

Analysis of the Kent Core assessment method, with a recommendation and plan for reform

**Prepared by the University Requirements Curriculum Committee (URCC)
for the Kent State University Office of Accreditation, Assessment and Learning
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Executive Summary

The University Requirements Curriculum Committee (URCC) has conducted a study of the current assessment method used in the Kent Core, the university's general education program. This study is in response to a request from the Higher Learning Commission (HLC) to Kent State to provide more information on the assessment process. This request coincides with new changes to the general education program in Ohio, as promoted by the Ohio Department of Higher Education (ODHE). The URCC conducted inventories and analyses of the past five years of assessment data derived from the 124 courses that compose the Kent Core. Also, surveys were conducted with the faculty of all 8 campuses, as well as students and advisors. All these sources of data were used in our analysis of the success of the assessment of the Kent Core.

The URCC learned that despite the best intentions of all involved, there is considerable variability in how and when assessments are conducted in the Kent Core courses, and how and where those data are stored. The URCC recommends three key changes to the Kent Core assessment process:

- 1) Paired assessment should occur as a first assessment in students' first course in their majors, and a second assessment in a senior level course in their majors, not within the Kent Core courses themselves.
- 2) KSU should make use of the LEAP Essential Outcomes and the VALUE Rubrics, which are freely available from AAC&U and have national recognition, instead of using internal assessment rubrics.
- 3) Assessment data should be delivered to a new faculty committee that sits above the college level, the Kent Core Assessment Council, which could assess the data, make recommendations on changes, and provide those assessments back to the departments and their faculty as well as to the university's office of Accreditation, Assessment and Learning. This feature will allow a clear path for "closing the loop", bringing the assessment data forward to consider in curriculum changes and student success.

These three recommended changes will allow KSU to meet the recommendations of both the HLC and the ODHE, and expand the ability of the university to more easily adjust and reform the Kent Core itself.

I. Introduction

The Higher Learning Commission's letter of August 8th, 2016 to President Warren requested further information on implementation of the planned improvement of university-wide assessment. This report documents the analysis of the past five years of assessment data for the general education program (the Kent Core) and proposes changes to meet the evolving needs of our students and the recommendations of both the Higher Learning Commission (HLC) and the Ohio Department of Higher Education (ODHE). Specifically, HLC concerns rested upon KSU's ability to demonstrate that the general education program itself was successful through standard assessment measures (HLC report, 2016). Assessment in this context refers specifically to "activities directly related to measuring student learning through systematic means, analyzing the data derived from these activities, and using those data to make improvements in programming or other areas that affect student learning" (HLC, 2016). Standard assessment measures for general education include, but are not limited to, paired assessments, use of recognized rubrics, clear link to the institution's mission, review of learning outcomes, and "closing the loop" by using results to improve the students' learning experience and improve the program(s) (HLC, 2019).

Recently, the Ohio Department of Higher Education proposed changes to the ways students are presented with general education programs at state colleges and universities (ODHE, 2019). These proposed changes include, among others:

- publishing a straightforward, easily understood statement of institutional intent;
- linking general education to the student's major; and
- establishing explicit continuity between general education and the major.

Many of these changes are consistent with the HLC list of recommendations for general education programs (HLC Criteria for Accreditation, 2019).

Taken together, the structural and pedagogical recommendations from both the Higher Learning Commission (HLC report, 2016; HLC Criteria for Accreditation, 2019) and the Ohio Department of Higher Education (ODHE, 2019) promote a reform of Kent State's current assessment practice used in the Kent Core, and indeed serve as the drivers of a reform of the university's general education program.

This report addresses the plan to reform the assessment process of general education at Kent State, which in turn is the basis for the overall reform currently underway of the general education program.

II. Kent Core Assessment: Background

Kent State University follows the State of Ohio general education requirements (ODHE, 2015). General education courses are offered in the range of subject areas required by the state, and our 124 courses are offered in the lower division (10,000 to 20,000 course number level) throughout the eight-campus system. The KSU general

education program follows a breadth model rather than an integrative model, with a distribution of choices in seven areas: basic sciences, social sciences, fine arts, humanities, critical reasoning, composition, and “additional”. From 2011--13, the Faculty Senate approved the assessment plan for these 124 courses. This assessment plan was the result of intense planning and discussion by the faculty, who chose to assesses the general education courses as part of the course delivery. Each course made use of a rubric with 11 learning objectives from which particular learning objectives could be selected by the departments housing the courses. These rubrics were approved for the 124 courses by the University Requirements Curriculum Committee (URCC), the Educational Policy Council (EPC), and the Faculty Senate. Assessment tools were then created within the departments and were originally planned as paired or end of term assessments. For paired assessments, first assessments were conducted at the beginning of a semester and a second assessment was conducted towards the end of each semester for each of the Kent Core courses offered. For the five years since 2012 and to this present time, we have been using the 124 courses with their general education rubrics, learning outcomes and within-course assessment tools in our general education program.

III. Assessing the Success of the Kent Core Assessment

In Fall of 2017 the University Requirements Curriculum Committee (URCC) was charged by the Provost’s office to address the HLC concerns about the Kent Core assessment process. The URCC is a university-wide committee composed of faculty and college administrators, and is responsible for reviewing, recommending changes, and assessing those courses that are university-wide requirements, such as the Kent Core. The URCC then implemented several actions in order to collect and analyze data:

URCC Actions Taken:

- Inventory of Kent Core courses and their learning objectives;
- Inventory and summary of five years of assessment results for all Kent Core courses;
- Independent analysis of summary of five years of assessment results for all Kent Core courses;
- All Faculty All Campus Survey on their perceptions of the Kent Core;
- Survey of All College Advisors regarding advising in the Kent Core;
- Survey of current undergraduates regarding value of the Kent Core;
- Comparative study of general education assessment best practices within Ohio and nationally;
- Discussion with ODHE and workshops with AAC&U regarding general education assessment.

