

## ALC Tip Sheet #4

### Specifying Content Outcomes

#### FAQ

#### ***How detailed should the program outcomes be with regard to content?***

Not detailed. You should try to think in terms of the broad strokes of what you hope students will be able to understand, remember, and use at the end of their program.

You should *not* try to identify a master list of principles, theories, and concepts that you want to hold students accountable for primarily because you don't want to have the obligation to measure something that detailed and because the disciplinary canon tends to change over time. You don't want to construct a list that must be continuously revised. Therefore, speaking in general terms gives you the best strategy.

#### ***What would be good examples of content outcomes?***

A graduate of X program...

- Accurately employs basic terminology of the discipline.
- Uses frameworks (e.g., concepts, principles, theories) of the discipline effectively to explain \_\_X\_\_.  
    "X" can be social science phenomena, works of art, natural science outcomes, or other complex targets in a discipline
- Describes the complex nature of the discipline.
- Identifies how the discipline prepares individuals for professional opportunities after graduation.

#### ***How would those outcomes play out in a specific program?***

Let's arbitrarily choose two examples that provide some contrast:

Theatre and Engineering (these are hypothetical)

A graduate of the Theatre program

- Accurately employs basic terminology of the theatre.
- Uses frameworks (e.g., concepts, principles, theories) of the discipline effectively to explain theatrical phenomena.
- Describes the complex nature of the theatre arts.
- Identifies undergraduate training in the theatre arts prepares individuals for professional opportunities after graduation.

A graduate of the Engineering program

- Accurately employs basic terminology of the discipline.
- Uses frameworks (e.g., concepts, principles, theories) of the discipline effectively to explain engineering phenomena.
- Describes the complex nature of engineering.
- Identifies how undergraduate training in the engineering prepares individuals for professional opportunities after graduation.

***Do we have to use those four specific outcomes in the content domain?***

No. Keep in mind that we are trying to provide exemplars in the Tip Sheets to help but not constrain your planning. There may be other outcomes that express the content preparation for your specific discipline better than these do. These are provided as a generic model that may be most useful in getting the conversation moving in your department.

***The ALC/QEP timeline calls for our department to do a curriculum “map” or “matrix” with the outcomes that we ultimately choose later in the academic year. Can you describe how that process might work with these content outcomes?***

After the department decides on the specific outcomes for your ALC, you will need to have a discussion about where these specifics occur in the curriculum.

Using the content model provided above, your department might decide that all of your required and elective courses refine student performance in the first two bullets-- terminology uses and framework facility. Technically, every class should contribute to building the students' content knowledge base. You could formally assess how well students are doing in these two areas in every class using ongoing embedded assessment techniques. However, it is likely that a better, more efficient measure of content retention for the overall major could be conducted once as a freestanding assessment or embedded in the senior capstone course.

The second two bullets describe a specific portion of the content base—the student's understanding of the nature of the discipline as well as the student's grasp of career potential within the discipline. The most productive strategy to measure these outcomes probably would be to embed them in the senior capstone course. A writing assignment that asks students to discuss the positive and negative features of the discipline and link that to their own career plans would be a way to capture measurable progress along these outcomes.

In summary, the first two bullets will be formally taught in all classes but formally assessed for program quality purposes perhaps just once. The second two bullets will be formally taught in a narrower, more advanced context--typically courses that help students integrate what they have learned across their coursework-- and assessed in the same setting.

***Our program undergoes formal accreditation procedures. Can we “count” the results of the related national exam as the formal assessment measurement for this area?***

Definitely. If you must undergo accreditation that requires your students to take a nationally-normed exit exam, their performance can be benchmarked against students in other programs. This quantitative measure will work well to establish how well your students are managing content retention and use.

***Our program is not accredited and we don't currently use an external national exam to provide benchmarks. Should we?***

Not necessarily. Multiple choice tests capture how well students have learned and retained over a four-year program but often can lead to some disappointing assessment performance. The reason is that the students have studied broadly over the course of their four years or so in the major. Nuances or details, often the primary fodder for multiple choice tests, have plenty of time to get fuzzy if not repeatedly used or re-introduced. Therefore, your students may not test particularly well or crisply on basic concepts even if they are doing refined work in their advanced major courses.

