

## RELATIONSHIP OF TUNING AND DISCIPLINARY ACCREDITATION

Tuning is the faculty-led process of defining a body of knowledge and skills for a discipline in terms of general competencies and discipline-specific competencies for its graduates. These competencies are translated into learning outcomes that define levels of achievement at the AS/AA-equivalent level, the BS/BA, MS/MA, and doctoral levels. Tuning thus provides expected levels of achievement of both general and discipline-specific competencies at each step along the process of becoming a fully qualified practitioner of the discipline. Tuning can also define competencies achieved through experience after formal education. Through Tuning, students have a clear picture of what is expected and can efficiently plan their educational experience to achieve those expectations.

While disciplinary accreditation standards differ appreciably from discipline to discipline, these expectations can be thought of as providing both the foundation and the motivation for Tuning. Tuning takes discipline faculty deeper and into more explicit outcomes expectations than do existing accreditation standards. Furthermore, Tuning reports can be organized and formatted so they are useful for accreditation. There need not be duplication of effort in this process.

For example, ABET accredited engineering programs are required to develop program educational objectives (PEO's), the career and professional accomplishments that the program is preparing its graduates to achieve, at some point after graduation (typically five years after graduation). The PEO's are crafted by each program for its particular and unique mission. ABET accreditation also requires specification of program outcomes, describing what students are expected to know and be able to do by the time of graduation. These outcomes are not dictated by ABET, but programs are required to define them as part of the accrediting process.

Similarly, many discipline accrediting bodies require that programs seeking accreditation carefully define their objectives and outcomes as is done in the Tuning process, but most frequently Tuning goes further by considering general competencies, often taught by other departments, in greater detail, and by defining learning outcomes at each level of education, not simply program outcomes. Both Tuning and disciplinary accreditation expect disciplines to put in place assessment tools that certify the achievement of the appropriate outcomes when degrees are awarded.

The Tuning process does not seek to supplant the criteria of discipline accreditation with different or expanded criteria. Rather, Tuning is complementary to discipline accreditation in that it seeks to define in specific and assessable terms the program objectives and learning outcomes, level by level. Tuning asks that learning outcomes define levels of achievement at critical milestones in the education of a student of the discipline. The Tuning process also calls upon disciplines to write Degree Profiles in terms of general and discipline-specific competencies their students will achieve, at specified levels. Tuning thus facilitates demonstrating achievement of the program outcomes as students move through the educational process. It also provides a framework for demonstrating the degree to which program objectives are attained.

Through defined consultations with employers and stakeholders, by surveys, focus groups, or other means, Tuning establishes priorities in the program's objectives. Tuning also develops an employability map showing students the variety of employment options to which their degree can lead. All of these tools provided by the Tuning process help students, parents, and policy makers understand clearly the academic preparation necessary to seek employment in the field.

In addition to these complementary activities that directly support discipline accreditation, Tuning emphasizes transparency in learning outcomes and degree definitions so that prospective students and parents, interested observers from other disciplines, employers, and policy makers can see clearly what students are expected to know, understand, and be able to do when they graduate from a program, (i.e., the knowledge, skills, and attitudes they are to have developed at program milestones). They can also see what kind of employment opportunities a graduate might reasonably expect. This transparency allows students and parents to make better informed choices at the outset of a program, potentially making it possible to plan a more efficient and cost-effective educational path. Tuning also helps make the case for the value of graduates to employers and policy makers.

Another distinct aspect of Tuning is that students are included in deliberations about program outcomes and levels of achievement. They provide feedback based on their actual experience in the program, thereby providing a reality check on the learning outcomes and other products of the Tuning process. Although this has already been done at the department level in many cases, the role of students is especially critical to Tuning because levels of competency are being defined at critical milestones and agreed upon across diverse institutions.

Tuning is a faculty-driven process that aims to define what students are expected to know, understand, and be able to do when they graduate from a program; to align these expectations with the needs of employers and society; to keep the expectations realistic and consistent with students' actual experience; and to make these expectations clear and transparent to a wide audience. Tuning does not dictate to the faculty how to achieve these aims. This approach is consistent with discipline accreditation that explicitly avoids prescribing curricular details. Different institutions and different programs have different missions, different student populations, and different employer groups. Thus, the details of individual programs must continue to be developed as appropriate for the individual institutions – all degrees in a given discipline provide the same fundamental competencies, but how these are achieved will vary from institution to institution. Further, institutions and programs will likely develop additional objectives and associated competencies to support their unique missions.

We emphasize that discipline accreditation need not duplicate effort expended on Tuning. Tuning can be carried out in a format suitable for accreditation reviews. To minimize duplication, all the products of Tuning should be prepared so they can also be used for accreditation, and they should be prepared in a form that makes program improvement efficient and accessible.