

Australian Graduate Survey
2013 Manual
October 2012 Round

Graduate Careers Australia

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Acronyms

ACER	Australian Council for Educational Research
AGS	Australian Graduate Survey
ASCED	Australian Standard Classification of Education
ASCO	Australian Standard Classification of Occupations
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
AQHE	Advancing Quality in Higher Education
AVCC	Australian Vice-Chancellors' Committee (now Universities Australia)
CEQ	Course Experience Questionnaire
DEEWR	Department of Education, Employment and Workplace Relations
DIISRTE	Department of Industry, Innovation, Science, Research and Tertiary Education
GCA	Graduate Careers Australia
GCAID	Graduate Careers Australia Identification Number
GCCA	Graduate Careers Council of Australia (now GCA)
GDS	Graduate Destination Survey
oAGS	online Australian Graduate Survey
oCEQ	online Course Experience Questionnaire
oPREQ	online Postgraduate Research Experience Questionnaire
Pre-SOC	Pre-Survey Operations Checklist
PREQ	Postgraduate Research Experience Questionnaire
SACC	Standard Australian Classification of Countries
SOC	Survey Operations Checklist
SRG	Survey Reference Group
SRM	Standard Recommended Methodology
UA	Universities Australia (was the Australian Vice-Chancellors' Committee)
UES	University Experience Survey

Introduction

This manual provides information on conducting the **October 2012 round** of Graduate Careers Australia's (GCA) **2013 Australian Graduate Survey (AGS¹)**. The AGS includes the Graduate Destination Survey (GDS), the Course Experience Questionnaire (CEQ) and the Postgraduate Research Experience Questionnaire (PREQ).

This Manual has been updated from the 2012 AGS. **Substantive new text introduced since the April 2012 Manual is coloured red.** Caveats are included in this document where issues remain undecided or where it appears possible that changes will take place.

This manual is being supplied as a PDF only and will be accompanied by a set of worksheets in a spreadsheet file ('AGS 2013 variables') listing variables, related codes and data processing instructions. Sample PDFs of the October 2012 AGS forms can be found in the accompanying zip file 'AGS 2013 master forms'.

Key Points

- GCA recommends that institutions use the oAGS (or an equivalent institutional online system) as the method of first contact with graduates
- oAGS log-in ids and AGS questionnaires should be sent to graduates as close as possible to the relevant referent date (31 October 2012) and not before the official start of the fieldwork period (1 October 2012).
- Follow up of non-respondents should **largely** be completed by mid-January (October round) or mid-July (April round).
- Coding is best done progressively as questionnaires are returned. Please check that the key questions are coded or answered.
- Any queries on the survey should be directed to surveyhelp@graduatecareers.edu.au (or call GCA on (03) 9605 3700).

¹The name **Australian Graduate Survey** was adopted in 2006 to act as an umbrella label for the GCA's GDS, CEQ and PREQ work.

Summary of main steps in AGS

This summary represents the main steps undertaken in conducting the AGS. It does not constitute all required steps. Survey Managers should read this entire manual for complete details (perhaps adding their own notes).

Institutions **order questionnaires** from GCA (August for October round, February for April round)

- Confirm CEQ scales to be used
- Decide whether your institution will pre- and/or post-populate
- Order GDS+CEQ forms from GCA
- Order GDS+PREQ forms from GCA
- Order oAGS IDs from GCA
- Check returned proof art and approve or request changes as required

The **survey population** for the 2013 AGS includes those who completed requirements for any higher education qualification in the calendar year 2012, including overseas or international students who studied in Australia and excluding those who studied at an off-shore campus

- Establish survey populations as described later in this manual
- Consult with the appropriate office in your institution to get your mailing list based on this population

Forward the text of proposed AGS-related communications (engagement material, instrument distribution letters, etc) to GCA for checking against recommended guidelines and comment.

Give GCA access to any non-standard AGS instruments including online forms and telephone scripts.

If you plan to conduct telephone follow-ups of non-respondents, check the requirements in this Manual, particularly those for the collection of CEQ and PREQ data.

Institutions should conduct an **initial distribution of AGS online IDs or paper forms** to graduates along with a minimum of two **follow-ups** of non-respondents

- Arrange emails and/or envelopes and appropriate covering letter/s (including oAGS log-in IDs if applicable)
- Arrange envelope stuffing
- Conduct first distribution ... Mark respondents off distribution list as not requiring follow-up ... Monitor response rate
- Conduct second distribution (first follow-up) ... Mark respondents off distribution list ... Monitor response rate
- Conduct third distribution (second follow-up) ... Mark respondents off distribution list ... Monitor response rate
- And so on for further iterations.

If using the **oAGS**, Survey Managers need to monitor online responses and mark oAGS respondents off distribution lists before follow up distributions. If it's considered necessary to improve the response rate, conduct final follow-ups via **telephone**.

When collating completed forms for return to GCA, please **separate by round and whether they are GDS+CEQ or GDS+PREQ forms. If you require GCA to do some coding of these forms, please also sort by first major field of education response.**

If you are **coding forms**, make sure codes are used correctly and that all key questions are completed.

Completed survey forms or data files are returned to GCA for processing.

If returning a data file (deadline Friday 20 September 2013)

- Process your oAGS data file (if used) per oAGS manual.
- Ensure you have GDS+CEQ and (if used) GDS+PREQ responses.
- Ensure your single data file is set out as per data file specifications (available from GCA).
- Ensure key questions are answered.
- Ensure that the origin and mode codes are entered.
- Clean data before submitting the file and run frequencies of all variables to look for coding or data entry errors.
- Complete packing slips.

If returning survey forms, coded and uncoded forms will be accepted from Monday 19 August 2013 through to Friday 13 September 2013.

- Process your oAGS data file (if used) per oAGS manual.
- Ensure you have GDS+CEQ and (if used) GDS+PREQ forms.
- Ensure key questions are answered.
- Ensure that the origin and mode codes are entered.
- Count and sort (as described above) survey responses.
- Complete packing slips.

Forms and data files may be returned to GCA at any point prior to these deadlines and they do not have to be sent all at once. If you have a large amount of hard-copy forms, you may wish to send more than one consignment.

GCA returns a preliminary set of standard **summary tables for checking**. Survey managers need to check the files and confirm that there have been no obvious errors in punching or processing your institution's data

- look for anomalies such as missing codes (e.g., no PhDs)
- look for radical changes in the percentages (e.g., 10% PhDs last year and 20% this year, or unexpectedly high percentages missing)
- look for missing variables (no responses at all in a variable)
- look for codes that need recoding to meet GCA specifications (such as data downloaded from student records)
- confirm that the summary tables are correct or indicate where errors are present.

Survey Managers should consider making use of the Pre-Survey Operations Checklist (see discussion below re the 'Pre-SOC').

Overview of AGS processes and documents

The Graduate Careers Australia **Australian Graduate Survey (AGS)** includes

- the Graduate Destination Survey (GDS)
- the Course Experience Questionnaire (CEQ)
- the Postgraduate Research Experience Questionnaire (PREQ).

The purpose of these surveys is to collect information on the main destinations and the higher education experiences of graduates shortly after they qualify, and to provide institutions taking part in the survey with a range of information about their graduates.

The AGS has been conducted annually by Graduate Careers Australia (GCA) and higher education institutions since 1972. Prior to 2006, it was known simply as the Graduate Destination Survey. The name **Australian Graduate Survey** was adopted in 2006 to act as an umbrella label for the GCA's GDS, CEQ and PREQ work.

GCA manages the AGS nationally, while institutions conduct the surveys of their own graduates and return survey forms and/or data files to GCA for processing. The main results of the surveys are presented in published reports and on the GCA website (www.graduatecareers.com.au). More detailed tables are available from GCA and special cross-tabulations of data are also available by arrangement with GCA.

Raw data are available to outside researchers in a number of file formats. As no student names are retained on file, confidentiality is not a problem in making survey data available for further research. Please note that requests to use AGS data will need to be submitted in writing and include the nature and purpose of the study and intended use of results. Applications will then be referred to the Survey Reference Group (SRG) for consideration.

Web-based assistance

A lot of assistance is available on the GCA research website (currently being re-developed):

- Survey reports, national tables, CEQ Files
- Examples of useful contact materials submitted by Survey Managers
- Background reading, and additional tips and information.

<http://www.graduatecareers.com.au/research/start/>

The CEQ files and some other items are protected by a login area on the site.

New in the 2013 Australian Graduate Survey

Information in this document covers the October 2012 round of the 2013 AGS. **Substantive new text introduced since the April 2012 version of the 2012 AGS Manual is coloured red.**

There have been some important changes, along with smaller updates, in the survey for the 2012 AGS which need to be noted. The major modifications to the AGS process (further information can be found below in the body of the Manual) include

- the new calculation process for response rates using HECSFEE rather than PERMRES to identify those who had been international students will be in place across all institutions (see page 9)
- some occupation codes have been updated
- data and form return dates have been updated and modified
- additional comments about cleaning and processing data files can be found on page 34
- additional Information additional to the updated **Code of Practice** has been made available via an FAQ document added to the START site

Code of Practice

GCA, after extensive consultation with Universities Australia, the Department of Education, Employment and Workplace Relations (DEEWR) and other stakeholders, has developed an updated Code of Practice for the use of AGS data aimed at ensuring that the results of the GDS, CEQ and PREQ are fairly and correctly presented and interpreted by institutions. The Code of Practice is available from the GCA START website at

<http://www.graduatecareers.com.au/research/start/agsoverview/cop/>

Information additional to this updated **Code of Practice** has been made available via an FAQ document (**updated in June 2012**) added to the same website. This information discusses the uses of the AGS data by institutions in their marketing efforts.

Annual AGS Report

At the conclusion of each annual survey cycle (i.e. when the national data file has been compiled and verified), GCA prepares a report on the conduct of that survey. This report is provided to Universities Australia, institutional Vice-Chancellors and CEOs, Senior Survey Contacts, Survey Managers and DEEWR. The main features of the report are as follows

- The report shall include an overview of the conduct of the survey and the collection and processing of survey responses. It will broadly report on the conduct of the AGS, be a vehicle to document problems that arise during the AGS and to canvass issues of concern. GCA will report, separately, any issues of potential concern at the institutional level directly to the relevant Vice-Chancellor or CEO, to Universities Australia and to DEEWR.
- The reconciliation of the institution's survey population summary with course completions numbers: after the completion of the AGS, a comparison of the level of award and major field of education figures for each institution's survey population (discussed below) and course completions figures (to be supplied by the institution) will be made and institutions will be asked to clarify any notable differences identified. This will allow institutions and GCA to ensure the completeness of their survey population.

Response rates

The Code of Practice notes that institutions should not publish any AGS data outside of the institution where the relevant response rate calculated by GCA is less than 50%. In this situation, publication within the institution is acceptable. This 50% response rate applies separately to GDS and CEQ data. This could mean that an institution has a GDS response rate above 50% and a CEQ response rate below 50% which would mean that they cannot publicise their CEQ results.

