

# National Institute for Learning Outcomes Assessment

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## DQP Case Study: Kansas City Kansas Community College

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Kansas City Kansas Community College (KCKCC) is a public, urban community college with a total enrollment of approximately 10,000 students, about two-thirds of whom attend part time. Founded in 1923 as part of the Public School System of Kansas City, Kansas, the mission of the college today is to provide higher education and lifelong learning to the varied communities it serves, primarily in Wyandotte and Leavenworth counties.

NILOA selected KCKCC as an appropriate site for a case study because of its progress in creating an alternative system for documenting student achievement of Degree Qualifications Profile (DQP) proficiencies. Its interactive curriculum mapping database allows faculty to enter information about individual student performance on each learning outcome and competency in their courses, which is then indexed against 28 university-wide learning outcomes formulated around the DQP, with reports returned to faculty and programs for review and action.

This development is of special interest because of its centrality to the vision of assessment implied by the DQP (Ewell, 2013). First, it returns assessment to the faculty, relying on work done in the regular contexts of teaching and learning rather than turning to “add on” instruments and approaches that are externally developed and administered. Second, and as a corollary to this first point, assessment is no longer about student achievement on average or about inspection of samples of students; it is an expectation that all students achieve the outcomes set forth by the institution. Third, KCKCC’s approach to assessment is of special interest because of the need for alternative documentation systems. As Ewell notes, “In a DQP context, assessment is ongoing and decentralized. It occurs every time a faculty member examines a particular student response to a posed examination question, demonstration, or assignment—so assessment is happening all the time. Because of this, the DQP approach requires a comprehensive record-keeping system for posting, housing, and manipulating data on what students have learned” (2013, p. 13). The challenge of documentation is one in which models are needed, and KCKCC’s work may well be useful to other campuses.

### Institutional Context

Academically, KCKCC offers four Associate degrees, which provide the foundation for nearly all four-year degrees. In addition, many one-year programs and Certificate programs are offered. Students may enroll in pre-professional programs (i.e., pre-dentistry) and transfer to a four-year university or college, or earn a one-year Certificate or two-year degree and enter the work force.

Over the past decade, the college has worked to develop outcomes for its various programs, including general education. These “21st Century Outcomes” as they are called, fall into six broad categories:

#### 1. Communication Learning Outcomes

The learner will have the ability to express, interpret, and modify ideas/information effectively (both written and oral), including but not limited to reading text accurately and correctly; writing with a clear purpose and effective organization; speaking effectively using appropriate styles that suit the message, purpose, and content; and employing active listening techniques.

## **2. Computation Learning Outcomes**

The learner will have the ability to understand and apply mathematical concepts and reasoning using numerical data.

## **3. Critical Reasoning Learning Outcomes**

The learner will understand inductive and deductive reasoning and have the ability to define problems and use data (qualitative and quantitative) to make complex decisions utilizing analysis, synthesis, and evaluation skills.

## **4. Technology and Information Management Learning Outcomes**

The learner will have the ability to define, collect, organize, analyze, and evaluate information from a variety of sources. The learner will also have the ability to understand basic technology concepts and functionality in order to use technology as a tool to locate and retrieve information.

## **5. Community and Civic Responsibility Learning Outcomes**

The learner will demonstrate knowledge, awareness, and understanding of diverse ideas, values, and perspectives of a culturally diverse world; an understanding of the ethical issues and values that are prerequisites for making sound judgments and decisions; a recognition of the obligation to become actively involved as a contributing member of the community; and a sensitivity to and awareness of aesthetic expression.

## **6. Personal and Interpersonal Skills Learning Outcomes**

The learner will have the ability to work cooperatively and productively with others; to understand and evaluate his/her capabilities; to manage his/her personal growth by setting realistic and appropriate goals.

## **Initial Thinking about the DQP**

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The campus was first introduced to the DQP at an April 2011 event sponsored by the Higher Learning Commission (HLC), KCKCC's regional accrediting body, focused on an alternative "Open Pathways" Quality Initiative. Along with 23 other institutions, KCKCC had been invited to pioneer the new approach, which included a commitment to test out the DQP. According to Sangki Min, Dean of Institutional Services, whose role includes oversight of student outcomes assessment and leadership for accreditation, this invitation was a "big incentive" to engage with the DQP in that it would count as fulfilling the HLC's Quality Improvement Process, the first of two processes required for achieving re-accreditation.

