This has been a really busy semester in the world of the Assessment Committee, and I’m pretty sure this describes how we have all have been in these changing times. We have been working hard on four major projects this semester:

1. Planning for our fall 2011 Effective Writing pilot; full assessment coming in fall 2011.
2. Initial data processing and analysis from our recent Social Science assessment; thanks to all faculty and staff who supported this.
3. Comparing our results from the Community College Survey of Student Engagement assessment in 2005 and 2009 to decide how we disseminate these important findings; for the most part, we have made some important improvements.
4. Finalizing our findings and recommendations from our Quantitative Reasoning assessment; our students struggle with math and their skills do not follow a cumulative path as they progress through our sequence of courses…

You will begin to see the results from much of this soon. We have a mass of data on student approaches to learning, student engagement, student attitudes to and direct skills in quantitative reasoning, and the social sciences.

The most complex part of our charge is analyzing, interpreting and utilizing our data in ways that support us all in improving student learning and success. We will be disseminating a range of materials over the remainder of the semester to share with you much of what we have found.

Our findings from the Quantitative Reasoning continued on page 2
assessment paint an interesting picture of our students, their perceptions of math, the relevance and relationships they see for math in their lives, and their specific math skills. We had a large sample of students for this assessment, over 1,100, and they clearly struggled with both confidence in math and competence in key skills. Our students were the strongest at interpreting visual data and the weakest at working out percentages. We also found some statistically significant shifts in student math competence as they progress through their math journey with us. However, simple cumulative assumptions about learning and progressive math courses could not be made. Our Quantitative Reasoning Assessment Findings document will soon be circulated and we hope we can all think about how to influence perceptions of math and how math skills are a communal and collegiate responsibility.

We have considerable work to do in analyzing the narrative responses from our most recent Social Science Assessment. This was our first ‘electronic’ assessment, and we were only partially successful in using Blackboard as the platform for our data gathering. We still have a lot to learn in this area. It took too many “clicks” for students to get to the first question, and our internet and Blackboard capabilities could not always handle the number of students involved in the assessment. Towards the end of Assessment Week, we resorted to our old tried and tested methodology – paper and pencils – not very 21st century! We were also 23 students short of our 1,000 target, but the usable sample size will be much smaller than this. Some interesting first details of findings can be found elsewhere in the Times.

The Assessment Committee Web Site

The Assessment Committee Web site (http://sites.google.com/site/hwassessment/) serves as the official channel of the Committee on the Web. Meeting minutes are posted within one week of the Committee’s meetings which are weekly during fall and spring semesters. Other sections include a repository for accreditation documents, committee newsletters, a multi-year calendar of Assessment Committee processes, as well as information about the committee such as the committee charge, framework and philosophy.

An unofficial but potentially just as useful presence on the Web for the Committee is the Harold Lounge Web site, http://haroldlounge.com/about-assessment/. The Assessment Committee makes use of these two public domains for ease of frequent updating and in the latter case, for its blog format.

Effective Writing Pilot

In the next two weeks, the Assessment Committee will be piloting the Effective Writing Assessment. This assessment addresses one of the General Education Student Learning Outcomes concerning written communication.

For the first time, student writing samples will be collected from volunteer instructors from work that is already taking place in the classroom. Samples of writing may include essays, journal entries, exam answers, etc. We are hoping to collect a variety of writing that reflects the writing that is going on all over 30 E. Lake Street. In addition, students will be asked to complete a short demographic survey to accompany the assessment.
First Look – Social Science Assessment

This was our first “electronic” assessment, and we were only partially successful in using Blackboard as the platform for our data gathering. We still have a lot to learn in this area. It took way too many keystrokes for students to get to the first question, our internet and Blackboard capabilities could not always handle the number of students involved in the assessment, and this was a complex assessment.

Indeed, towards the end of Assessment Week in fall 2010, we resorted to our old reliable methodology – paper and pencils – not very 21st century! We were also 23 students short of our 1,000 target but the usable sample size will be much smaller than this.

