2019-2020 Assessment Report on the Quantitative Skills Capacity

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The Quantitative Skills Committee was formed at the beginning of the 2019-2020 academic year in order to oversee Hendrix College's Quantitative Skills (QS) Capacity. The QS Capacity is a general education requirement designed to instill basic numerical literacy in all of its graduates. As discussed in the description of QS in the 2019-2020 Hendrix College Catalog, it is "important that students possess a base level of mathematical/computing skills necessary for the development of those quantitative skills they will need in their chosen disciplines and in their lives."

The initial charge put to this committee was to update the program's learning goals and to develop a formal assessment plan. The initial learning goals for QS were distilled from catalog language put in place when the college's general education program, the Collegiate Center, was adopted in the early 2000s. These learning goals are listed below.

- 1. Use mathematical/computing techniques to analyze and solve models.
- 2. Quantitatively interpret results of analysis as they apply to real world problems.

These goals are laudable but are difficult to assess as written. Furthermore, there was evidence that some instructors of QS courses did not feel that they were accomplishing both learning goals in their courses. This was sufficient basis to justify a revisit of the learning goals. Over the course of several meetings, the QS committee came up with the following pair of learning goals for the QS program. Upon successful completion of the requirements for the Quantitative Skills Capacity, students will be...

- 1. ...capable of interpreting quantitative ideas graphically, symbolically/algebraically, and/or numerically.
- 2. ...able to evaluate quantitative information in the context of a given question.

It was generally agreed that this pair of goals more closely reflects the purpose of the capacity and are more easily assessed.

Upon completion of the revised learning goals, the committee developed an assessment plan that will require assessment of each program learning goal (PLG) in alternating years and provided both direct and indirect assessment instruments for each PLG. Copies of the assessment plan and associated instruments are attached to this report. Given the changes to program learning goals and the development of a new assessment plan, the decision was made to not attempt an assessment of either QS learning goal this academic year. PLG 1 will be assessed next academic year (2020-2021) and PLG 2 in the following year (2021-2022); this assessment pattern will repeat in subsequent years.