2013 CEQ Methodology

Overview

The Course Experience Questionnaire (CEQ) is administered as a component of the Australian Graduate Survey (AGS), along with the outcomes-focused Graduate Destination Survey (GDS). Students who qualify for the award of a degree or diploma from an Australian higher education institution are invited to complete the AGS by means of a paper questionnaire, online questionnaire or telephone interview. Students who complete their course of study in the first half of the year are surveyed as at 31 October, while students who complete their course of study in the second half are surveyed as at 30 April the following year. A total of 130,686 graduates from 56 institutions provided a valid response to the 2013 CEQ, representing a national response rate of 53.1 per cent.

The CEQ measures 11 facets of the higher education student experience, underpinned by 49 Likert-type items that share a common five-point response format. These items are listed in Table 1. Items denoted with 'R' are reverse coded for scoring purposes, which is discussed more in the following section. The standard national survey instrument utilises a dual response format, which allows graduates to provide responses for two courses of study or two major fields of education.

Prior to 2010, only the *strongly disagree* and *strongly agree* anchor points on the response format were labelled. Currently, all five points are labelled as *strongly disagree*, *disagree*, *neither agree nor disagree*, *agree* and *strongly agree*. Labelling all five points resulted in a notable change in the nature of response to the CEQ, so for all intents and purposes the 2010 CEQ represented the first year in a new CEQ time series. As such, comparisons with earlier years are not reliable.

Not all items are administered to all graduates. The GTS and GSS core scales and the OSI (13 items in total) are required to be administered by all institutions. Institutions may then choose to add a number of additional scales from the remaining eight optional scales to the questionnaire.

A detailed discussion of the development and properties of the CEQ is beyond the scope of this document. Interested readers are directed to GCA & ACER (2010) and McInnis, Griffin, James and Coates (2001) for further detail in this regard.

Table 1. CEQ scales and constituent items

Scale	Label	Item
Good Teaching	GTS01	The staff put a lot of time into commenting on my work.
	GTS03	The teaching staff normally gave me helpful feedback on how I was going.
	GTS10	The teaching staff of this course motivated me to do my best work.
	GTS15	My lecturers were extremely good at explaining things.
	GTS16	The teaching staff worked hard to make their subjects interesting.
	GTS27	The staff made a real effort to understand difficulties I might be having with my work.
Generic Skills	GSS06	The course helped me develop my ability to work as a team member.
	GSS14	The course sharpened my analytic skills.
	GSS23	The course developed my problem-solving skills.
	GSS32	The course improved my skills in written communication.
	GSS42	As a result of my course, I feel confident about tackling unfamiliar problems.
	GSS43	My course helped me to develop the ability to plan my own work.
Overall Satisfaction	OSI49	Overall, I was satisfied with the quality of this course.

Table 1. Continued

Clear Goals and Standards	CGS08	It was always easy to know the standard of work expected.
	CGS28	I usually had a clear idea of where I was going and what was expected of me in this course.
	CGS39	It was often hard to discover what was expected of me in this course. R
	CGS46	The staff made it clear right from the start what they expected from students.
Appropriate Workload	AWS05	I was generally given enough time to understand the things I had to learn.
	AWS09	The sheer volume of work to be got through in this course meant it couldn't all be thoroughly comprehended. R
	AWS19	The workload was too heavy. R
	AWS29	There was a lot of pressure on me as a student in this course. R
Appropriate Assessment	AAS04	To do well in this course all you really needed was a good memory. R
	AAS26	The staff seemed more interested in testing what I had memorised than what I had understood. R
	AAS44	Too many staff asked me questions just about facts. R
Intellectual Motivation	IMS02	I found my studies intellectually stimulating.
	IMS07	I found the course motivating.
	IMS13	Overall, my university experience was worthwhile.
	IMS35	The course has stimulated my interest in the field of study.
Student Support	SSS21	I was able to access information technology resources when I needed them.
	SSS24	Relevant learning resources were accessible when I needed them.
	SSS25	Health, welfare and counselling services met my requirements.
	SSS34	The library services were readily accessible.
	SSS37	I was satisfied with the course and careers advice provided.
Graduate Qualities	GQS11	The course provided me with a broad overview of my field of knowledge.
	GQS17	The course developed my confidence to investigate new ideas.
	GQS30	University stimulated my enthusiasm for further learning.
	GQS36	I learned to apply principles from this course to new situations.
	GQS40	I consider what I learned valuable for my future.
	GQS48	My university experience encouraged me to value perspectives other than my own.
Learning Resources	LRS12	The library resources were appropriate for my needs.
	LRS33	The study materials were clear and concise.
	LRS38	It was made clear what resources were available to help me learn.
	LRS41	Course materials were relevant and up to date.
	LRS47	Where it was used, the information technology in teaching and learning was effective.
Learning Community	LCS18	I felt part of a group of students and staff committed to learning.
	LCS20	Students' ideas and suggestions were used during the course.
	LCS22	I learned to explore ideas confidently with other people.
	LCS31	I felt I belonged to the university community.
	LCS45	I was able to explore academic interests with staff and students.

