2021 Employer Satisfaction Survey

Methodological Report

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# Introduction

## About this report

This methodological report describes the sample preparation, data collection, data processing and reporting aspects of the 2021 Employer Satisfaction Survey (ESS, ‘the survey’), conducted on behalf of the Australian Government Department of Education, Skills and Employment (‘the department’) by the Social Research Centre. This report is organised into the following sections:

* Section 1 introduces the survey background, objectives and provides a general overview.
* Section 2 describes the target population and sample build.
* Section 3 documents the survey design and procedures for conducting the study.
* Section 4 outlines the questionnaire development phase and provides an overview of changes from the previous iteration including institution specific items.
* Section 5 describes the data processing procedures and deliverables.
* Section 6 documents the final dispositions and response rates.
* Section 7 presents an analysis of response.
* Section 8 notes considerations for future iterations of the ESS.

## Background

The ESS is a component of the Quality Indicators for Learning and Teaching (QILT) suite of surveys, commissioned by the department. Conducted annually since 2016, the ESS is the only national survey that measures the extent to which higher education institutions in Australia are preparing graduates to meet employer needs.

Prior to the 2021 ESS, the department funded the participation of Higher Education Support Act (HESA) institutions only. In 2021, department funding of QILT participation extended to non-HESA institutions for the first time.

## Objectives

The broad aim of the ESS is to collect insights and perceptions from employers about the attributes of recent graduates from Australian higher education institutions including universities and non-university higher education institutions (NUHEIs). Employer views of the technical skills, generic skills and work readiness of recent graduates provide assurance about the quality of Australia’s higher education sector. The development, collection and reporting of these measures assists the department to monitor service delivery and improve higher education over time.

Specific research objectives of the ESS are to measure, monitor and better understand:

* the specific skills and attributes employers need in their business,
* how well higher education is equipping graduates for the workforce, and
* the varied employment pathways graduates are taking after completing their study.

## Overview

The ESS is administered in parallel with the GOS and the first collection round for the 2021 ESS took place in November 2020, the second in February 2021 and the third in May 2021. The sample was drawn from graduates who responded to the 2021 GOS, were in paid employment the week prior to completing the GOS and consented to provide contact details for their work supervisor.

The survey was conducted in English only. The survey was fielded primarily via online collection, with interviewing via Computer Assisted Telephone Interviewing (CATI) as a secondary mode. Supervisors were invited to participate via email or phone (using CATI) depending on the contact information provided by the graduate. Unlike the GOS and the Student Experience Survey (SES), completed ESS CATI surveys are included in the nationally reported data.

A total of 3,450 surveys were completed. This was made up of 3,175 supervisors of graduates from 41 Australian universities and 255 supervisors of graduates from 53 NUHEIs. Refer to Table 1 for a summary of the key project statistics.

Table 1 Key project statistics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | November 2020 | February 2021 | May 2021 | Total |
| Total supervisors approached (n) | 2,731 | 758 | 4,704 | 8,193 |
| Out-of-scope supervisors1 (n) | 139 | 31 | 174 | 344 |
| In-scope supervisors (n) | 2,592 | 727 | 4,530 | 7,849 |
| Completed surveys (n) | 1,181 | 285 | 1,984 | 3,450 |
| Overall response rate2 (%) | 45.6 | 39.2 | 43.8 | 44.0 |

1 Includes opt-outs and out-of-scope surveys.

2 For the purpose of the ESS, response rate is defined as completed surveys as a proportion of ‘in-scope supervisors’, where in-scope supervisors excludes unusable sample (e.g. no contact details), out-of-scope and opted-out. This definition of response rate differs from industry standards by treating certain non-contacts and refusals as being ineligible for the response rate calculation. See American Association for Public Opinion Research (2016) for standard definitions.

## Project milestones

Table 2 provides a summary of the key project milestones for each round in the 2021 ESS.

Table 2 Key project milestones

|  |  |  |  |
| --- | --- | --- | --- |
| Task | November 2020 | February 2021 | May 2021 |
| **Establishment** |  |  |  |
| Questionnaire development | 5-Oct-20 to  14-Oct-20 | 6-Dec-20 to  15-Dec-20 | 5-Apr-21 to  12-Apr-21 |
| **Sample** |  |  |  |
| Ongoing collection of contact details | 27-Oct-20 to  2-Jul-20 | 27-Jan-21 to  12-Jul-21 | 27-Apr-21 to  8-Aug-21 |
| **Fieldwork** |  |  |  |
| Start online fieldwork | 29-Oct-20 | 28-Jan-21 | 29-Apr-21 |
| Fieldwork closes1 | - | - | 13-Aug-21 |
| **Reporting** |  |  |  |
| Draft data and documentation to the department | - | - | 15-Oct-21 |
| Draft National Report to the department | - | - | 8-Nov-21 |
| Final data and documentation to the department | - | - | 8-Nov-21 |
| Institutional data files delivered | - | - | 15-Nov-21 |
| Final National Report to the department | - | - | 24-Nov-21 |
| Methodological Report to the department | - | - | 26-Nov-21 |

1 For employed graduates who completed the GOS in the November 2020 or February 2021 rounds, the supervisor could be enumerated up until 13 August 2021.

# Sample build

## Target population

The in-scope population for the 2021 ESS comprised supervisors of employed graduates who completed the 2021 GOS. Refer to the *2021 GOS Methodological Report* for a complete description of the GOS target population.

## Institutional participation

Graduates of 95 higher education institutions, including 41 universities and 54 NUHEIs, were in-scope to provide contact details for supervisors to participate in the 2021 ESS. Of these institutions, supervisors of graduates from 41 universities and 54 NUHEIs were included in the 2021 ESS sample. In all, supervisors responded with data for 41 universities and 51 NUHEIs. As such, the number of participating institutions in the 2021 ESS was lower than those reported as participating the 2021 GOS. In 2021, with the scope of the ESS extended, 5 non-HESA approved providers participated and are included in reporting as NUHEIs.

Refer to Appendix 1 for a list of institutions that had graduates provide valid contact details and supervisors complete the ESS.

## Sample preparation overview

The initial method for building the ESS sample took place at the end of the GOS, where employed graduates were presented with the ESS bridging module. Refer to Section 2.3.1 for further information on the function and outcomes of the ESS bridging module.

Due to low levels of agreement at the ESS bridging module, a range of additional sample workflows were implemented to maximise sample for the ESS. The process and scope of each additional sample workflow used to build the ESS sample are detailed in Section 2.4. A summary of contact details collected from each sample workflow is provided below in Table 3.

As can be seen, more than half (62.7 per cent) of all contact details were collected via the refusal conversion workflow. This was followed by the ESS bridging module (20.8 per cent) and GOS partial completers (13.6 per cent). These were supplemented by the survey invitation pack (1.7 per cent) and CATI follow up (1.2 per cent) workflows. Sample workflows other than the ESS bridging module accounted for nearly four-fifths (79.2 per cent) of contact details collected, emphasising the necessity of the additional sample build workflows. Overcoming the difficulties in collecting supervisor contact details from graduates at the end of the GOS is an issue of note for future collections (see Section 8).

Table 3 Contact details collected by sampling workflow

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample build workflow** | **November 2020 n** | **November 2020 %** | **February 2021 n** | **February 2021 %** | **May 2021n** | **May 2021 %** | **Total n** | **Total %** |
| **Total contact details collected** | **2,731** | **100.0** | **758** | **100.0** | **4,704** | **100.0** | **8,193** | **100.0** |
| ESS bridging module | 616 | 22.6 | 164 | 21.6 | 926 | 19.7 | 1,706 | 20.8 |
| Survey invitation pack | 48 | 1.8 | 15 | 2.0 | 75 | 1.6 | 138 | 1.7 |
| CATI follow up | 60 | 2.2 | 14 | 1.8 | 27 | 0.6 | 101 | 1.2 |
| Refusal conversion | 1,625 | 59.5 | 463 | 61.1 | 3,046 | 64.8 | 5,134 | 62.7 |
| GOS partial completers | 382 | 14.0 | 102 | 13.5 | 630 | 13.4 | 1114 | 13.6 |

### ESS bridging module

The ESS bridging module was presented to employed graduates at the end of the online GOS. This module described the purpose, importance and relevance of the survey and asked graduates if they would be willing to provide their supervisor’s contact details (name, business name, email address and/or phone number). In the ESS bridging module, graduates could choose to:

* Provide contact details.
* Speak with their supervisor before responding.
* Request further information about the ESS. This option presented the graduate with a set of frequently asked questions and answers. Graduates could request a call from an interviewer if they had a query, entering the graduate into the CATI follow up workflow.
* Request a survey invitation pack be sent by email. The survey invitation pack included the *ESS Brochure* and an ESS approach email for the graduate to forward to their supervisor. The approach email linked to an online form that allowed the supervisor to self-register for the ESS.
* Refuse to provide contact details.

