

A Guide to Interpreting the Graduate Opinion Survey

**The following is a short guide to the
methodology and interpretation of information from
the University's Graduate Opinion Survey**

Background Information

The first University of Otago Graduate Opinion Survey was undertaken in 1995, asking all students who graduated in 1993 to assess the quality of their University experience. A revised survey took place in 1998, following a review of all aspects of the survey process by a Student and Graduate Opinion Surveys Working Party. This survey sampled graduates from 25% of the University's degree and diploma programmes. The Graduate Opinion Survey has been conducted annually since 1998, using this revised method of sampling.

In addition to the Graduate Opinion Survey, the University runs a Student Opinion Survey each year. The same courses and majors are surveyed for both Graduate and Student Opinion Surveys. The aim is to survey each degree/major combination once every four years. Departmental reviews are also taken into account, in order to provide up-to-date and relevant information for Departments in their review year.

The 2008 Graduate Opinion Survey was sampled from graduates who completed their qualification requirements in 2006.

Survey Structure

Although refined and expanded specifically for Otago, this survey draws on similar exercises in Australia. The survey contains sections dealing with the following:

- Course Experiences
- Postgraduate Supervision and Support
- Course Outcomes

In each case, graduates were asked to respond to specific questions on a five point scale where, for example, '1' represents strong agreement with a statement and '5' represents extreme disagreement, while '3' represents a neutral response. The items and their associated scales can be viewed in the questionnaire included at the end of this report (Appendix B).

The Course Experience Questionnaire

The core instrument of this survey is the 'Course Experience Questionnaire' (CEQ). The contribution of Professor Paul Ramsden as author of the CEQ instrument is acknowledged.

Directed at those undertaking course work as part of their study, the CEQ groups questions into a number of scales in order to measure graduate assessment of the following:

- Quality of teaching (The Good Teaching Scale)
- Clear goals and standards (The Clear Goals and Standards Scale)
- Intellectual motivation (The Intellectual Motivation Scale)
- Assessment methods (The Appropriate Assessment Scale)
- Acquisition of general competencies (Generic Competencies Scale)
- Overall satisfaction with course (Overall Satisfaction Item)

These scales were derived from the extensive literature on student evaluation of learning. The statements in the CEQ are based on comments that students often make about their experiences of university teaching and study which are indicative of better learning. The emphasis of this questionnaire is on graduates' perceptions of their entire course of study. The results are the "averages" of graduates' experiences.

After consultation with the Graduate Careers Council of Australia, a decision was made to alter the calculation of the Appropriate Assessment scale from the 2003 survey onwards, in line with current Australian practice. Item B23 (*Feedback on student work is usually provided ONLY in the form of marks and grades*) is no longer included in the calculation of the Appropriate Assessment mean. Individual results for Item B23 are recorded for information purposes only. For comparative purposes, Appropriate Assessment Scale means for surveys conducted prior to 2003 have also been recalculated.

It is important to stress that, like most performance indicators, the CEQ results are indicative rather than conclusive. Interpretation of the results within particular teaching contexts includes an element of informed judgement, and extreme caution is required when attempting to make comparisons with results either between graduates or between different fields of study. See the final section of this guide for further information on the interpretation of results.

Postgraduate Supervision and Support

Two further scales, one dealing with postgraduate supervision and the other with postgraduate support, have been developed for respondents (including Honours degree candidates) who have undertaken study involving a thesis or dissertation component.

Course Outcomes

Graduates were also asked to assess the extent to which they developed a number of generic attributes, or life-long learning skills, through their study, and the extent to which they have subsequently applied these. This information assists in assessing the extent to which we are providing graduates with the skills and attributes which they require after the completion of their studies.

Other Questions

Graduates were further asked to supply personal details covering such items as gender, disability and ethnicity. This enabled analysis by particular categories of graduate. Note however, that when data was analysed based on some of these categories, it was not possible to give the number of graduates surveyed (or the response rate), as this would have required knowledge of the self-identification traits of those graduates who did not respond.

Respondents were also provided with the opportunity to make written comments. The comments are provided word-for-word to Departments, except where such comments (positive or negative) identify any individual.

Sampling Methodology and Response Rates

All graduates from a combination of degree/diploma/certificate and major are surveyed.

Information from groups for which the response rate is less than 30% is excluded from summary reports produced for general circulation. The same is true for groups of fewer than 10 respondents, except where the response rate for such a group is at least 75%.