The response rate used when assessing whether public release of data is allowed should refer to the cohort being examined. If an institution has a 49.9% response rate calculated by GCA for all (domestic plus international) graduates and a 50.1% GCA response rate for Australian citizens and permanent residents (i.e., domestic only), figures from the former data set cannot be used external to the institution whereas figures from the domestic 50.1% dataset **can** be released publicly. This does not apply to sub-groups of respondents based on (for example) level of award or field of education as institutions do supply population figures breakdowns to allow the calculation of response rates for smaller groups.

These guidelines apply in any publication that GCA produces and GCA strongly recommends observance of these for other data users.

Response rates are calculated based on the final reported survey population and survey returns. Subjects for whom there is no or outdated contact information available, or where envelopes are returned marked 'not at this address' **cannot** be subtracted from the survey population. GCA cannot currently calculate response rates for any cohort other than Australian citizens and permanent residents and the overall population.

In 2010, the Survey Reference Group (SRG) agreed on a definition of what constituted a valid CEQ response. For the 2012 AGS, and relating only to the calculation of CEQ response rates, to be valid, graduates must have provided at least four (4) item scores for either the Good Teaching Scale (GTS), OR the Generic Skills Scale (GSS) OR a response to the Overall Satisfaction Indicator (OSI).

To be valid, a CEQ response must also have a valid CEQ major field of education. If a graduate has supplied a valid scale response (see above) but no CEQ major field of education, this value may be imputed using MAJ1 for CEQMAJ1, and MAJ2 for CEQMAJ2.

As of the 2011 AGS, institutional response rates for domestic graduates have been calculated using variable HECSFEE instead of PERMRES. This is because it is important that domestic and international graduates are identified properly. Because of the increasing number of international students who were achieving permanent resident status as a result of completing their studies, leading to an inflation of domestic graduate response numbers, GCA has started to identify international graduates via code 3 in HECSFEE (international fee-paying student) to create a new variable called HECSRES:

```
compute hecsres = 1.  
if (hecsfee eq 3) hecsres = 2.  
value labels hecsres 2 'OS resident at enrolment' 1 'NON-os resident at enrolment'.
```

While there are still some anomalies using this process (some respondents say they were born in Australia but also that they were international fee-paying students) it is more reliable than using PERMRES. Survey Managers can ensure their HECSFEE data is as accurate as possible by cross-checking responses against course liability data in student records. **This method was used to calculate response rates for most institutions in the 2011 AGS. As of the 2012 AGS, it is being used to calculate response rates for all institutions.**

The standard AGS instrument

The standard AGS instrument is a uniform questionnaire developed and designed by GCA through a consultative process with the sector and with GCA's Survey Reference Group.

The AGS form has been modified for use with pre- and post-population. Go to the URL below for an outline of the variables to be pre- and post-populated:

<http://www.graduatecareers.com.au/research/start/2012ags/icm/>

Standardised telephone scripts have been prepared for AGS use in the collection of GDS data, CEQ or PREQ data, or GDS and CEQ (or PREQ) data. These should be used by all institutions participating in the AGS. See later discussion in this Manual of important caveats regarding gathering CEQ and PREQ data by telephone.

Work on the establishment of a new standardised online instrument is on hold pending an AGS Review.

AGS questionnaires are supplied by GCA. Please email surveyhelp@graduatecareers.edu.au for information.

GCA requires either access to, or a copy of, any non-GCA online and telephone instruments in order to ensure that these instruments comply with required elements of the new model. See further detail below.

oAGS

The oAGS is an online version of the standard GDS, CEQ and PREQ surveys and is available to all institutions participating in the AGS. **GCA strongly recommends that Survey Managers use the oAGS as the method of first contact with graduates**, as a relatively large proportion of responses can be gathered quickly in this manner, reducing the cost of printing, mailing and processing printed forms (and see the discussion re incentives below re this). However, the oAGS is not designed to replace the existing process.

As with all computer-based systems, oAGS users should regularly download and back-up their data files. There are also standalone online versions for the CEQ and PREQ (called the oCEQ and oPREQ) for use in conjunction with telephone GDS surveying.

The oAGS was developed in order to

- offer institutions another avenue for collecting AGS survey data from both local and overseas graduates
- provide students with an easy, online method of completing the surveys, thereby hopefully speeding response and improving response rates
- increase the efficiency and cost-effectiveness of the survey.

Email surveyhelp@graduatecareers.edu.au for information regarding the oAGS. The oAGS manual will be distributed separately to this manual.

Pre-Survey Operations Checklist

GCA has introduced a **Pre-Survey Operations Checklist** (Pre-SOC) to assist institutions in planning and recording their AGS operations.

The **Pre-SOC** is intended as a planning aid for Survey Managers as it will act as a prompt list for various key AGS steps through the planning, fieldwork and processing phase of the AGS. It is recommended that this document be completed prior to the referent date of the first round of the AGS. Note that institutions are not required to submit the **Pre-SOC** to GCA.

The additional value to an institution of completing these forms is that it documents AGS practice at the institution so that new Survey Managers can quickly develop an understanding of what AGS management entails.

Privacy issues

Survey Managers should be aware of issues regarding the privacy of survey responses. If they haven't done so already, they should consult their institution's privacy policy officers regarding local and recent legislation with a view to formulating a policy for the reporting, handling and storage of their survey forms and data.

General queries about the GCA surveys

Any queries on the survey should be directed to surveyhelp@graduatecareers.edu.au (or call GCA on (03) 9605 3700).

2013 AGS operating notes

The following information outlines key AGS concepts and management issues directly relating to the conduct of the AGS.

Survey years, rounds, referent dates and commencement dates

All Australian institutions of higher education are invited to participate in the GCA Australian Graduate Survey (AGS).

The AGS generally takes place in two rounds: October and April. While most institutions have mid-year completers (see below) and so participate in the October round, April is the main survey round. All institutions should conduct an October round if they have any graduates in the appropriate cohort (the cohort should **not** be saved and surveyed with the April round).

If there is only a small number of graduates in any cohort for an institution, it is recommended that the oAGS (or the institution's equivalent online instrument where applicable) is used exclusively. Should any institution have concerns with this requirement, they should contact GCA and discuss the situation.

Each survey round has a referent date. For the 2013 AGS, the referent date for the October round of the survey is 31 October 2012. The referent date for the April round of the survey is 30 April 2013.

The AGS allows for additional survey rounds and referent dates to accommodate institutions that operate on other than a two semester model. Institutions that wish to make use of this provision are asked to contact GCA.

Each survey round has a commencement date of the first day of the same month as the survey referent date (i.e., October 1st for October round and April 1st for the April round). No distribution of survey forms (via mail, email or graduation ceremony) or access to online survey instruments for the survey population should take place until on or after this commencement date. Hard-copy forms may be mailed one working day prior to the commencement date, but no earlier. No emails or collections at graduation ceremonies should be undertaken until the commencement date.

For non-standard referent dates, the round commencement date should be a month prior. For example, a referent date of 30 May should have a 1 May commencement date and a referent date of 30 September should have a 1 September commencement date.

The survey year is the year in which the data are submitted and is used to describe the particular AGS survey. For example, the October 2012 and April 2013 rounds make up the 2013 AGS.

GCA is aware that questionnaires will, in some instances, be circulated before the referent dates, and that institutions will have to follow up non-respondents after those dates. However, responses to the survey should be 'as at' the referent dates.

For institutions returning 2013 data files (rather than sending forms to GCA for processing), the value of the variable 'refyear' (item 0.03 in the worksheet '2013 data processing' in the spreadsheet file 'AGS 2013 variables') (which is the survey year discussed above) will be "2013". The 'round' variable (item 0.04) will be coded '1' for the October round, '2' for the April round and '3' for any other timing.

Mid-year completions

Because the survey includes all course completers in a calendar year, those who complete requirements for their award in the first half of the year are regarded as being in the same AGS cohort as those who complete in the second half of the year (most commonly November-December).

Those completing in the first half of 2011 and graduating (i.e., receiving their awards) mid-to-late 2012 should be surveyed as at 31 October 2012, which is the October round of the 2013 AGS. Their responses should be included with the April 2013 responses returned to GCA in September 2013 for data processing.

Survey population specifications

All students who completed the requirements for the award of a bachelor degree or three-year diploma, a graduate or postgraduate diploma, a graduate certificate, a master's degree, or a higher degree in the **first six months** of calendar year 2012 should be included in the October 2012 survey round.

All students who completed the requirements for the award of a bachelor degree or three-year diploma, a graduate or postgraduate diploma, a graduate certificate, a master's degree, or a higher degree in the **second six months** of calendar year 2012 should be included in the April 2013 survey round.

The survey population is essentially course completers and not 'graduates'. The former are people who have *completed the requirements* for an award and the latter are those who have been *formally recognised* as having completed an award. Occasionally, survey subjects might be referred to as 'graduates' for the sake of convenience or simplicity.

Key points in survey population selection

- Those completing a research-based higher degree (master degree by research or doctorate by research) should get the AGS form with the PREQ rather than the CEQ. All others should get the AGS form with the CEQ. It's vital that Survey Managers ensure that survey subjects get the right forms.
- Students continuing with an *honours* course which includes an additional year of study, and who have thus met the requirements for the award of a pass bachelor degree but who have not actually graduated, should also be sent a survey form. Thus in this survey the term 'graduate' may be used to include some students who technically remain 'graduands'. **The number of people in this cohort might need to be added to the survey population total.**
- Students completing two-year associate degrees or diplomas, or two-year undergraduate certificate courses, should also be included where possible, although their responses will be reported separately from degree or degree-equivalent respondents.
- *Off-shore students* (people who studied at a campus outside Australia) should be **excluded** from the survey. If the institution wishes to survey these people they can, but their data should not be submitted to GCA.
- Domestic or international students who were situated off-shore (outside Australia) but who studied at an Australian campus via distance education are to be **included** in the survey.
- Institutions aligned with Open Learning Australia should treat course completers who have done the majority of the award at their institution as their own graduates and survey them as such.
- In those few cases where (for example) a survey instrument distribution leads to a report that a graduate has passed away, take them out of your survey population. If a graduate has replied to the survey and then passes away at a later date, leave them in your survey population and leave their response in the data.

Double and combined degrees

Membership of the survey population where the individual has completed a *double degree* depends on how they are graduated by your institution.

- In the instance of someone who has completed an arts/law degree (for example), if the institution graduates them separately (for example, the arts degree first and the law degree a year or two later), then they should be administered two survey forms on their separate graduation.
- If the institution graduates them once (for the combined degree), then they should get one form only. If the institution graduates them twice but in the same year (once for the arts degree and once for the law degree), they should be administered only one survey form.
- If a student's record is marked 'eligible to graduate' for a first (completed) component but the student does not do so (continuing on to complete the second part of the combined degree), he or she should only receive a form after they have finished the second part and gone on to graduate.
- If someone is graduated with two separate awards in the same year (for example, a BSc and a DipEd) they should be administered one form only. This is simply to avoid confusing the graduate.
- The AGS covers people and not graduations, as some people can graduate twice in the same calendar year. Simply put, the idea is that every graduate (not every 'graduation') gets *one survey form in a single year*. Their destinations will be reported in terms of how they make their response.