In the 2021 ESS, to try overcome recent years’ response issues at the ESS bridging module, a customised script was developed for graduates who were working at least 30 hours per week and had been working for their employer less than two years. The customised script was designed to avert common concerns of graduates who had newly entered an organisation. Targeting of the customised script was based on employment characteristics of graduates reported in the GOS. Further customisation was included at the ESS bridging module to appeal to graduates who were in-scope for industry specific stakeholder items. A copy of the ESS bridging module for each round and CATI follow up scripts are provided in Appendix 2.

A summary of graduate response to the request for contact details within the ESS bridging module is shown in Table 4. As can be seen, only a small number of graduates indicated they would provide contact details (3.0 per cent). Results varied somewhat between rounds, with February having the highest level of agreement (3.8 per cent) and May the lowest (2.7 per cent). With the ongoing decline in graduate agreement from 2019 (8.1 per cent) and 2020 (4.0 per cent), improving the level of agreement achieved in the ESS bridging module remains a key consideration for the future of the ESS (see Section 8).

It should be noted that the collection of contact details, may have been impacted by the COVID-19 pandemic due to the general disruption caused to the broader labour market.

Table 4 Graduate response to the ESS bridging module

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Response to the ESS bridging module | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total graduates shown**  **ESS bridging module** | **22,867** |  | **5,459** |  | **46,755** |  | **75,081** |  |
| No response | 541 |  | 125 |  | 1,252 |  | 1,918 |  |
| **Total responses** | **22,326** | **100.0** | **5,334** | **100.0** | **45,503** | **100.0** | **73,163** | **100.0** |
| I will provide their details | 813 | 3.6 | 205 | 3.8 | 1209 | 2.7 | 2227 | 3.0 |
| I want to speak with my supervisor before providing their details | 1947 | 8.7 | 464 | 8.7 | 3673 | 8.1 | 6084 | 8.3 |
| I want more information about the Employer Satisfaction Survey | 227 | 1.0 | 62 | 1.2 | 360 | 0.8 | 649 | 0.9 |
| I do not wish to provide my supervisor’s details | 19,339 | 86.6 | 4,603 | 86.3 | 40,261 | 88.5 | 64,203 | 87.8 |

All graduates who responded ‘I do not wish to provide my supervisor’s details’ were asked the main reason for their refusal. As shown in Table 5, the three most common reason for refusal were concern that the supervisor was too busy (28.9 per cent), followed by the graduate’s job not being related to the study they did (15.5 per cent) and graduates having privacy concerns (13.1 per cent). To acknowledge the potential disruption to graduate employment caused by COVID-19, a refusal code ‘Supervisor not working / Business closed due to COVID-19’ was included in the November and February rounds and removed for the May round due to low usage (0.6 per cent in February, shown as part of ‘Other reasons’).

Table 5 Graduate reasons for refusal in the ESS bridging module

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Graduate reason for refusal** | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total refused** | **19,339** |  | **4,603** |  | **40,261** |  | **64,203** |  |
| No response | 734 |  | 163 |  | 1,543 |  | 2,440 |  |
| **Total responses** | **18,605** | **100.0** | **4,440** | **100.0** | **38,718** | **100.0** | **61,763** | **100.0** |
| My supervisor is busy and does  not have enough time | 5,054 | 26.8 | 1,410 | 31.8 | 11,375 | 29.4 | 17,839 | 28.9 |
| My job is not related to the study  I did | 3,218 | 17.1 | 670 | 15.1 | 5,700 | 14.7 | 9,588 | 15.5 |
| I have privacy concerns | 2,405 | 12.8 | 602 | 13.6 | 5,081 | 13.1 | 8,088 | 13.1 |
| I have not been in my job long  enough | 1,630 | 8.7 | 427 | 9.6 | 5,235 | 13.5 | 7,292 | 11.8 |
| My job is temporary only/casual  only | 2,513 | 13.3 | 413 | 9.3 | 4,265 | 11.0 | 7,191 | 11.6 |
| I do not have a direct supervisor | 1,825 | 9.7 | 450 | 10.1 | 3,818 | 9.9 | 6,093 | 9.9 |
| I do not know the contact details  of my supervisor | 388 | 2.1 | 80 | 1.8 | 819 | 2.1 | 1,287 | 2.1 |
| Other reasons | 1,572 | 8.3 | 388 | 8.7 | 2,425 | 6.3 | 4,385 | 7.1 |

### Sample build quality assurance

The data quality of each sample record was checked as it was collected and prior to the record being entered into the appropriate contact workflow (see Section 3.3).

To minimise data quality errors, the following validation processes were applied at the time of detail collection:

* validation of supervisor email addresses,
* checks on supervisor phone number, name and email address fields to ensure they did not match the graduate’s sample information, and
* checks on domestic phone numbers to ensure they were 10 digits and international phone numbers to ensure they were formatted with a country code.

### Sample cleaning

Before being built as the ESS sample, all contact details were passed through a manual review process to ensure a high data quality. Records could be accepted or rejected, with accepted records forming the ESS sample. The majority (98.6 per cent) of records were accepted, with a minority (1.4 per cent) rejected.

Light cleaning was undertaken throughout the manual review process to ensure optimal presentation of sample information throughout the survey.

The main components of sample record cleaning and manipulation were as follows:

* email cleaning, e.g. correct domain formats,
* phone cleaning, e.g. leading zeros,
* name cleaning, e.g. correct capitalisation and salutations, and
* business name cleaning, e.g. correct capitalisation.

### Sample quality issues

Quality issues identified during the sample build inform the ongoing development of future quality assurance processes. Sample quality issues from the telephone follow up workflows were monitored throughout fieldwork. Feedback was provided to call centre operators and training modules were updated each round as necessary to address common issues.

The most common data quality issues observed during the 2021 ESS sample build were as follows:

* incomplete contact information (e.g. missing supervisor name, business name, email or phone),
* graduate contact information being provided in place of supervisor contact information,
* academic supervisor contact details being provided instead of the requested work supervisor contact details,
* poor quality contact information (e.g. business name provided in place of the supervisor name),
* phone numbers with missing or invalid international dialling codes, and
* invalid email addresses due to erroneous domain names.

The quality checks applied to the collection of ESS sample could be revised to resolve or reduce these issues in future years of the ESS (see Section 8).

### Type of contact details

Table 6 provides a summary of the type of valid contact details provided by graduates for the 2021 ESS.

The collection of both an email and a phone number allowed supervisors to be approached through both online and CATI workflows (see Section 3.3) and was an important component of maximising response to the ESS. The collection of both an email and phone number were a focus of call centre operator training for the CATI follow up (the briefing slides used for training are provided in Appendix 3). Collection of both a valid email and phone number in 2021 increased slightly (to 48.4 per cent) from 2020 (47.4 per cent).

Table 6 Type of contact details collected

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of contact details collected** | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total valid contact details** | **2,731** | **100.0** | **758** | **100.0** | **4,704** | **100.0** | **8,193** | **100.0** |
| Valid email only | 1,210 | 44.3 | 336 | 44.3 | 2,047 | 43.5 | 3,593 | 43.9 |
| Valid phone number only | 241 | 8.8 | 38 | 5.0 | 353 | 7.5 | 632 | 7.7 |
| Valid email and phone number | 1,280 | 46.9 | 384 | 50.7 | 2,304 | 49.0 | 3,968 | 48.4 |

## Additional sample workflows

To further build the ESS sample base and maximise response, several additional sample workflows were used to supplement 2021 ESS sample build. Graduates were eligible for additional sample workflows in the following circumstances:

* requested an email containing the survey invitation pack and had not provided contact details (see Section 2.4.1),
* requested to be called before providing contact details (see Section 2.4.2),
* did not provide a response at the ESS bridging module (see Section 2.4.3),
* provided a refusal reason at the ESS bridging module that was suitable for a refusal conversion attempt (see Section 2.4.4),
* were an employed graduate who had only partially completed the GOS and had not been approached for the ESS (see Section 2.4.5), or
* provided contact details that were unusable, or a repeat non-contact when approached through the ESS online workflow (‘ESS boost’, see Section 2.4.6).

### Survey invitation pack

The ESS bridging module included an option for graduates to request an email containing a survey invitation pack. The survey invitation pack contained a link to the *ESS Brochure* and an ESS approach email that the graduate could forward onto their supervisor. The approach email contained a unique link to an online form where the supervisor could self-register for the ESS by providing their own contact details.

This workflow provided alternative method of collecting contact details for graduates that preferred to give the option of registering for the ESS directly to their supervisor. The survey invitation pack was offered to graduates through a variety of pathways within the ESS bridging module. CATI follow up with graduates who requested the survey invitation pack, but whose supervisor had not registered, was conducted as part of the refusal conversion workflow (see Section 2.4.4).

