Assessment at UT

- x Assessment is grounded in Best Practices as reflected in the following:
    - o Academic Department Mission Statement
    - o Academic Department Student Learning Outcomes
- x Assessment Cycle
    - o Submit annual Assessment Plan to Assistant Provost & Assistant/Associate Deans of the college
        - ƒ June 1st Unit Assessment Plan Due
    - o Submit Annual Assessment Reports to AP and AD's
        - ƒ May 1st reporting on most recent academic year's activities/results
            - x Based on measures used to assess outcomes
            - x Show how data was utilized to improve the strategic and learning outcomes of unit.

Components of an Assessment Plan/Report

- x Departmental Mission
    - o Purpose of unit within framework of UT
    - o Align with UT's mission
    - o Align with UT's strategic plan
    - o Align with Strategic initiatives (from President, Provost, and Ds)
- x Program/Unit Strategic Goals or Objectives
    - o Broad general statements of long range intended outcomes

What is assessment?

x   "The overriding purpose of assessment is to understand how educational programs are

Defining Terms: The Common Language of Assessment

- x Program Review: comprehensive review of an academic program, unit, or division within the university. Conducted on a cycle of 5-6 years. May involve bringing in outside evaluators as well as an in-depth self-review of the unit. Assessment Plans and Assessment Report form a part of the Program Review.
- x Assessment Plan: an annual plan detailing unit goals and outcomes, how those outcomes are measured.
- x Assessment Report: a yearly report presenting the results of the unit's assessment measures and how the results are used to inform unit improvements.
- x Strategic Goals/Objectives: broad general statements of long range intended outcomes
  - o Institutional Goals: goals related to process. Example: Chemistry department will increase the number of students majoring in chemistry.
  - o Learning Outcome Goals: broad statements of knowledge, skills, and abilities that a student attains as a result of the program. Example: All students

How to Build Student Learning Outcomes
Learning Models

x Bloom's Taxonomy of Educational Objectives:
- o Cognitive: knowledge recall and intellectual skills: Knowledge, comprehension, application, analysis, synthesis, and evaluation
- o Affective: concerned with attitudes, values, interests, appreciation and feelings towards people, ideas, places and objects. Affective Outcomes range from receiving (or willingness to participate in an activity) to adopting a value system that directs behavior.
- o Skills: Bloom's taxonomy did not develop this area originally. Others have defined the skill domain to "classify movement patterns and behaviors."

x Building a Learning Outcome: Use concrete verbs not passive or vague verbs. Keep statements simple.
- o See Appendix A for list of verbs associated with the various cognitive, affective, and skill levels.

x A good learning outcome is SMART:
- o Specific – clear and using action words
- o Measurable – quantify objectives with targets and benefits
- o Achievable – objectives can be achieved in steps
- o Realistic – keep in mind timeframe and monetary concerns
- o Time-bound – when are objectives measured and when is objective achieved

x Perry's Model of Intellectual Development (See Appendix B)
- o Student development through a sequence of nine positions which can be grouped into four major categories
  - ƒ Dualism – division of meaning into two realms – ex. Good vs. bad
  - ƒ Multiplicity – diversity of opinion and values is recognized as legitimate in areas where right answers are not yet known.
  - ƒ Relativism – diversity of opinion, values, and judgment derived from coherent sources, evidence, logic, systems, and patterns allowing for analysis and comparison.
  - ƒ Commitment – an affirmation, choice, or decision made in the awareness of relativism.

x Learning Outcomes need to relate to the Mission of the University and your School/Division or Unit.
- o Mission of the University of X is: "The mission of the University of X is to sustain a collaborative learning and research community that supports the personal development of its members and the creation of new knowledge. A X Education prepares students to lead livers of purpose, thoughtful inquiry, and responsible leadership in a global and pluralistic society.

Tools of Assessment: measures, rubrics, etc.

x Direct Measures
- o Capstone experience
- o Portfolio assessment
- o Standardized tests (major field achievement, tests of critical thinking, etc.)
- o Performance on national licensure exams
- o Locally developed tests (final examinations in key courses, qualifying examinations, and comprehensive examinations)
- o Gains between entry/exit on published or local tests
- o Student Writing
- o Juried reviews (speeches, performances)
- o External internship evaluations linked to learning outcome objectives
- o Summaries/analyses of electronic discussion threads
- o Student reflections on their values, attitudes and beliefs

x Indirect measures
- o Student and alumni surveys
- o Exit interviews
- o Time to degree studies
- o Job placement data
- o Satisfaction survey
- o Self-report measures of student learning
- o Enrollment trends
- o Data from courses

x Rubric
- o Guides to score student performance and work. Can be used for assessment, program evaluation and improvement of student learning.

x What is NOT a measure of student learning?
- o Faculty publications and recognition
- o Faculty/student ratio
- o GPAs
- o Curriculum review reports
- o Grades