Based upon the data and analyses generated by these actions, the URCC looked at the existing assessment process in the Kent Core. Here we summarize our findings:

III.1. Who teaches the Kent Core?:

The Kent Core courses are taught by all cohorts of our faculty: tenure-track, non-tenure-track, and part-time/adjunct instructors. On the Kent Campus, a few of these courses are taught by graduate students. Although the numbers within each cohort vary from campus to campus within the eight-campus system, 37% of the Kent Core courses are taught by adjunct/part time instructors, 30% by the NTT faculty, and 26% by the Tenure-Track & Tenured faculty. This is a solid indicator that not only do all undergraduates experience the Kent Core, but all faculty cohorts are engaged in Kent Core instruction (**Figure 1**).

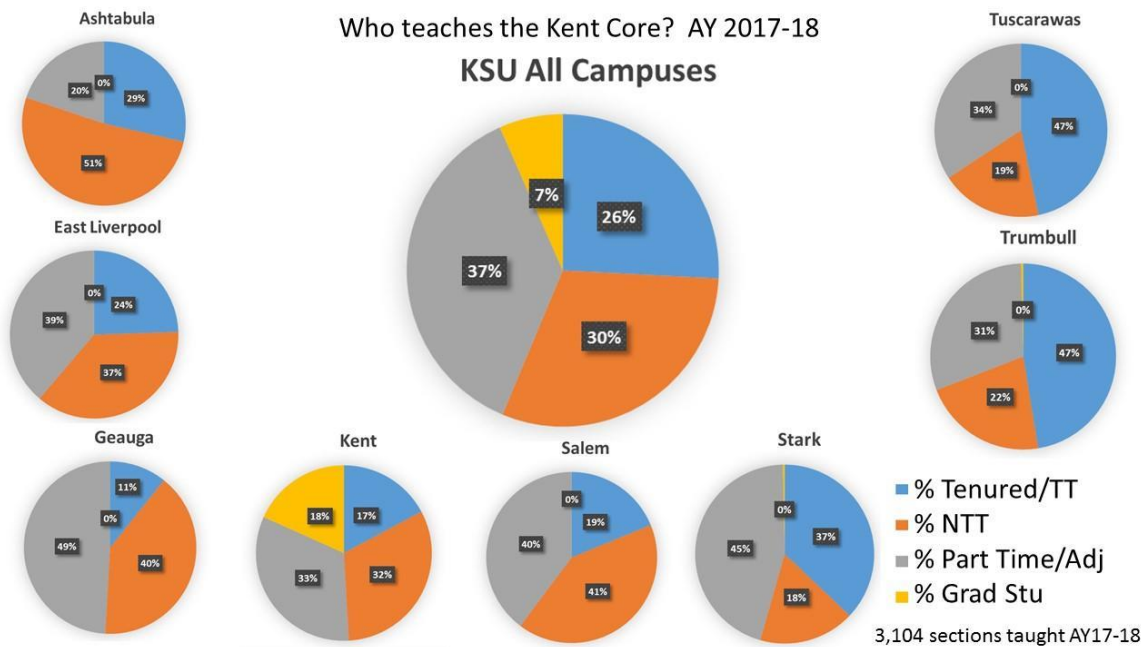


Figure 1: Distribution of Kent Core instructors by campus and cohort

III.2. Which learning objectives are used in the assessment of the Kent Core?

There are eleven learning objectives, which represent essential learning outcomes. Department faculty chose at least one and as many as all eleven learning objectives to use in the assessments. The list is as follows:

1. Acquire critical-thinking and problem-solving skills;
2. Apply principles of effective written and oral communication;
3. Broaden their imagination and develop their creativity;
4. Cultivate their natural curiosity and begin a lifelong pursuit of knowledge;
5. Develop competencies and values vital to responsible uses of information and technology;

6. Engage in independent thinking, develop their own voice and vision and become informed, responsible citizens;
7. Improve their understanding of issues and behaviors concerning inclusion, community and tolerance;
8. Increase their awareness of ethical implications of their own and others' actions;
9. Integrate their major studies into the broader context of a liberal education
10. Strengthen quantitative reasoning skills;
11. Understand basic concepts of the academic disciplines.

III.3 How are the 11 learning objectives distributed in the Kent Core courses overall?

For most of the 124 courses, selection of learning objectives is heavily skewed towards basic knowledge and critical thinking. Overwhelmingly, 70% of the Kent Core courses are assessed in these two areas. In many cases, only these two objectives were selected (**Figure 2**). In contrast, some learning objectives were only rarely selected.

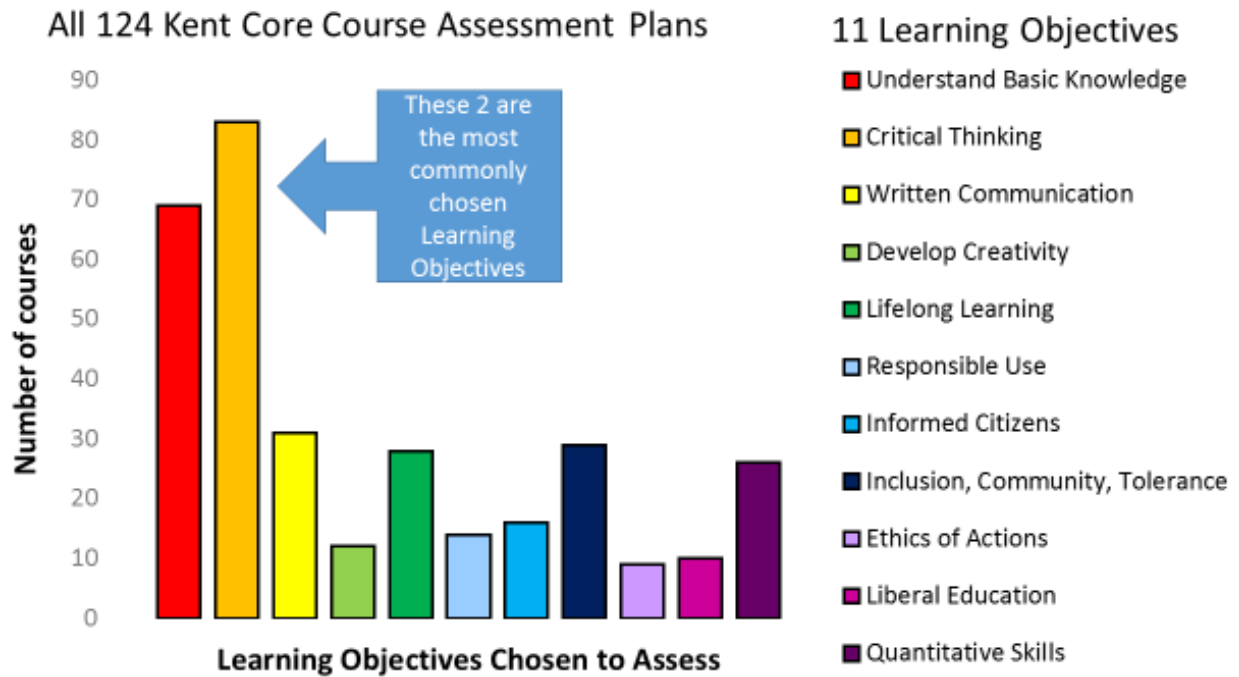


Figure 2: Distribution of 11 Learning Objectives used in the Kent Core

III.4 How successful was the implementation of the course assessments over the five years?

