



Developing Effective Signature Assignments: Lessons from the DQP

Indiana Signature Assignment Workshop

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Ivy Tech

Peter Ewell

National Center for Higher Education Management Systems
(NCHEMS)





The Central Problem...

- Documenting Student Attainment of Key Proficiencies at Strategic Points in their Development ***Without*** Resorting to Standardized Testing
- Rubrics (Like the AAC&U VALUE Rubrics) Can Help Faculty Achieve Consistency in Rating Student Work
- But Use of Rubrics Does Not Ensure that a Selection of Student Work Will Actually Exhibit the Proficiency In Question...So Responses May Not Be Able to be Scored





The DQP as an Example

- The DQP Covers the Same Kinds of Proficiencies as the AAC&U LEAP Outcomes, but at Different Degree Levels
- The DQP is being Used by More Than 400 Institutions to Map and Align Curricula, Design New Programs, and Assess Student Performance
- Many of These Applications Require the Use of Signature Assignments and NILOA Paper Intended to Provide Broad Guidance





What Does the DQP Look Like?

- Matrix of Identified Proficiencies by Degree Levels
- Three Degree Levels: Associate, Bachelor's, and Master's
- Five Learning Areas: Specialized Knowledge, Broad/Integrative Knowledge, Intellectual Skills, Applied Learning, and Civic Learning
- Framed as Successively Inclusive Hierarchies of “Action Verbs” to Describe Outcomes at Each Degree Level





Why Active Verbs?

- They lead *directly* to assessable language; if you describe what students should do to demonstrate competence, then
- You can bring on stage a range of appropriate assignments (papers, exhibits, laboratories, performances) and/or examination questions that will elicit the demonstration
- The action verbs that describe what a student can do are a good place to start in constructing an effective assignment





Verbs Are Different for Different Levels

- **Associate's**: identifies, categorizes, and distinguishes among elements of ideas, concepts, theories, and/or practical approaches to standard problems.
- **Bachelor's**: differentiates and evaluates theories and approaches to complex standard and non-standard problems within his/her major field;
- **Master's**: disaggregates, adapts, reformulates, and employs principal ideas, techniques, or methods at the forefront of his/her field of study in the context of an essay or project.





An Example: Communication Skills

- **Associate Level**: The student presents substantially error-free prose in both argumentative and narrative forms to general and specialized audiences


- **Bachelor's Level**: The student constructs sustained, coherent arguments and/or narratives and/or explications of technical issues and processes, in two media, to general and specialized audiences

- **Master's Level**: The student creates sustained, coherent arguments or explanations and reflections on his or her work or that of collaborators (if applicable) in two or more media or languages, to both general and specialized audiences





An Example: Engaging Diverse Perspectives

- **Associate Level**: Describes how different cultural perspectives would affect his or her interpretations of prominent problems in politics, society, the arts, and/or global relations
 - **Bachelor's Level**: Constructs a cultural, political, or technological alternative vision of either the natural or human world, embodied in a written project, laboratory report, exhibit, performance, or community service design; defines the distinct patterns in this alternative vision; and explains how they differ from current realities
 - **Master's Level**: Addresses a core issue in his/her field of study from the perspective of either a different point in time, or a different culture, political order, or technological context, and explains how the alternative perspective contributes to results that depart from current norms, dominant cultural assumptions, or technologies—all demonstrated through a project, paper, or performance
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Assignment Implications of the DQP

The DQP Asserts that **Every** Student Should Graduate with the Designated Competencies. This Means that:

- The Typical Approach of Setting Outcomes as “Aspirations” and Conducting Assessments of “Average” Student Performance is not Adequate
- Assessment as an “Add-On” to the Curriculum (e.g. via Standardized Test) is Not Appropriate
- Assessment Must Be Embedded in Regular Student Assignments and Examination Questions and Certified at Multiple Levels on the Way to Degree Completion





The Role of Curricular Mapping in Creating Signature Assignments

- Frequently Used to Plan Where “Signature Assignments” Should be Located
- A Map is a Two-Dimensional Matrix with Courses on One Dimension and Competencies on the Other
- Entries Note Whether the Competency is Taught, Required, or Mastered at a Given Level in the Course
- Usually Done for the Highest Enrollment Courses in Both General Education and the Major





Rubrics and Assignment Templates

- Rubrics Array Multiple Criteria for Judging Student Constructed Responses (to an Assignment, Test Question, etc.) at Various Levels
- Assignment Templates Support the Development of Assignments that Unavoidably Elicit Demonstration of a Particular Competency
- Assignment Templates “Mirror” Rubrics by Noting the Central Task to be Undertaken, How the Answer Should be Communicated, and How Extensive or Evidential the Response Should Be





Points About Assignment Templates

- Basic Format: “Compare the Substance of [Argument X] with [Argument Y] by Means of a Written Essay [of Z Length] that Contains at Least Three Examples of Important Ways in Which these Arguments Differ”
- Should Address No More than Two or Three Proficiencies
- Should Combine Broad Generic Proficiencies with Subject-Specific Competencies Tied to Course Content





An Example

Prepare an exhibit of not more than five discrete 2-dimensional pieces illustrating the range of chaos in color, drawing on at least two of the major color theory sources, e.g. Goethe, Kandinsky, Chevrueil, in a 3-5 page catalogue of your exhibit. You are not required to present in the same 2-dimensional medium across all five pieces. The class exhibits will be displayed from April 1–30. It is now January 15.





Another Example


Suppose a new form of energy were developed that would emit no carbon, gases, or other pollutants. Critics of the development contend that within a month of its deployment, the earth's rotation would slow from 24 to 26 hours per day. To guard against this and other consequences, an environmental impact statement must be prepared. In the space below, outline the chapters and sub-chapters of such a statement.