Enabling courses

Some institutions have adopted the practice of using award courses as enabling courses for higher degrees – for example in the case where applicants for a particular masters degree are required to complete a related graduate diploma in order to gain access to study in that higher award. In an instance where this is common practice at an institution (which could lead to lower response rates for these students) Survey Managers should discuss the issue with GCA in order to consider excluding the relevant graduate diplomate group from the overall survey population. However, in a situation where (for example) a graduate certificate or graduate diploma are simply nested within a masters degree (i.e., the student enrolls in the masters degree but elects to leave early with a lesser award), the graduate should be surveyed in relation to the award taken.

Population numbers and variations

GCA gathers specific information about variations from the recommended survey population. Institutions are asked to supply a breakdown of their initial survey population via frequency tables showing level of award, major field of education and permanent residency.

Survey Managers will be sent a spreadsheet file with a summary AGS population numbers template for these figures. They should complete the file for the relevant round and return it to surveyhelp@graduatecareers.com.au **prior to the related referent date.**

This summary population information may be modified after the AGS referent date but institutions will be asked to explain the reasons for any such change.

The purpose of this summary population file is to establish the institution's survey population early in the survey round and to ensure that response rates can be accurately monitored and calculated.

When GCA gathers the 2013 AGS data and forms for processing and analysis we will ask Survey Managers to confirm or update their pre-survey population summary which includes

- their total GDS+CEQ population
- their total GDS+PREQ population
- the total number of people in the first two groups (GDS+CEQ, and GDS+PREQ) who were Australian citizens or permanent residents (for institutions using your student records to calculate this figure, use the sum of DEEWR data element 358 where codes equal 1, 2, 3 and 8 (NZ people are included in the count))
- the total number of responses being returned.

GCA will calculate response rates from these figures. These four pieces of information will be requested as data are returned to GCA in 2013. If there are notable variations between these population figures and those reported prior to the referent date, institutions will be asked to supply an explanation.

GCA will also ask institutions to reconcile their summarised DEEWR course completions figures with their previously submitted pre-survey population numbers. Information about deviations from the prescribed survey population will also be requested. This is discussed in more detail below.

Survey instruments

The standard AGS instrument is a uniform questionnaire developed and designed by GCA through a consultative process with the sector and with GCA's Survey Reference Group. GCA has a single standardised hardcopy form (the traditional paper form) and a set of telephone scripts. The development of a new standardised online instrument is in abeyance awaiting an AGS Review.

Until the introduction of the system-wide standard online instrument, Survey Managers need to ensure that GCA has access to any **non-GCA** online instrument used in order to ensure that these instruments comply with required elements of the new model. GCA requests access to the instrument for the purpose of testing (i.e. so that GCA can complete the survey as a respondent).

Survey Managers should send relevant content and access information to surveyhelp@graduatecareers.com.au at least two weeks prior to the related commencement date in order to give GCA time to assess the instrument/s. Survey Managers should note any login IDs given to GCA for testing so that responses generated by GCA testing of the instrument can be removed from downloaded data.

Contact and engagement text protocols

These protocols note *recommended* and *inappropriate practices* for all AGS-related contact with survey subjects. The intention is to ensure that institutions are communicating appropriately with AGS subjects, using best practice and avoiding usage which might be seen as influencing the graduate's response.

'Contact' includes pre-survey engagement work as well as the distribution of instruments and the follow-up of non-respondents. 'Engagement work' is defined as communications aimed at informing the survey cohort about the impending arrival of the AGS instrument, encouraging response, etc.

There can obviously be exceptions to these guidelines. For example, postcards and SMS messages used for pre-survey engagement work and for follow-up reminders will necessarily be briefer than a covering letter or an email. In these instances, the practices to avoid are the most important guidelines to observe.

Example communications are shown at the end of this document (see **Example AGS covering letter or email template**). GCA recommends that institutions submit their planned communication texts to GCA for review prior to the distribution of such correspondence.

Recommended practices

For all distributions of AGS instruments

- The distribution of an AGS instrument, or an invitation to respond via an online instrument, should be accompanied by a covering letter or email.
- The distribution of hard-copy AGS forms should be accompanied with a reply-paid envelope for the return of completed forms (with the exception of mail distributions to international addresses that do not provide a reply-paid service).

Where appropriate (depending on the type and nature of the contact, including pre-survey engagement, survey instrument distribution and follow-up and introductory telephone survey scripts)

- Note the name of the survey and explain its purpose and value – make reference to the AGS being a national joint project involving all higher education institutions and coordinated by GCA.

- Explain the use of the data, for example that the data are
 - used internally for institutional planning
 - used to improve students' course experience
 - used by government and media
 - used to provide course and careers information for future students.
- Include a privacy and confidentiality statement in the communication
- Indicate how long the survey will take to complete (about 15 minutes maximum)
- Indicate that follow-ups will happen (dates are optional)
- Use personalised letters where possible (e.g. *Dear <First Name>* rather than *Dear Graduate*)
- Provide details of an institutional contact person (with phone number) for any queries.
- Indicate where graduates can find previous results (GCA and/or institution sources)

Practices to avoid

For all contact types

- Avoid 'push polling' – for example do not make statements such as, "please tell us how good you think we are" or "a good result is important for us".
- Avoid making any claims about the quality of the institution or prior good survey results.
- Do not link AGS results to funding.
- Do not link AGS results to institutional ratings or rankings or to related publications such as the Good Universities Guides.
- Do not indicate the survey is mandatory or a government requirement (the AGS is not a statutory requirement).
- Do not make vague statements about privacy or use of data e.g., "the data will be used for the purpose for which you provided it".
- Unless your institution is doing all its own data processing, do not state that the respondent's identifying data will not be sent to GCA.

Possible additions and variations to practices

Where appropriate (depending on the type and nature of the contact, including pre-survey engagement, survey instrument distribution and follow-up and introductory telephone survey scripts) the following variations can be made:

- Reference to incentives (observing the recommendations noted earlier in this section and those following, and issues to avoid)
- Indication of a deadline date for responding to the survey
- Reference to the importance of the response rate
- Inclusion of online survey URL
- Inclusion of contact details for the university's careers centre
- Reference to reply-paid envelope
- VC (or relevant senior non-teaching staff member) signature
- Different letters (observing the above recommendations and issues to avoid) for different student cohorts (e.g. CEQ, PREQ, faculties – different signatures, continuing / non-continuing)
- Relevant variations in text for follow-up communications

- Reference to the pre-population of variables, and their ability to edit these

Offering incentives

The Survey Reference Group (SRG) has considered the issue of the offer of incentives in the AGS. A paper summarising the effect of incentives in survey research is available at

<http://www.graduatecareers.com.au/research/start/2012ags/cmei2012/>

Broadly, this paper suggests that incentives have little impact on overall response rates and that resources would be better devoted to the actual survey methods employed (for example, use of the online instrument as method of first instrument distribution, pre-survey engagement with the cohort and the use of a sustained and multi-modal approach to contact and follow-up such as that discussed in the recommended timetable for AGS distribution below, which gives an example).

However, the paper also acknowledges that incentives might encourage **earlier** response to the AGS, with the consequence of freeing up time and resources for the further follow-up of non-respondents.

The SRG recognises that some institutions might therefore wish to offer an incentive aimed at encouraging early response (for example, by a certain date) in order to streamline their AGS administration.

The following additional contact practices and protocols are noted with reference to the offer of incentives.

- *The incentive should only be an encouragement to the subject to respond to the AGS.*
- *The incentive could be a monetary or non-monetary reward presented as a token of appreciation for completing the survey.*
- *The incentive should not be capable of being construed as encouraging more positive responses to (for example) the CEQ and PREQ.*
- *The offer of an incentive should be offered via the covering letter (or email) and not on the survey instrument itself.*
- *Survey Managers should be aware that there is differing legislation across States and Territories regarding the offering of prizes.*

Recommended timetable for AGS distribution

It is recommended that a multi-modal, sustained and targeted approach should be used to optimise the effectiveness and efficiency of survey distribution and follow-up processes. Integrated use should be made of online, post, onsite (graduation ceremony) and, if possible, telephone collection methods. Responses should be tracked continuously so that distributions can be scheduled to stimulate a sustained momentum of AGS returns.

The following outlines recommended distribution and follow-up schedules for the four main modes of data collection for the AGS – email, mail-outs, telephone and onsite (or face to face) collection. Survey Managers should consider their institution's policy and local legislation regarding repeated contact with students.

Emails (for direction to an online instrument and for follow-up reminders)

- Emails are cheaper and less resource hungry than mail-outs, and there is much value to be gained using email, in particular cycling through university and personal email addresses, to approach potential respondents in the first instance. Emails appear to prompt response within a day of receipt, with the returns diminishing after a few days.

Mail-outs (with hard-copy instruments and for follow-up reminders)

- Mail-outs, which can take around a week to generate response, can stimulate response over a period of weeks. In general, the effects of a mail-out tend to decrease by half each week after distribution, suggesting that a three or four week separation might be optimal. It is recommended that a maximum

of three mail-outs be conducted, beginning around two weeks before the referent date, each mail-out separated by approximately 4 weeks.

Telephone contacts (for GDS data gathering and for follow-up reminders)

- Telephone contacts deliver immediate results. While generally used as a last resort due to their perceived cost, this may be counterbalanced by the efficiencies which they provide. There may be considerable advantages in employing telephone interviewing earlier in the survey process.
- GCA now offers a centralised telephone interviewing service through a third party provider. The advantage of using GCA as a telephone interviewing provider is that we are able to offer telephone data collection at a discounted rate. Further discounts can then apply when more than one institution is using the service. If you would like more information regarding this service please contact surveyhelp@graduatecareers.edu.au
- SMS messaging might also be a useful and relatively inexpensive adjunct in follow-up reminders for institutions with this capability.

Onsite collection at graduation ceremonies

- Like telephone contacts, onsite methods also deliver immediate results. It is recommended that onsite collections be conducted (where applicable) throughout the survey period (provided they are conducted from the commencement date of the survey period and not before). Even in cases where graduation ceremonies take place on the day prior to a survey commencement date, onsite collection cannot be used. This ensures consistency in the new survey model. Ceremonies conducted prior to the survey commencement date can be used as a means of alerting students to the forthcoming survey, and collecting current contact details.

There are many possible permutations of a distribution and follow-up schedule which can be refined to meet the needs of the institution. GCA will be collecting institutional reports of their instrument distribution and follow-up strategies and schedules and this information will feed into the development of some best practice models.