Example copies of the *ESS Brochure* and survey invitation pack email are provided in Appendix 4. The script for the online registration form and refusal aversion scripting is included in Appendix 5.

Outcomes of requests for the survey invitation pack are shown in Table 7. The proportion of supervisors that self-registered contact details after graduates were sent the survey invitation pack was low (2.6 per cent). This could be due to graduates not forwarding the survey invitation pack onto their supervisor, and so additional engagement with graduates who request the survey invitation pack could be considered in future collections (see Section 8).

Table 7 Survey invitation pack outcomes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Requested survey invitation pack** | **1,735** | **100.0** | **411** | **100.0** | **3,227** | **100.0** | **5,373** | **100.0** |
| Supervisor self-registered valid  contact details | 48 | 2.8 | 15 | 3.6 | 75 | 2.3 | 138 | 2.6 |

### Requested CATI follow up

CATI follow up was conducted with graduates who requested contact, after responding with ‘*I want more information about the Employer Satisfaction Survey*’ at the ESS bridging module. This workflow allowed interviewers to offer personalised reassurance regarding graduate concerns about the ESS and attempt to collect contact details. Graduates who refused to provide contact details during CATI follow up were read a short, tailored script to try and avert the refusal (Appendix 2 contains a copy of the CATI follow up script). A short call cycle of up to four calls was used for the CATI follow up.

As can be seen at Table 8, fewer than one-in-five (17.2 per cent) graduates who requested contact went on to provide valid contact details during the follow up phone call. Note that the base size for graduates requesting CATI follow up is small and the ongoing inclusion of this workflow should be reviewed ahead of the 2022 ESS (see Section 8).

Table 8 Requested CATI follow up outcomes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total graduates approached** | **33** | **100.0** | **<5** | **100.0** | **27** | **100.0** | **64** | **100.0** |
| Graduate provided valid contact  details | 6 | 18.2 | <5 | 25.0 | <5 | 14.8 | 11 | 17.2 |

### ESS bridging module non-response follow up

The ESS bridging module non-response follow up workflow was conducted with graduates who reached the ESS bridging module but stopped the survey without completing.

The non-response follow up was conducted via both email and CATI. Graduates were sent up to two reminder emails prompting completion of the ESS bridging module. The initial reminder email was sent one day after the survey was stopped and the second email was sent following a further three-day delay. If the graduate had a phone number available, they were subsequently entered into the CATI follow up workflow (described in Section 2.4.2) after an additional four days.

Outcomes of the non-response follow up are shown in Table 9. The workflow yielded the best collection of contact details in the November round (22.4 per cent) followed by February (21.4 per cent). A lower yield was achieved in May (9.1 per cent), although it is possible this workflow was impacted during the May round by increased economic disruption caused by COVID-19.

Table 9 ESS bridging module non-response follow up outcomes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total graduates approached** | **312** | **100.0** | **70** | **100.0** | **540** | **100.0** | **922** | **100.0** |
| Graduate provided valid  contact details | 70 | 22.4 | 15 | 21.4 | 49 | 9.1 | 134 | 14.5 |

### Refusal conversion

To try and further increase the ESS sample base, a refusal conversion workflow was conducted using CATI. Only graduates with a phone number in the GOS sample were eligible for selection. Refusal reasons from the ESS bridging module were chosen for conversion based on their level of suitability, with some reasons deemed not suitable (e.g. ‘I don’t have a direct supervisor’). Sample was selected from the following six refusal reasons:

* my job is temporary only / casual only,
* my supervisor is busy and does not have enough time,
* my job is not related to the study I did,
* I have privacy concerns,
* I have not been in my job long enough, and
* supervisor not working / business closed due to COVID-19 (November and February rounds only).

To reduce any potential burden placed on graduates, where applicable, only graduates who consented to recontact after refusing were selected for the refusal conversion workflow. The consent to recontact scripts are detailed in Appendix 2. To improve operational productivity, refusal conversion follow up was then prioritised towards the refusal reasons that were easiest to convert (e.g. ‘I have not been in my job long enough’) and graduates who met the criteria for the ESS bridging module customisation (see Section 2.3.1).

The delay between refusal and CATI follow up was dependent on operational needs, the nature of the refusal and strategies to maximise response. The refusal conversion script was customised to address common concerns associated with each refusal reason (see Appendix 5). Interviewer training for refusal conversion emphasised identifying and responding to the graduate’s personal concerns, rather than strict adherence to a predefined script. No more than four calls were placed to graduates to attempt to make contact and collect contact details.

The goal of this workflow was for interviewers to collect contact details directly from the graduate. However, interviewers also had the option of sending a survey invitation pack to the graduate’s email, allowing supervisor self-registration. The survey invitation pack was offered only as a final refusal aversion technique. Non-response follow up to requests for the survey invitation pack was also conducted as part of the refusal conversion workflow.

Refusal conversion was the largest of the additional sample workflows undertaken as part of the 2021 ESS. Outcomes from refusal conversion are listed in Table 10. The revised sample selection protocol and improved training for the refusal conversion workflow contributed to an improvement in the collection of contact details in 2021 (16.5 per cent) in comparison to 2020 (11.4 per cent).

The proportion of graduates that provided valid contact details was similar in November (18.0 per cent) and February (18.1 per cent). The shorter fieldwork period for the collection of contact details in May (see Section 1.5) may have contributed to the lower rate of contact details provided (16.5 per cent). It is also possible that disruption caused by the COVID-19 pandemic influenced graduate response during the May round.

Table 10 Refusal conversion outcomes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total graduates approached** | **9,020** | **100.0** | **2,564** | **100.0** | **19,536** | **100.0** | **31,120** | **100.0** |
| Valid contact details collected  from refusal conversion1 | 1,625 | 18.0 | 463 | 18.1 | 3,046 | 15.6 | 5,134 | 16.5 |

1 Includes contact details provided by graduates via refusal conversion telephone follow up, and supervisor self-registration as a result of a survey invitation pack sent from the refusal conversion workflow.

### GOS partial completers

To further increase the ESS sample base, CATI follow up was conducted with a select group of graduates who only partially completed the GOS (‘GOS partial completers’). Employed graduates were selected for this workflow if they had completed enough of the GOS to be eligible for national reporting but did not complete enough of the GOS to reach the ESS bridging module. Graduates were also required to have a phone number in the GOS sample to be selected.

The GOS partial completers workflow was conducted after the end of fieldwork for each round of the GOS, and CATI follow up aligned with processes described in Section 2.4.2. The introduction of the CATI follow up script was customised for GOS partial completers and is included in Appendix 2.

Table 11 shows that near one-in-ten (9.9 per cent) graduates contacted for the GOS partial completers workflow provided valid contact details. As the yield from this workflow is lower than refusal conversion (see Section 2.4.4), follow up with GOS partial completers could be given lower operational priority in the overall sample workflow strategy in future years (see Section 8).

Table 11 GOS partial completers outcomes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total graduates approached** | **4,155** | **100.0** | **985** | **100.0** | **6,054** | **100.0** | **11,194** | **100.0** |
| Graduate provided valid contact  details | 381 | 9.2 | 102 | 10.4 | 629 | 10.4 | 1,112 | 9.9 |

### ESS boost

A CATI follow up workflow referred to as the ESS boost was implemented to recover ESS sample that had an unusable outcome (disconnected phone number or permanent failure to deliver email) or sample that was a repeat non-contact through the ESS online workflow. Records with contact details collected directly from supervisors (see Section 2.4.1) were not eligible for the ESS boost workflow and only records where the graduate had a phone number in the GOS sample were selected.

A short call cycle of up to three phone calls was employed for the ESS boost. Graduates were asked by interviewers to confirm if the original contact details provided were correct. Existing contact details could be confirmed or removed, and new details provided. In circumstances where new or updated information was provided, the contact protocol for the ESS record was reset and the record was entered anew into the appropriate online or CATI workflow (refer to Section 3.3). If no new contact information for a record was obtained, no adjustment was made to the ESS contact protocol.

Table 12 displays the outcomes of the ESS boost workflow. In total one-quarter of graduates contacted confirmed the original contact details provided (25.9 per cent) and more than one-fifth provided new contact details (21.4 per cent). Only one-in-ten (10.6 per cent) graduates provided new contact details in the May round, this difference is likely due to the shorter fieldwork period allowed in May (see Section 1.5). This should be noted as an ongoing operational consideration for the ESS boost workflow (see Section 8).