The advantage of using such a test is that it will give you a profile of where students are relatively weak compared to national standards and that can give you a clearer sense of courses that might need to be refined. Unfortunately, those national comparative data can be pretty wobbly. Every year new customers become part of the national comparison and old customers drop out so that the comparison is not stable from year to year. It may be possible for your students to register as to having a relative strength one year and weakness the next in the same category of work just because of the way the pool of participants has been constructed. In general, using an *authentic* assessment performance—one in which the student performs a discipline-based cognitive activity *involving the content*-- is preferred to using a standardized multiple choice exam.

Available tests, such as those offered as Advanced Field Tests from ETS, are also expensive and since we don't have special funding, you would have to pass this cost on to the student. In addition, if students don't believe they have a personal stake in the results, their motivation to take a large multiple-choice test may not be optimal.

***I've heard some departments develop their own exam to test content basics. Is this a good idea?***

Some programs have figured out ways to develop a comprehensive multiple-choice test to provide a sense of comparison in year-to-year performance across their students. The advantage of measuring content achievement with a local test is that the test can be tailored to the distinctive experiences offered in the required courses of the major. Typically, such tests are very challenging to develop to ensure that they represent the various content areas properly. Security of the tests can be a problem over time. And getting the whole department to agree to one unitary measure that will do an adequate job can sometimes be an insurmountable problem.

***If we don't use a multiple choice test to measure content, what other alternatives are there?***

A solid performance in a capstone course offers you a chance to sample the students' content mastery skills. A professionally-oriented paper, a presentation on internship experience, or a speech about a specialized topic in the discipline can give you an opportunity to make some expert judgments about

how facile the student is in the basic content of the major. The best way to make this approach work for assessment purposes is to have a department's consensus on what constitutes "mastery" in the content.

***Can you provide an example of how that would work?***

Yes. Here is a way that traditional grading and "embedded assessment" can work together to help us resolve our assessment obligation. Suppose you have students in a capstone course who are obligated to write a term paper as their exit performance. You might apply your normal grading standards to the paper to come up with a letter grade in the traditional mode; however, you can also link the grades themselves to the content outcomes you are trying to assess. For example,

- "A" Student shows clear mastery of the language used in the discipline. The student appropriately applied and spelled the disciplinary concepts. The student selected described appropriate frameworks to use in the development of the thesis. The student abided by appropriate writing conventions.
- "B" Student showed many strengths in communicating the content of the discipline although there was some room for improvement in concept accuracy, framework use, or convention writing.
- "C" Student demonstrated both strengths and weaknesses in communicating the content of the discipline.
- "D" Student's communication of the content was problematic although some competence was evidence in concept accuracy, framework use, or conventional writing.
- "F" Insufficient competence in disciplinary content was evident. Student was unable to use appropriate terminology, apply disciplinary frameworks, and/or write in acceptable disciplinary conventions.

Note: This approach would allow you to be able to make some comparisons over time in your own program about the quality of the students content expertise reflected in an authentic performance. This approach simply makes the criteria for grades more explicit and will be the basis of the spring workshops we will offer by consultant Barbara Walvoord from Notre Dame University.

***Don't assessment strategies have to have an external judge to be valid?***

Not necessarily. Most stakeholders prefer that there are more judges than just the classroom teacher deciding on the quality of the students work to constitute legitimate assessment. However, if you have departmental backing for the explicit criteria you are applying, you may not necessarily have to have a formal external judgment of the quality of the work.

On the other hand, some departments use juried poster sessions or juried regional student conference performances can lend the externality that make assessment-savvy audiences happier.

***Does every outcome that we specify have to be measured?***

At this stage of things, it probably is a good idea to aim for outcomes that lend themselves to measurement. Think through measurement strategies that would give you good feedback about what areas in your program need refinement.