We have already learned a great deal methodologically as we took this big step into electronic assessment. Some of our learning was:

• Blackboard has restrictions and complications that did not identify themselves in our pilot
• Our technical capacities were stretched beyond their limit at times during the week
• The tried and tested methodology of faculty volunteering sections of students still worked best
• We offered the opportunity for students to take the assessment as individuals outside of faculty volunteered class cohorts or as extra credit, 131 students did this – 13.4% of respondents.
• Faculty involvement in Assessment Week has remained steady over the last two years.
• Electronic surveys of some complexity require considerable design skills; we had 49 web pages and 7 clicks before students got to the first question….

One of the main reasons we chose to use Blackboard as our assessment platform was because it would give us the capability to analyze data immediately. This first look at some data presents some interesting findings and poses further questions we will address in the full Social Science Assessment Report.

Our assessment tool asked students to read nine separate hypothetical conversations between two social scientists and then identify which discipline they believed the social scientists belonged to. Sociology and history had two conversations, so that we could mitigate against students choosing an answer simply based on a process of elimination. The following chart contains the percentage of correct answers identifying the appropriate discipline from a sample of 454 students.

![Overall % Correct Chart]

Clearly, we have work to do in reconciling the different rates of correct responses for the duplicated disciplines of History and Sociology, but it is intriguing to see different recognition of the different social science disciplines.

Our data also contains evidence to support the strength of social science courses here at HWC. We organized students into analytical cohorts based on their self-reported number of completed social science courses. In the following chart we can see the impact on correct identification of disciplines from students with three or more social science courses at HWC.

Obviously, there is much more work to do on analyzing the data we have and working out what this might mean for all of us. We still have 666 narrative answers to grade and analyze from the sections of the assessment where students were asked to demonstrate, apply and synthesize their social science knowledge. We know we will have many interesting results to share and discuss. More soon…

*see accompanying chart on following page*
During the fall 2009 semester, we administered the Quantitative Reasoning Assessment (QRA). The QRA was written in two parts, the first part including informational questions on demographics, math comfort level, and appreciation of math complexity, and the second part including questions measuring quantitative reasoning competence on key skills. Over 30 faculty members volunteered a total of 61 class sections, and some students also volunteered on their own outside of class. A total of 1,132 students participated in this assessment.

The key skills competence section included questions on various topics:

- Percents
- Linear versus exponential reasoning
- Perimeter
- Area
- Basic statistics
- Graphs

On average, students performed strongest on the graph questions and they performed weakest on questions regarding percents. The inference from this could be that our students were much more able to work with visual data, which would suggest the usefulness of using visual strategies as a teaching tool whenever possible, even for concepts that may not usually be taught using visual data. Our data would certainly support the need for more emphasis in all classes, even non-math classes, on concepts regarding percents.

Our analysis of the results also found a number of key statistically significant correlations between math competence and other data. For example, students who self-reported that they had repeated a math class at some point in their HWC career did significantly weaker statistically on the competence section than students who had never had to repeat a math class at HWC. This illustrates the need for instructors to be aware of students who have had to repeat a class and to make sure that these students know about services such as tutoring.

There was also a very strong statistically significant correlation between math competence and a student’s self-reported ‘comfort’ level in math. Students reported their math comfort level on the following scale: highly uncomfortable=0, uncomfortable=1, comfortable=2, highly comfortable=3. Between each level of self-reported comfort, a rise in self-reported comfort was associated with a statistically significant rise in score on the competence section. These data support a very strong relationship between comfort and competence in quantitative reasoning.

**Comfort, Complexity and Competence**

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There is some fascinating detail in our data, especially between affective data and direct math skill competence. For example, there is an increasingly significant relationship between positive student support for the statement “Math helps me understand the world around me” and student math competence.

