

University of Washington

IASystem™ Interpreting Reports

May 8, 2015

INDIVIDUAL COURSE REPORTS

IASystem™ Individual Course Reports summarize student ratings of a particular class. They display a summary of numeric responses to evaluations conducted either online or on paper, and, for online evaluations, verbatim student comments. The following is a description of report content.

Header information

The name of the institution, college or school, and department of the course are printed at the top of each Individual Course Report, along with the academic term in which the class was taught.

Reports are also labeled with the course number and name, instructor name(s), whether the evaluation was conducted on paper or online, and the particular evaluation form used. The number of students who completed at least a portion of the evaluation form, class enrollment, and overall response rate are also displayed. Response rate is an important indicator of the reliability of the class ratings, and should be kept in mind when interpreting evaluation results.

General indices

Individual Course Reports present two general indices summarizing student ratings of the class.

OVERALL SUMMATIVE RATING

Four general items (described below) are included on most *IASystem™* evaluation forms to provide a global rating of the class and instructor. They are rated from *Very Poor* to *Excellent* (0-5) and are summarized as a Combined Median. The items are:

The course as a whole was:

The course content was:

The instructor's contribution to the course was:

The instructor's effectiveness in teaching the subject matter was:

The Combined Median of the summative items is computed by first summing the numerical weights of all of the responses within each response category (e.g., all of the responses to *Excellent*, all of the responses to *Very Good*, etc.) across all four items. This provides a response array from which a median (ranging from 0-5) is calculated using the procedure described under *Computing Item Medians*, below. The resulting index is intended to be used in making high stakes summative decisions such as those relating to curricular development or faculty merit, promotion, and tenure. See *Using IASystem to make decisions*, below, for more information.

CHALLENGE AND ENGAGEMENT INDEX (CEI)

The Challenge and Engagement Index (CEI) provides an estimate of how challenging students found the class and how engaged they were in it. It is based on the combined response to four items included on most *IASystem™* evaluation forms. The items are:

Relative to other college courses you have taken,

The intellectual challenge presented was:

The amount of effort you put into this course was:

The amount of effort to succeed in this course was:

From the total average hours [per week spent on the course], how many do you consider were valuable in advancing your education?

IASystem™ transforms responses to each of these items to standard scores and calculates their average as described under *Computing the Challenge and Engagement Index*, below. The CEI correlates only modestly (~.25) with the Combined Median.

Item ratings

Individual Course Reports provide a rich perspective on student views by reporting responses to three categories of items.

- *Summative Items* are the first four items on most *IASystem™* evaluation forms. These items are used to compute the global rating of the course and instructor, described above.
- *Student Involvement Items* are a set of items included on most *IASystem™* evaluation forms to support computation of Adjusted Medians and the Challenge and Engagement Index.
- *Formative Items* relate to specific aspects of the course that instructors may want to change prior to the next iteration of the course. Responses to *Standard* and *Instructor-Added Formative Items* are reported separately.

Responses to individual items are reported in several ways: as frequency distributions, average (median) ratings, and either a) deciles or b) adjusted medians and relative ranks. Note that item text is not provided for *Instructor-Added Formative Items* added to paper evaluation forms; instructors should retain a copy of these items to assist in interpreting results.

FREQUENCY DISTRIBUTIONS

The total number of students who responded and the percentage of those students who selected each response choice are displayed for each item. Frequency distributions allow faculty to identify

unusual patterns of response. Instructors sometimes express the concern that evaluations may be completed primarily by students who feel strongly positive or strongly negative toward a course. When this is the case, the frequency distribution will be bi-modal.

ITEM MEDIANS

Individual Course Reports display average ratings in the form of item medians. Although means are a more familiar type of average than medians, they are less accurate in summarizing student ratings. Distributions of course evaluation item ratings tend to be strongly skewed. That is, most of the ratings are at the high end of the scale and trail off at the low end. The median indicates the point on the rating scale at which half of the students selected higher ratings, and half selected lower.

To interpret median ratings, compare the value of each median to the respective response scale. For example, a median of 4.5 on Items 1-4 means that the average rating is half-way between *Very Good* and *Excellent*. IASystem™ utilizes several different rating scales:

Excellent	Very Good	Good	Fair	Poor	Very Poor	
5	4	3	2	1	0	
Strongly Agree		Somewhat Agree	Somewhat Disagree		Strongly Disagree	
6	5	4	3	2	1	
Always, Much Higher, Very Much, Great		About Half, Half of the Time, Average, Moderate, Average			Never, Much Lower, Not at All, None	
7	6	5	4	3	2	1

Note that for items relating to course workload, the median has been divided by credit hours to allow comparisons across classes.

STATISTICAL ADJUSTMENT OPTIONS

Deciles. Institutions may choose to display either deciles or a combination of adjusted medians and relative ranks to assist in interpreting course evaluation results. *Decile ranks* provide a means to compare the median rating of a particular item to ratings of the same item in all other classes within the college/school and across the institution. Values range from 0 (lowest) to 9 (highest); the lowest 10% of item medians are assigned a decile rank of 0, item medians above the bottom 10% and below the top 80% are assigned a decile rank of 1, etc. Note that because average ratings

tend to be high, a *Good* rating may have a low decile rank. *IASystem™* restandardizes decile ranks annually for each institution based on ratings from the previous two academic years. Decile ranks are shown only for items for which there are sufficient data.

Adjusted medians. Institutions may choose to have *Adjusted Medians* displayed on Individual Course Reports in lieu of *Deciles*. Research has shown that student ratings may be somewhat influenced by factors such as class size, expected grade, and reason for enrollment. In particular, ratings may be lower for a) large classes, b) classes in which a high proportion of students expect low grades, and c) courses taken as a requirement rather than an elective. To control for these effects, *IASystem™* analyzes institutional data to determine the strength of the observed relationships and applies a corrective formula to compute *Adjusted Medians* for the four *Summative Items* and the combined global rating. The formula is recalculated annually for each institution based on ratings from the previous two academic years as described under *Computing Adjusted Medians*, below.

Relative rank. Individual Course Reports that display adjusted medians for *Summative Items* display *Relative Rank* for *Formative Items*. These rankings are specific to the particular class evaluated. Relative ranks are computed by standardizing and rank ordering the median ratings of the items. Scores are standardized by subtracting the item median from the overall institutional item median and dividing by the standard deviation across all courses. The standardized scores are then rank ordered, with 1 being the highest ranked item with respect to that particular course. These ratings are intended to serve as a guide to direct instructional improvement efforts, with the top ranked items (1, 2, 3, etc.) representing the strongest areas and the lowest ranked items perhaps in need of additional focus.

Student comments

Responses to open-ended questions are provided as a separate report for evaluations conducted online. Colleges and schools within the institution determine whether these comments can be viewed by departmental coordinators and administrators. Comments are not available online for evaluations conducted on paper. Paper comment sheets should be collected by coordinators and sent to faculty after grades have been posted.