But even beyond its immediate connection to HLC accreditation, the DQP was seen as potentially helpful at KCKCC, Min says. For one thing, the DQP proficiencies seemed to offer a way to enrich the campus's own locally devised outcomes (above), which Min saw as lacking in specificity. For instance, everyone agreed that critical reasoning was important, but it was not yet clear what that broad category entailed, or how critical reasoning might look different in different contexts. Min saw the DQP proficiencies as a way to "help specify and to break open" the broad outcomes categories the campus had been working with. Thus, for the category of critical reasoning, engagement with the DQP allowed the campus to add a number of much more specific, verb-driven proficiencies to their list—such as "Describes how existing knowledge or practice is advanced, tested, and revised" and "Assembles evidence relevant to problems, describes its significance, and uses it in analysis." In this way, the DQP outcomes were incorporated into KCKCC's existing 21st Century Outcomes and a longer, more elaborated 28-item list ([http://www.learningoutcomeassessment.org/documents/KCKCC/KCKCC\\_Learning\\_Outcomes.pdf](http://www.learningoutcomeassessment.org/documents/KCKCC/KCKCC_Learning_Outcomes.pdf)) was presented by the Vice President for Academic Affairs and Sangki Min to the deans, who approved it, then shared with the faculty for their review and feedback, and finally approved by the Board and thereby officially adopted.

Additionally, the DQP was seen as a way to re-invigorate assessment at KCKCC. “It was dragging” Min says. As on many campuses, the history of assessment at the college over recent years had been one of fits and starts. The assessment coordinator role had turned over several times. The chain of communication from the Student Assessment Committee through its faculty coordinator and then through Min had not always been efficient or clear. And like many campuses, KCKCC had once (in 1995) received a warning from HLC about the need to do more in assessment. As one long-time faculty member put it, “it was confusing,” and there were concerns about what assessment was “supposed to look like.”

With this history as a backdrop, Min explains, “We didn’t want the DQP to appear as ‘something else.’” Instead, the goal was to frame it “as a way to improve what we had been doing, not as something new.” In short, the invitation from HLC to participate in the pilot program felt like the “perfect time to jump in and a chance to do something really good in assessment.”

## Engaging the Campus Community

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The DQP was formally introduced to the campus community in January 2012 by the provost at the time and by Min, both of whom had recently attended the HLC meeting the previous spring and were eager to engage the institution with the New Pathways model. The occasion was an all-faculty gathering, where, recalls a faculty member in mathematics, “we were asked to bring syllabi.” The task for the afternoon was to work in small departmental groups to map course competencies onto the newly adopted 21st Century Outcomes—essentially the six original general education outcomes, fleshed out into 28 proficiencies that draw on the DQP.

It was an intense afternoon of working in small groups, and the task was predictably easier for some fields than others. For nursing it was familiar territory. As one faculty member in that field told us, “Nursing is used to thinking in terms of outcomes and competencies, so it was not much of a stretch.”

One faculty participant in the experience reported that some colleagues “felt slighted,” not having had input “on something so intimate as curriculum and assessment.” But, he added, “the time was right. We were in limbo, and so we were good with this.” And it helped that Min worked with the various academic divisions after the event to “help us get it off the ground.”

Today, the mapping of course outcomes has been completed for all 1,000 courses at KCKCC, resulting in a set of Excel files that link course competencies with the university-wide 21st Century Learning Outcomes.

## Creating a DataBase

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The important next step was to turn these Excel files into usable information by creating an interactive curriculum mapping database—designed and overseen by Min’s Office of Institutional Services. Though the campus might have purchased a commercially available data management system, the sense was that none of these did exactly what was needed, and KCKCC chose to design its own system. The goal was to remake assessment, using information from existing course assignments and exams rather than creating “add-on” assessments that had to be administered and evaluated apart from course work, or re-evaluating work that had already been graded once. In fact, the campus had tried the latter approach a few years earlier: collecting writing assignments that had already been graded and grading them yet again for assessment purposes. This time they wanted to skip the extra step and make assessment completely integral and organic to teaching and learning.

The process works like this: Each course employs its own regular class assignments and activities as designed by the faculty member to evaluate students on the outcomes and competencies as listed in the course syllabus.

The instructor then translates the results of these course assignments and assessments into a 0 to 4 scale score on each of the chosen learning outcomes and competencies. The 0 to 4 scores on each competency by each student are submitted through the Online Competency Index Form. This information then triggers the development of a report for each course showing the average 0 to 4 scale score for all students from all sections of the course. This report is generated by Min's office and distributed back to faculty in their programs (see Sample Report 1 at <http://www.learningoutcomeassessment.org/documents/KCKCC/SampleReport1.pdf>).