These are what are termed "Institutional" or "Programmatic" Goals or Outcomes

Grades vs Learning Outcomes
- x Grades are the summative evaluation of individual student performance in a specific course
- x Learning Outcomes represent the formative evaluation of programs based on all elements of the curriculum

Appendix A

Bloom's Classification of Cognitive Skills – From Ball State University[v]
Bloom's levels of cognitive skills are provided in the table below, along with definitions for each

Perry's Model of Intellectual Development

The Stages in Transition

Stage Name	Position	Transition
Dualism	**Position 1** This position is pure, closed structure. Uncertainty is not adequately perceived. Truth is out there and accepted. Authorities know, and if we work hard, read every word, and learn Right Answers, all will be well.	But what about those Others I hear about? And different opinions? And uncertainties? Some of our own authorities disagree with each other or don't seem to know, and some give us problems instead of answers
Dualism	**Position 2** Here there is the recognition of limited diversity. True authorities must be right, the others are frauds. We remain right. Others must be different and wrong. Good authorities give us problems so we can learn to find the right answers by our own independent thought.	But even good authorities admit they don't know all the answers, yet.
Dualism--->Multiplicity	**Position 3** Here we see the realization that some truth remains unknown even to true *authorities*. Then some uncertainties and different opinions are real and legitimate temporarily, even for authorities They're working on them to get to the truth	But there are so many things they don't know answers to! And they won't for a long time.

	certainty to uncertainty. Where authorities don't know the right answer, everyone has a right to his own opinion; no one is wrong.	About what?

Position 4b

Multiplicity

In certain courses authorities are not asking for the right answer. They want us to think about things in a certain way, supporting opinion with data. That's what they grade us on.

Commitment	Position 8 Here we see the emergence of additional choices regarding the implementation of initial commitments. I've made seveal commitments. I've got to balance them; how many, how deep? How certain, how tentative?	Things are becoming contradictory. I can't make logical sense out of life's dilemmas.
Commitment	Position 9 Here we see the integration of commitments, and commitments are seen as ongoing activities. This is how life will be. I must be wholehearted while tentative, fight for my values yet respect others, believe my deepest values to be right yet be ready to learn. I see that I shall be retracing this whole journey again and again; but, I hope, more wisely	Back to square one.

The Stages of Intellectual Development

According to Dary (reflecting Perry -- hey, that rhymes!) the Scale of Intellectual Development, there are four stages of intellectual development characteristic of college students. However, later research on the model has shown that most college students do not complete the cycle of stages and that development continues into adulthood.

Stage Name	Stage Description
Dualism	Dualistic thinking is characterized by binary thought processes. That is, met with a course which presents many theoretical positions on a given issue, the typical college freshman will ask, "so, which one is right?" The dualistic thinker sees the world as black and white,

	missing the many shades of gray. Respect for an authoritative position is a hallmark of dualistic thought.
Relativism	The relativistic thinker views the world from a multiplicity of perspectives. However, the relativistic thinker still looks to external authority for guidance. The relativistic thinker has a greater tolerance for uncertainty and can reference the context of an argument, thus, at least in a rudimentary fashion, evaluate the authority within that context. In other words, the relativistic thinker might evaluate a political argument depending upon whether the source was representing the Republican or the Democratic position.
Commitment	The commitment level thinker sees the multiplicity of divergent viewpoints and has developed a coherent belief system. This thinker acknowledges alternative views but can argue the committed position in a cogent fashion while not punishing others for the alternative view. This thinker can walk a mile in another's shoes and modify cognitive structures accordingly within the frame of reference of a cohesive belief system.
Empathy	The empathetic thinker can genuinely see the world as others see it and is constantly aware of the impact of one's own belief system on the society and culture. The empathetic thinker is capable of using the view of others to defuse argumentation while presenting one's own position effectively. This thinker acknowledges the rights of others to divergent positions while maintaining a cohesive belief system.

Appendix C

Curriculum Mapping

An efficacious method of mapping outcomes onto the curricular structure is by producing a curriculum map. Below is a simple method of constructing a curriculum map.

Curriculum Map for [enter program name and CIP Code]

Key: I

Step 6: Test the rubric by using it with a few student papers.

- x If necessary, make changes based on the use with trial papers.
- x It is now time to establish inter-rater reliability.

Step 7: Have one or more colleagues review the rubric.

- x If necessary, make changes based on agreement with colleagues.
- x Have the colleagues score an array of sample work which you have already scored using the same rubric.
- x Calculate the correlation between your scores and the scores of your colleagues.
- x The correlation should be 0.7 or higher.
- x NOTE: you may ask the Office of Assessment or Institutional Research for assistance in calculating the correlation coefficients.

Below is a sample, single-skill rubric to evaluate written communication.

NOTE: the column and row structure as well as the numerical scale related to the skill level.

SCALE =	1 point - NOVICE	2 - APPRENTICE	3 - PROFICIENT	4 - DISTINGUISHED

performance elements are in