Table 12 ESS boost outcomes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total graduates approached** | **542** | **100.0** | **159** | **100.0** | **559** | **100.0** | **1,260** | **100.0** |
| Confirmed original contact details | 102 | 18.8 | 28 | 17.6 | 234 | 41.9 | 270 | 21.4 |
| Provided new contact details | 136 | 25.1 | 37 | 23.3 | 59 | 10.6 | 326 | 25.9 |

# Survey design and procedures

## Institutional engagement

To build institutional engagement with the ESS, the Social Research Centre employed a strategy based on the principles of stakeholder need, transparency, knowledge sharing, and responsiveness. The Social Research Centre’s institutional engagement strategy for the 2021 ESS is described in this section and included:

* planning resources such as the QILT key dates calendar and the GOS Collection and Sample Guide,
* webinars and newsletters, and
* an ongoing dialog with survey managers to build rapport.

### Planning resources

The Social Research Centre provided planning resources to participating institutions to support the ease of institution participation, allow forward planning of institution resources and ensure project milestones were delivered to schedule.

The *QILT Key Dates Calendar*, accessible via the QILT provider portal, contained an overview of the 2021 ESS project milestones (refer to Section 1.5), along with timelines for the entire QILT suite of surveys. The calendar was kept up to date year-round with any project schedule adjustments.

While an ESS collection guide was not provided, the GOS *Collection and Sample Guide* provided institutions with a brief overview of the ESS. The guide introduced the ESS by describing how graduate participation in the GOS leads to the ESS sample build, and it outlined a plan for institutions to raise awareness of the ESS with their graduates.

### Webinars and newsletters

As part of the institutional engagement strategy, a series of webinars and newsletters was provided to institutions throughout the 2021 ESS collection cycle. Newsletters were sent monthly covering information related to key QILT survey milestones, acting as a regular point of contact with institution contacts who subscribed.

A series of webinars was presented for institutions on a near monthly basis. Webinar topics were designed to guide institutions through key stages of the survey administration process and to share technical and methodological insights. To ensure continued engagement with the webinar series, institutions were consulted to inform topics of interest for future sessions. Webinars relating directly to the ESS during the 2021 collection covered topics such as fieldwork milestones, survey methodology, challenges related to the sample build, how institutions can support the ESS, and discussion of the *2020 ESS National Report* results.

### Ongoing dialogue with institutions

An open dialogue with survey managers was maintained throughout the 2021 ESS collection cycle to build rapport, offer support, discuss fieldwork performance and better understand key issues that could impact the ESS (such as resourcing difficulties experienced by institutions during the COVID-19 pandemic).

## Graduate and supervisor engagement

An *ESS Brochure* was made available to graduates and supervisors as part of engagement materials and upon request. The *ESS Brochure* was presented in a question and answer format and covered topics relevant to supervisor participation. These topics included the benefits of participation, what is required of supervisors to participate and the privacy provisions of the research. A copy of the *ESS Brochure* is included in Appendix 4.

The GOS *Marketing Pack* was available to participating institutions on the QILT website provider portal. While the primary purpose of this pack was to help institutions increase graduate engagement and support the institutional administration of the GOS, the included approach letter and email templates encouraged graduates to nominate their supervisor for the ESS. All correspondence provided the ESS or QILT email address and phone number for the purpose of contacting the Social Research Centre if there were any queries.

An ESS website ([www.qilt.edu.au/ess](http://www.qilt.edu.au/ess)) was also made available and included links to the *ESS Brochure*, as well as previous years' ESS results and reports. A redesign of the QILT website was launched in July 2021 and will facilitate improved engagement with graduates, supervisors and industry in future years (see Section 8).

## Contact protocol

Dual methodologies were utilised in the 2021 ESS with online and CATI workflows established to support supervisor participation. Supervisors with a valid email address were entered into the online workflow consisting of an invitation email followed by up to five reminders. This was the primary workflow on the basis that supervisors would prefer to receive information about the ESS in writing, and that they would prefer the opportunity to self-complete in their own time. Records with only a valid phone number (i.e. no email address), were entered into the CATI workflow. Records with both a valid email address and phone number were initially entered into the online workflow.

The initial delay between contact details being provided and the supervisor being approached allowed graduates time to make their supervisors aware of the ESS before an invitation was received. A series of increasing delays was employed for each subsequent email, utilising the long fieldwork period to maximise response. To accommodate the shorter fieldwork period in the May round (see Section 1.5), an accelerated contact protocol was applied in the final months of fieldwork.

A new email (Reminder 4) was introduced to the contact protocol for the 2021 ESS to prompt engagement from supervisors who may have been on leave or busy with seasonal work commitments during previous contact attempts.

Records in the online workflow were transferred to the CATI workflow if they had a valid phone number and the supervisor did not respond to the survey within twelve days of the invitation email being sent, or the email address hard bounced.

Except for when the email address hard bounced, supervisors continued to receive email reminders when transferred from the online to CATI workflow. Supervisors in the CATI workflow had the option of completing the survey via CATI or online. If a supervisor requested to complete the survey online at the time of the call, their preferred email address was collected and an email with a link to complete the survey was sent immediately following the call. Supervisors choosing this option remained in the CATI workflow and if the supervisor had not responded to the survey within seven days, further CATI follow up was conducted.

It is important to note that all contact was ceased to supervisors who had completed the survey, been disqualified from participating (i.e. screened out because they were not eligible) or otherwise opted-out. The contact protocol was adjusted as required to meet operational needs. For example, the email schedule was paused during the end of year holiday period, and if contact details were collected in the final month of fieldwork a reduced email reminder schedule was employed.

### Email invitation and reminders

The email invitation was sent to all supervisors with valid email addresses to advise of their selection in the ESS, present the survey objectives, outline privacy provisions, and communicate the value of participation. All emails included a unique link that took supervisors directly into their survey and referred to the Social Research Centre and QILT webpages for further information. An unsubscribe link was included in the footer of each email if supervisors no longer wanted to receive correspondence.

The general objective of the email plan was to appeal to a diverse audience and so the theme, length and tone of each email varied. All emails featured text customised to the supervisor and the content differed throughout the reminder program. For example, a sense of urgency was created by appealing to survey closure in Reminder 5. The design intent of each email communication is listed in Table 13.

Table 13 2021 ESS message intent

|  |  |
| --- | --- |
| **Activity** | Message intent |
| Invitation | Build ESS awareness and invitation to participate. |
| Reminder 1 | Express importance and value of participation, incentivise via sharing of research findings. |
| Reminder 2 | Appeal to help improve Australian higher education, succinct reminder. |
| Reminder 3 | The Australian Government still needs your feedback. |
| Reminder 4 | Acknowledgement that you may be busy. Importance of sharing your perspective as a supervisor. |
| Reminder 5 | Final chance to complete, inform that this is the final email for the 2021 ESS. |

A customisation to the Invitation email was made for sample that qualified for one set of stakeholder items (see Section 4.4.2). The customisation was written to appeal to, and add legitimacy for, supervisors working within a specific industry.

To minimise the risk of complaints due to engagement fatigue, emphasis was placed on the unsubscribe mechanism for Reminder 3 and Reminder 4. A sentence acknowledging the potential disruption caused to businesses by COVID-19 was included in emails during fieldwork periods when lockdown restrictions were prominent.

A copy of the email invitation and all reminders from the May round is provided at Appendix 6.

### Email send outcomes

Opt-outs were less than one per cent at each email, suggesting the nature of the survey and the timing of sends were not a concern for supervisors.

Table 14 provides a breakdown of email send outcomes by standard contact activity for each round in the 2021 ESS collection cycle.

As can be seen, the email invitation open rate was highest in May (44.7 per cent), followed by November (44.0 per cent) then February (42.6 per cent). However, supervisor engagement (‘Clicked on link as a per cent of opened’) with the invitation was highest in February (52.8 per cent) in comparison to May (51.8 per cent) and November (48.6 per cent). It should be noted that the sample size for February is quite small relative to the November and May rounds and this should be considered when interpreting results.

Reminder 2 had the lowest open rate and supervisor engagement in each round. The deliverability and design of Reminder 2 should be reviewed for the 2022 ESS. Supervisor engagement with Reminder 4 was highest in May (37.1 per cent) and lowest in November (29.5 per cent) suggesting this email may perform better if sent with less of a delay to supervisors. Reminder 5 achieved a high level of supervisor engagement in all rounds and should be considered as an addition to the contact protocol in future years (see Section 8). The proportion of hard bounced records across all rounds was relatively low, except for the invitation sends in each round which was highest in February (11.7 per cent). This high initial bounce rate suggests collection and verification of email addresses could be further improved. Opt-outs were less than one per cent at each email, suggesting the nature of the survey and the timing of sends were not a concern for supervisors.