Only 30% of all Kent Core courses had five years of assessment data without breaks or gaps. High variability exists in how and when assessment occurs, and how and where the data are stored. Although designed with the best of intentions, the method of conducting assessments within the Kent Core courses was marked by a lack of continuity from one semester or year to the next. Departments did make use of these assessment data to make improvements in their Kent Core courses and in the assessment instruments themselves.

III.5 What types of issues were identified with the completed assessments?

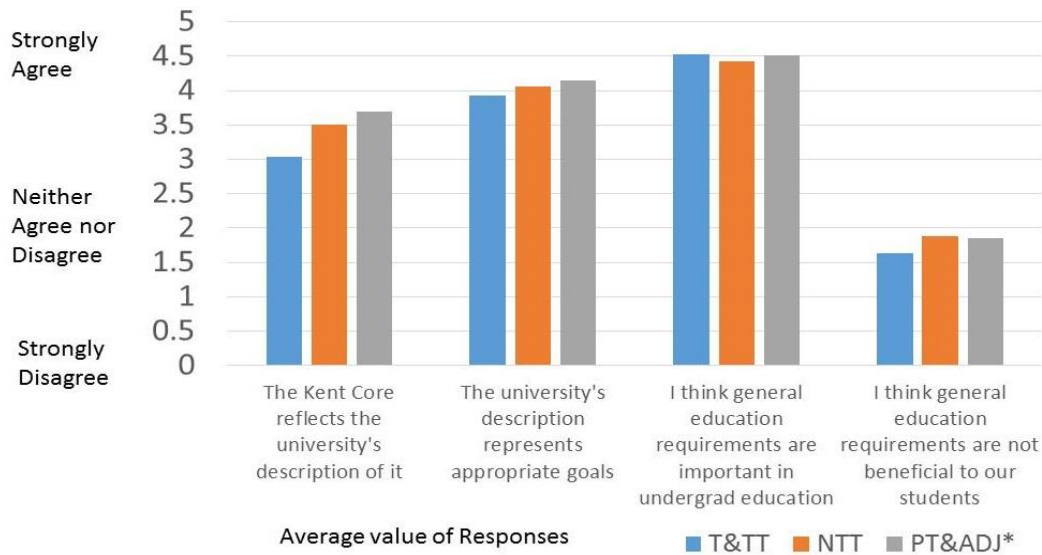
The URCC invited an independent assessment of the summaries of five years of Kent Core assessment data from specialists in Assessment and Evaluation in Higher Education, within the Kent State University College of Education, Health and Human Services. The following seven issues were identified, which confirmed our own findings:

1. Due to the overwhelming selection of "Basic Knowledge" as a Learning Objective (> 70% of courses), assessments of course content are dominant.
2. Varying measurement quality exists. Some assessment tools (questions, quizzes, writing samples) are indirect assessments (e.g. asking about students' perceptions of learning which is not the same as assessing whether they learned).
3. Many assessments used a single measurement approach, not a pre/post survey of student knowledge, which is recommended because it provides richer data and a means of comparison.
4. Often, written prompts were assessed without a rubric, and therefore these assessments only provide indirect data.
5. Written prompts were most common in assessing "Basic Knowledge" (course content), but were less used in assessing other Kent Core outcomes.
6. Variable oversight of course assessment may have contributed to gaps and lapses in coverage within and between years.
7. Departments each store assessment data differently, a concern for operational effectiveness as well as college & institutional access.

III.6 What is the faculty perception of the value of the Kent Core to students?

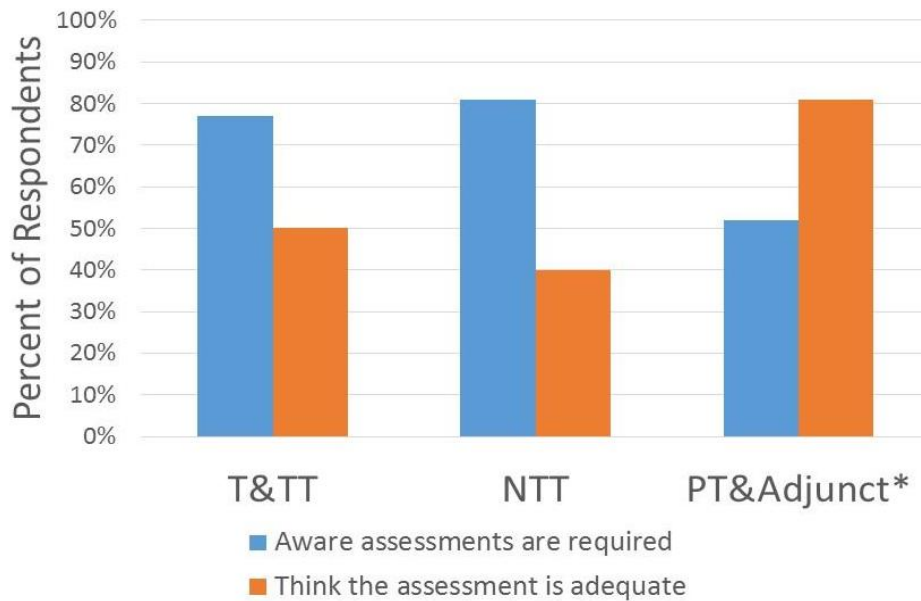
In a survey delivered to all faculty across all campuses in Fall, 2018, faculty members were asked a series of questions concerning their perceptions of the value of the Kent Core. Of the 2,723 faculty members in the 8 campus system, 16% responded. In terms of the 3 faculty cohorts, we had 23% of the Tenured & Tenure-Track faculty, 19% of the Non-Tenure Track faculty, and only 10% of the Part Time-Adjunct faculty responding.

