IDEA Research Notes #3



J U L Y 2 0 0 3

Teaching Evaluation and Number of Objectives Chosen The IDEA Center

The most important global measure of teaching effectiveness provided by the IDEA system is Progress on Relevant Objectives (PRO), a weighted average of student progress ratings on objectives chosen by the instructor as "Essential" (weighted "2") or "Important" (weighted "1"). Since learning is the goal of all teaching, and since a number of studies have established that the average student rating of progress or achievement is a valid indicator of student learning, value considerable measure has assessing teaching effectiveness. Therefore, The IDEA Center has provided detailed guidance to participants about the selection of objectives (See Directions to Faculty). The Center recommends that no more than 3-5 objectives be chosen as "Important" or "Essential" on the grounds that, if more are selected, instructional efforts are likely to be spread too thinly.

A recent study sought to determine if this were true empirically. Thirteen groups were formed from our three-year data base of over 73,000 classes—those where only objective was chosen, those where two objectives were chosen, those where three were chosen, and so forth. The twelfth group consisted of classes where all 12 objectives were chosen, and the thirteenth consisted of classes where the instructor failed to identify any "important" or "essential" objectives. The number of classes in each group ranged from 1,241 (those where one objective was chosen) to 17,613 (those where three objectives were chosen); in over half of the classes (38,665), from 3 to 5 objectives were chosen. Average PRO scores were computed for each of these 13 groups, and comparisons were made of these averages.

The average PRO score was highest (54.7) for those classes where only one objective The next highest average was selected. (53.2) was obtained in classes where two objectives were selected. Average scores continued to decrease by small, statistically significant, amounts (between 0.5 and 0.7) for groups 3 through 7. The PRO average did not change from Group 7 (classes where 7 objectives were chosen) through Group 12 (classes where all 12 objectives were chosen). It reached its low point (47.7) in the group for which no objective was chosen. Instructors of these classes probably had objectives represented by the 12 included in the IDEA form; but, by failing to identify them, they obtained a PRO score that treated relevant and irrelevant objectives alike.

The study was repeated for "Adjusted" PRO ratings. Results were nearly identical to those found for unadjusted scores.

It was concluded that there is a significant relationship between number of objectives chosen and the IDEA system's principal measure of teaching effectiveness. Students report the most progress in classes where the instructor focused on 1-3 objectives. If more than 6 objectives were regarded as "Important" or "Essential," the adverse affect on student progress ratings was especially apparent.

Research Notes #3 Teaching Evaluation and Number of Objectives Chosen Supporting Statistics – July 2003

Number of	Number of	Mean		Standard Deviation	
Objectives Selected	Classes	Unadjusted	Adjusted	Unadjusted	Adjusted
1	892	54.69	54.92	8.01	8.13
2	3731	53.23	53.42	8.49	8.42
3	11803	52.43	52.40	8.41	8.39
4	7598	51.81	51.83	8.42	8.34
5	7064	51.43	51.35	8.32	8.24
6	3687	50.82	50.63	8.44	8.37
7	2992	50.43	50.14	8.55	8.49
8	2941	50.43	50.30	8.65	8.40
9	2379	50.03	49.59	8.89	8.72
10	2040	50.07	49.32	9.00	8.83
11	1395	50.11	49.50	8.56	8.39
12	1419	50.79	49.55	9.15	8.86
0	1943	47.65	47.03	9.02	8.65