

Analysis of Learning Objectives in a Curriculum Review

Alyssa Opishinski & Karl Aspelund; Textiles, Fashion Merchandising, and Design

Project Description

The first step in a comprehensive review of the curriculum of the TMD Department, involved a double-mapping of the Course Learning Objectives (CLOs) of every undergraduate course offered onto the Program Student Learning Outcomes (PSLOs).

The aim was to create framings for a restructuring of the program's curriculum by identifying potential gaps, inconsistencies, and imbalances in course offerings and content.

I-R-E categorizations of the courses (Introduces, Reinforces, Establishes) by faculty from previous years were used to understand how faculty saw their courses fulfilling the PSLOs. An outside analyst then logged their own understanding of this solely through reading course descriptions and objectives as stated in syllabi.

In tandem with this operation, the CLOs and PSLOs were investigated for how their verb-use conformed with Bloom's Taxonomy of Educational Objectives ("Bloom").

Project Process

(please see accompanying video: <https://web.uri.edu/atl/what/events/faculty-showcase/>)

Step 1: CLOs were extracted from 41 TMD undergraduate-course syllabi.

Step 2: Action verbs were identified, extracted from the CLOs, and categorized using Bloom's Taxonomy using Roman Numerals. This was done out of context of the full CLO.

Step 3: Each CLO was analyzed to determine if it mapped to any PSLOs.

- CLOs which did not map, action verbs which could not be categorized using Bloom, and courses with no clear CLOs were flagged.
- CLOs that mapped partly onto a PSLO were separately flagged.

Step 4: A spreadsheet ("the blue sheet") was developed from the Objectives Mapping Grid to chart which PSLOs were being fulfilled and by which courses.

- This helped identify unfulfilled PSLOs and other inconsistencies.

Step 5: (See Chart 1 below) Another spreadsheet was developed to show how the assigned Bloom's categorizations were ranked from the 100 level courses to the 400 level courses. Cells were shaded darker per each additional course. This helped identify when courses' CLOs are too high or low in their expectations and illustrate if the expectations of CLOs flow accordingly with students' progress.

Step 6: (See Chart 2 below) The outside analyst's understanding of "Courses Fulfilling PSLOs" was compared to the faculty-produced analysis ("the red sheet.") Anomalies were noted and categorized as follows:

- CLO was identified as mapping to a PSLO by faculty, but not by outside analyst.
- CLO was identified as mapping to a PSLO by outside analyst, but not by faculty.
- Faculty and outside analyst agreed.
- A course was new and therefore had not yet been categorized by faculty.

Indications and Next Steps

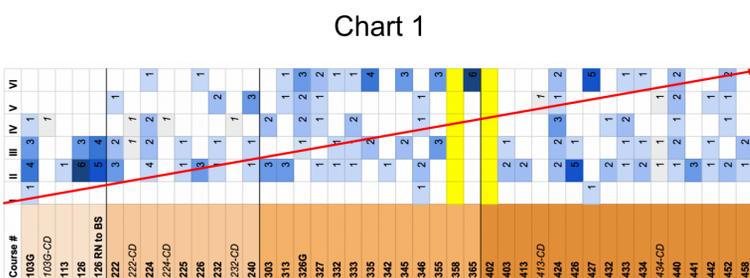
Indications:

- Considerable discrepancies were found between the understanding of an outside analysis of syllabi and faculty self-categorization. Further work on examining course descriptions, CLOs, and syllabi is warranted.
- PSLOs were too complex in presentation and needed to be re-written in paragraph form. (Drafted already.)
- Bloom's Taxonomy does not work well with technical, hands-on skill acquisition.

Next Steps:

- Create a "course-creation" guide w/ PSLOs, rubrics, and Blooms Taxonomy.
- Address and plan how to use Bloom's with CLOs required for technical skills mastery
- With Bloom's Taxonomy at the forefront, PSLOs have been re-drafted with an eye toward the projected needs *vis-à-vis* students and industry in 2030's. A new recently completed round of I-R-E assessment of required courses will afford a first step into alignment with these.
- Examine and reconcile gaps and anomalies in CLO-to-PSLO mapping.
- Consideration of course content re-design, course elimination, and/or refocusing commences in Fall '22, along with creation of assessment rubrics.

Objectives Mapping Grid->Flow of Assigned Bloom's Categories



Courses Fulfilling PSLOS (Outside v. Faculty Comparison)

Chart 2 is a table comparing faculty and outside analyst categorizations for courses fulfilling PSLOs. The table has columns for PSLO, 100 Level Course, I-R-E, Anomaly, I-R-E, 200 Level Courses, I-R-E, Anomaly, I-R-E, 300 Level Courses, I-R-E, Anomaly, I-R-E, 400 Level Courses, I-R-E, Anomaly, I-R-E. The rows are labeled 1a, 1b, and 1c.

PSLO	100 Level Course	I-R-E	Anomaly	I-R-E	200 Level Courses	I-R-E	Anomaly	I-R-E	300 Level Courses	I-R-E	Anomaly	I-R-E	400 Level Courses	I-R-E	Anomaly	I-R-E
1a	103G	113-I, 126-I	113, 126		222-I, 225-I	222, 225			303, 305-R	303, 305			413, 432, 433, 440, 424-E	402-R, 403, 424		
1b	103G	113-I, 126-I	113, 126		222, 225, 232, 240	226-I	228, 240	240-I	326, 332, 333, 340	303-R, 303, 313, 335-R, 326-G, 335, 342-R, 327, 335, 345-R, 342, 345, 326, 355-R			403, 424, 432, 433, 413-R, 434, 440, 442, 452, 426-R	413, 426, 440-I, 433, 440, 442-I, 442, 452		
1c	103G-I	103G			222-I, 225-I, 226-I, 228, 240, 240-I				303-R, 303, 313, 335-R, 326-G, 335, 342-R, 327, 335, 345-R, 342, 345, 326, 355-R			403, 424, 432, 433, 413-R, 434, 440, 442, 452, 426-R	413-E, 432-E, 413, 432, 433, 441			