Respondents agree slightly that the Kent Core reflects the university’s description of the Kent Core (as printed in the catalog and on the website), and agree the described goals are clear and appropriate. All respondents agree strongly that general education requirements are an important part of an undergraduate education (**Figure 3**). However, only 50% or less of the Tenure-Track and NTT respondents view the current assessment process as adequate. (**Figure 4**). This compares closely with the 53% of all faculty responding in written statements that the Kent Core needs to be adjusted and updated in order to improve the assessment process and provide a better student experience.



* Low numbers of respondents –interpret with caution

Figure 3: Faculty survey responses regarding value of the Kent Core



* Low numbers of respondents –interpret with caution

Figure 4: Faculty survey responses regarding Kent Core assessment

IV. What We Learned About the Current Assessment Process:

The URCC concluded from these data that the present Kent Core assessment process was in need of revision, and that this revision was fundamental to a refreshment of the Kent Core itself. In particular, the URCC noted that:

- 1) there was too much variability in how and when assessments were conducted within the Kent Core courses, including low numbers of paired assessments;
- 2) the assessments were not based on nationally recognized standards, making it difficult to compare outcomes with national outcomes;
- 3) the assessments were skewed towards assessment of course content because of the high number of courses with both “basic knowledge” and “critical thinking” as learning outcomes;
- 4) the number of learning outcomes (11) is unusually high. Best practices currently make use of 3 to 5 broadly themed learning outcomes, which are easier for students to relate to their majors;

- 5) there was not a clear and straightforward link for students to find between the Kent Core courses, learning outcomes, assessments, and their majors. Specifically there was no obvious link to the university mission;
- 6) there was too much variability in the ways that assessment results reached administrative offices; and
- 7) there was too much variability in “closing the loop”, that is, using the results of the assessments to make needed changes in the curriculum, budgetary planning relative to curriculum, and students’ learning experience that could impact student success and retention.

Following extensive discussions with KSU faculty, administrators, students, and advisors over the past 18 months, as well as discussions with ODHE, University of Cincinnati, and workshop instructors in AAC&U, the URCC developed a new model for general education assessment that is consistent with ODHE and HLC recommendations. The model presented here is based on best practices from peer institutions within the state (e.g., University of Cincinnati, Miami University of Ohio), recommendations from ODHE and expectations of the Higher Learning Commission.

V. Building an assessment model for the Kent Core

Based on the seven conclusions made by the URCC about the current Kent Core assessment process, we propose the following changes:

V.1. Reducing the number of learning objectives from 11 to 4

Currently, the 11 learning objectives are confusing to students examining their Kent Core choices. Also, the presence of “basic knowledge” within the list of learning objectives has tended to drive the assessment tools towards a focus on course content. Some of the 11 learning objectives are only rarely selected. For all these reasons, the URCC looked at the option of reducing the number of learning objectives by making them much broader and more easily understood and valued.

Our Initial exploration used standard cluster analysis (farthest neighbor, agglomerative cluster, jaccard coefficient), (see Manly, 2004) to examine how the Kent Core courses were related based on their assigned learning objectives (**Figure 5**). The Kent Core courses cluster in four basic groups, based on their learning objectives. However, it was also apparent that when examining the distribution of learning objectives within the Kent Core course assessments, *Understanding Basic Knowledge* was ubiquitous and skewed the assessments towards course content testing, and other objectives, such as *Developing Creativity* and *Awareness of Ethics of Actions*, were rarely used. To better illustrate this problem, the same cluster analysis shown in **Figure 5** is shown in **Figure 6**, but with the 124 courses visible.

Example Cluster Analysis of the Kent Core with 11 Learning Objectives

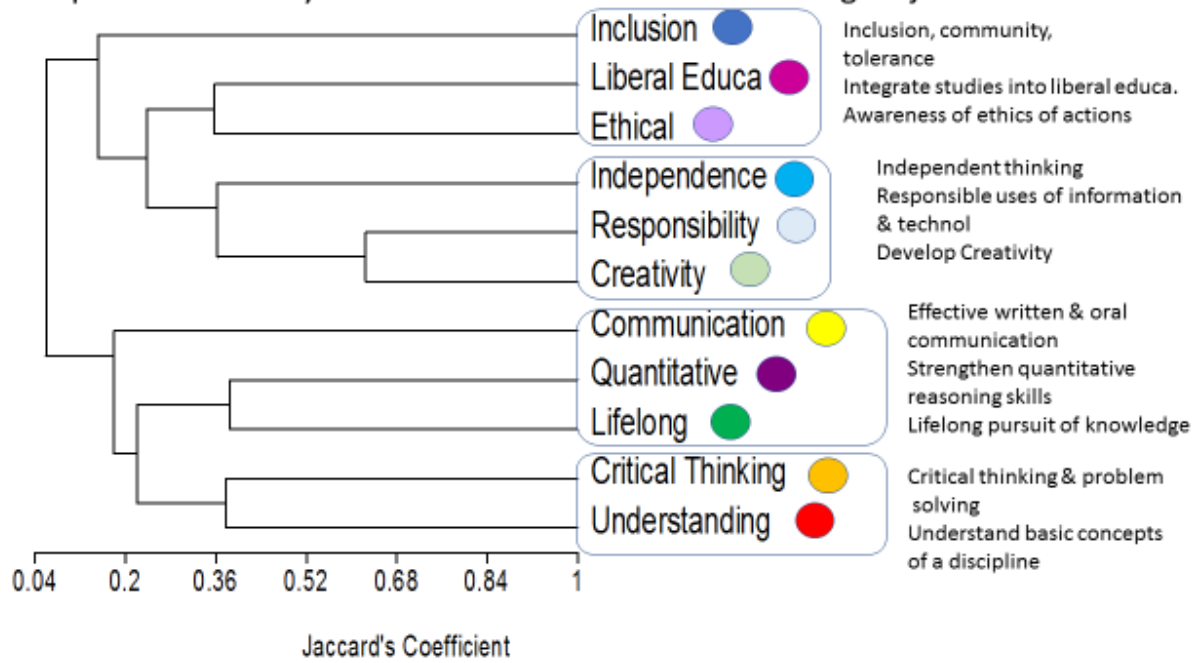


Figure 5: The Kent Core courses, based on their 11 learning objectives, cluster into four distinct groups.