The table below is presented simply as an example of an AGS strategy. In this instance, the institution has decided to cover graduation ceremonies in the first four weeks of the AGS period to maximise exposure to graduates and it has also planned an email distribution in that period. These might have been fine-tuned so that (for example) the email distribution was not aimed at the graduates being surveyed via the graduation ceremonies). For example, it might have been aimed at graduates who attended ceremonies prior to the survey commencement date and in absentia graduates.

The first mail-out might target graduates without an email address, and non-respondents to earlier contacts. Contact via telephone is often left until later in the process but earlier small-scale targeted phone campaigns might assist in sustaining response. GCA can advise on strategies.

It is also possible that additional, small-scale and targeted email follow-ups can be slotted into the schedule towards the end of the AGS as needed. Pre-survey engagement work might also have been conducted.

GCA has established a small-scale centralised data collection and processing service for a number of institutions. The data collection service includes pre-survey engagement, a multi-modal survey collection methodology including email and mail, and assiduous follow-ups. Also offered is pre- and post-population (subject to an institution's data availability), as well as the potential for earlier data return. A participating institution is therefore able to give GCA a population file and then GCA will administer the survey and return a final data file to the institution at the end of the survey round. The model offered adheres strictly to the GCA recommended methodology.

Example framework for survey distribution and follow-up (April 2013)				
Week beginning	Distribution and follow-up method			
	Onsite (graduation ceremony)	Email	Mail-out	Phone
25-Mar-13				
01-Apr-13	O1			
08-Apr-13	O2	E1		
15-Apr-13	O3			
22-Apr-13	O4		M1	
29-Apr-13				
06-May-13				
13-May-13		E2		
20-May-13				
27-May-13			M2	
03-Jun-13				
10-Jun-13				
17-Jun-13		E3		
24-Jun-13			M3	T1
01-Jul-13				
08-Jul-13				
15-Jul-13		E4		T2
22-Jul-13				
29-Jul-13				
05-Aug-13				T3
12-Aug-13				

Missing data

Ideally, each response submitted to GCA should have data for each question included on the questionnaire or in the data file. Missing data can introduce bias and inefficiency into statistical estimates.

Certain intended forms of missing data are built into the design of the AGS, in particular, as a result of each institution's choice of CEQ scales or where questions are not relevant to the respondent.

Other unintended forms of missing data will occur when respondents fail to answer (usually) demographic questions administered in the questionnaire. This form of missing data is difficult to eliminate completely, and a small amount of random item-level missing data is inevitable, usually far less than 5% of responses to each variable. Efforts should be made to reduce the incidence of unintended missing data in supplied data files. This might involve institutions imputing demographic data from known sources, such as student records systems. Each valid response should, in general, have data for each question included on the administered questionnaire. Ideally, complete data would be provided for all questions.

Ambiguous responses

Occasionally, a response will be completed in a fashion that makes it difficult to ascertain the intention of the respondent. Following are a few examples of ambiguous responses and how to deal with them. The list is by no means exhaustive, and we encourage any Survey Manager who finds other consistent examples of ambiguous response to submit them to GCA for inclusion in this section.

One important issue is when CEQ or PREQ responses are not clear. For example, sometimes a graduate will mark more than one response on a single CEQ or PREQ item. This can be either due to respondent error (the graduate might have intended for one of the marks to go on the line below) or it could indicate an attempt by the graduate to indicate that his or her response falls between the two points marked. In either case, **both responses for that item should be considered invalid and not entered in the data file.**

Another example is an apparent reversal of CEQ responses where a respondent has (for example) given notably negative CEQ responses in the 'strongly disagree' to 'strongly agree' columns but a very positive CEQ text response. In this instance it might be surmised that the respondent has mis-read the CEQ column labels and reversed his or her responses. The SRG has considered this issue, including looking at some examples of returns and hearing the experiences of the Survey Managers who are on the SRG and decided that such responses should be treated as respondent error and left as is.

Another example of ambiguous response is with the level of award variables (items 1.06 and 8.05), where any double, out-of-range or missing response must be recoded within the range 1-13 or the questionnaire will be processed but the data will not be used. Missing or out-of-range responses should be checked against student records and correctly entered.

Survey Managers should check the 'coding notes, hints and tips' column in the '2013 data processing' worksheet of the file 'AGS 2013 variables'. Any queries on how to deal with ambiguous responses within variables not covered here should be directed to GCA at surveyhelp@graduatecareers.com.au.

Imputed responses

Prior to the 2009 AGS, GCA recognised as appropriate the addition of imputed responses for graduates from an institution who continued on in further full-time study at that institution (including those people going from a pass degree to an honours year). Similarly, the imputation of responses for non-respondents who could be shown to be employed at the institution was accepted.

In order to meet the aims of the new AGS model, the imputation of full AGS responses is no longer supported by GCA.

In the case of responses that are received via AGS instruments that are not post-populated, the filling in of missing data from student records (for example, where a response is missing information regarding level of award or age) is acceptable. More detail of imputation of missing data from institutional data is provided in the next section of this manual.

In the instance where a member of the graduate's family reports that the individual is overseas, relatives can sometimes provide accurate information about graduates' activities, and this is seen as acceptable by GCA. However, Survey Managers are encouraged to make endeavours to have the survey instrument forwarded to the graduate in question. Failing this, a response from a family member which indicates the destination of the graduate is acceptable. In some cases, the accuracy of such information might be subject to the Survey Manager's judgement. In all such cases, the CEQ and PREQ sections must remain blank and the relevant origin and mode of collection of all responses should be recorded.

Data required for response to be used

For a response to be used in analysis, it must have information for the following questions:

In the 'your qualification(s)' section the following questions must be completed with valid responses (missing data will be available via your student records)

- maj1 [first major field of education] (item 1.02b) and
- level [of award] (item 1.06).

It is important to keep in mind that this is a minimum requirement and that the presence of these two variables alone does not constitute an AGS response. Data regarding further study or labour market activity is needed to allow cases to be allocated to a valid destination. However, a case which is complete in all responses except for maj1 and/or level cannot be used in analysis.

Survey Managers should not manufacture responses by collecting only CEQ data and adding a graduate's biographic and demographic student record data to fill out the information. This results in cases having no GDS data to match up with the CEQ response and goes against the overall intention of the AGS.

In the case of responses that are received via AGS instruments that are not post-populated, missing data for some variables within a graduate's completed response can often be imputed using student record data. Where possible this should be done to ensure a response is as complete as possible. The more complete a response is, the more valuable is its contribution to analysis.

Data are available from your student records people to allow the checking and completion of the following variables (where relevant) in the 'your qualification(s)' section. A number of these variables are post-populated in the post-population form.

- maj2 (item 1.03b)
- maj3 (item 1.04b)
- maj4 (item 1.05b)
- yearcomm (item 1.07),
- double (item 1.08)
- attend (item 1.09)
- mode (item 1.10)
- hecsfee (item 1.11),
- credit (item 1.12)²

Those questions administered to postgraduate research students only - supmode (items 1.13a and 13b), supechng (item 1.14) and supcamp (items 1.15a, 15b and 15c) - need not be completed.

Data are available from your student records people to allow the checking and completion of the following variables (where relevant) in the 'about you' section

- age (item 2.01)
- sex (item 2.02)
- disab (item 2.04)
- atsi (item 2.05)
- nesb (item 2.06)

² See previous variable list for DEEWR data element numbers.

- bornaust (item 2.07)
- yeararrv (item 2.08)
- permres (item 2.09)
- pcode (item 2.10)
- permnat (item 2.11b)

Data are available from your student records people to allow the checking and completion of the following variables (where relevant i.e., where variable study = 1 or 2) in the *'your further study'* section:

- study (item 8.01),
- furmaj1 (item 8.03b),
- furmaj2 (item 8.04b),
- furlev (item 8.05),
- furmode (item 8.06),
- furinst (item 8.07b),
- furstt (item 8.08), and
- fursyear (item 8.09).

The quality of results depends entirely on the quality of data secured and GCA encourages Survey Managers to use student records to complete as many missing fields as possible.

Survey Managers often ask what constitutes a valid GDS response. This is impossible to answer as there are so many potentially valid variations on response and GCA's data cleaning process can also save responses with one or two missing variables.

Coding key AGS questions

Key AGS questions must be appropriately coded to obtain relevant data on the main groups of respondents such as those in work, those studying, and those seeking work or unavailable for work and/or further study.

For institutions undertaking these tasks, aids to assist in coding and data entry for the GDS+CEQ and GDS+PREQ forms will be released on the AGS commencement date (see zip file 'AGS 2013 coding and data entry aids'). These aids constitute a quick visual reference as to which text responses should be coded and the corresponding location for that code on the form. They also indicate the values assigned to 'tick-box' responses and the location within the data file for each of the responses.

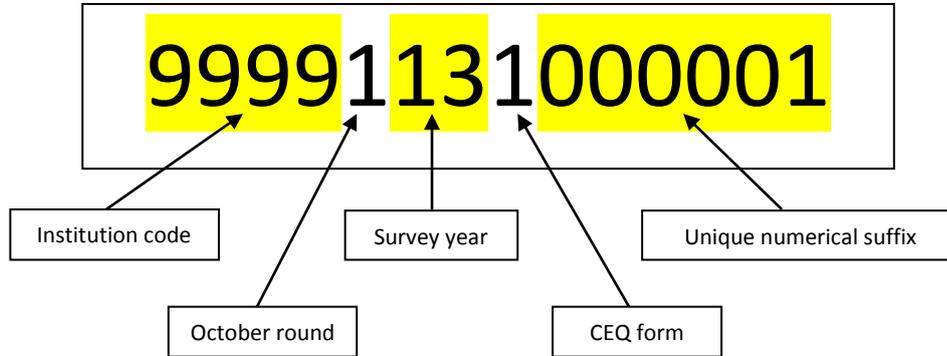
GCAID

Each member of the AGS population needs to be assigned a unique GCA identification number, a 'GCAID' (item 0.02). **Noting the point made earlier regarding the definition of the AGS population that if "someone is graduated with two separate awards in the same year (for example, a BSc and a DipEd) they should be administered one form only" then there should be no duplicate GCAIDs in the final data file.**

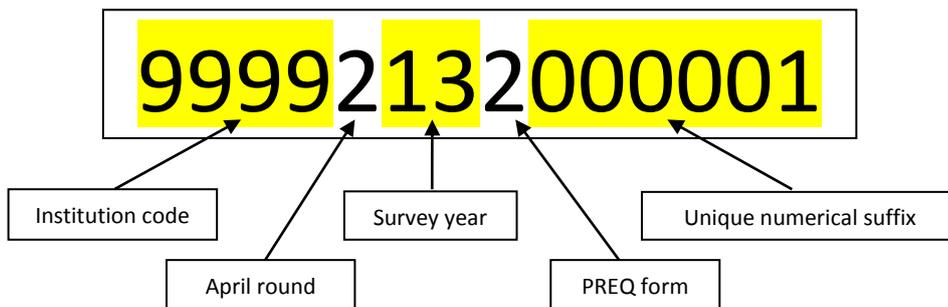
Should a graduate legitimately need to be surveyed twice, different GCAIDs should be used so as to avoid the duplication of GCAIDs.