Preparation of CEQ data

Following routine processing of AGS data by Graduate Careers Australia (GCA), filters are applied to eliminate invalid CEQ responses from the data file. A CEQ response must satisfy three main criteria to be considered valid and thus be included in the final analysis file.

1. Graduates must provide
   - at least four item scores for the Good Teaching Scale (GTS) <u>or</u>
   - at least four item scores for the Generic Skills Scale (GSS) <u>or</u>
   - a response to the single-item Overall Satisfaction Indicator (OSI).
2. Graduates must specify the level of their recently completed qualification.
3. Graduates must specify their major field of education. If no CEQ major field of education is supplied, this may be imputed from the corresponding field collected by the GDS.[1]

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[1] If imputation is necessary, 'CEQMAJ1' is imputed from 'MAJ1' and 'CEQMAJ2' is imputed from 'MAJ2'.

As noted earlier, graduates are able to provide responses for up to two major fields of education on the CEQ, with each response treated as an individual case for the purposes of data analysis. This is facilitated by duplicating cases in the data file with a valid second CEQ response, moving the item responses for these cases from the 'CEQ2' variables to the 'CEQ1' variables and merging these cases back into the main analysis file. As a result, there are more CEQ responses than respondents.

A number of steps are taken to produce the various CEQ item and scale scores. CEQ items are initially recoded to the conventional CEQ reporting metric (1=-100, 2=-50, 3=0, 4=50, 5=100) and the generic 'CEQ' item prefix is replaced with a three letter scale prefix. For example, CEQ04 is retitled to AAS04 and CEQ01 is retitled to GTS01. The negatively-worded items AAS04, AWS09, AWS19, AAS26, AWS29, CGS39 and AAS44 are reverse coded for analytical purposes, such that (1=100, 2=50, 3=0, 4=-50, 5=-100). This reverse coding is necessary to ensure that all items within a scale measure the underlying phenomenon in a uniform direction. Missing item scores are classified as planned or unplanned missing data based on whether a particular item was included on the CEQ. To this end, missing item scores for the core GTS, GSS and OSI are automatically designated as unplanned missing data, while missing item scores for the eight optional scales are classified as planned or unplanned based on whether the scale was used by the respondent's graduating institution.

Percentage agreement (PA) and percentage broad agreement (BA) scores are produced for each item. These are binary scores in which a response is coded 100 for agreement and 0 otherwise. PA reflects a response in either the *agree* or *strongly agree* response categories (1=0, 2=0, 3=0, 4=100, 5=100). BA reflects a response in either the *neither agree nor disagree*, *agree* or *strongly agree* response categories (1=0, 2=0, 3=100, 4=100, 5=100).

For each valid CEQ response, mean scores are calculated for each scale. To allow for missing data, scale scores are computed when graduates respond to at least two items of the three-item AAS, at least three items of the four-item scales and at least four items of the five or six-item scales. As a single-item indicator, the mean score for the OSI is equal to its item score. PA and BA scores are produced for each scale in a similar fashion.

References

GCA & ACER, 2010. *Graduate Course Experience 2009*. Melbourne: GCA.

McInnis, C., Griffin, P., James, R.H. & Coates, H.B. (2001). *Development of the Course Experience Questionnaire*. Canberra: Department of Employment, Training and Youth Affairs.