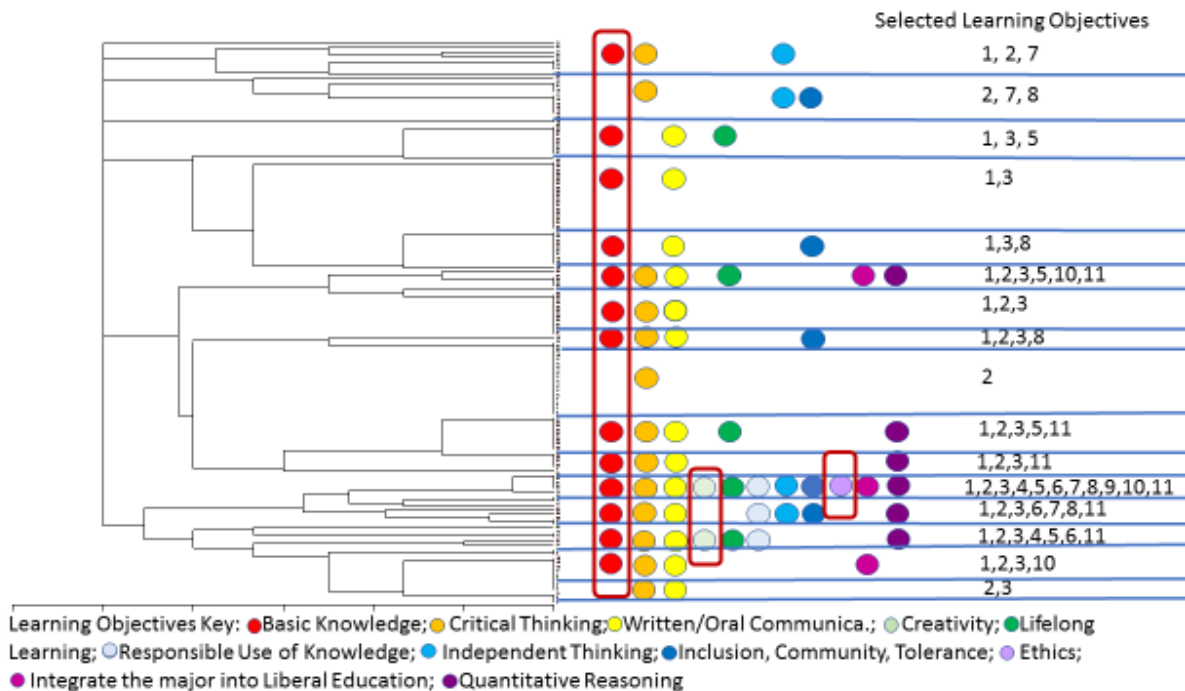


Figure 6: The same cluster analysis as shown in Figure 5 indicates with the red outlines a strong influence of the Basic Knowledge learning objective, and the rarity of other learning objectives.

Therefore, the URCC removed “Basic Knowledge” from the list of learning objectives, and also removed the two objectives which were rarely selected-these two can be included in broader objectives. When cluster analysis was performed on the remaining 8 learning objectives, the underlying structure of four clusters persisted (**Figure 7**).

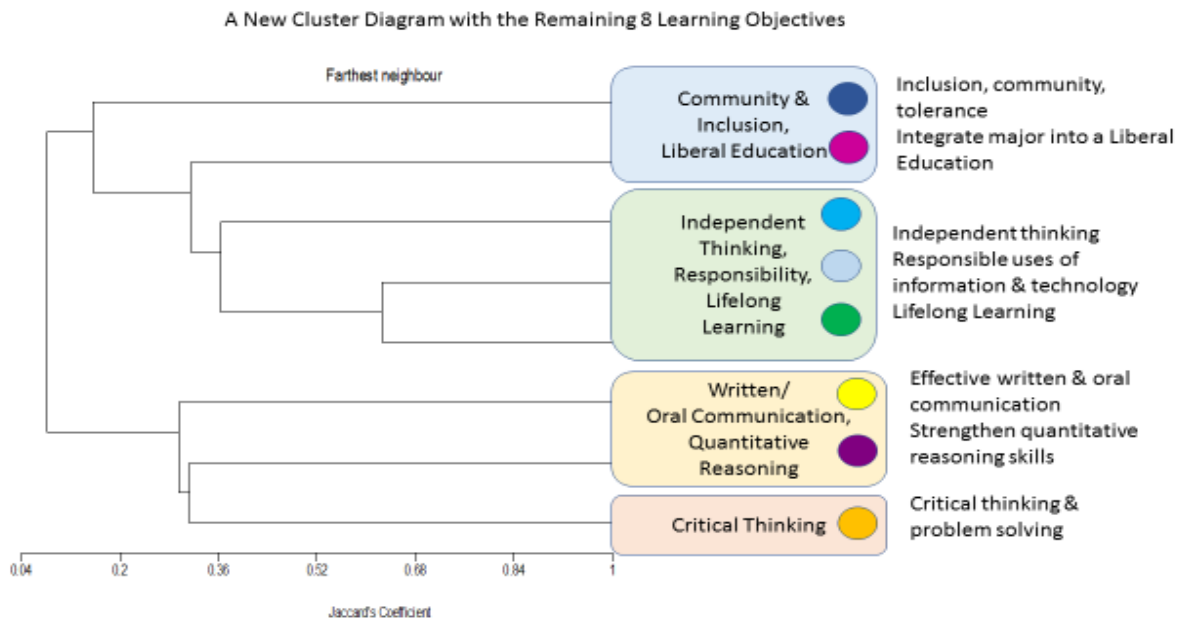


Figure 7: A cluster analysis of the 124 Kent core courses following removal of 3 of the learning objectives (see text) shows the persistence of four clusters that can serve as four broad categories or learning outcomes.