The national data file will contain this unique identification number. The GCAID assists with management of the survey both within institutions and nationally, and provides the infrastructure for ongoing evaluation of issues such as non-response and validation of responses. It also helps with reporting and analysis.

The format of the GCAID number can be anywhere from 10 to 20 numerical characters, depending on the number of graduates in your survey population. The GCAIDs must adhere to the following format: DEEWR institution code (see file 'AGS 2013 variables'), survey round number (October = 1, April = 2, 'other' = 3), the survey year (two digits), CEQ/PREQ indicator (GDS+CEQ = 1, GDS+PREQ = 2), and a unique numerical suffix. For example, if the code for your institution is 9999, and you are numbering October 2012 GDS+CEQ forms for the 2013 AGS, the initial GCAID would be:



For other GDS+CEQ respondents surveyed by this institution for the October 2012 round of the 2013 survey, only the numerical suffix would change. However, for GDS+PREQ forms for the October 2012 round, the GCAIDs would start at:



All GCA-produced AGS forms are pre-printed with this GCAID. Forms will be numbered sequentially (000001 to nnnnnn) and there will be one set of GCAIDs only. This means a new GCAID needs to be applied to each person at each follow-up mailing and Survey Managers might find it simpler to add the appropriate GCAID to the list of survey subjects once the follow-up form is returned. In the case of pre-population, it is recommended that each graduate be allocated one GCAID number, and that that one number be printed onto each of that graduate's hardcopy forms.

Every response, including oAGS responses, must have this unique GCAID, following the format specified above. If your institution wishes to use a different identification code or number (for example to identify the faculty of the respondent), this can be added in addition to the GCAID (for example, as the 'other1' variable), but there must still be a GCAID included in the space reserved for the GCAID. Additional identification numbers can be placed in one of the 'other' variable spaces in the 'office use only' box on page four of the paper form, or in the clear space provided on the lower right-hand corner of the front page.

At the end of the AGS cycle, Survey Managers should be able to link any GCAID number in their data file to a response (paper, online or telephone) and any response in their data file to a member of the survey population.

Collection of CEQ and PREQ data via telephone

As of the 2010 AGS, GCA accepts CEQ and PREQ data gathered via telephone. The intention of allowing CEQ and PREQ data to be gathered via telephone is that it be used mainly as a follow-up mechanism to collect CEQ or PREQ data when GDS data have already been gathered via telephone and have no related CEQ or PREQ data. This is to help bridge the gap in GDS and CEQ/PREQ response rates.

The collection of CEQ or PREQ data via telephone is governed by a set of protocols aimed at ensuring that the collection of these important data is consistent and fair across all institutions. The protocols are

1. CEQ/PREQ collection via telephone is optional.

Each institution has the option of collecting data in this manner and no institution is forced to do so. Institutions might elect to gather GDS data via telephone but not to do so for CEQ and PREQ data.

2. CEQ/PREQ collection must be done by a third party such as an independent research organisation. It must not be done by the institution or by any organisation related to the institution (such as an institution-based survey research centre). Institutions should also ask any organisation contracted to gather CEQ or PREQ data via telephone to ensure that none of their graduates are involved in the process.

This removes concerns that a graduate's response could be influenced by a caller employed by the surveying institution. Institutions can still collect GDS data via telephone themselves should they wish to do so.

Some institutions might opt to collect all AGS data via telephone. This would mean they would need to either outsource all the 'phone work or separate the GDS work for in-house collection from the CEQ work for outsourcing.

3. The standard GCA telephone script must be used for collecting CEQ/PREQ responses via telephone.

4. CEQ/PREQ data collected via telephone must be flagged in the data file as having been gathered in this way.

All data are currently flagged as being gathered via hardcopy form, online instrument or telephone.

5. Users of the AGS data, including the Australian Government, have the capacity to decide whether to use CEQ and PREQ data gathered via telephone.

This is in line with the new AGS method put in place following the review of GCA's research methods conducted in 2005-06. GCA will continue to (a) seek details from institutions regarding the survey practices they employed and (b) seek an assurance from the institution that the data were gathered within the limits of the prescribed survey methods. An 'end of survey' report to the sector will be produced detailing this information and will accompany all data thereafter as a detailed record of the data collection methods employed by each institution.

6. CEQ/PREQ data collected via telephone will count towards relevant response rates.

7. CEQ and PREQ data should not be collected in isolation. These data should always relate to a GDS response.

GCA will ensure that CEQ and PREQ data are reported (a) in total (all collection methods combined) and (b) disaggregated by collection method. GCA also undertook a comparative analysis of CEQ and PREQ data gathered via the various modes to investigate the possibility that there are differences in response. It is presumed that a substantial number of CEQ and PREQ responses gathered via telephone will be available for this comparative analysis. While this method of gathering data for comparative analysis is not optimal, the work should provide hypotheses for further testing.

So the additional options institutions now have are to (a) contract the collection of follow-up CEQ or PREQ data out to an independent research organisation to capture CEQ or PREQ data to add to GDS-only responses or (b) contract the telephone collection of all the AGS out.

General notes on coding and data capture

It is imperative that new coders are adequately trained before they code any forms. Coding is not always a simple task of establishing a one-to-one relationship between a response and a code. There is often a need to interpret a response and find the code which is the 'best fit'. Coders who do not have an adequate understanding of the task or knowledge of the variable being coded (for example, of industries or occupations) may make widespread, repeated errors that can require all of an institution's forms to be checked and recoded at considerable cost. Standard coding schemes are used in the AGS so that coders can use coding assistance where available and so that results can articulate with other data sets. Coders should thoroughly familiarise themselves with each of these coding schemes prior to beginning coding.

For example, the AGS uses the Australian Standard Classification of Education (ASCED), Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006, and Australian and New Zealand Standard Classification of Occupations (ANZSCO) code sets (discussed below). Full documentation for these code sets is available online from the Australian Bureau of Statistics (ABS).

Survey Managers need to ensure that coding is checked. If the work is being carried out on behalf of the Survey Manager by other staff, each coder should have a sample of their coding work checked by another individual, preferably someone with more coding experience.

Institutions coding their own returned standard AGS forms should code all responses in the 'office use only' sections located on pages two and four. Questions requiring coding on pages one and four should be coded to the labeled boxes on page four (forms can be flattened to A3 to make this easier). Questions requiring coding on pages two and three should be coded to the labeled boxes on the bottom of page two.

GCA offers a central coding service to institutions unable to code their own returned standard AGS forms. GCA will not process any non-standard forms. A non-standard form is any form not produced and printed by GCA or printed to GCA specifications from art produced by GCA. Before sending questionnaires to GCA for coding, they must be checked to see that required questions are completed (see above discussion re maj1 and level variables).

Any optional course/faculty variables must also be added to the form (in variables 'other1' to 'other4') by the institution.

Coding of field of education using ASCED can be more accurately done by the institution, provided the individuals doing the coding are aware of, or have access to information about, what courses are offered at that institution and how these are commonly referred to. GCA is willing to undertake coding field of education but cannot be responsible for inaccuracies due to a lack of institution-specific knowledge. In coding field of education for institutions, GCA coders are greatly assisted by the supply of a list of ASCED codes valid for that institution. A definitive list will allow coders to identify misleading information on forms and verify the correct codes for difficult responses. Institutions are encouraged to send this information to GCA to assist in coding and data checking and cleaning. This is optional but the additional information will undoubtedly have a positive impact on final data quality.

Whether you are having field of education responses coded and scanned by GCA, or just scanned, a list of valid codes relating to your particular institution will assist us in eliminating errors from your data set. Survey Managers can send such a list to surveyhelp@graduatecareers.com.au.

To allow quicker and more accurate scanning, coders should ensure that codes are written neatly within code boxes with black or dark blue pen only. Sometimes numbers are confused by the scanner (6s for zeroes, for example) and neater writing can ensure cleaner data and less time required for data verification.

Country codes (SACC)

The **Standard Australian Classification of Countries (SACC)** is used to code countries. Country codes are used for the following questions:

- ‘...which is your country of permanent residence?’ (permnat (item 2.11b))
- ‘... in what country was your employment based?’ (empnat2 (item 7.06b))

SACC codes and specifications are available from DEEWR, the ABS or GCA (and see the file ‘AGS 2012 variables’ where an alphabetical listing is supplied). Note that each of these two questions has a ‘filtering question’ intended to ensure permanent residents bypass the permnat item and those employed in Australia bypass the empnat2 item. Therefore, if a response for either of these items is Australia it should not be coded and the relevant filtering question should be checked to ensure it has the correct response.

Field of education codes (ASCED)

The **Australian Standard Classification of Education (ASCED)** codes are used to code field of education. These codes are used for up to four major fields of education on the first page of the standard AGS form, two fields of education for CEQ majors, and two further study majors.

Field of education codes are used for the following questions:

- ‘What were the major fields of education in your qualification(s)?’ - maj1 (item 1.02b), maj2 (item 1.03b), maj3 (item 1.04b) and maj4 (item 1.05b)
- ‘MAJOR FIELD ONE’ and ‘MAJOR FIELD TWO’ - ceqmaj1 (item 4.01b), ceqmaj2 (item 4.02b)
- ‘What were your major fields of education in that qualification?’ - furmaj1 (item 8.03b), furmaj2 (item 8.04b)

Adjacent questions regarding the title of the qualification may also provide useful information.

ASCED codes and specifications are available from DEEWR, the ABS or GCA (and see the file ‘AGS 2012 variables’).

IMPORTANT: Some institutional coding of ASCED diverges from the correct use of the code set by coding field of education in a way that will assist the institution with later internal analyses. However, this creates inconsistencies with the correctly coded data from other institutions and is a practice that should be avoided. The AGS form has four additional variables called ‘other1’, ‘other2’, ‘other3’, and ‘other4’ and these can be used by institutions to add specific codes to each case to identify them for later analysis. For example, some Survey Managers add codes to identify the respondent’s faculty or degree to allow them to analyse the final data in ways that are relevant to institutional needs. This is discussed further below.

In addition, major fields of education should be captured at the most detailed possible level of coding. In their student records, some institutions do not code majors to the most detailed level. If such an institution uses its student records to populate major field of education variables, the data will lose value as the responses won’t be able to be allocated to the most detailed level of field of education (for example, giving an institution CEQ results for ‘humanities’ but not for history, archaeology, etc).

ASCED coding notes

There are various complex definitions of a ‘major field of education’ available but for the purposes of AGS use (for variables maj1-4 and ceqmaj1-4) Survey Managers are referred to that used in DEEWR’s data collection. An example is the code given to each student in E461 and E462.

For example, in a dentistry award, the major field of education is dentistry. In a diploma of nursing the major field of education is nursing unless a nursing specialisation (such as palliative care) is named and the award can then be coded to that. In an arts degree, most graduates have to achieve some sort of target (for example, of study units or credit points) in at least one field of education which becomes their major.

