OFFICE OF
EDUCATIONAL
ASSESSMENT
Improving Learning Through Assessment

What Student Ratings Results Tell Us About
Academic Demands and Expectations

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This document is based on a presentation by Dr. Gerald Gillmore, Director of the UW Office of Educational Assessment, at the Second Campus-wide Forum on Student Expectations and Demands, which took place on April 26, 2001. The purpose of these brief remarks were to present what students tell us about demands and expectations via their evaluations of classes using the Office of Educational Assessment Instructional Assessment System (IAS). [1]

Based on student rating (IAS) results, I believe students provide four strong messages or facts for teachers. The following analyses are based on UW-Seattle student rating data from autumn 1995 to summer 2000, using the Instructor Assessment System (IAS). Included in the dataset are ratings of 25,471 undergraduate classes taught by 5,296 different instructors. Ratings of quiz and lab sections were excluded from analyses. The units of analysis for the first three facts are class medians. The fourth fact depends upon class medians averaged over instructors.

1. Effort and Course Demands

The IAS contains the following two items.

> Relative to other courses you have taken:
>
> > 25. The amount of effort you put into this course was:
> > 26. Amount of effort to succeed in this course was.

Both items use a seven choice response scale from much lower to much higher.

The correlation between these two items is a very high +0.86.

Fact 1: Students put more effort into classes that demand more effort for them to be successful.

While this relationship may seem obvious, it is important to note that this conclusion is based on a lot of data. Furthermore, it is important to note that the effort demanded is specified as *to succeed in the course*. Additional demands that are unrelated to success may not yield additional effort.

2. Challenge and Student Satisfaction

IAS also contains the following item:

> Relative to other courses you have taken:
>
>> 24. The intellectual challenge presented was:

This item also uses a seven choice response scale from much lower to much higher.

The correlation of this item with the overall rating of the course (Item 1) is +0.44.

Fact 2: Students tend to prefer more challenging classes over less challenging classes.

3. Workload and Student Satisfaction

IAS also contains the following item:

> 28. On average, how many hours per week have you spent on this class, including attending classes, doing readings, reviewing notes, writing papers, and any other course-related work?

To make the results of ratings of this item comparable across courses, the median response was divided by course credits.

The correlation of total hours per credit per week with students' average course rating is a negligible +.07.

Fact 3: The widely held belief that assigning students more work will lead to lower student ratings is not true in and of itself.

It is probably true that assigning students work that they see as of no value either for their lives or for their grades will indeed lead to lower ratings. [2] Or, adding more of what students perceive as busy work will do nothing good for your ratings.

## 4. Differences in Workload across Faculty

Ratings faculty receive on *total hours per credit per week* is as consistent across courses as ratings they receive on teaching effectiveness.[3] In other words, faculty whose rating on total hours per credit per week is relatively high in one course tend to receive ratings that are relatively high in all courses, and vice-versa.

The following graphs are based on the ratings of 1,652 faculty who were rated in at least six undergraduate courses during the last five years. The variable graphed is the average on *total hours per credit per week* for each of these faculty, averaged over their six or more courses. The first graph shows averages for faculty at the 10th, 25th, 50th (Median), 75th, and 90th percentiles.

One can see that the median hours per week is 1.97. If we assumed that all classes met for the number of hours equal to their credits and that students attended all classes, then this average represents one hour out of class for every hour in class. The more relevant finding is that the average for faculty in the 90th percentile (2.78) is 80% larger than the average for faculty in the 10th percentile (1.54).