Table 14 Email send outcomes by round of activity

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Invite | R1 | R2 | R3 | R4 | R5 |
| **November 2020** |  |  |  |  |  |  |
| Total sent (n) | 2,489 | 1,998 | 1,787 | 1,487 | 1,258 | 1,173 |
| Opened (%) | 44.0 | 41.2 | 28.5 | 36.5 | 32.6 | 35.0 |
| *Clicked on link (%)* | *21.4* | *17.1* | *6.9* | *15.3* | *9.6* | *16.5* |
| *Opt-out from link (%)* | *0.6* | *0.8* | *0.7* | *0.7* | *0.9* | *0.1* |
| *Opened email (%)* | *22.0* | *23.3* | *20.9* | *20.4* | *22.1* | *18.4* |
| Unopened (%) | 44.8 | 56.8 | 69.3 | 61.3 | 64.0 | 62.4 |
| Soft bounce (%) | 1.3 | 1.8 | 1.8 | 2.1 | 2.4 | 2.0 |
| Hard bounce (%) | 10.0 | 0.2 | 0.3 | 0.1 | 1.0 | 0.7 |
| *Clicked on link as % opened* | *48.6* | *41.5* | *24.3* | *42.0* | *29.5* | *47.1* |
| **February 2021** |  |  |  |  |  |  |
| Total sent (n) | 720 | 577 | 514 | 443 | 264 | 379 |
| Opened (%) | 42.6 | 41.4 | 28.0 | 40.2 | 32.6 | 37.5 |
| *Clicked on link (%)* | *22.5* | *21.0* | *6.6* | *17.2* | *10.2* | *18.7* |
| *Opt-out from link (%)* | *0.8* | *0.9* | *0.4* | *0.7* | *0.4* | *0.0* |
| *Opened email (%)* | *19.3* | *19.6* | *21.0* | *22.3* | *22.0* | *18.7* |
| Unopened (%) | 43.8 | 55.6 | 68.5 | 55.5 | 65.2 | 57.8 |
| Soft bounce (%) | 1.9 | 2.8 | 3.5 | 4.1 | 2.3 | 4.5 |
| Hard bounce (%) | 11.7 | 0.2 | 0.0 | 0.2 | 0.0 | 0.3 |
| *Clicked on link as % opened* | *52.8* | *50.6* | *23.6* | *42.7* | *31.4* | *50.0* |
| **May 2021** |  |  |  |  |  |  |
| Total sent (n) | 4,324 | 7,533 | 3,514 | 3,124 | 420 | 2,324 |
| Opened (%) | 44.7 | 19.5 | 24.9 | 31.6 | 33.3 | 35.8 |
| *Clicked on link (%)* | *23.1* | *9.8* | *6.9* | *14.7* | *12.4* | *18.6* |
| *Opt-out from link (%)* | *0.5* | *0.2* | *0.6* | *0.6* | *0.0* | *0.4* |
| *Opened email (%)* | *21.0* | *9.5* | *17.4* | *16.3* | *21.0* | *16.8* |
| Unopened (%) | 45.7 | 79.5 | 73.1 | 66.7 | 64.3 | 62.2 |
| Soft bounce (%) | 1.0 | 0.7 | 1.9 | 1.6 | 2.1 | 1.9 |
| Hard bounce (%) | 8.6 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 |
| *Clicked on link as % opened* | *51.8* | *50.1* | *27.7* | *46.6* | *37.1* | *51.9* |

### CATI workflow protocols

Call procedures for supervisors entering the CATI workflow directly (that is, where no email address was provided by the graduate) or after being transferred from the online workflow were as follows:

* Call attempts placed over different days of the working week and times of day. Up to eight call attempts were made in cases where contact had been made, with a maximum of six when contact was not made. Additional calls beyond these limits were allowed only by appointment request.
* Placing a second call attempt to ‘fax / modem’ and ‘number disconnected’ outcomes (given that there are occasionally issues with internet connections and problems at the exchange).
* The option of sending supervisors an email with their unique survey link if supervisors preferred to complete online, rather than complete a phone interview.

Nearly half of the surveys completed in the CATI workflow (49.3 per cent) occurred within the first two call attempts. However, almost a fifth of the CATI workflow surveys completed (19.6 per cent) required five or more calls to the supervisor, indicating the ongoing requirement for an extended call regime when approaching supervisors to participate in the ESS.

### Fieldwork briefing

Call centre operators selected to work on the 2021 ESS attended a briefing session delivered by the Social Research Centre project management team. Briefings were conducted each round prior to the commencement of sample build workflows and ESS interviewing. Additional briefings were conducted throughout fieldwork as required to meet operational needs. The briefings covered:

* an overview of the ESS and QILT,
* privacy and confidentiality policy,
* survey procedures for each workflow, and
* fieldwork timelines.

Each briefing session was followed by a run through of the survey script and a training module delivered by the operations team. The training module focused on building skills for respondent liaison and respondent engagement. It made use of interactive learning, utilising call recordings and role-play exercises to tailor response maximisation skills to the ESS. The briefing slides are provided at Appendix 3.

### Quality control

In field quality monitoring techniques applied to the sample building and CATI workflow components of this project included:

* Listening-in validations conducted in accordance with existing ISO 20252 procedures.
* Monitoring (listening in) by the Social Research Centre project manager and supervisory staff.
* Field team de-briefing after the first shift, and thereafter, whenever there was important information to impart to the field team in relation to data quality, consistency of reminder call administration, or project performance.
* Maintenance of an ‘field team handout’ document detailing project performance metrics, graduate liaison techniques and data quality requirements.
* Maintenance of a wiki with answers to common graduate and supervisor queries.

Quality assurance and applicable standards are discussed further at Section 3.4.5.

### Email deliverability testing

For the 2021 ESS email deliverability testing processes were improved with the goal of maximising supervisor email engagement by ensuring that all emails avoided delivery to a spam or junk folder. Further, testing was conducted to optimise emails for deliverability to primary inboxes (e.g. ‘primary’ tab in Gmail, ‘focused’ inbox in Outlook).

Actions taken and products used to optimise email deliverability included:

* a dedicated Internet Protocol (IP) address range used only by the Social Research Centre for bulk email delivery. The reputation of this range was maintained year-round to keep the IP addresses ‘warm’. The dedicated range eliminated risks associated with bulk mailing from a shared IP pool (as was used during the 2020 ESS),
* during sample cleaning email addresses were validated to reduce bounce rates, thereby minimising the degradation of IP reputation,
* ongoing maintenance of technical services and policies to meet sender best practice,
* optimisation of all images, hyperlinks and HTML code used in emails to meet deliverability best practices,
* pre-field testing of emails across a broad range of mail clients, devices and providers to confirm and optimise compatibility, display and delivery, and
* in field tracking of email deliverability using analytics tools.

## Data collection

### Data collection workflows

The ESS utilised a dual mode methodology, with data collected through both online and CATI workflows to maximise response. A reporting module was developed for live monitoring of response (refer to Section 3.4.6).

Table 15 shows the proportion of supervisors allocated to the online and CATI workflows. As can be seen, the majority (92.3 per cent) of supervisor records were initially assigned to the online workflow, with a minority (7.7 per cent) initially assigned to the CATI workflow due to only providing a phone number.

Table 15 Workflow allocation

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total supervisors approached** | **2,731** | **100.0** | **758** | **100.0** | **4,704** | **100.0** | **8,193** | **100.0** |
| **Total assigned to online workflow** | **2,490** | **91.2** | **720** | **95.0** | **4,351** | **92.5** | **7,561** | **92.3** |
| Email only provided | 1,210 | 44.3 | 336 | 44.3 | 2,047 | 43.5 | 3,593 | 43.9 |
| Email and phone provided | 1,280 | 46.9 | 384 | 50.7 | 2,304 | 49.0 | 3,968 | 48.4 |
| **Total assigned to CATI workflow** | **1,339** | **49.0** | **357** | **47.1** | **2,189** | **46.5** | **3,885** | **47.4** |
| Phone only provided | 241 | 8.8 | 38 | 5.0 | 353 | 7.5 | 632 | 7.7 |
| Changed from online workflow | 1,098 | 40.2 | 319 | 42.1 | 1,836 | 39.0 | 3,253 | 39.7 |

Table 16 shows the number and proportion of supervisor records changing workflow because of a ‘hard bounce’ outcome, or non-response to the online survey invitation and reminders. In the 2021 ESS, approximately four-fifths (82.0 per cent) of supervisors changed from the online to CATI workflow, a slight increase from 2020 (78.6 per cent). This increase in the change of workflow could be due to reduced engagement with the Invitation and Reminder 1 emails (see Section 3.3.2).