The AGS is not concerned with 'minors'.

DEEWR notes that the ASCED field of education classification is used to describe higher education courses, specialisations and units of study. The main purpose of the classification is to ensure courses, specialisations and units of study with the same or similar vocational emphasis are reliably classified to the same field of education code. It is intended also to aid people who design data collections, respond to requests for data, and compile, verify and analyse data.

As such, the classification may be viewed as a dictionary clarifying where particular courses, specialisations and units of study data should be categorised. It is important to note that this classification has been developed to be used nationally in all administrative and survey collections which incorporate data on education by field.

ASCED codes are based on the *similarity of potential vocations* rather than the *similarity of content* and are six digits long. For this reason, in a few cases the qualification title may actually be more appropriate to code than the text in the usual response box. This applies only in cases where the qualification title clearly indicates that the course is aimed at a particular vocation, which is not reflected, or given any further specialisation, in the major fields of education the respondent has listed.

For example, a graduate with a Bachelor in Education might list their major fields of education as French and history. Because this respondent has clearly trained to be a teacher, their first major should be coded as teacher education, not French. If, however, the qualification title had been Bachelor of Arts, then the first major would be coded as French. Similarly, a respondent who lists their qualification title as Bachelor of Nursing, but their major as (for example) public health, should have their first major (maj1) coded as general nursing.

The situation differs with regard to the ASCED codes for the CEQ responses. For example, a graduate with a Bachelor in Education might list their **CEQ** major fields of education as French and history. While for the variable maj1 we recommend the appropriate code for teacher education should be used, it is entirely likely that the graduate's CEQ responses refer to the French and history components of their course and should be coded as French and history. If the graduate has listed 'education' at the top of the CEQ column, then it should be coded as education.

ASCED codes are six digit numbers that divide into three levels: Broad Field of Education (BFOE – **NN0000**), Narrow Field of Education (NFOE – **NNNN00**) and Detailed Field of Education (DFOE – **NNNNNN**). BFOE is determined by the first two digits, NFOE is determined by the first four digits and DFOE is determined by all six digits. Note that GCA codes field of education to the detailed (six digit) level.

For example, in code 010501, the first two digits (01) represent the broad field of 'natural and physical sciences', the first four digits (0105) represent the narrow field of 'chemical sciences', and the full six digits (010501) represent the detailed field of organic chemistry. *ASCED should be, as far as possible, coded to the six digit DFOE level in all GCA surveys. This is an important point to be observed by Survey Managers who download ASCED codes from their student records. If institutional records are not coded to the DFOE level, valuable information (including for CEQ analysis) can be lost.*

The 'other' and 'not elsewhere classified' categories are included for use where the field of education given does not clearly fit into its own category. Examples of this are multi-disciplinary courses where there are no obvious predominant fields of education.

The codes ending in 00 (such as 010500 - chemical sciences) are only used when there is enough information to code to 'chemical sciences' but not enough to code to a more detailed level.

In the case of law courses, initial law training courses (LLBs) should be coded 090900 and post-initial but pre-registration courses (practical legal training) should be coded 090913.

Please note, 'nec' means 'not elsewhere classified' and indicates that enough information to allow more specific coding is not available.

Common errors in coding field of education using ASCED

- Coding qualification title instead of field of education when this is not appropriate. For example, coding a graduate with a Bachelor in Business and a major in accounting as business management (in maj1) instead of accounting.
- Coding field of education instead of qualification title where the qualification title actually gives better information about the core purpose of the course. For example, coding a graduate with a Bachelor of Nursing with a major listed as anatomy as 'anatomy' instead of 'nursing'.

- Not coding to six digits when detail is available. For example, coding construction engineering (030901) as civil engineering (030900).
- Coding to 'nec (not elsewhere classified)' when enough detail is available. For example, coding civil engineering (030900) as 'civil engineering not elsewhere classified' (030999).

With the introduction of the pre-population of the major field of education variables, a number of institutions have elected to pre-populate the Maj1-Maj4 coding boxes on the form as well. Although this practice is supported by GCA, it should be noted that these values may need to be amended if the graduate elects to change their pre-populated major values.

Note: If GCA is coding and harvesting ASCED information for your institution, it is recommended that you submit to GCA with your forms an excel spreadsheet containing all ASCED codes valid for your institution. This will allow GCA to validate your ASCED codes while processing to minimize the number of incorrect ASCED codes.

Industry codes (ANZSIC)

The **Australian and New Zealand Standard Industrial Classification (ANZSIC) 2006** codes are used to code industry information in the AGS.

Industry codes are used for the following question:

- 'What was your employer's main business?' - industry (item 7.02b)

ANZSIC codes and specifications are available from DEEWR, the ABS or GCA (and see the file 'AGS 2012 variables').

For more detailed information, visit the Australian Bureau of Statistics web site at <http://www.abs.gov.au/ausstats> and search on "ANZSIC".

Industry coding notes

The ABS says that ANZSIC codes comprise four hierarchical levels: division, sub-division, group and class. GCA codes industry consistently to the group level. The 2006 edition of ANZSIC identifies a greater number of divisions and sub-divisions than its predecessor. It also breaks up the very large Property and Business Services division into three separate categories, and includes a new division, Information, Media and Telecommunications. More information on the changes from ANZSIC 1993 is available in the document itself (ANZSIC 2006 – ABS catalogue number 1292.0), accessible via the ABS website at no cost.

Common errors in coding industry information

- Respondents sometimes give misleading industry information and this should be checked against their occupation details. For example, a respondent who writes they are working for the NSW Department of Education and lists their employer's main business as 'Government' might indicate they are working as a secondary school teacher. Their industry should therefore be coded as 'Secondary School Education', not 'State Government Administration'.
- Lack of understanding of the range and content of various industry categories frequently leads to classification of industries with the wrong code. Coders should familiarise themselves with ANZSIC as listed in the spreadsheet file 'AGS 2012 variables' and check the detail of the full ANZSIC coding frame as listed in ABS documentation if in doubt about where a particular industry fits within the coding scheme.

Occupation codes (ANZSCO)

The full **Australian and New Zealand Standard Classification of Occupations (ANZSCO)** codes are used to code occupation information in the AGS. Please note that this is a change from 2007 when a sub-set of codes was used. However, if you do not wish to use the full set of ANZSCO codes provided by GCA, you can use a sub-set of the codes. These are the codes at the Unit Group level in the spreadsheet file 'AGS 2012 variables' which end in double zero.

The purpose of allowing the full ANZSCO code set to be used is so that institutions can choose to retain the greatest level of detail in their data for their own analysis if they wish. Standard analysis by occupation in GCA reports will remain at the broader level embodied by the sub-set of codes.

Occupation codes are used for the following question:

- 'What were the main tasks or duties in your job?' - duties (item 7.12b)

Codes and specifications are available from DEEWR, the ABS or GCA (and see the file 'AGS 2012 variables' where an alphabetical listing is also supplied). The full title of the ANZSCO document is *1220.0 - ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition, 2006*.

The latest issue was released on 11/09/2006 and can be downloaded from the ABS web site at:

<http://abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/1220.02006?OpenDocument>

Occupation coding notes

ANZSCO codes comprise five hierarchical levels: major, sub-major, minor, unit and group. As of the 2006 AGS, GCA has coded occupation consistently to the four-digit unit level, as much as is possible given the detail available in survey responses. Coders should familiarise themselves with the major groups and sub-groups by which the codes are organised and with the range and logic of available codes.

Although ANZSCO codes should generally be based on the information provided in response to the question 'What were the main tasks or duties in your job?' (the 'duties' variable), where this information is not sufficient for coding purposes, coders may utilise other information on the form. The primary alternative is generally the title of occupation and in some cases, the industry of employment. Such information should only be used in the event that the response provided for 'duties' is not sufficient for coding, as occupation titles can sometimes be misleading.

When coding an occupation listed as 'research assistant', 'postdoctoral researcher' or similar, coders should treat the graduate as working professionally. For example, if an economics graduate is working as a research assistant, code the response as 'economist'. Not all occurrences will be as simple as this, but it gives an indication of how coding should be done. Queries can be passed on to the Research Manager.

A number of graduates have, in the past, listed their occupation as (for example) 'PhD student'. This should not be classified as a full-time occupation, and related responses regarding employment status (i.e. indication of whether graduate is working full-time or part-time) should be corrected as required. If the respondent indicates they have teaching or research duties however, this does indicate part-time work and their occupation should be coded appropriately.

There have been some small changes to the ANZSCO codes (called 'Revision 1') and these changes have been included in the 2013 AGS.

Institution codes (E306)

DEEWR Higher Education Provider codes are used to code institutions. These codes can change over the years as the make-up of the institution changes. The current code is always used and is updated where necessary.

Institution codes are used to identify each case and for the following questions:

- 'Institution enrolled at for further study' - furinst (E306 – item 8.07b)

Institutions doing their own data entry will also need to add their own institution code to each case. The code is not printed on the AGS forms. Codes and specifications are available from DEEWR or GCA (see the file 'AGS 2013 variables'). Where an institution is not an HEP and does not have a HEIMS institution code, one will be assigned.

Optional variables

The GCA standard AGS form includes four optional variables (other1, other2, other3 and other4) which institutions can use if they wish. These four string variables have an open format. Institutions can use these to code the respondent's degree, course or faculty, etc.

While GCA can enter the optional information into these fields, it cannot code these fields for institutions, as correct coding will depend on local knowledge and the established coding scheme. This means that institutions using GCA's central coding service and wanting to include a course or faculty variable will need to code this before sending the forms to GCA for final coding. Any codes used by institutions will have to be generated by them and any reports generated by GCA will show only the codes and not related labels. This is to say, each institution will have to decide for itself what code it wants to use for, say, its Bachelor of Arts or Arts Faculty. If an institution asks GCA to produce extra reports, only the code number, and not the label (such as 'Bachelor of Arts' or 'Arts Faculty') will appear.

Using these variables is optional. In certain instances, there could be a small cost to the institution for processing this information. Please contact GCA (surveyhelp@graduatecareers.com.au) for an estimate of the cost of the extra work.

Note: If GCA is harvesting information from other1-other4 for your institution, it is recommended that you submit to GCA with your forms an excel spreadsheet containing all possible valid codes for these variables. This will allow GCA to validate these codes while the forms are processed to minimise the number of incorrect entries.

Entry of CEQmaj1 and CEQmaj2 data

When an institution is doing its own data processing, Survey Managers are asked to capture CEQmaj1 and CEQmaj2 **as recorded on the response** and not to simply copy and paste maj1 and maj2 across to CEQmaj1 and CEQmaj2. The key danger here is that a respondent might have reversed his or her majors when completing the CEQ. For example, a graduate might have written 'English' and 'History' for maj1 and maj2 (respectively) but have then responded on the CEQ with History as CEQmaj1 and English as CEQmaj2. So it is important, as always, that the graduate's response is reflected correctly and that corners are not cut.