Student responses to the above statement used this scale: strongly disagree=0, disagree=1, agree=2, strongly agree=3. Between each level of agreement, a rise in self-reported agreement with the question was associated with a statistically significant rise in score on the competence section. Evidence we believe indicates that students with a deeper appreciation of the complexity and connectivity of math also have higher quantitative reasoning competence.

In fact, students were asked a series of 20 questions, including the one just mentioned, each measuring students’ appreciation of the complexity of mathematics. It was found that higher levels of appreciation were significantly linearly correlated with higher quantitative reasoning competency.

One surprising result involves the comparison of quantitative reasoning competency among the three math cohorts, divided by class as follows:

- Cohort 1 including FS Math 3001-3002 and Math 098,099
- Cohort 2 including Math 118, 121, 122, 125, 140
- Cohort 3 including Math 141,144, 146, 204, 207, 208, 209, 210, 212.

Students in Cohort 2 had the highest average score on competency, and this average was statistically significantly higher than either of the other cohorts. One possible reason for this is that the questions in the competency section focused on foundational math concepts that students in Cohort 2 were currently immersed in. Yet this may also illustrate the need to keep students in Cohort 3 immersed in those foundational concepts, such as percents, even as they learn the more specialized concepts such as calculus.

As you can see from these examples, there is a mass of learning here for us all and much that should inform a broad dialogue between faculty and administration. Math skills are central to a strong general education profile, and our imminent report on quantitative reasoning will give us a range of new data on which to build continued dialogue.
The HWC Assessment Committee is dedicated to the improvement of student learning through the meaningful utilization of assessment data in an effort to support the HWC community towards the evolution of college curriculum. As outlined in this charge, the HWC Assessment Committee is committed to defining assessment at Harold Washington College, as well as establishing and ensuring that appropriate assessment procedures and practices are followed in collecting, reviewing, analyzing and disseminating information/data on assessment. Finally, the HWC Assessment Committee is responsible for providing a forum for dialogue regarding assessment issues to support a college culture, which includes the assessment process.

COMMITTEE MEMBERSHIP

We are always looking for new faculty, students and staff to join in our exciting work. We meet every Wednesday from 3 p.m. to 4 p.m. in room 1046. All are welcome to join us. The Committee Charge states that there can only be two voting members from each department, but we are happy to involve as many people in our work as possible. If you want to discuss what this might involve or ask further questions, please contact Mike Heathfield (see contact info at left).

CCSSE Improvement, continued from page 5

colleges, and vs. Large colleges across US. Scores are provided as means, with five groupings of questions into benchmarks related to qualities suggested to contribute to student success: Active/Collaborative Learning, Student Effort, Academic Challenge, Student Faculty Interaction, and Support for Learners.

In 2005, HW beat the mean for all reporting colleges in 4 of 5 benchmarks; HW bettered the mean for Illinois colleges in 4 of 5 benchmarks; and scored higher than the mean for all large colleges in 4 of 5 benchmarks. The one benchmark we scored below the mean on in every measurement was “Support for Learners” which led to a number of interventions including the restructuring of Student Services, and a Registration committee, which made multiple changes to the registration process, as just two examples.

In 2005, HW beat the mean for all colleges reporting for 37 of 74 questions of interest, and scored higher than the mean by a statistically significant margin in five areas (while scoring significantly below the mean in four areas). HW beat the mean for Illinois colleges on 54 of 74 questions, with nine of those significantly above and two significantly below, and for large colleges on 46 of 74 questions (five significantly above the mean & four significantly below).

In 2009, by comparison, HW beat the mean for all colleges reporting in 45 of 74 areas, including nine in which we were significantly above the mean and three significantly below. In comparison to Illinois community colleges, HW beat the mean of those schools in 51 of 74 areas, including 13 in which we were significantly above the mean, and three significantly below. Versus other Large colleges, HW beat the means of the cohort in 45 of 74 areas, including 12 that were significantly above the mean and two that were significantly below.