## **University Rankings: Students as Pawns Once Again**

No doubt, students, and increasingly concerned parents, will again ponder the release and continued marketing of *Maclean's* annual (e.g., Nov., 2005) university rankings. As the apparent significance of these data has become strengthened over time, students and parents are thus trained annually to accept them as a guide toward "what every student needs to know."

The 2005 rankings issue again contains repeated references to winners and losers, glossy advertisements from universities about where students "should" go, and of course multiple references to where the best and brightest students may be found and not found. Moreover, the naivete of readers, and noncritical eye regarding matters of measurement error and interpretation of sampling or mean differences, are exploited once again. In one advertisement--trolling for students--one school thus points out that 85 per cent of its students reported in a survey that they liked the quality of their education, while at other major schools this figure was only 82 per cent.

In the *Maclean's* procedures, each of 47 schools in Canada is rank-ordered according to scores on 24 indices reflecting student characteristics, class size, faculty qualifications, and other parameters concerning finance, library resources, and reputation. Schools are classified further in terms of basic program orientation, that is, as Medical/Doctoral, Comprehensive, or Undergraduate.

In several publications (summarized in Cramer & Page, 2005, 2006) we have reported statistically-based analyses of the *Maclean's* ranking data, for each year from 1992 to 2005. In every case, although the indices are promoted as individual and collective "guides," they are not strongly intercorrelated either conceptually or empirically, nor are they strong predictors of a university's overall final rank. Also, for each set of universities designated as Medical/Doctoral, Comprehensive, or Undergraduate, *the average rank on most indices is usually not significantly different in comparisons between the top and bottom 50 percent of schools within each classification*. For example, for Comprehensive universities in the 2005 rankings, and using Mann-Whitney U tests, 3 of 23 indices (13%) were significantly different in these comparisons.

## **Pitfalls of Rank-Based Data**

The measurement limitations of rank-based data do not allow for assessment of how "good" or "bad" the higher and lower ranking universities are, whether absolutely or relatively, nor of how they might differ in relation to others or each other. Using cluster analysis (Ward's method) as a method for identifying similarity and dissimilarity between schools on the various component indices underlying the rankings, we find repeatedly that many schools differing considerably in final ranking, classification, and many other aspects, are actually highly similar in their pattern of rank scores on the indices. Other schools show similar overall ranks, but dissimilarities in terms of clusters and pattern of indices therein.

In addition, we have found, using various sets of student satisfaction ratings, including those published recently by the *Toronto Globe and Mail* as well as those published by *Maclean's*, that student satisfaction seldom correlates well with overall ranking results or with the individual ranking indices. Indeed, several prominent schools,

which usually have fared poorly on measures of satisfaction, generally do well in *Maclean's* final ranks; moreover, several lower-ranking schools have scored highly on satisfaction measures. Using a set of student satisfaction data published by *Maclean's* in 2004, for example, the top versus bottom halves of the schools (in all university categories) showed no statistically meaningful differences in the satisfaction scores of recent graduates of Canadian schools. These same data showed further that in fact *every* school was rated as either "good" or "very good" by 90 per cent of the12,400 graduates surveyed, seemingly supporting the view advanced by some university administrators of essential comparability and overall perception of high quality across schools.

*Maclean's* thus elevates and transforms small, sometimes minute, statistical differences to the status of discrete differences in rank. Yet, rank-based data (third, fifth, etc.) allow only limited quantitative comparisons between the ranked items, and no reliable interpretation of the size or nature of differences obtained between them.

Careful consideration of the ranking indices shows that the *Maclean's* rankings essentially reflect a school's resources and the various component budgets therein. What indices or parameters of universities are of importance to students? In one recent study, we found, for example, that most undergraduates chose their university for a variety of personal, practical, geographical, logistical, and financial reasons, quite unlike the type of indices put forward by *Maclean's*. In fact, most students do not simply "choose" a university in the usual sense of making a rational, statistically-based comparative choice among several alternatives—as one might do in choosing items from a used car lot. In some ways, ranking exercises have thus become as important to institutions as to the students who attend them, and now have come to affect managerial and administrative priorities, reminiscent of furnace manufacturers hoping to do well in *Consumer Reports*.

## **Implications for Student Welfare**

To date, the implications of ranking exercises for student welfare, amid advertising and hype about "where the bright students are," remain sadly unrecognized by both psychologists and the general public. Moreover, such a state of affairs is worsened by the idea that there exists a single best or worst school, indeed decided annually like the World Series. The stage and basic dynamics are thus set in motion for yet another form of educational self-fulfilling prophecy, wherein students attending less prominent schools come to perform below what their potential might otherwise be, while perceiving themselves as effectively disadvantaged. We also know, from studies of stereotyping, that students don't think or learn, or generally do as well (maybe even in terms of job-seeking activities) when they feel stigmatized or put down in some way, for example, through nationally publicized "evaluations" of the school they attend. Of course, in the opposite direction, other students will participate in a positive self-fulfilling process.

An interesting feature of the *Maclean's* rankings is that, while the overall response rate in its 2005 reputational survey was a solid 11 per cent, by far the largest return from any subgroup of those respondents (41 per cent), was that of "university officials." To us, it is a plausible and researchable hypothesis that these unidentified individuals, safely comforted with the task of completing anonymous forms, likely support primarily their present schools or those they attended themselves.

We recall well that when *Maclean's* published its first (1990) set of annual rankings, several university presidents and academic authorities were openly critical of the overall exercise and of the underlying ranking criteria to which importance was seemingly being given. They did not believe that higher education could be calibrated in the idiom of *Consumer Reports*. Yet those same criteria remain unchanged today. Moreover, social scientists, supposedly vigilant about injustice and knowledgeable about the properties of rank-based data, still have not realized or informed the public about the implications of annual ranking data for the personal and academic welfare of students. Instead, universities, including committees given the task of improving (or monitoring or maintaining) a school's rankings, now must obediently supply the raw data with which to help *Maclean's* generate its annual results. Naturally, with this whole ritual well entrenched as a prominent and no doubt effective marketing tool, many of those earlier voices, including those from several prominent schools, remain piously quiet.

We note, however, that 26 universities (55%) declined participation (provision of data) for the 2006 rankings. The magazine continues nevertheless to use its original list of demonstrably misleading and fallacious "indicators," demonstrated as such in many published studies, and to view the nonparticipation as meaning that these schools shy away from being "fully" evaluated. Again, in deliberately disregarding the many criticisms now advanced from many sources, it reaches a new low by informing the public in a prepublication editorial (Sept. 4, 2006) that the nonparticipating schools must be cynically attempting to prevent students from learning the truth about universities today.

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## References

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