THECB PROJECT WITH LUMINA FOUNDATION FOR EDUCATION

This document outlines goals and procedures for "Tuning" discipline learning outcomes and for the course-level alignment that Tuning facilitates. This work must be driven by the deep disciplinary understanding of the faculty to be effective in transforming curricula.

Tuning addresses one discipline at a time and is the process whereby faculty carefully define learning outcomes essential to qualify for a degree in the discipline. "Tuning" is an apt term to describe this process because it involves harmonizing the approaches of various kinds and levels of institutions with diverse missions and student populations. By defining common demonstrable learning outcomes, the diverse institutions do not standardize their curricula or programs, but they focus these educational programs according to their own needs and strengths so as to achieve common outcomes. Tuning takes place with input from students, alumni and employers as well as faculty, in order to retain clear grounding in the realities of needed skills and abilities as well as retaining perspective on realistic student workloads and expectations. The audience for Tuning extends beyond these participating groups to prospective students, parents, policymakers, funding groups and a wider group of employers. This diverse audience can use the transparent picture provided by Tuning of what a student will achieve in a degree program and how that achievement can be useful to the student and to potential employers and society.

Course-level alignment is the process of assuring consistency of course outcomes across institutions. The products of course-level alignment allow course transfer among institutions with confidence that students will have similar abilities and knowledge. Course-level alignment is also not a process for standardizing curricula. The ways different institutions achieve the course-level outcomes will depend on the nature, student populations, strengths and opportunities of each institution. Course-level alignment is primarily a faculty process, using the learning outcomes developed in the broader Tuning process that included employer, alumni and student contributions as well as faculty leadership.

Course-level alignment should grow out of Tuning by assigning elements of the demonstrable program-level learning outcomes identified in the Tuning process to individual courses. The role of the course in the program is thereby clarified, and alignment is motivated by the connection of the course goals and learning outcomes to the discipline's goals and learning outcomes for the degree.

Outline of Procedures for Tuning a Discipline

A. <u>Establish a Discipline Tuning Team (or Voluntary Discipline Work Group)</u>

The Discipline Tuning Team should be made up of

- faculty representatives from a sample of institutions in Texas offering a bachelor's degree in the discipline
- faculty representatives from a sample of two-year institutions in Texas offering an associate's degree or certificate closely related to the discipline

- faculty representatives from a sample of institutions in Texas not offering degrees or certificates but offering courses or programs that could prepare a student to transfer into one of the degree programs in the discipline
- a sample of upper-division or graduate student representatives
  NOTE: *Student inclusion in the Tuning process is critical. All tuning teams should have student membership. Students can be asked to help in the collection of materials, the suggestion and discussion of competencies, the evaluation of workloads associated with learning outcomes, and the identification of targets for surveys. If at all possible, they should be included in all team meetings. Involving upper-division students in learning outcomes is useful because students often know something about what they want and need from their studies.*

It is essential that faculty representatives be chosen who have the respect of their colleagues. Furthermore, faculty representatives should be those who have been interested in and willing to work on learning outcomes, such as faculty involved in departmental curriculum issues or accreditation.

The appointment of the members of the Discipline Tuning Team must be coordinated with the institutional administrations. These members will ordinarily be nominated by department chairs with the approval of deans, and provosts or chief instructional officers.

An initial meeting should be organized to orient team members to the Tuning process. They should be introduced to a limited amount of advance reading material and to the role of the common information sources that can inform the discussion of learning outcomes: (e.g., guidelines or standards set by accrediting bodies or learned societies; prior efforts to clarify the meaning of degrees or expected learning outcomes within individual departments or institutions; course catalogs and syllabi; employers' evaluations of the curriculum; credentialing examinations; credit articulation agreements; student and alumni surveys; and state regulations).

Each team should have a chair either selected by the team or appointed by THECB organizers. If appointed, the chair should be a faculty member respected by the group and committed to the project, with adequate time allowed by his or her institution.

B. Surveys of General Competencies

The purpose of surveys of general competencies is to identify those general competencies (not discipline-specific competencies) that employers, alumni, faculty, and students see as most important to a graduate's performance in employment or other future use of the degree earned in the discipline. These results should guide the Discipline Tuning Team in its specification of demonstrable learning outcomes.

The team should be asked to review the survey questions, to suggest additional general competencies and more user-friendly phrasing, and to suggest specific survey recipients for each group to be surveyed. The team should be told that survey results will be provided as input to their deliberations on discipline learning outcomes.

Carrying out the mechanics of the surveys should not be part of the Discipline Tuning Team's assignment. This task should be given to an administrative group to carry out as early as possible. The discipline team should be put to work thinking through its discipline with the expectation the team will get employer, alumni, student and faculty survey results to provide context from which they can recalibrate the draft learning outcomes as necessary.

Note that the general competencies essential to any particular discipline may be developed and demonstrated through courses and experiences outside of the discipline department. Some may be developed and demonstrated through general education requirements. Others through programs in departments allied with the discipline. *General competencies are not equivalent to general education competencies but are competencies important to the discipline while not being specific to it.* Indeed, general competencies will, in general be important to many disciplines.

C. Team Meetings

After introducing the process and developing background information, team meetings should focus on general and discipline-specific competencies that are important to the discipline and how to define demonstrable learning outcomes. Learning outcomes need to be ratcheted up to higher and higher expectations as students progress through degree levels.