Reports from these groups are supplied to Departments for internal use, but caution is advised in the use of information from such reports. No reports are supplied for groups where responses are fewer than five.

Presentation of Results

Results are broken down to the level of degree/diploma/certificate and major for the Graduate Survey. This allows the distribution of relevant material to the appropriate Deans, Heads of Department and course administrators.

A Summary Report is produced, which includes:

- Responses to all questions for all graduates
- CEQ scale results for departments and qualifications meeting the report requirements detailed in the section above
- Results for special interest groups (*eg.* Māori, International students)
- Course Outcomes questions results for departments and qualifications meeting the report requirements detailed in the section above.

Calculation of Means

The Otago surveys follow the Australian model in the use of a weighted mean. This transforms responses on the 1 - 5 scale into a scale ranging from +100 to -100. On this scale, zero represents an overall neutral response, any negative number a generally undesirable response, and any positive number a generally desirable response.

For example, the following illustrates the calculation of a weighted mean for 10 graduates:

	Very Satisfied/ Strongly Agree		Neutral		Very Dissatisfied/ Strongly Disagree
Standard Scale	1	2	3	4	5
Responses Received	3	4	1	2	0
Weighted Scale	+100	+50	0	-50	-100

Weighted Mean: [(=responses x weighted scale)]/total responses = [(3x100)+(4x50)+(1x0)+(2x-50)+(0x-100)]/10 = 40

Where a question is framed in a negative way, the weighted mean is calculated using the same formula, but with the values reversed (*i.e.* the weighted scale ranges from -100 for a response of 1, to +100 for a response of 5).

Standard deviations are not usually presented, but these generally fall in the range 45 - 55 for each question. Australian experience with the CEQ portion of the survey instrument suggests that differences of more than 0.3 standard deviation units (a difference of approximately 15 points between means) can be considered significant in terms of identifying areas worthy of further consideration. Less conservative analysts may wish to lower this threshold to 0.2 (a difference of approximately 10 points between means), while a more conservative approach would be a 0.5 threshold (a difference of approximately 25 points between means).

Course Outcomes

Responses to the Course Outcomes section of the survey are displayed as mean scores corresponding to the development and application of each attribute for the group studied. This form of presentation enables readers to determine the extent to which attributes developed to a certain level through University study have then been applied by graduates in their post-graduation employment, further study or other experiences.

To facilitate the interpretation of these results attributes have been classified in four categories for each group studied:

High Development/ High Application

Attributes in this category are those that were most highly developed during study, and most highly applied subsequently.

Low Development/ High Application Items

Attributes appearing in this category are those that were highly applied after study but not as highly developed during study as those appearing in the High development/ High Application category.

Attributes appearing in this category could warrant greater teaching emphasis, although when undertaking this analysis it is important to take account of the size of the development mean for each attribute. For example, an item in this category with a development mean of -5 would be of greater concern than an item with a development mean of +40.

Low Development/ Low Application Items

Attributes appearing in this category are those that have been developed to a lesser extent during study, and are not being applied to such a high extent subsequently.

High Development/ Low Application Items

Attributes appearing in this category are those that have been developed during study, but are not being applied at such a high degree subsequently.

Interpretation of Results

Use of Comparative Information

The weighted mean for the sample groups is accompanied by further means on the summary tables. These allow for comparison with previous results for similar groups of graduates. Such results, from earlier surveys of graduates undertaking the same course of study at the same institution, have been found to be the most reliable source of comparative data and should be given the greatest weight in any comparative analysis.

When using further comparative data, caution is recommended. Australian research on the CEQ suggests, for example, that more able students are harsher judges than less able students, and that students from some disciplines will judge some items on the CEQ more harshly than others. Variations have also been observed between institutions and, obviously enough, students and graduates will be making their judgements from quite different perspectives. As a result, the ranking of results – either by discipline for different institutions, or across disciplines within an institution – to create ‘league tables’ should be avoided.

Tips for Interpretation

Having assessed the information provided in the General Information Profile of All Respondents section, a useful first step to interpretation is to scan the subsequent section of each report, identifying those questions or scales where the mean is least positive.

A second step is to identify those questions or scales where the mean for the group you are examining is significantly different (see Calculation of Means section above) from those supplied in the comparative tables. These questions or scales should, then, be the focus of attention.

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