Program-Level Assessment
Articulating Learning Goals

As part of program-level assessment of student learning, each academic program must adopt, use, and publish program-level learning goals. These intended student learning outcomes articulate what students who complete the program should know, be able to do, and/or value upon completion. These goals are required to be specific, measurable, focused on student learning, and aligned with John Carroll's nine Academic Learning Goals. Alignment is discussed in a separate document.

There is no single right way to establish learning goals. Many programs look at other institutions' goals as models (some are linked from the assessment website), adopt or adapt goals provided by a professional organization, or brainstorm among the faculty and other important stakeholders. Another option is to begin with the Academic Learning Goals or University Learning Goals and consider how they are manifested within the program in question.

> *Quick research tip: Searching for "student learning outcomes" rather than "learning goals" will usually lead to better search results with a search engine or scholarly database.*

Adopt and Publish

Each academic program should officially adopt learning goals in whatever manner is appropriate for the particular program (vote of department faculty or program steering committee). Once adopted, the learning goals should be posted on the program's website, printed in the *Bulletin*, and posted on the Office of Academic Assessment's Learning Goals website.

> *Changes to learning goals that occur outside of the normal assessment process (in response to new guidelines from a professional organization, for example) must be reported to Office of Academic Assessment.*

Program-Specific

Strictly speaking, each distinct major, minor, or concentration within a major is a separate program. Closely-related programs (concentrations within a major, majors and minors in the same discipline, or majors within a single discipline) should have a number of commonalities but some distinct features as well (otherwise, why distinguish the program as a separate concentration or major?).

Knowledge and Skills

It may help, in designing learning goals, to consider two rough categories: knowledge and skills. What should students **know**? What should they be able to **do**? Is there a certain body of knowledge that students completing the program should possess? If so, articulate that. Emphasize the aspects of the body of knowledge that are important to the program or that set the program apart from its competitors. In terms of skills, the nine Academic Learning Goals emphasize critical analysis, aesthetic appreciation, creativity, innovation, communication, promotion of social justice, leadership, and collaboration. Some of these skills may be crucial to the program in question, or perhaps, there are discipline-specific skills.

Domains and Taxonomies of Learning

A slightly more complicated model divides learning into three domains: cognitive (which includes both factual and procedural knowledge), affective (feelings and values), and psychomotor (movement and perception). The affective domain adds the question "What should students value/feel/believe when they complete the program?" While many programs are uncomfortable or even hostile to the suggestion of including affective learning goals, some are interested or even required to do so (education has long been required by accreditors to identify and nurture teaching dispositions that strengthen student learning). The use of affective learning goals is neither encouraged or discouraged at John Carroll University.

Blooms' Taxonomy

The literature on learning goals/outcomes will often suggest making use of Bloom's taxonomy, an organization scheme which places cognitive processes into a hierarchy. The original hierarchy, as described in

> Bloom, B. S.; Engelhart, M. D.; Furst, E. J.; Hill, W. H.; Krathwohl, D. R. (1956). *Taxonomy of educational objectives: The classification of educational goals. Handbook I: Cognitive domain.* New York: David McKay Company.

moved from *knowledge* to *comprehension* to *application* to *analysis* to *synthesis* to *evaluation*. In the 1990s, a team of researchers "updated" the taxonomy by changing the nouns to verbs (*remember* instead of *knowledge*, exchanging the top two categories (*create* now supersedes *evaluate*) and adding a second dimension reflecting different types of knowledge (*factual, conceptual, procedural,* and *metacognitive*). It is well explained here and originally appeared in

> Anderson, L.W. (Ed.), Krathwohl, D.R. (Ed.), Airasian, P.W., Cruikshank, K.A., Mayer, R.E., Pintrich, P.R., Raths, J., & Wittrock, M.C. (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of Educational Objectives* (Complete edition). New York: Longman.

The assessment website also links to a document which provides verbs categorized by level of Bloom's taxonomy that may be helpful in writing learning goals.

Similar schemes exist for the affective and psychomotor domains, but they are not as widely used.

Focused on Student Learning

When higher education began working with goals, objectives, and outcomes, many of the resulting statements were focused on a program or a course. The current expectation from most accreditors is that programs should articulate goals that focus on student learning. They should address what **students** will do or know, not what the **program** or **course** will do. Here are some examples at the course level:

Course-Focused Statements	Student-Focused Statements
This course will include the exploration of sensitivity, accuracy, and consistency in written communication.	The student will be able to critique a written essay for sensitivity, accuracy, and consistency.
This course will involve the concept of Backwards Design.	Students will be able to apply the concept of Backwards Design to writing learning outcomes.
This course will introduce major classifications of therapeutic drugs.	The student will be able to discriminate between the therapeutic and adverse effects of different medications.

Measurable

Learning goals should use language that allows the program faculty members to *observe* and *measure* what students have learned. If it can't be observed, how can it be evaluated? If it can't evaluated, how can the program make changes to improve student learning?

As an example, one can observe *calculate* and *identify* and *critique*, but *understand* or *know* or *appreciate* are more difficult. The verbs chosen for learning goals are crucial.

Specific

There are a number of levels of learning goals, from the University Learning Goals at the top to the learning goal for a single activity in a single course. As one move further down this chain, goals should become more and more specific. Specificity matters to learning goals in two important ways: it provides program distinctiveness and it reflects the time frame involved.

An institutional-level goal and a program-level goal (for example, about written communication) may be similar, but the program-level goal should be more specific, since it explains specifically how the program in question realizes the larger institutional goal (in this case, reflecting discipline-specific concerns about writing).

Goals for a course need to be more specific than those for a four-year program in order to be attainable in the time frame allowed.

Like measurability, specificity is strongly affected by the choice of verb for the learning goal.

A goal that is too broad to serve as a program-level learning goal will often fall short of the other criteria, as well. If necessary, a broad learning goal can be retained, but supplemented with more specific learning objectives.

Example of Measurable and Specific Goals

Weak Verbs	Strong Verbs
The student will <u>understand</u> the importance of cell growth and reproduction.	The student will be able to <u>explain</u> the importance of cell growth and reproduction.
The student will <u>know about</u> hydraulic brake systems.	The student will be able to <u>service</u> hydraulic brake systems.
The student will <u>demonstrate knowledge</u> of a work of 20th century British sculpture.	The student will be able to <u>analyze the form and content</u> of a work of 20th century British sculpture.

The tables are adapted from a presentation by Macomb Community College