

Interpretive Guide: IDEA Diagnostic Form Report

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This two-page Interpretive Guide provides information to help you understand your IDEA Diagnostic Form Report. Additional details about various topics related to IDEA and the use of student ratings are available at www.idea.ksu.edu.

Effective teaching is a complex art. It requires sensitivity to the unique objectives of the course, the personality and preferred communication/interaction style of the instructor, the background and motivation of the students, and the peculiarities of the discipline. It is these factors and their interactions that determine the degree to which desired outcomes are achieved. Although student ratings cannot provide all of the information needed to evaluate and improve instruction, this guide will help you make more complete and accurate interpretations of results from the *IDEA Diagnostic Form Report*.

The *IDEA Diagnostic Form Report* is designed to respond to five questions:

1. Overall, how effectively was this class taught?
2. How does this compare with the ratings of other teachers?
3. Were you more successful in facilitating progress on some class objectives than on others?
4. How can instruction be made more effective?
5. Do some salient characteristics of this class and its students have implications for instruction?

Two kinds of scores are reported: "Average" scores are based on a 5-point rating scale, while "Converted" scores all have an average of 50 and a standard deviation (measure of variability) of 10. Both "Average" and "Converted" scores are presented in "raw" (unadjusted) and "adjusted" forms. Each type of score is important to a complete understanding of your results.

Question 1. Overall, how effectively was this class taught? (Refer to the tables and graph reported on Page 1 of the *IDEA Diagnostic Form Report*.)

One of the best ways to infer teaching effectiveness is to examine student ratings of progress on objectives chosen as *Important* or *Essential* by the instructor. The average of these ratings provides a good indication of how successfully objectives were reached, especially if at least 10 students provided ratings and if at least 75% of enrollees responded.

Progress ratings are made on a 5-point scale: 1=No apparent progress; 2=Slight progress; 3=Moderate progress; 4=Substantial progress; and 5=Exceptional progress. In interpreting "raw" and "adjusted" averages, these terms can be substituted for the numeric figures; e.g., an average of 4.0 indicates that "substantial progress" is an appropriate term for summarizing student ratings.

An overall index of teaching effectiveness (PRO=Progress on Relevant Objectives) combines ratings of progress on the objectives identified by the instructor as *Important* (weighted "1") or *Essential* (weighted "2")¹. The IDEA Center regards this as its single *best estimate of teaching effectiveness*. Raw and adjusted PRO scores are provided for converted averages as well as for those based on the 5-point rating scale. Converted averages are preferred when making comparisons among faculty members or classes because they take into account the fact that average progress ratings are much higher for some objectives than for others; that is, some objectives appear to be more easily achieved than others. Converted scores assure faculty members that they will not be penalized for selecting objectives that are especially difficult.

Two additional overall measures of teaching effectiveness are shown on the report. These are the average ratings of two items using a 5-point scale (1=Definitely false; 5=Definitely true):

1. Overall, I rate this instructor an excellent teacher.
2. Overall, I rate this course as excellent.

As an index of teaching effectiveness, the average of these two ratings is commonly regarded as about equal in value to the "Progress on Relevant Objectives" index described above. Therefore, the **Summary Evaluation** reported on Page 1 averages the PRO score with the average of these two ratings. Although many IDEA users find this method of arriving at a Summary Evaluation to be meaningful, some may feel that other methods for arriving at a summary judgment better reflects their institution's philosophy and/or priorities; they are encouraged to define a process or use an index that best reflects the local situation.

Question 2. How do your ratings compare with those of other teachers? (Refer to the comparisons shown on the right hand side of Page 1 of the *IDEA Diagnostic Form Report*.)

¹ Ratings of progress on individual objectives are provided on Page 2 of the report and can address Question 3.

Criterion-referenced standards avoid comparisons that can promote an unhealthy competitive atmosphere. Still, many institutions believe a “Norm-referenced” (comparison-based) framework provides a better basis for making judgments about teaching effectiveness. Your report compares your average ratings to results for three different groups of classes. The first comparison group is with all classes in the standard *IDEA database*, and is always reported. The other two are reported only if enough classes were available to provide a stable basis for comparison. These consist of (1) all classes in the *same discipline* as the class in question and (2) all classes *at your institution*. *Institutional* and *disciplinary* norms are updated annually and include the most recent five years of data; the IDEA database is updated on a periodical basis.

