" or some other name, these culminating experiences require students nearing the end of their college years to create a project of some sort that integrates and applies what they've learned. The project might be a research paper, a performance, a portfolio of "best work," or an exhibit of artwork. Capstones are offered both in departmental programs and, increasingly, in general education as well.



## Example of Completed Map

The image below depicts a completed map that was returned to Institutional Effectiveness and Assessment (IEA) after completing the Discovery Toolkit Steps 1 and 2.

| Maxwell: Citizenship and Civic Engagement BA  |   |                                   |  |                                    |                         |   |   |  |  |
|---|---|-----------------------------------|--|------------------------------------|-------------------------|---|---|--|--|
| Program Learning Outcome  | Ethics, Integrity,<br>and Commitment<br>to Diversity and<br>Inclusion | Critical and<br>Creative Thinking | Scientific Inquiry<br>and Research<br>Skills | Civic and Global<br>Responsibility | Communication<br>Skills | Information<br>Literacy and<br>Technological<br>Agility | Provide rationale for faculty revisions |  |  |
| 1. VALUES & ETHICS – Students will be able to evaluate ethical practices of citizenship and civic and community engagement in light of different public philosophies, societal and community values, and their own experiences. | x   |                                   |  | x                                  |                         |   | Revised learning outcomes fall 2019     |  |  |
| 2. RESEARCH & DISCOVERY – Students will be able to utilize social science research methodologies to discover community and societal facts and values.   |   |                                   | x  |                                    |                         |   | Revised learning outcomes fall 2019     |  |  |
| <ol> <li>COMMUNITY &amp; CONTEXT – Students will be able to analyze and evaluate<br/>the development of civic life in specific locational settings, from global to local.</li> </ol>  |   | x                                 |  | x                                  |                         |   | Revised learning outcomes fall 2019     |  |  |
| 4. COLLABORATION & ENGAGEMENT – Students will be able to interact and work with diverse communities using appropriate and ethical practices.  | x   |                                   |  |                                    | x                       |   | Revised learning outcomes fall 2019     |  |  |
| <ol> <li>DESIGN &amp; IMPLEMENTATION – Students will be able to create a feasible and<br/>sustainable community and/ or civic engagement project or policy with a<br/>partner organization.</li> </ol>                          |   | x                                 |  |                                    | x                       |   | Revised learning outcomes fall 2019     |  |  |
| 1_Learning Outcome Mapping 2_Optional_Course Mapping +  |   |                                   |  |                                    |                         |   |   |  |  |