These four clusters represent all 124 courses, and can serve as the basis for four broad learning objectives, to be named by the faculty. In other words, the general education courses could be cross-listed in these four broad categories. The categories could draw their names from the original learning objectives, e.g., Critical Thinking, Written & Oral Communication, etc, but broader titles could be identified that closely link to our university mission and goals.

V.2. Mapping the LEAP Outcomes to the Kent Core

The nationally recognized LEAP (Liberal Education and America's Promise) Outcomes provide a common set of learning outcomes (www.aacu.org/leap):

- Knowledge of Human Cultures and the Physical and Natural World
- Intellectual and Practical Skills
- Personal and Social Responsibility
- Integrative Learning

Following discussions with faculty we plan to map these outcomes to the four broad clusters, and this will link our learning goals directly to the VALUE rubrics. By doing

this, we will have internal consistency linking the general education courses to LEAP outcomes, and the LEAP outcomes to the VALUE rubrics (see below).

V.3. Assessing General Education within the Majors using Paired Assessments

Paired assessments are important for an understanding how of learning is progressing. Our analysis of the past five years of Kent Core assessments indicate that we do not have reliable continuity in the area of giving paired assessments within the Kent Core courses. A better option is needed. The URCC proposes carrying out a first assessment of general education in the first course taken in a major by a student (but not one of the general education courses), and a second assessment during the senior year, in a course taken by most or all students in a major. This would provide the following benefits:

- The university would then be assessing our ability to reach the goals of general education within the majors, a new “best practice” as indicated by ODHE (2019);
- Reliable testing would be established for these paired assessments, as these courses in the majors are typically taught by full time faculty with the opportunity to develop continuity from one year to the next.

Alumni could then be surveyed in specific time windows following graduation, such as two and five years following graduation. These data could also be used in improving curriculum and increasing student success. (**Figure 8**).

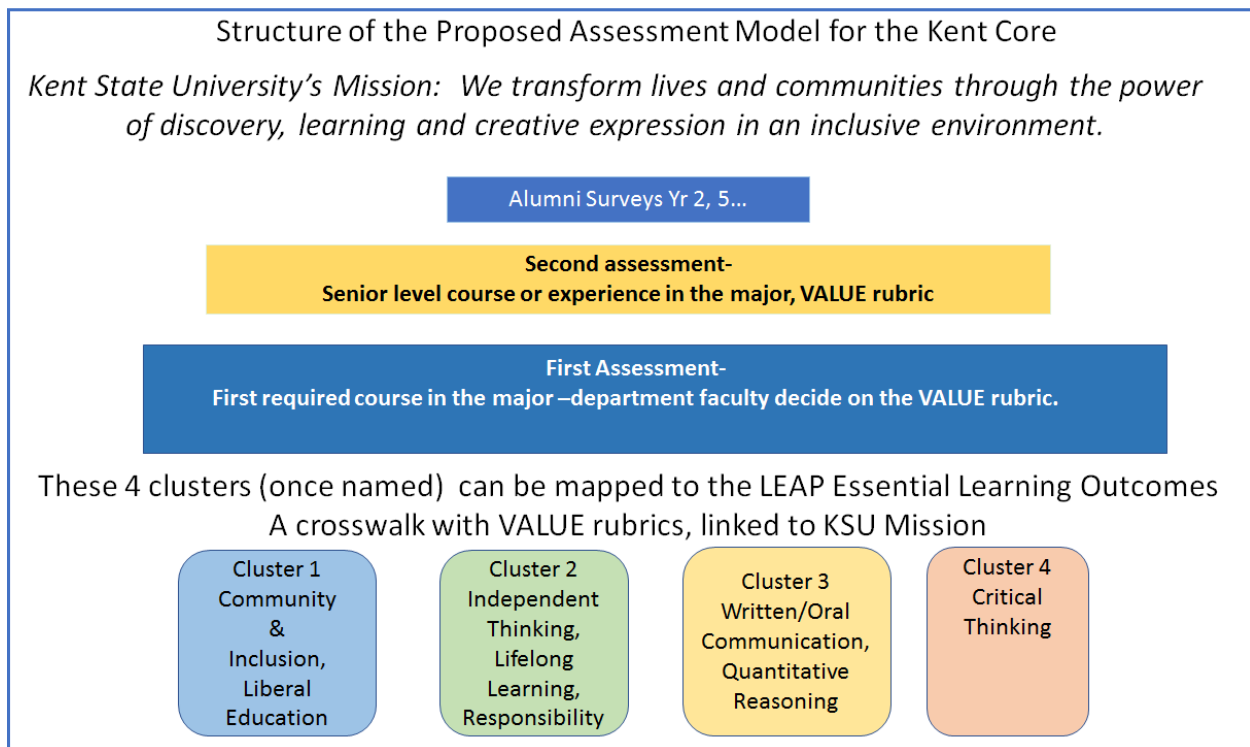


Figure 8: The general structure of the proposed Kent Core assessment plan.

V. 4. Using the AAC&U VALUE Rubrics

There is a distinct advantage in choosing nationally recognized rubrics for assessment of general education. The URCC recommends making use of the VALUE rubrics (Rhodes, 2010; AAC&U, 2010) which are freely available through the AAC&U and have been rigorously tested in a national setting through the LEAP initiative (www.aacu.org/leap).

One attractive aspect of making use of the VALUE rubrics is that faculty interested in publishing their pedagogical studies using these rubrics will be able to compare their results to results reported nationally. At present, our in-house rubrics do not have that capability. It is very likely that faculty will be keenly interested in this feature.

V. 5. A Recommendation for encouraging innovative pedagogy in the Kent Core and beyond

With the proposed mapping of LEAP outcomes to the four broad clusters of general education courses comes an opportunity to provide workshops for instructional development for those teaching in the Kent Core, and for those working with the VALUE rubrics in the majors. The Center for Teaching and Learning (CTL) at KSU was established as part of the university-wide assessment improvement project and does this now for other types of pedagogical projects. We view this faculty enrichment program through the Center for Teaching and Learning as an important part of transitioning to an improved assessment process.

V. 6. A recommendation for the formation of a Kent Core Assessment Council

The URCC expects that each department or program will discuss which of the VALUE rubrics is appropriate for the First Assessment and the Second Assessment in the major. The chosen rubric can then be adjusted to serve an assignment appropriate for the course. These assignments can be ranked and reported, with the data moving forward from the departments to a new central committee focused on the assessment of the Kent Core.