A Third Example

You are given a map of the United Kingdom with three airfields marked. You are flying a military interceptor aircraft with the following specifications (weight, fuel capacity, current fuel level, fuel use in different maneuvers), your location at point X, your current speed, the current reading of your fuel gauge, the location of a refueling tanker at point M, its current speed, and the rate/ time of refueling. You are told that an alien aircraft is approaching a northeast coast radar station at a speed of Y and is currently located at Z. Is it 3 p.m. and the weather is closing. You are instructed to intercept the approaching aircraft, destroy it with missiles and return. At which airfield will you land? at what time? and how much fuel will you have left (the amount must be at or above 500 kg)? For each of these questions, provide a formula that reflects the way you arrived at your solutions. All your responses should fit on one page.





Questions to Consider

- How Difficult Should the Central Task Be?
- How Much “Scaffolding” Should the Assignment Contain?
- Is there Anything in the Language that Might Mislead?
- Can Intermediate Credit be Granted for Partial Answers? Or is the Assignment “All or Nothing?”
- How Will You Provide Feedback to Students?



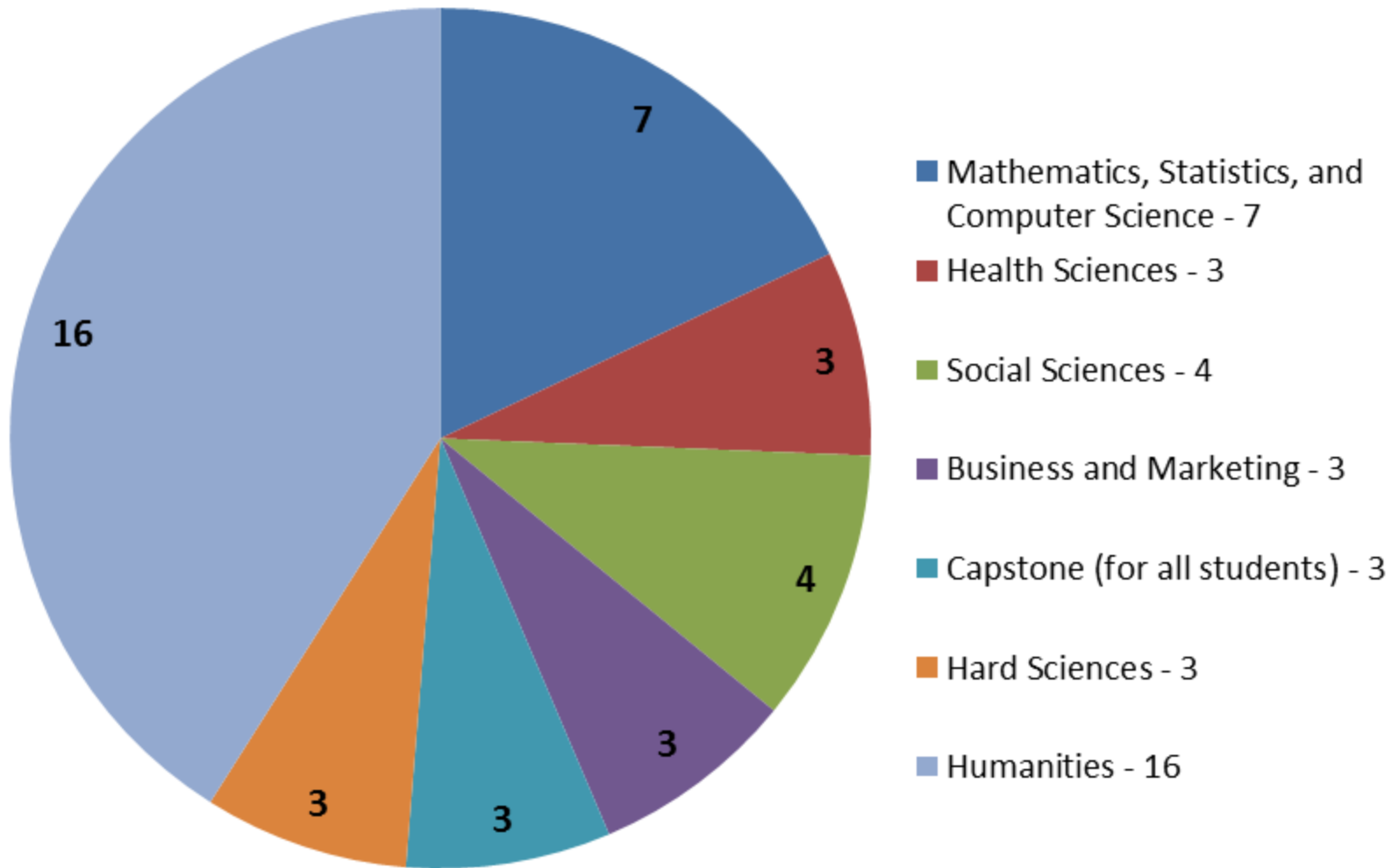


Developing a Library of Model Assignments

- NILOA Project Funded by Lumina
- Assignment Design “Charrettes” Convened in November 2013 and March 2014 with Faculty from DQP Pilot Institutions
- Faculty Document their Assignments with Contextual Information and Tips on How to Use or Adapt
- Result will be a Web-Enabled Library Searchable on a Range of Tags/Criteria by 2015



Combined Charrettes: Disciplines Represented





In Sum...

- Building Signature Assignments Requires Substantial Levels of **Intentionality**
 - Careful Planning of Course Sequences and Embedded Assignments
 - Assignments and Rubrics Carefully Scripted to Elicit and Judge Student Responses
 - Done in Collaboration Across Instructional Staff

- But the Result is a Powerful Way to Demonstrate Mastery and to Improve Teaching and Learning