Faculty groups need considerable discussion to develop confidence in each other and in their joint conclusions. This process cannot be rushed. Team meetings will likely need to take place monthly. It is recommended that these meetings be face-to-face about every four months, with video conferencing in between to limit time and expense.

Tuning engages faculty, students, recent graduates and employers in the critical analysis of the learning a degree represents. It is the only process of its kind that includes such a wide array of stakeholders for the purpose of defining key competencies that students need to possess in order to meet the needs of society and employers. The Tuning process is a "bottom up" approach that is led by those closest to teaching, the faculty. Only when the team is given the opportunity to develop its own conclusions will team members really accept that they are the definers of the outcomes. A certain amount of patience is required to reach that level of buy-in by faculty and students on the team.

Tuning discussions should also focus on what students need to learn to prepare themselves for further study or employment rather than on what they need to be taught. Tuning understood correctly is inherently student centric.

D. Tuning the Discipline

The tuning team begins by defining learning outcomes for the degrees in their discipline, agreeing across many institutions on the essential outcomes the degrees in a particular discipline should represent. They ratchet up the expectations by degree type (associate's to bachelor's to master's and beyond). They use the results of surveys of employers, alumni, faculty and students to determine the most important general skills and abilities a student must

demonstrate to earn a degree in this field. These surveys can initiate joint reflection among stakeholders (employers, graduates, academics and students), build a common language and stimulate discussion. In addition, faculty members in the field not on the team are surveyed regarding the discipline-specific knowledge and skills students must possess at each degree level.

Once the outcomes are agreed upon, representatives of the participating institutions write Degree Profiles grounded in the learning outcomes, allowing for a high degree of flexibility in how students are taught, the material they learn and how learning outcomes are assessed. These institution-specific profiles are like marketing statements highlighting the particular strengths of each degree program but grounded in the reality of general and subject-specific competencies, with demonstrable learning outcomes at their core. The degree programs at various colleges that participate in Tuning are not uniform, nor should they be.

Then the relevance of each degree is mapped into the workplace, giving students, graduates, faculty members and employers a clear picture of the types of occupations graduates in the field can aspire to.

Tuning is not an easy process. Common challenges include writing learning outcomes that are too vague or describing sets of activities instead of learning outcomes. Special attention should be given to converting the degree-level descriptors into active learning outcomes when faculty members are ready. This is best done by coaching once the team obtains a clear understanding of and agreement on the essentials of the discipline. Good learning outcomes describe what a student should be able to do, are clear and attractive to the student, are appropriate to the student's career goals and career plans, and are both attainable and assessable. (Learning outcomes not only give focus to the learning process but are also important elements of transparency for all stakeholders including policymakers and employers.)

Outline of Procedures for Course-Level Alignment

The purpose of course-level alignment is to identify a set of common courses within a discipline and align their learning outcomes across institutions and sectors in order to provide a basis for voluntary transfer compacts and articulation agreements. The result of Tuning provides a foundation to help ensure the learning outcomes of these courses are connected to the critical elements of the learning outcomes at the program level.

A. <u>Identify Common Courses and Atypical Courses in Suggested Curriculum</u>

This task should involve students as well as faculty members so it can be carried out in a context of teamwork and collective responsibility. Considering the role of general education, service courses in allied disciplines and departmental curriculum, the Course-Level Alignment Team will create a database showing which courses are taught by the various participating institutions. From the database, the team will identify from among participating institutions those courses that are common to most institutions and those that are unique or atypical, with gradations at a level the team finds useful. They will then identify the suggested curriculum.

For each course proposed for inclusion in the common curriculum, the team will obtain syllabi and review these to understand the extent to which these courses are designed to produce similar or divergent outcomes. For each of these courses, they will examine the course description, prerequisites, co-requisites and learning objectives. The team will involve professors who teach these courses to tap their subject-matter expertise (e.g., math, physics, etc.).

On the basis of syllabi comparisons and team expertise, the team will select the most comprehensive course description from among participating two-year institutions and the most comprehensive course description from among participating four-year institutions as the "base" course descriptions (including co-requisites and prerequisites) for the two- and four-year institutions respectively. They will then draft a consensus course description on the basis of common elements (and any uncommon elements the course instructor believes are essential), ensuring that the course description can be grounded in demonstrable learning outcomes that are clearly and concisely stated.

Finally, the team will seek to arrive at a consensus of which learning outcomes (from Tuning) the course is responsible for delivering and at what level. The team will review whether the course, as designed, provides an adequate path to develop those outcomes. Learning outcomes, especially at the course level, must be expressed in a way that is meaningful to the students. This means that course-level learning outcomes should be focused, non-repetitive and limited in number.

The relationship between workload and learning outcomes is an area of real concern for students. At one level, this is a matter of being realistic in setting learning outcomes. But it also has implications for collaboration in curriculum design, so that the learning outcomes for all of the course units/modules and other educational experiences a student may undertake are manageable within what might be described as a normal student workload.

A final review will evaluate the entire common curriculum against the Tuning outcomes.

B. <u>On the Basis of State Statutes and Rules, Secure through Appropriate Channels Final Approval of the Course-Level Alignment Team's Recommended Transfer Compact.</u>

C. <u>Continue Curricular Work at Major Level Among Team Members</u>