Table 16 Changed workflow

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Eligible for workflow change1** | **1,280** | **100.0** | **384** | **100.0** | **2,304** | **100.0** | **3,968** | **100.0** |
| **Total changed workflow2** | **1,098** | **85.8** | **319** | **83.1** | **1,836** | **79.7** | **3,253** | **82.0** |
| Hard bounce | 122 | 9.5 | 40 | 10.4 | 188 | 8.2 | 350 | 8.8 |
| Online non-response | 976 | 76.3 | 279 | 72.7 | 1,648 | 71.5 | 2,903 | 73.2 |
| **Total unchanged workflow**3 | **182** | **14.2** | **65** | **16.9** | **468** | **20.3** | **715** | **18.0** |

1 Only records with an email and phone provided were eligible for workflow change.

2 Hard bounce and Online non-response added to CATI workflow.

3 Total unchanged workflow are those who had completed, screened out or unsubscribed prior to trigger for changing workflow.

### Online survey

The online survey could be accessed by clicking on the link in the email invitation or email reminders (refer to Appendix 6). Clicking from the email invitation or email reminder would go directly to the beginning of the survey. Unlike the SES and GOS, due to the limited ESS sample frame, there was no option to start the survey via the QILT website.

Online survey presentation was informed by accessibility guidelines and other relevant resources, with standard features including:

* optimisation for small screen devices (see Appendix 7),
* consistent presentation and placement of “Next” and “Previous” buttons,
* input controls and internal logic/validation checks,
* tailoring error messages as appropriate,
* splitting long statement batteries over several screens to reduce the number of items that require vertical scrolling on a desktop,
* sizing the panels for free text responses commensurate with the level of detail required in the response,
* automatically ‘saving’ with progression to the next screen, and
* the capacity to save and return to finish off at another time, resuming at the last question viewed.

The survey look and feel was customised to be consistent with QILT branding guidelines, including the use of the ESS logo and colour scheme. This ensured consistency with the look of the email invitation, reminders and *ESS Brochure*. A copy of the questionnaire for the 2021 ESS is included in Appendix 8 and screen shots of the online survey are provided in Appendix 9.

### CATI survey

The CATI survey was administered in an identical format to the online ESS noting some modifications to facilitate CATI data capture. Interviewers had an interfacing script at the start and finish of the online survey which allowed categorisation of call outcomes. Once agreement to complete the survey by phone was established, the interviewers conducted the survey and recorded responses using web browser based CATI software. Consistent with the online survey, the non-mandatory nature of the ESS questionnaire items allowed for responses to items to be skipped by the interviewer if requested by the supervisor.

### Survey testing

Standard operational checks of the online survey were conducted pre-fieldwork to ensure implementation aligned with the intended questionnaire design. In addition to these standard checks, institutions and stakeholders with new or revised additional questionnaire items (refer to Section 4.4) were sent a test links to review.

The survey was launched with a small component of the total population and surveys completed on the day of launch were checked for correct base sizes to ensure sequencing was functioning as intended. No issues were identified, and the survey fieldwork proceeded. Data was again reviewed to ensure the integrity of small base items once a larger number of surveys had been completed.

### Quality assurance and applicable standards

All aspects of the ESS were undertaken in accordance with the Privacy Act (1988) and the Australian Privacy Principles contained therein, the Privacy (Market and Social Research) Code 2014 (superseded on 22 March 2021 by the Privacy (Market and Social Research) Code 2021), the Research Society’s Code of Professional Behaviour, and ISO 20252 standards. All senior QILT staff are full members of the Research Society or maintain professional membership relevant to their role and the Social Research Centre is also a member of the Australian Data and Insights Association (ADIA, formerly Association of Market and Social Research Organisations). All sensitive or personally identifiable information such as sample and data were transferred using the QILT secure file exchange.

### Progress reporting and live online reporting module

The department was provided with email updates covering survey launches, fieldwork milestones and response rate progress. The department was also provided with access to a bespoke ‘live’ online reporting module which provided an overview of supervisor detail collection rates for each institution and the total participation rates for all institutions. Results were provided in real time and included the number of in-scope graduates who agreed to provide contact details, the total contact details collected and participation rates of supervisors (including partial completes, out-of-scopes and opt-outs).

## Supervisor and graduate support

The Social Research Centre maintained an ESS helpdesk to provide supervisors and graduates an avenue to establish contact with the ESS team. The helpdesk featured a 1800 number and an ESS inbox. The 1800 number was also available to internationally (with an international dialling code) and remained operational for the duration of the overall fieldwork period. The helpdesk was staffed seven days a week during call centre operational hours and all calls outside these hours were routed to a voicemail service. Queries to the helpdesk were responded to within one business day. A QILT inbox was also maintained year-round, managed by the QILT administration team and staffed during business hours.

The ESS helpdesk team was briefed on the ESS background, procedures and questionnaire to enabling them to answer a wide range of queries. To further support the helpdesk, a database was made available to the team to enable them to look up graduate and supervisor information and survey links, as well as providing a method for logging all contacts. All opt-outs and out-of-scopes received via the helpdesk were removed from the in-scope sample to cease further contact.

A summary of enquires to the ESS helpdesk is provided at Table 17. Survey queries were the most common type of query (71.5 per cent), these included queries about the survey content ESS and technical support for the online survey. The next most common queries included requests to opt-out of the research and requests for general information (e.g. queries for information about QILT or the Social Research Centre). There was an increase in contact to the ESS helpdesk in 2021 in comparison to 2020, which may have been driven by an increased reliance on the refusal conversion telephone follow up with graduates for the sample build.

Table 17 Enquiries to the ESS helpdesk overall

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Type of enquiry** | 1800 number n | 1800 number % | ESS Inbox n | ESS Inbox % | Total n | Total % |
| **Total** | **399** | **100.0** | **186** | **100.0** | **585** | **100.0** |
| Survey query | 322 | 80.7 | 96 | 51.6 | 418 | 71.5 |
| Opt-out | 52 | 13.0 | 27 | 14.5 | 79 | 13.5 |
| General query | 10 | 2.5 | 23 | 12.4 | 33 | 5.6 |
| Change of contact details | 8 | 2.0 | 20 | 10.8 | 28 | 4.8 |
| Out-of-scope | 5 | 1.3 | 8 | 4.3 | 13 | 2.2 |
| Other query | <5 | 0.3 | 8 | 4.3 | 9 | 1.5 |
| Deletion or removal request | <5 | 0.3 | <5 | 1.1 | <5 | 0.5 |
| Follow up call | 0 | 0.0 | <5 | 1.1 | <5 | 0.3 |

# Questionnaire

## Development

The 2021 Employer Satisfaction Questionnaire (ESQ) was based on the 2020 instrument, with standard operational updates made to align the questionnaire with current reference periods.

For the 2021 GOS, at the request of the QILT Working Group, the Graduate Attributes Scale – Graduate (GAS-G) were removed from the core GOS questionnaire. However, the Graduate Attributes Scale – Employer (GAS-E) was retained for the 2021 ESS. Only minor changes were made to the ESQ for the 2021 ESS, refer to Section 4.3 for a summary.

In addition to the core questionnaire changes, institutions were able to add, modify or remove their additional items for each round. Institutions were also given the option of including stakeholder items for the full ESS year (refer to Section 4.4).

## Overview

Table 18 outlines the thematic areas of the five main modules in the questionnaire. The design of the ESS instrument was modular, with items essential to response analysis (Module B) positioned early in the questionnaire and core item modules positioned before additional items (Mobile E). Items related to future contact (i.e. for notification of survey results publication) were delivered in the closing module. A copy of the generic survey instrument (i.e. excluding any additional items) is included at Appendix 8 with screen shots of the online survey at Appendix 9.

Table 18 ESS module themes

|  |  |
| --- | --- |
| **Module** | Themes |
| **Module A** | Introduction and screening |
| **Module B** | Overall graduate preparation |
| **Module C** | GAS-E |
| **Module E** | Additional items (institution and stakeholder specific) |
| **Module F** | Close |

Note: The GAS-E measures the extent to which supervisors agreed the graduate was prepared for employment across each of the GAS-E domains.

## Changes from 2020

The main changes to the core questionnaire from the 2020 ESS for the November round are outlined below:

* Updated year references throughout the questionnaire.
* Added interviewer instruction to CATI script encouraging item level refusal aversion at the items *EQUALIMP* (importance of graduate’s qualification) and *ECRSPREP (*overall preparation*)*.
* Minor text revision to CATI closing script.

No further changes were made to the core questionnaire for the 2021 ESS.

## Additional items

### Institution items

In keeping with QILT survey processes, institutions were able to add institution specific items to the ESS. One university opted to include institution specific items in the 2021 ESS. Content covered by the institution specific items related to net promoter score. Currently, institution specific items do not fall under any data sharing arrangements and are therefore only included in the respective institution data file.

### Stakeholder items

The Optometry Council of Australia and New Zealand (OCANZ) included items in the 2021 ESS. Graduates from five institutions were in-scope to be asked OCANZ items related to the work preparedness of optometry graduates.