There are occasions when some missing CEQmaj data can be filled from maj1 and/or maj2. This is already done during data processing for reports and for the CEQ tables that appear on the START site. The list below gives examples of what can be done under various circumstances.

Scenario 1

Response for maj1 – History

Response for maj2 – English

Response for CEQmaj1 – English

Response for CEQmaj2 - Blank

Fix – CEQmaj2 can be coded to History

Scenario 2

Response for maj1 – History
Response for maj2 – English
Response for CEQmaj1 – History
Response for CEQmaj2 - Blank
Fix – CEQmaj2 can be coded to English

Scenario 3

Response for maj1 – History
Response for maj2 – English
Response for CEQmaj1 – Blank
Response for CEQmaj2 - Blank
Both CEQmaj fields must be left blank

Scenario 4

Response for maj1 – English
Response for maj2 – Blank
Response for CEQmaj1 – English
Response for CEQmaj2 - History
Fix – maj2 can be coded to History

Scenario 5

Response for maj1 – Blank
Response for maj2 – Blank
Response for CEQmaj1 – English
Response for CEQmaj2 - History
Fix – maj1 can be coded to English and maj2 can be coded to History

Deadlines for the submission of data

Coded and uncoded forms will be accepted from Monday 19 August 2013 through to Friday 13 September 2013.

Data files sent via email can be accepted up until Friday 20 September 2013.

Submissions of forms and/or data files can be accepted after these dates but the Survey Manager should negotiate any delayed submissions with GCA and this will be noted in any GCA AGS report to the institution in question. We encourage the Survey Managers to send us their forms and data files on time in order to cut down on unnecessary processing delays.

Forms may be sent to GCA in batches, and should be accompanied by a completed packing slip. This packing slip will be distributed to Survey Managers at a later date. Please indicate on the packing slip the number in each batch and which batch is the last.

Electronic submission of data

Institutions may wish to enter and supply their own data via emailed data file attachment (*files over 2MB to be zipped, please*).

Data sent electronically should be emailed to Bruce.Guthrie@graduatecareers.edu.au, with a copy to surveyhelp@graduatecareers.com.au.

Please archive a copy of the exact version of any file which is sent to GCA.

It is the responsibility of institutions to ensure that no systematic errors are present in the data files returned to GCA. Examples of such errors include variables being miscoded, missing or misplaced relative to the data column notations in the data file format (see the file 'AGS 2012 variables').

Institutions returning data files are required to produce and check a frequency table for each survey variable. There is no requirement to return this file to GCA. A completed packing slip is still required, however.

The Vice-Chancellor (or delegated authority such as the Senior Survey Contact) should sign the Method Assurance form assuring the sector that the data have been collected in line with this Manual and Standard Recommended Methodology and have been checked and contain no errors. This assurance will be acknowledged in any GCA report to institutions.

It is important to keep in mind a few general issues to ensure the quality and efficiency of the transfer of data to GCA, and the following points should be observed:

- Electronic submissions of data should be spreadsheet compatible. If comma- or tab-delimited files are sent, no commas or tabs should occur in any field in the submitted file (such as the comments fields).
- Institutions should review frequency tables of their supplied data before returning the file to GCA in order to spot out of range responses and ensure that the data file meets coding and data quality specifications.
- Data downloaded from student records should be recoded to GCA specifications if necessary.
- All specified variables should be included in the submitted file, and the variables should be returned in the specified format and order.
- Variables should contain valid codes for each question.
- All CEQ fields should be included in the submitted data file, not just those which were included in your institution's survey. Leave blanks in the CEQ fields not used.
- GCA requires ONE Survey Manager to return ONE total data file or ONE set of survey forms (not separate GDS+CEQ and GDS+PREQ files).
- For post-population, this data should be submitted to GCA at the same time as your collected data, either as part of your AGS data file, or in a separate file with your forms.

For various reasons relating to time pressure and workload, GCA can take responsibility for cleaning the data (for example, checking missing and out-of-range responses) but cannot be responsible for finding errors generated by the returning institution.

Survey Managers should be aware that failure to check for errors and inform GCA of any problems in a timely manner could result in substantial adjustments to data and publications, and may incur financial penalties which might have to be passed on to the institution or may mean the exclusion of that institution's data from the national analyses and reports. This is particularly so in the case where the error is not found for some weeks or months and GCA has completed substantial analysis on the data set.

Common data return problems to avoid

In recent years, some problems have regularly arisen with the return of AGS data files and forms that need to be avoided in the future.

Survey Managers returning data files are asked to produce, and check before return, a file of frequency tables based on their data files. This will give them the chance to find all obvious mis-codes, missing variables and

codes, etc. Recently, one institution sent four 'final' data files before they produced a useable version - all because they failed to fully check their own frequencies before they returned each file. Other institutions have taken two and three attempts.

Examples of problems that we have found in recent years have been

- data downloaded from student records weren't recoded to GCA specifications
- numerous examples where vital variables like the permanent residency indicator, field of education, level of award, sex and age, were partly or completely missing
- cases where sex was coded as 'M' or 'F' rather than 1 or 2 s required by GCA data specifications
- data files returned in a format (order of variables) other than that specified
- CEQ items listed one after the other (as they appeared on the institution's CEQ form) and not in the order specified by GCA (an order that includes **all** CEQ items whether used or not)
- origin and mode codes were sometimes not completed or completed incorrectly.

Other issues that arose were Survey Managers who returned forms not specifying that they needed additional variable/s entered and institutions returning GDS+CEQ and GDS+PREQ forms or files separately.

If using a variety of collection means (paper, online, and/or telephone), great care should be taken when merging the data files from these various sources, particularly if the variable order in the file from one collection method (such as the oAGS) does not equate with the variable order of the file from an alternate collection method (such as paper). GCA is able to assist Survey Managers with this exercise if needed.

An additional problem with data from online AGS instruments is the inclusion of non-standard symbols that need to be cleaned out before data processing can proceed. This problem arises from respondents entering (for example) line breaks and bullet points in text fields (often when copying and pasting duty statements into the relevant AGS field). These often appear as symbols like Euro signs and US cents symbols in the data file. Cleaning these out can take a great deal of time and notably slow data processing time. For those returning data in Excel files, the CLEAN () function will take most of these non-printable characters out of cells.

Submission and handling of paper forms

Coded or uncoded hard-copy questionnaires can be returned to GCA for processing.

GCA provides a packing slip for institutions to use when returning survey forms to GCA for processing. A PDF copy of the packing slip will be emailed to all Survey Managers at data collection time (by August 2012).

All standard paper forms returned to GCA are fed through an electronic scanner to capture the responses marked on the form. Certain alterations to forms can reduce the accuracy of this process. When dealing with paper forms to be scanned for data capture, please be careful not to alter the forms in any way that may interfere with their scanning. Please:

- Do NOT use photocopied versions of the form unless absolutely necessary (GCA will not process these non-standard forms);
- Do NOT place an ink stamp, adhesive label or other markings over any of the responses, the barcode, or the small black squares at the corners of the form. If you do want to apply a date stamp or other marking, a clear space near the lower right-hand corner of page one has been provided specifically for this purpose.
- Do NOT hole-punch the form for filing. This will affect scanning and can remove or alter actual responses on the form.
- Collate any forms with attachments (e.g. additional notes from the respondent) and place at the top of bundles of forms so that these are easily identifiable and the attachment can be removed prior to scanning and re-attached afterwards. Write the form's GCAID number of the attachment so that if they are separated they can still be related to each other.

When dispatching questionnaires to GCA, please ensure that they are sorted by type of form (GDS+CEQ and GDS+PREQ) and then by field of education (maj1) and packed adequately. It is preferable to receive forms laid flat as A3 sheets; however folded A4 forms are also acceptable.

Express Post, Registered Mail or courier services should be used. Please retain tracking numbers. GCA can take no responsibility for survey forms which are lost in transit.

Send forms to the following addresses:

POSTAL ADDRESS

Australian Graduate Survey
Graduate Careers Australia
PO Box 12103
A'BECKETT STREET
VIC 8006

STREET ADDRESS

Australian Graduate Survey
Graduate Careers Australia
Level 10
313 La Trobe Street
Melbourne VIC 3000

After data entry, all forms will be returned to originating institutions. It is a matter for each institution as to how long they archive their forms.

Data and reports returned to institutions

Each participating institution receives output files with its own results, showing the GCA generated frequency response for each question, and a summary table showing main activity by level of qualification.

At a later stage each institution will be sent a set of cross-tabulations of its bachelor degree respondents showing detailed activities for the aggregated first major field of education.

These results should be examined for gross errors, as it is still possible to make some corrections at this stage. If errors are found later there can be severe penalties in cost and time. Most importantly, Survey Managers should check their GCA frequency tables against those for the previous year, to:

- look for anomalies such as missing codes (such as no PhDs);
- look for radical changes in the percentages (such as 10% PhDs last year, and 20% this year, or notable changes in the percentage of missing values);
- check that CEQ item frequencies reflect those used by your institution;
- look for missing variables (no responses at all in a variable); and
- look for codes that need recoding to meet GCA specifications (such as data downloaded from student records).

Survey Managers will be asked to confirm that returned frequencies have been checked and that they are happy for us to proceed with data processing.

GCA returns cleaned data files to institutions, usually as SPSS files or spreadsheet files. In order to allow institutions to do additional analyses of their data we include a number of destination related variables. The most important is the variable called 'dest' (short for 'destination'), which can be used in either its current form, or aggregated, to produce destination tables.

The 'dest' variable categorises all respondents in terms of a single graduate destination. Used in conjunction with the 'area' variable (a summary of ASCED), or the optional course or faculty variable (if used), this can offer a useful analysis tool to enable institutions to get more out of their data.

The value labels for the variable 'dest' appear on the next page.

Survey Managers can also request the SPSS syntax used to clean data and produce key destinations tables.

GCA can provide institutions with customised reports of their results such as cross-tabulations or graphs. This can often save time in the production of documents such as annual reports or educational profiles, and avoid double handling of data. GCA can also return data files in various formats. Please contact the GCA Research Manager for further details including a costing on the service.

Over the course of data submission and cleaning, GCA sends a number of files to Survey Managers containing their GDS, CEQ and PREQ figures and data. It is recommended that a centralised system of electronic folders be created to categorise and store these files (in terms of survey year and round). Renaming them to make their contents more obvious to institutional users is also recommended.

It is the responsibility of individual Survey Managers to ensure that these files are properly named and archived for current and future use. Much time is lost on re-sending files to Survey Managers or having to send complete sets of documentation and tables to new Survey Managers when their predecessor has left little or no information.