The 21st Century and DQP Outcomes currently are assessed indirectly using the information from the course competencies mapped to the 28 items of institution-wide learning outcomes. For example, suppose course competencies 2 and 3 in ENGL 101; 4, 6 and 7 in ECON 201; and 12, 17, 20, and 22 from SPCH 201 are the competencies that would contribute and hence be mapped to DQP proficiency #1 - Presents substantially error-free prose in both argumentative and narrative forms to general and specialized audiences. The average 0 to 4 scale scores on these nine course competencies submitted by instructors from the three courses would be the score that shows how well the student performed on that particular DQP proficiency. This process allows cross-discipline assessment of student achievement on DQP proficiencies.

Good progress has been made in implementing this model: Sangki Min has visited each division to provide training, and also answered many phone and email queries along the way. But campus leaders understand that full implementation will take time. Today—more than two years into the process—about half of the sections offered in each semester are submitting student achievement data. That number might be higher were the process required of faculty, but Min's view is that a requirement might lessen authentic buy-in among those who are now engaged. Part of the shortfall is explained, too, by a large population of adjunct faculty (about 60% of the college's courses are taught by adjuncts), who have less time and motivation to dedicate to the new process and who were, for the most part, not part of the initial January meeting where the mapping activity was undertaken and did not therefore get in “on the ground floor.”

For that matter, even full-time faculty find that the task of translating students' classroom work into 0 to 4 scale scores is a challenge. It requires a judgment about each student, drawing on work throughout the entire semester (a variety of assignments, projects, papers, class discussions, and the like) on each of the course competencies. (For some courses this is a small number; for some a larger one.) And, as noted above, for each competency, the faculty member is asked to rate the student's level of proficiency from 0-4. It's a difficult task, and as several people told us, the quality and consistency of the data can be an issue. This is a challenge the campus is continuing to work on, as suggested below in the section on Lessons and Next Steps.

## Policy and Infrastructure

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Meanwhile, to more firmly connect the new outcomes to the ongoing work of teaching and learning, the long-standing Academic Policy Committee, which approves all new or modified courses, has adopted a new guideline. The committee now requires that every course seeking approval submit not only a syllabus but a Degree Profile Index (or DPI) specifying which of the 21st Century Outcomes the course will assess. In the 2013-14 academic year, approximately 75 courses were reviewed under this new guideline, each of them specifying a DPI. According to committee chair Susie Myers, the process has made a tremendous difference: “Now when we create a course, we start with the outcomes we want.” It has helped, too, she says, by giving faculty a firmer sense of what to expect in terms of learning from other courses. “We can look up the DPI from courses students would have taken before ours and find out what proficiencies they bring to our course.”

Importantly, the committee's work connects the record-keeping aspect of assessment to the more fundamental work of course design and teaching.

## Closing the Loop

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The real challenge of assessment often comes in using the data, and KCKCC is at an early stage in this process. But with the interactive database fully functional, reports are now being returned to faculty. As one department coordinator explained, “What we get back from Sangki Min is a report for every course, showing the level at which students are achieving on every outcome the course assesses. (All courses do not assess all outcomes, only those that link to their course competencies.) Reports can be focused at various levels: providing information on students’ performance on a course-by-course basis, as a compilation of all the sections of the same course, on courses within the same discipline, in a program, and/or by academic division, and college-wide. Min’s office also generates a transcript analysis of graduates (see Sample Report 2 at <http://www.learningoutcomeassessment.org/documents/KCKCC/SampleReport2.pdf>).

Predictably, departments (and individual faculty) are at different points in their use of the reports. In nursing, for instance, some changes have already been made. As one nursing faculty member explained, “We looked at how students did in our program, saw that some outcomes were lacking, and tried to do something about that—for instance in community and civic responsibility, by adding more community outreach.” In exercise science, too, the new system has revealed shortfalls in students’ ability to solve problems and to apply their critical thinking skills to actual cases involving client needs. This information has led the program to experiment with more hands-on work, increased use of case studies, and further work developing treatment plans.

Other faculty we spoke with were hopeful about the usefulness of the data but not yet at a point where they can put results into action. Part of the issue appears to come from the need to focus more sharply. After all, data about achievement by every student on a range of competencies is a lot to process. The work of the math department is instructive here. Early on—after mapping course competencies against the DQP outcomes—the department decided to look at just three competencies per course. This was helpful, says department coordinator Michele Bach, “but we probably should have done just one. In retrospect, three was still too many, too ambitious.”

Bach’s plan, going forward, is to focus more sharply on areas of student difficulty (for instance, their work with fractions) and “bring faculty together to look at what we know, and think about what we can do based on the data we have at this point.”