# Data processing

## Definition of the analytic unit

The analytic unit for the ESS is the course or major. The ESS data file contains one record for each of the graduate’s courses or majors to a maximum of two. Supervisors appear twice in the file if the graduate they supervised either completed a single degree with two majors, or a double degree. If a graduate had completed a single degree with two majors, the second major is included in the ESS data file but not included in the *National Report*.

In the 2021 ESS data set, a record was considered complete if the supervisor had provided a response at any of the following items:

* *EQUALIMP* (importance of qualification to be able to do their job well).
* *ECRSPREP* (qualification prepared graduate for the job).
* *EHIRE* (likelihood the employer would hire another graduate with the same qualification) questions.

## Data cleaning and preparation

Data preparation occurred on the raw data file exported from the data collection platform with derivations, re-coding and cleaning routines applied, including:

* derivation of outcome variables based on Australian Bureau of Statistics (ABS) standards (derivations are documented in the *2021 ESS Data Dictionary*,made available to institutions on the QILT provider portal),
* re-coding value labels where required,
* re-coding of ‘no answers’ to the missing values conventions, and
* cleaning of supervisor name.

## Coding and processing of open text responses

Spell checking and light cleaning of ‘other’ specify responses were applied to remove identifiers and expletives. Table 19 summarises the items where industry standard frames were applied for the coding of free text responses. For items with free text responses not associated with an industry standard frame, code frames and back-coding rules were developed in conjunction with, and approved by the department, and were largely unchanged from previous iterations of the ESS.

Table 19 Items coded and source for coding decisions

|  |  |
| --- | --- |
| Item coded | Source |
| Occupation | Occupation was coded using the Australian and New Zealand Standard Classification of Occupations (ANZSCO, Version 1.3, 2013, ABS catalogue number 1220.0) |
| Industry | Industry was coded using the Australia and New Zealand Standard Industrial Classification (ANZSIC, 2006 Revision 2.0, ABS catalogue number 1292.0) |
| Country employer/business is based | For graduates working overseas, country of employment was coded using the Standard Australian Classification of Countries (SACC, 2016, Second edition, ABS catalogue number 1269.0) |

## Data deliverables

The Social Research Centre provided institutions and the department the following data deliverables at the completion of the 2021 ESS collection cycle:

* institution data files in CSV and SPSS format as a standard, and in SAS format for institutions specifically requesting this format,
* department national data file in SAS format,
* data dictionary and data map,
* institution report tables, and
* *National Report Tables*, available on the QILT website.

# Final dispositions and response rates

Table 20 summarises outcomes for sample records in the ESS online and CATI workflows for all supervisors approached.

A total of 8,193 supervisors were approached for the 2021 ESS. More than one-quarter (26.2 per cent) of supervisors approached completed the survey via the online workflow and a further 15.9 per cent completed via the CATI workflow. A small proportion (4.2 per cent) of supervisors approached were out-of-scope (i.e. refused the survey or had not supervised the graduate). After the online and CATI workflow contact protocols were completed, more one-in-six approached were an online workflow non-response (18.7 per cent) and nearly another one-in-six were CATI workflow non-contacts (16.3 per cent). Finally, less than one-fifth (18.7 per cent) of supervisors approached were recorded as an online or CATI workflow other outcome or a CATI workflow other contact.

The average CATI interview duration, inclusive of time to identify and screen the supervisor, was consistent in each round at 11 minutes.

Table 20 Final survey outcomes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total supervisors approached** | **2,731** | **100.0** | **758** | **100.0** | **4,704** | **100.0** | **8,193** | **100.0** |
| Out-of-scope supervisors1 | 139 | 5.1 | 31 | 4.1 | 174 | 3.7 | 344 | 4.2 |
| **In-scope supervisors** | **2,592** | **94.9** | **727** | **95.9** | **4,530** | **96.3** | **7,849** | **95.8** |
| Online workflow complete | 655 | 24.0 | 184 | 24.3 | 1,310 | 27.8 | 2,149 | 26.2 |
| Online workflow non-response | 486 | 17.8 | 137 | 18.1 | 908 | 19.3 | 1,531 | 18.7 |
| Online workflow other outcome2 | 353 | 12.9 | 106 | 14.0 | 496 | 10.5 | 955 | 11.7 |
| CATI workflow complete | 526 | 19.3 | 101 | 13.3 | 674 | 14.3 | 1,301 | 15.9 |
| CATI workflow non-contact | 367 | 13.4 | 126 | 16.6 | 845 | 18.0 | 1,338 | 16.3 |
| CATI workflow other contact3 | 135 | 4.9 | 42 | 5.5 | 209 | 4.4 | 386 | 4.7 |
| CATI workflow other outcome2 | 70 | 2.6 | 31 | 4.1 | 88 | 1.9 | 189 | 2.3 |
| Average CATI workflow interview duration (minutes) | 11 | - | 11 | - | 11 | - | 11 | - |

1 Includes opt-outs and out-of-scope surveys.

2 Includes outcomes such as email bounces, unusable sample and partial surveys.

3 Includes outcomes such as language difficulties, away for duration of survey, claims to have completed survey, residual appointments.

# Response analysis

## Mode of completion

As can be seen at Table 21, approximately two-thirds (62.3 per cent) of supervisors who completed the ESS, completed online with only a small of online completions requiring follow up in the CATI workflow.

More than one-third (37.7 per cent) of ESS surveys were completed by CATI, supporting the case for a dual mode design and underlying the importance of maintaining the CATI workflow to boost response rates.

Table 21 Mode of completion

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total completed** | **1,181** | **100.0** | **285** | **100.0** | **1,984** | **100.0** | **3,450** | **100.0** |
| Total completed online | 655 | 55.5 | 184 | 64.6 | 1,310 | 66.0 | 2,149 | 62.3 |
| Completed online without  CATI workflow follow up | 502 | 42.5 | 142 | 49.8 | 1,024 | 51.6 | 1,668 | 48.3 |
| Completed online after  CATI workflow follow up | 153 | 13.0 | 42 | 14.7 | 286 | 14.4 | 481 | 13.9 |
| Total completed by CATI | 526 | 44.5 | 101 | 35.4 | 674 | 34.0 | 1,301 | 37.7 |

Table 22 compares sample yield and mode of completion within the workflow to which the supervisor was originally assigned. Overall sample yield was higher for the online workflow (44.3 per cent) than the CATI workflow (40.5 per cent). One-in-seven supervisors in the online workflow (14.7 per cent) completed by CATI, in comparison to a low rate of online completion (2.2 per cent) by supervisors assigned to the CATI workflow.

Table 22 Sample yield and mode of completion by initial workflow

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Online n | Online % | CATI n | CATI % | Total n | Total % |
| In-scope supervisors1 | 7,222 | 100.0 | 627 | 100.0 | 7,849 | 100.0 |
| Total completed | 3,196 | 44.3 | 254 | 40.5 | 3,450 | 44.0 |
| Completed online | 2,135 | 29.6 | 14 | 2.2 | 2,149 | 27.4 |
| Completed by CATI | 1,061 | 14.7 | 240 | 38.3 | 1,301 | 16.6 |

1 In-scope supervisors excludes unusable sample (e.g. no contact details), out-of-scope and opted-out

## Workflow attribution

As noted in Section 2.3.1, low levels of consent to provide contact details at the ESS bridging module meant additional workflows were required to supplement the collection of contact details. Note: the analysis in this table is based on valid responses to the 2021 GOS and 2021 ESS by characteristic.

There is a slightly higher level of responses from supervisors of external graduates in the ESS by 2.1 percentage points as seen in Table 25. Supervisors of external graduates report lower overall satisfaction so that overrepresentation of the supervisors of external graduates could lead to a downward bias in reported overall satisfaction in the 2021 ESS.

Supervisors of postgraduate coursework and postgraduate research graduates are somewhat over-represented by 1.3 percentage points and 3.1 percentage points respectively, while undergraduate supervisors are underrepresented by 4.3 percentage points.

Table 23 provides an overview of ESS completes by sample workflow (i.e. source of contact details collection).

The workflows that collected the most contact details that led to ESS completes were refusal conversion (59.4 per cent), followed by the ESS bridging module (24.4 per cent) and GOS partial completers (11.7 per cent). Other workflows contributed to less than five per cent of total response.

The reliance on refusal conversion to build a sample base comparable to prior years suggests that the methodology used to approach graduates for the ESS (i.e. the ESS bridging module) could be reviewed (see Section 8).