1	FT Employed: Australian Government	81	FT Employed: Private Health
3	FT Employed: Defence	82	FT Employed: Health NFI\Other
4	FT Employed: State Government	90	FT Employed: Schools, Public
5	FT Employed: Local Government	91	FT Employed: Schools, Private
6	FT Employed: Other Government	100	FT Employed: Higher Education
7	FT Employed: Professional Practice	110	FT Employed: Education NFI\Other
8	FT Employed: Industry\Commerce	115	FT Employed: Not-for-Profit
10	FT Employed: Agriculture\Forestry\Fisheries	120	FT Employed: Employment NFI\Other
11	FT Employed: Mining	121	Working part-time, not seeking full-time work
12	FT Employed: Manufacturing	122	Working part time, seeking full-time work
13	FT Employed: Electricity\Gas\Water	123	Not working, seeking full-time work
14	FT Employed: Construction	124	Not working, seeking part-time work only
15	FT Employed: Wholesale, Retail Trade	125	Further FT study (honours)
16	FT Employed: Transport & Storage	126	Further FT study (higher degree)
17	FT Employed: Communication Services	127	Further FT study (other degree\diploma)
18	FT Employed: Business, Finance	128	Further FT study (teacher training)
19	FT Employed: Accommodation\Entertainment\Recreation	129	Further FT study (other)
20	FT Employed: Personal & Other Services	130	Unavailable for full-time work or full-time study
80	FT Employed: Public Health		

Archiving and destroying old responses

GCA recommends that old AGS responses (whether paper, online or other) are archived for a period of time. This period would be based on institutional policy and would thus potentially differ from institution to institution. Some might keep them for 12 months, some for a few years and some set an open-ended period.

The value of keeping responses for a period after the survey is completed would include allowing Survey Managers to refer back to returns should there be a problem with the data returned to GCA, to assist the Survey Manager with follow-up research, etc.

Obviously, archived responses need to be stored securely.

Similarly, should the time come for old responses to be disposed of, hard-copy forms should be destroyed via a process of secure document destruction (most institutions would have arrangements for this sort of document disposal).

Collecting long-term email addresses

For some years, GCA has added to the AGS form a request that the respondent supply a long-term email address should they be happy to participate in follow-up research. This request is only added with the agreement of the institution.

GCA uses this contact information for research such as the Beyond Graduation Surveys.

Origin and mode variables

There are four variables used to indicate the origin of the case level data. These are the variables

- GDSmode (item 11.02)
- CEQmode (item 11.03)
- PREQmode (item 11.04)
- origin (item 11.01)

The first three variables listed above indicate how the response was gathered (via telephone, paper form, online or emailed form, graduation ceremony). The variable ORIGIN (item 11.01) indicates the source of the response (the graduate, a relative, the student records system or other source).

Due to the changes to the AGS Model in recent years, some of the codes available in these four variables will be used less often, others more often. For example, it is unlikely that there will be any proper use for code 3 in the origin variable ('student records system') from the 2009 AGS on as the imputation of cases is no longer accepted.

Up until and including the 2009 AGS, GCA accepted CEQ and PREQ data gathered via telephone and cases were flagged as such (CEQmode = 1 or PREQmode = 1) but these responses were not used in any GCA analysis. Institutions could use such responses in their internal analyses.

As of the 2010 AGS, CEQ and PREQ data gathered via telephone are now accepted, and code 1 in CEQmode and PREQmode will be used more often. However, there are a number of important caveats regarding this process (see prior discussion in this Manual).

The codes are as follows

ORIGIN: graduate = 1 / relative = 2 / student records system = 3 / other = 4

GDSmode*: no response from the graduate = 0 / telephone = 1 / paper form = 2 / online & email = 3 / graduation ceremony = 4

CEQmode*: no response from the graduate = 0 / telephone = 1 / paper form = 2 / online & email = 3 / graduation ceremony = 4

PREQmode*: no response from the graduate = 0 / telephone = 1 / paper form = 2 / online & email = 3 / graduation ceremony = 4

*The addition of code 4 for 'graduation ceremony' over-rides code 2 for 'paper form' and code 3 for 'online & email'. A response on a paper form gathered at a graduation ceremony should be coded '4'. Similarly, a response gathered via an online instrument made available at a graduation ceremony should be coded '4'.

With the three MODE variables, the intention of the zero "no response from the graduate" codes is that they be used in situations where the ORIGIN variable is codes 2, 3 or 4. In these variables, a zero is NOT a missing value in the way that it would be for say, sex or age **as it represents valid information about the response.**

Examples

- A case where a GDS+CEQ response comes back from the graduate via email attachment would be coded 1-3-3-0. **A GDS+PREQ response would be 1-3-0-3.**
- A case where a GDS+CEQ response comes back from the graduate via paper form completed at a graduation ceremony would be coded 1-4-4-0. **A GDS+PREQ response would be 1-4-0-4.**
- A case where a GDS+CEQ response comes back from the graduate via an online form at a graduation ceremony (where a Survey Manager has set up a number of computers at a ceremony so that graduates can complete the AGS online while there) would be coded 1-4-4-0. A GDS+PREQ response would be 1-4-0-4.
- A case where a GDS+CEQ response comes back from the graduate via web-based survey form would be coded 1-3-3-0. **A GDS+PREQ response would be 1-3-0-3.**
- A case where a GDS+CEQ hard-copy response comes back from the graduate via postal mail would be coded 1-2-2-0. **A GDS+PREQ response would be 1-2-0-2.**
- A case where a GDS response comes back from the graduate via telephone and a CEQ response comes back via postal mail would be coded 1-1-2-0. **A similar GDS+PREQ response would be 1-1-0-2.**
- A case where a GDS response comes back from the graduate via mail and a CEQ response comes back via telephone would be coded 1-2-1-0. **A similar GDS+PREQ response would be 1-2-0-1.**
- A case where a hard-copy GDS response is received from a family member of the graduate would be coded 2-0-0-0. There can be no CEQ or PREQ response in this situation. **A similar GDS+PREQ response would be 2-0-0-0.**

Prepop variable

With the introduction of pre- and post-population of values to the AGS instrument it has become necessary to add a variable ('PREPOP') that records the performance of the change. GCA will examine the data gathered in order to allow consultation with Survey Managers regarding the fine-tuning of the process. The key intention is to gauge the frequency with which respondents need to change pre-populated information (for the name of the award and/or for the major fields of education).

The codes for variable PREPOP are as follows

1 = pre-population used, no changes by graduate

2 = pre-population used, QUALNTIT changed by graduate

3 = pre-population used, any of MAJ1-MAJ4 changed by graduate

4 = pre-population used, QUALNTIT **AND** any of MAJ1-MAJ4 changed by graduate

Institutions that did not pre-populate their forms should leave the variable blank.

For data entry, variable 'prepop' should appear in the data file after variable 'ceqpreq' and before the long-term email variable (which will remain the last variable for each case). Variable 'prepop' will go into column 'IF' in data returned in spreadsheets.

How to code PREPOP

- If you pre-populated your AGS instrument/s and the graduate accepted the values you entered (i.e., did not change the information), code PREPOP '1'.
- If you pre-populated your AGS instrument/s and the graduate substantively changes the information you entered for QUALNTIT, code PREPOP '2'.
- If you pre-populated your AGS instrument/s and the graduate substantively changes the information you entered for any of MAJ1-MAJ4, code PREPOP '3'.
- If you pre-populated your AGS instrument/s and the graduate substantively changes the information you entered for QUALNTIT **and** for any of MAJ1-MAJ4, code PREPOP '4'.

For any change made by the graduate to be recorded in PREPOP (requiring codes 2-4), it must indicate that the information you had originally pre-populated onto the form was wrong (i.e. the graduate must have requested a substantive change). Minor re-wordings and changes of that nature (ones that would not, for example, require a different ASCED code being used) would not normally represent a substantive change.

Institutions that did not pre-populate their forms should leave the prepop variable blank.

GCA plans to use this variable to check the accuracy of the information used by institutions during the introductory phase of pre-population.

Example AGS covering letter or email template

Dear <<Name>>

Congratulations on your recent completion of a <<course name>> at <<Institution>>.

I would like to invite you to participate in the Australian Graduate Survey (AGS). The AGS is a national survey coordinated by Graduate Careers Australia (GCA) together with participating higher education institutions. It is designed to collect information about the experience of each student during their course and the type of work or further study being undertaken after completing a course.

I hope you will complete the survey and return it to us in the enclosed [reply-paid] envelope as soon as possible. It is expected that the survey will take between 10 to 15 minutes to complete. Upon submission of your completed survey, your name will be removed from the mailing list for follow-up survey reminders [in <<month>> and <<month>>].

Your confidential response to the survey will be used by <<Institution>> to monitor and enhance the quality of our courses and to provide informed advice to students about career opportunities. These data will be submitted to GCA and will be used to produce their annual publications, and by the Commonwealth Government to inform higher education policy development.

AGS results are also reported by media and publishers.

[Privacy Statement:] <<Institution>> is committed to the Commonwealth Privacy Act 1988. Your <<identifying information>> is required solely for the administration of the survey. All survey results are aggregated so that no individual responses are identifiable.

[Alternate Privacy Statement:] Your responses are treated as confidential. All survey reports are aggregated and no information that identifies you personally is disclosed. Your <<identifying information>> will be separated from the data set and will only be used to remove you from our follow-up list.

If you have any questions about the survey, please contact <<Person>> (<<email>>) on <<phone number>>.

The information collected from this survey is extremely important to <<Institution>> and your prompt response is much appreciated.

Yours sincerely

Example AGS follow-up letter or email template

Dear <<Name>>

Congratulations on your recent completion of a <<course name>> at <<Institution>>.

I wrote to you recently to invite you to participate in the Australian Graduate Survey (AGS). The AGS is a national survey coordinated by Graduate Careers Australia (GCA) together with participating higher education institutions. It is designed to collect information about the experience of each student during their course and the type of work or further study being undertaken after completing a course.

Your response is important to the success of the AGS I hope you can find the time to complete the survey and return it to us in the enclosed [reply-paid] envelope as soon as possible. It is expected that the survey will take between 10 to 15 minutes to complete. Upon submission of your completed survey, your name will be removed from the mailing list for follow-up survey reminders [in <<month>> and <<month>>].

Your confidential response to the survey will be used by <<Institution>> to monitor and enhance the quality of our courses and to provide informed advice to students about career opportunities. These data will be submitted to GCA and will be used to produce their annual publications, and by the Commonwealth Government to inform higher education policy development.

AGS results are also reported by media and publishers.

[Privacy Statement:] <<Institution>> is committed to the Commonwealth Privacy Act 1988. Your <<identifying information>> is required solely for the administration of the survey. All survey results are aggregated so that no individual responses are identifiable.

[Alternate Privacy Statement:] Your responses are treated as confidential. All survey reports are aggregated and no information that identifies you personally is disclosed. Your <<identifying information>> will be separated from the data set and will only be used to remove you from our follow-up list.

If you have any questions about the survey, please contact <<Person>> (<<email>>) on <<phone number>>.

The information collected from this survey is extremely important to <<Institution>> and your prompt response is much appreciated. Please disregard this letter if you have already submitted your response to the survey.

Yours sincerely