Question 3. Were you more successful in facilitating progress on some class objectives than on others? (Refer to the upper portion of Page 2 of the *IDEA Diagnostic Form Report*.)

The first portion of Page 2 lists the 12 objectives included on the IDEA form and summarizes student ratings on those you selected as either *Important* or *Essential*. The main purpose is to help you focus your improvement efforts.

The reporting format is similar to that used on Page 1. In addition to “raw” and “adjusted” scores, the report shows the percent of students making ratings in the two lowest categories (No apparent progress or Slight progress) and in the two highest categories (Substantial progress and Exceptional progress). “Converted scores” are shown in the right hand section and compared with the three norm groups previously described (IDEA Database and, if available, Discipline and Institution). In addition to the actual converted average, the report describes the status of each relative to other classes in the comparison group: “Much higher” (highest 10%); “Higher” (next 20%); “Similar” (Middle 40%); “Lower” (Next 20%); or “Much Lower” (lowest 10%). Using broad categories like these rather than precise numbers is a reminder that ratings are neither perfectly reliable nor perfectly valid.

Question 4. How can instruction be made more effective? (Refer to Page 3 of the *IDEA Diagnostic Form Report*.)

The main purpose of instruction is to facilitate progress on objectives that the instructor selects as *Important* or *Essential*. Such progress is affected by a number of factors in addition to teaching methods.² But teaching

² Characteristics of the student (motivation, willingness to work hard, etc.) have an important effect on learning and can be only partially controlled by the instructor. Similarly, course management decisions related to assignments, appraisal methods, organization, etc. affect learning but are different from instructional methods, the focus of this section of the report.

methods are also of critical importance. The chief way in which the IDEA report addresses instructional improvement requires a careful examination of the 20 methods included on the form. These items, listed on Page 3, have been grouped into one of five categories to indicate the main focus of each.³

The IDEA Center has conducted many studies that relate ratings on each of these “methods” to ratings of student progress on the 12 learning objectives. Through these studies, 7-10 methods that are most closely related to progress on each of the 12 objectives for classes of different sizes have been identified. Although there is some overlap, there are distinct differences in the methods that facilitate progress on the 12 objectives; there are also some differences among class sizes. The objectives for which a given method is especially helpful in promoting learning are identified in the column titled “Relevant to Objectives.” The last column proposes an action for you to take, depending on the relevance of the item and how students rated it. If the rating for a relevant item was well above the IDEA average, it is described as a “Strength to retain”; if the rating was well below average, you are advised to “Consider increasing use”; and if it was in the average range, it is suggested that you “Retain current use or consider increasing.”

Question 5. Do some salient characteristics of this class and its students have implications for instruction? (Refer to the bottom portion of Page 2 of the *IDEA Diagnostic Form Report*.)

Course Characteristics. Students described the class by comparing it to other classes they have taken in terms of (1) amount of reading, (2) amount of work in non-reading assignments, and (3) difficulty. Average ratings are compared with “All classes” in the IDEA database; if sufficient data were available, comparisons are also made with classes in the broad *discipline* group in which this class was categorized and all other classes at your institution. Because relatively large disciplinary differences have been found on these three characteristics (see [Technical Report #13](#)), the disciplinary comparison may be especially helpful.

Student Characteristics. Students described their motivation by making self-ratings on the three items listed at the bottom of Page 2. These characteristics have been found to impact student ratings of progress.

Page 4 of the *Report* provides a detailed statistical summary of student responses to each of the items on the IDEA form as well as to optional locally devised items, if any.

³ Average ratings of items in each of these five categories, when summed, yield a “Teaching Approach” score. IDEA [Research Report #4](#) describes the relationship between these scores and outcomes. This study found that different combinations of the five scores resulted in six teaching “styles,” each of which was facilitative of progress on a different set of objectives.