Faculty Averages for Undergraduate Courses (1,652 Faculty, 17,614 Classes)
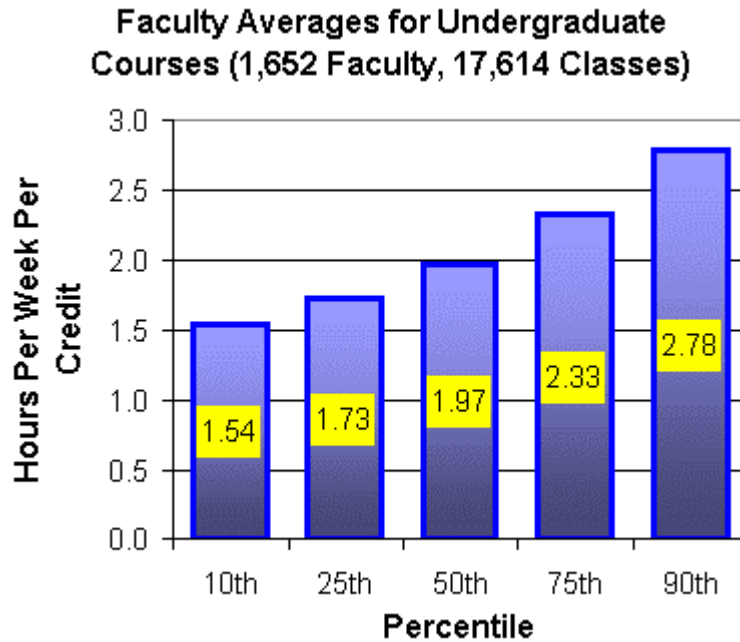
The second graph simply multiplies the average hours per week per credit by 15, a typical course load. Thus, if students were enrolled in courses taught by faculty at the 90th percentile, their average hours per week would by nearly 42. In contrast, if students were enrolled in courses taught by faculty at the 10th percentile, their average hours per week would be about 23.

Faculty Averages Projected to a 15 Hour Credit Load
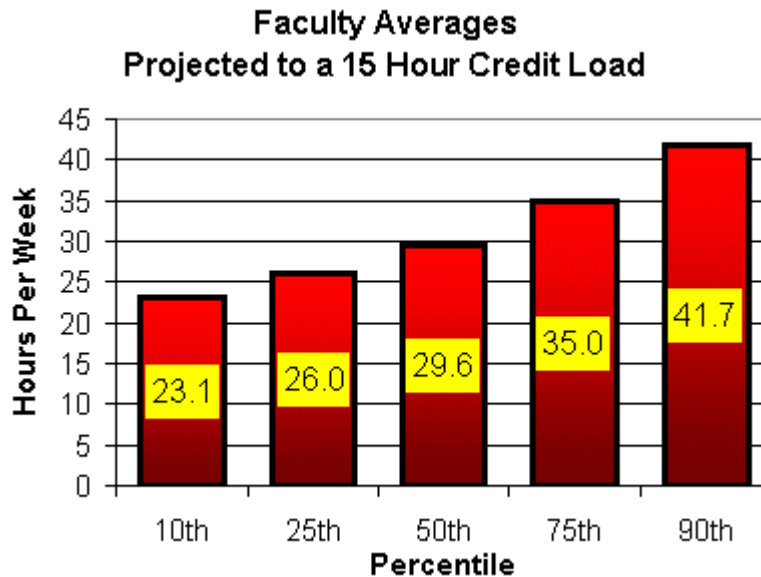
Fact 4: It is clear that all faculty are not equally demanding. In fact, there are considerable differences among faculty in the amount of time students devote to their courses.

[1] The forms of the Instructional Assessment System can be viewed on-line.

[2] Item 29 asks, "From the total average hours above, how many do you consider were valuable in advancing your education?" The correlation of this item, divided by course credits, with the rating of the course as a whole is only +0.27. However, the correlation of this item divided by total hours (Item 28) with the rating of the course as a whole is +0.58. Thus, students tend to give higher ratings to courses with a higher proportion of valuable to total hours, regardless of the magnitude of total hours, per se.

[3] The interclass reliability for instructors teaching 10 classes is .86 for hours per credit per week. The comparable reliability coefficient for Item 4, the instructors teaching effectiveness, is .88.

For further discussion, refer to *Drawing Inferences about Instructors: The Inter-Class Reliability of Student Ratings of Instruction.*