The URCC proposes the establishment of a council composed of faculty members interested in general education pedagogy and of specialists in assessment. Members should be drawn from all the colleges, include regional campus faculty, and serve on a two or three year rotation. It is important that this council sit above the level of the colleges, and not be composed of URCC members. This is because any course recommendations that come from this body would need to follow the established pathway of review by URCC, the EPC, and the Faculty Senate.

The council would be responsible for reviewing the paired assessments once a year and sending the review of these assessment outcomes to the university's office of Accreditation, Assessment and Learning and the University's Advisory Committee on Academic Assessment (ACAA), and also to the College Deans and Department Chairs.

These data would then be available for distribution to the public through the university’s office of Accreditation, Assessment and Learning, and to the colleges and departments to use as evidence for progress in student retention and student success, and to improve the curriculum. The council would also recommend and consider changes, deletions, and additions to the Kent Core, which would be passed to the appropriate colleges and their departments. Departments could then propose changes which would then follow the standard path to the URCC, EPC, and Faculty Senate (**Figure 9**).

“Closing the Loop” brings the results of assessment forward to use in budget planning, curriculum development, and student success. We foresee this process as one in which the Kent Core Assessment Council and the department faculty and chairs will be actively involved, and that a process known as “double loop learning” (**Figure 10**) best describes this activity (Argyris,2002; Senge, 2006)

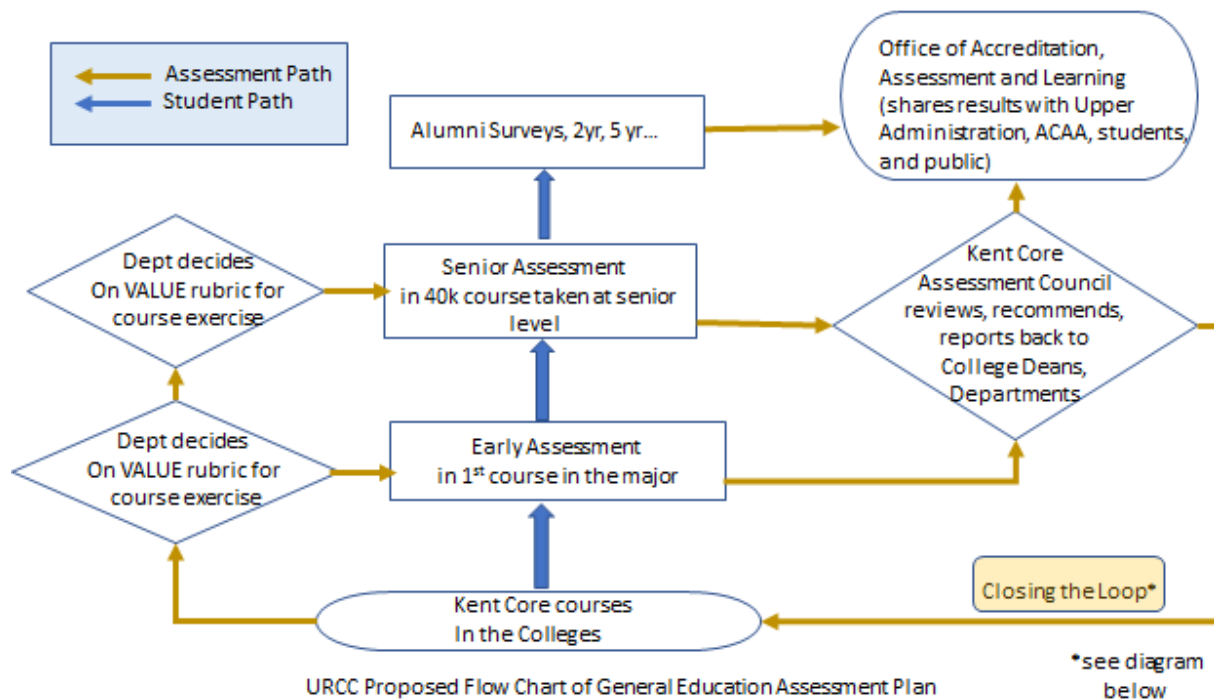
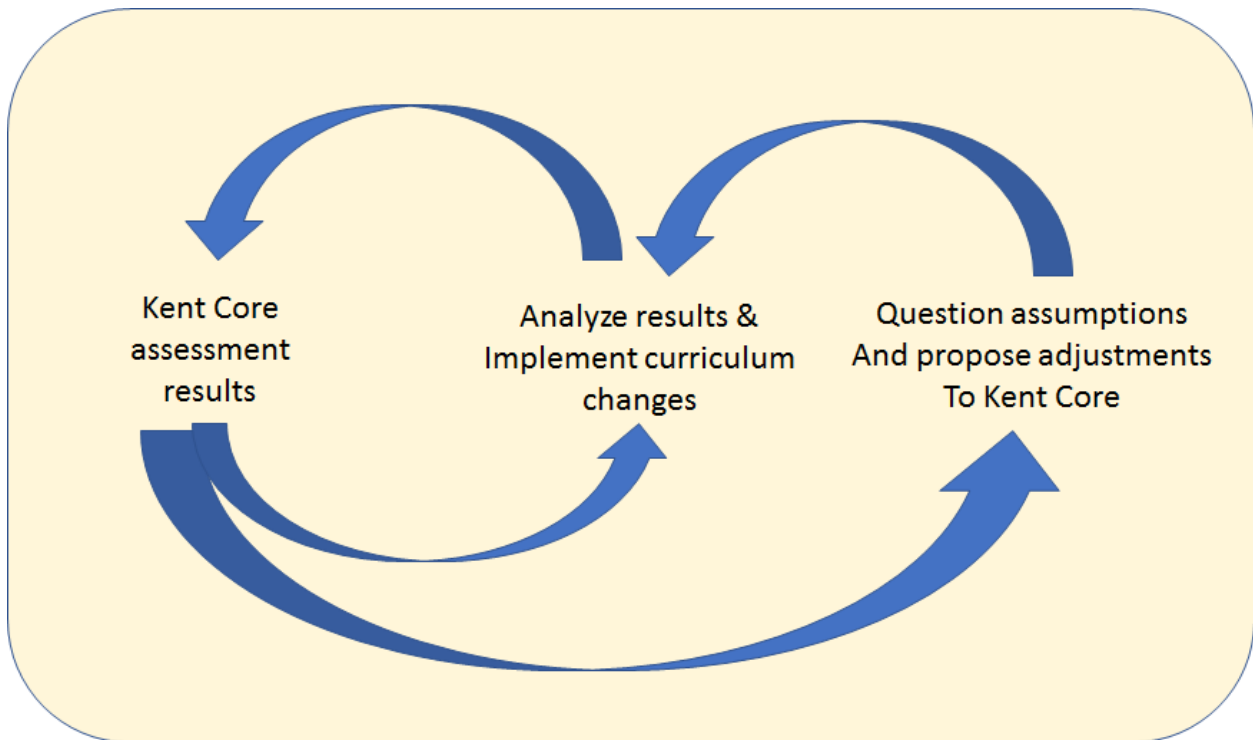


