

# Re-specifying Strategies and Models to Evaluate University Teaching Quality

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**Keywords:** Equivalence Model, Partial Invariance, Teaching Quality

## Abstract

The evaluation of teaching quality is necessary in the University System both for the planning phase and for the analysis of achievement results. Different decision levels are involved to evaluate teaching activity, for example from the single Course to the faculty and, finally, to the overall university. For these reasons, in each level, criteria, indicators and the information system are very important elements.

The focus of this work is the evaluation of teaching quality through the methodology of the covariance structure. The data (400 students) come from a survey on the teaching quality in the Economics Faculty of Milano-Bicocca University, carried out in 2001, and the chosen disciplines are Mathematics and Statistics. The CFA highlights that two latent dimensions govern these disciplines: the Level of the Course Difficulty (LDC) and Usefulness of the Course (UC), but the relationship between LDC and UC are quite different. For Statistics, LDC determines UC while for Mathematics it sets an equivalence model: since both LDC depends on UC and UC depends on LDC, because they cannot be distinguished in terms of overall fit. This situation has led to the specification a new model having characterized the variable Student Satisfaction (SS) responsible for the confusing effect. The next step is the analysis of the teaching quality through multigroup analyses and it focuses on the global and partial invariance condition among the groups: six groups for Mathematics and six groups for Statistics. The global invariance is verified in a single group while the comparisons among the twelve groups do not respect the global invariance condition, but only the partial invariance condition. The results highlight the fact that the comparison of the structural relationships, in similar contexts, does not always provide the same results. The main hint of our analysis, therefore, highlights the need to have a very flexible measurement model for each discipline.

## References

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