The situation is similar in the biology department, where the faculty member we spoke with has found “some useful things” in the data reports on his course. One of those—and this has become a topic of wider conversation in the department—is that students compartmentalize their learning and don’t retain it or bring it forward. Ironically, we were told, the “better” students are often actually the poorest performers on the cumulative final. This is a significant concern because the same criticism is heard from employers who hire students from the program. Faculty are now discussing possible interventions: How do we ensure that students retain information? How can we present materials differently? How can we help students understand that they need to know this material in the future?

## Lessons and Next Steps

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Faculty and administrators at KCKCC we spoke to were clear about a number of benefits that have come from the institution’s engagement with the DQP. For one thing, the campus’s institution-wide learning outcomes have been built out and elaborated much more fully by incorporating DQP items and the focus on active verbs. The course-embedded approach to assessment made possible through the interactive database has also

helped to give faculty a way to engage with assessment, seeing it as connected to their instructional work—though still, it is true, an additional and significant burden in terms of time.

With the new process now several years underway, it's also safe to say that the evidence is starting to make a difference. Faculty are seeing information they would not have seen (or perhaps thought to ask about) a few years ago. Areas for needed improvement are being talked about and are starting to be addressed. Some actual changes have been made; others are in discussion. And the individuals we spoke to, in a range of programs, were hopeful about the potential of the system to make a difference, though aware, as well, that the real key is finding time to bring colleagues together to look at the evidence, think together, plan, and act. As one person in the sciences pointed out, some problems are bigger than the DQP.

Several next steps are planned or in discussion.

1. Participation by adjuncts continues to be an issue. Min believes that the key will be time and “seeing that this process makes a difference.” Work must be done at the department level, as well, to bring adjuncts into the conversation, to increase their awareness of the assessment process, and to invite their participation. One department coordinator we spoke with was passionate about the need to bring the whole department together—full-time and adjunct faculty—to talk about goals and data and to strategize about how to improve the experience of students in the program.
2. Another area of future work is assignment design. Good assignments, after all, are the key to effectively translating student course work into more general university-wide outcomes; if the assignment does not elicit evidence relevant to the intended outcomes, that translation will be weak at best. Aware of work on other campuses, and of NILOA's leadership through the DQP Assignment Library (<http://www.assignmentlibrary.org>), Min hopes to see KCKCC focusing professional development on assignment design in the near future. Such work is valuable not only for its uses in assessment but because assignments are powerful pedagogical tools.
3. Related to the focus on assignment design is KCKCC'S new Assessment Award, beginning in the 2014-15 academic year. An exemplary assignment and rubric design are part of the selection criteria.
4. Finally, KCKCC plans to employ the BlackBoard Outcome Assessment feature. Starting in Fall 2014, all courses, including face-to-face courses, will be able to utilize the several online benefits that BlackBoard brings to campus. The Outcome Assessment feature allows each gradable course assignment to be linked to course competencies, program learning outcomes, and institution-wide learning outcomes (in this case the DQP proficiencies). Since the students' performances on assignments and linked information are saved in the database, Min's office is planning to translate the students' performances on these assignments to the 0 to 4 scale behind-the-scenes, relieving instructors of this additional step in the process.

## Conclusion

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Results from the 2013 NILOA Provost Survey (Kuh, Jankowski, Ikenberry, & Kinzie, 2014) indicate that some of the most valuable and useful information about student learning comes from classroom-based work assigned by faculty. What's needed to make the evidence from such work useful beyond the individual course are mechanisms for aggregating information up to higher levels and looking across courses in ways that align with cross-cutting outcomes. A number of campuses are now starting to make progress in this regard (Richman & Ariovich, 2013), and this case study from Kansas City Kansas Community College adds another promising model to the mix.

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## About NILOA

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- The National Institute for Learning Outcomes Assessment (NILOA) was established in December 2008. It is funded by Lumina Foundation for Education and The Teagle Foundation.
- NILOA is co-located at the University of Illinois and Indiana University.
- The NILOA website went live on February 11, 2009.  
[www.learningoutcomesassessment.org](http://www.learningoutcomesassessment.org)
- The NILOA research team has reviewed over 1,000 institution websites for learning outcomes assessment transparency.
- One of the co-principal NILOA investigators, George Kuh, founded the National Survey for Student Engagement (NSSE).
- The other co-principal investigator for NILOA, Stanley Ikenberry, was president of the University of Illinois from 1979 to 1995 and of the American Council of Education from 1996 to 2001. He served again as Interim President of the University of Illinois in 2010.

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