Figure 9: A flow chart showing the student path and the assessment path for the proposed Kent Core assessment model. “Closing the loop” involves a detailed process illustrated below in Figure 10.



Expanded from Figure 9 Flow Chart: Double Loop Learning Model, modified after Senge, 2006,p.236 and based on Argyris, 2002.

Figure 10: “Closing the loop” involves bringing the assessment results forward to implement curriculum changes, propose ways to enhance student success, and, using the double loop learning method, make adjustments to the Kent Core.

VI. Summary and Conclusion

A sound assessment process is central to the success of a general education program, and any reform of general education at this institution must begin with the assessment process. The URCC has analyzed and assessed the current assessment process used in our general education program, the Kent Core. We found opportunities to simplify and improve the assessment process, meet recommendations of HLC and ODHE, and make use of the assessment data to in order to improve general education curriculum and increase student success (**Table 1**).

Kent State is already a member of the LEAP Campus Action Network (<https://www.aacu.org/leap/can>), which includes more than 300 universities, including the University of Cincinnati, Miami University of Ohio, Bowling Green University, and Cleveland State University. In examining the assessment processes within this network, we found many useful approaches, particularly with the University of Cincinnati’s model (<https://www.uc.edu/gened.html>). Our proposed path to a simplified,

paired assessment plan embedded in the majors is similar to the approach taken by the University of Cincinnati.

Table 1:

Summary Table of Proposed Outcomes of the Kent Core Assessment Revision

<i>HLC and ODHE Recommended Assessment Attributes</i>	<i>Current Assessment Process</i>	<i>Proposed Assessment Process</i>
<i>Paired Assessment</i>	variable	yes
<i>Assessment of General Education within the Majors</i>	no	yes
<i>Link of General Education to the University Mission</i>	yes	yes
<i>“Closing the Loop”- Assessment data circles back to be used in improving the curriculum, retention and student success</i>	variable	yes
<i>Ability to Link assessment outcomes to nationally recognized LEAP learning outcomes</i>	no	yes

Thinking ahead to the reform of the Kent Core program, the university expects to continue the process of reforming the Kent Core for 21st century students, and addressing topics such as upper division general education courses integrated with tools for information literacy and design innovation. Our goal is to make sure the general education program is relevant to student learning and success and will deliver a distinctive Kent State experience. Designing a meaningful assessment is the first step in this reform process.

VI.1 Timeline:

Here, the URCC has presented a plan for reforming the assessment of the Kent Core, which is one step in the process of reforming the entire general education program. These kinds of changes take time to implement. We expect the process to unfold along a timeline of 3 years, including the year we have spent on the assessment revision project. Below is our expected timeline for the reform of general education assessment and programming (**Figure 11**). Our implementation of the new assessment plan for the Kent Core is targeted for Fall, 2020 and the revised Kent Core Program should be operational as early as Fall, 2021.

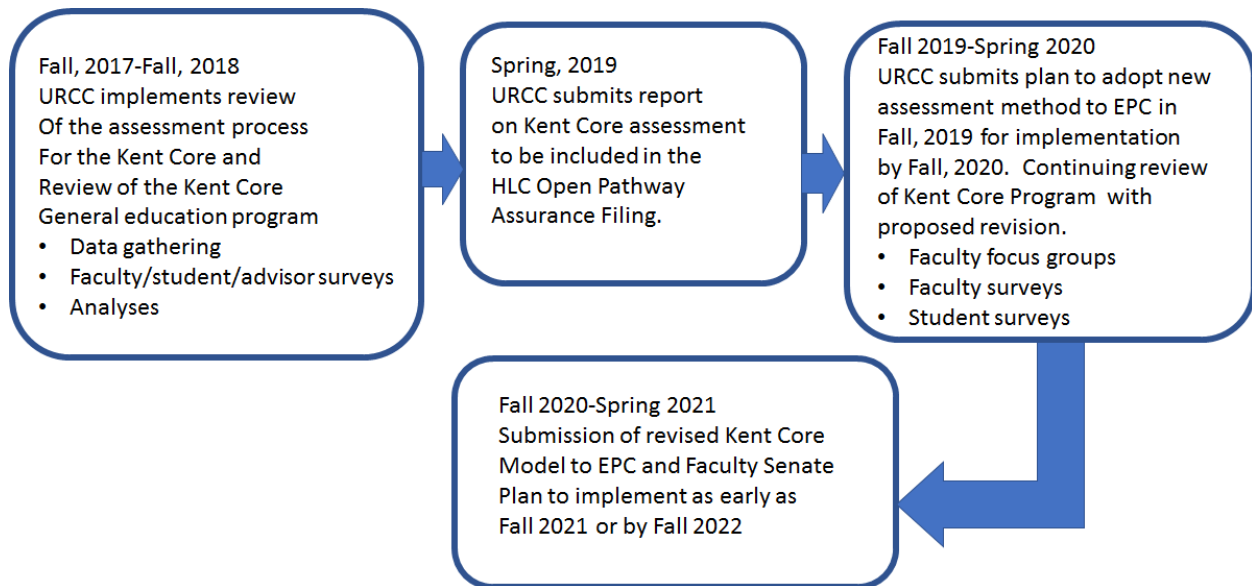


Figure 11: A timeline for implementation of the new Kent Core assessment plan and also the expected revision of the Kent Core program itself.

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