Table 23 Source of contact details for ESS completes

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Sample workflow** | November 2020 n | November 2020 % | February 2021 n | February 2021 % | May 2021 n | May 2021 % | Total n | Total % |
| **Total completed** | **1,181** | **100.0** | **285** | **100.0** | **1,984** | **100.0** | **3,450** | **100.0** |
| Refusal conversion | 664 | 56.2 | 166 | 58.2 | 1,218 | 61.4 | 2,048 | 59.4 |
| ESS bridging module | 309 | 26.2 | 65 | 22.8 | 468 | 23.6 | 842 | 24.4 |
| GOS partial completers | 144 | 12.2 | 34 | 11.9 | 226 | 11.4 | 404 | 11.7 |
| Survey invitation pack | 39 | 3.3 | 12 | 4.2 | 53 | 2.7 | 104 | 3.0 |
| CATI follow up | 25 | 2.1 | 8 | 2.8 | 19 | 1.0 | 52 | 1.5 |

## Response bias analysis

The tables that follow compare the course, demographic and labour market characteristics of employed graduate respondents to the GOS, with the characteristics of graduates whose supervisors responded to the ESS, to detect possible bias in the ESS. That is, these tables identify the extent to which the ESS departs from being a representative survey of employers of recent graduates. Employed graduate respondents to the GOS were asked to provide contact details of their supervisors and as such represent the population frame for the ESS. Please refer to the *2021 ESS National Report* for data related to the measures of satisfaction referenced within this analysis.

Comparison of employed graduates with supervisor responses by field of education shows that Education graduates are overrepresented by 4.2 percentage points in the survey whilst Health, Management and commerce, Society and culture, Information technology and Creative arts are underrepresented in the ESS, as shown by Table 24.

Table 24 Respondents by broad field of education[[1]](#footnote-2)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Employed graduates n | Employed graduates % | Supervisors n | Supervisors % |
| Natural and Physical Sciences | 7,523 | 7.8 | 280 | 8.2 |
| Information Technology | 6,832 | 7.1 | 208 | 6.1 |
| Engineering and Related Technologies | 5,919 | 6.2 | 243 | 7.1 |
| Architecture and Building | 2,328 | 2.4 | 84 | 2.5 |
| Agriculture and Environmental Studies | 1,399 | 1.5 | 73 | 2.1 |
| Health | 20,306 | 21.2 | 670 | 19.6 |
| Education | 8,763 | 9.1 | 457 | 13.3 |
| Management and Commerce | 19,026 | 19.8 | 626 | 18.3 |
| Society and Culture | 19,397 | 20.2 | 652 | 19.0 |
| Creative Arts | 4,466 | 4.7 | 131 | 3.8 |

Note: the analysis in this table is based on valid responses to the 2021 GOS and 2021 ESS by characteristic.

There is a slightly higher level of responses from supervisors of external graduates in the ESS by 2.1 percentage points as seen in Table 25. Supervisors of external graduates report lower overall satisfaction so that overrepresentation of the supervisors of external graduates could lead to a downward bias in reported overall satisfaction in the 2021 ESS.

Supervisors of postgraduate coursework and postgraduate research graduates are somewhat over-represented by 1.3 percentage points and 3.1 percentage points respectively, while undergraduate supervisors are underrepresented by 4.3 percentage points.

Table 25 Respondents by type of institution and course characteristics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Employed graduates n | Employed graduates % | Supervisors n | Supervisors % |
| **Type of institution** |  |  |  |  |
| University | 87,996 | 91.7 | 3,165 | 91.7 |
| NUHEI | 7,982 | 8.3 | 285 | 8.3 |
| **Mode** |  |  |  |  |
| Internal | 76,065 | 79.3 | 2,662 | 77.2 |
| External | 19,784 | 20.6 | 784 | 22.7 |
| **Course level** |  |  |  |  |
| Undergraduate | 50,402 | 52.5 | 1,663 | 48.2 |
| Postgraduate coursework | 40,734 | 42.4 | 1,509 | 43.7 |
| Postgraduate research | 4,842 | 5.0 | 278 | 8.1 |

Note: The analysis in this table is based on valid responses to the 2021 GOS and 2021 ESS by characteristic.

Table 26 compares the demographic characteristics of employed graduate respondents to the GOS with the demographic characteristics of graduates whose supervisors responded to the ESS. Supervisors of male graduates are slightly overrepresented in the ESS by around 4.4 percentage points as seen in, and they report slightly lower overall satisfaction. However, differences in employer satisfaction with male and female graduates are not significant so the overrepresentation of employers of male graduates is unlikely to materially impact on reported overall satisfaction.

Supervisors of graduates aged 30 years and over are overrepresented in the ESS by 7.3 percentage points. This is consistent with the overrepresentation of supervisors of postgraduate coursework and postgraduate research graduates as shown in Table 25. Employers of older graduates reported lower overall satisfaction, so the overrepresentation of older graduates is likely to lead to a small downward bias in reported overall satisfaction.

Table 26 Respondents by demographic characteristics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Employed graduates n | Employed graduates % | Supervisors n | Supervisors % |
| **Gender** |  |  |  |  |
| Male | 36,171 | 37.7 | 1,451 | 42.1 |
| Female | 59,613 | 62.1 | 1,993 | 57.8 |
| **Age** |  |  |  |  |
| 30 years or under | 66,282 | 69.1 | 2,131 | 61.8 |
| Over 30 years | 29,696 | 30.9 | 1,319 | 38.2 |
| **Indigenous status** |  |  |  |  |
| Indigenous | 1,057 | 1.1 | 40 | 1.2 |
| Not Indigenous | 94,921 | 98.9 | 3,410 | 98.8 |
| **Home language** |  |  |  |  |
| English | 79,344 | 82.7 | 2,926 | 84.8 |
| other than English | 16,634 | 17.3 | 524 | 15.2 |
| **Disability status** |  |  |  |  |
| Reported disability | 6,477 | 6.7 | 273 | 7.9 |
| No disability | 89,362 | 93.1 | 3,173 | 92.0 |

Note: the analysis in this table is based on valid responses to the 2021 GOS and 2021 ESS by characteristic.

Supervisors of graduates working in Professional occupations are overrepresented by 8.2 percentage points in the ESS. Supervisors of graduates working in Professional occupations reported higher overall satisfaction. All other things equal, this would lead to an upward bias in the reported overall satisfaction in the 2021 ESS.

Supervisors of graduates employed full-time are overrepresented in the ESS by 4.0 percentage points. There was little difference in reported overall satisfaction among supervisors of graduates who worked either full-time or part-time. Supervisors of graduates who have worked in their current job for between three months and one year are over-represented in the 2021 ESS by 8.2 percentage points. Satisfaction with this group was higher than for those who had been employed for under three months or those who had been employed for one year or more and so their overrepresentation may lead to an upward bias in employer satisfaction.

In summary, over-representation of responses from employers of graduates in Education courses, graduates working in Professional occupations and graduates employed between three months and one year, is likely to lead to an upward bias in reported employer satisfaction. On the other hand, over-representation of the supervisors of postgraduate coursework and external graduates is likely to lead to a downward bias in reported employer satisfaction.

Table 27 Respondents by labour market characteristics

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Employed graduates n | Employed graduates % | Supervisors n | Supervisors % |
| **Occupation** |  |  |  |  |
| Managers | 7,113 | 7.7 | 231 | 6.8 |
| Professionals | 49,903 | 54.0 | 2,118 | 62.2 |
| Technicians and trades workers | 3,494 | 3.8 | 136 | 4.0 |
| Community and personal service workers | 10,200 | 11.0 | 271 | 8.0 |
| Clerical and administrative workers | 9,574 | 10.4 | 322 | 9.5 |
| Other workers | 12,191 | 13.2 | 326 | 9.6 |
| **Work status** |  |  |  |  |
| Full-time | 60,948 | 63.5 | 2,329 | 67.5 |
| Part-time | 35,030 | 36.5 | 1,121 | 32.5 |
| **Duration of job with current employer** |  |  |  |  |
| Less than 3 months | 12,800 | 14.6 | 353 | 10.2 |
| 3 months to < 1 year | 30,347 | 34.7 | 1,478 | 42.9 |
| 1 year or more | 44,434 | 50.7 | 1,615 | 46.9 |

Note: the analysis in this table is based on valid responses to the 2021 GOS and 2021 ESS by characteristic.

# Considerations for future surveys

## Graduate response to the ESS bridging module

After being piloted in the 2019 ESS, additional sample workflows were expanded in the 2020 ESS in response to a low level of employed graduate agreement to the ESS bridging module. In the 2021 ESS the collection of contact details through the ESS bridging module remained a major challenge with the level of agreement again declining (see Section 2.3.1). This decline occurred despite numerous evidence-based changes to the ESS bridging module in recent years and ongoing experimental survey design trials attempting to improve response.

Additional sample workflows accounted for an even larger majority of the supervisor contact details collected in the 2021 ESS sample build (79.2 per cent, refer to Section 2.3). The increasing reliance on additional workflows to collect contact details has increased the complexity, cost and risk associated with the ESS sample build. While it may be reasonable to attribute some decline in agreement to the disruption caused by the COVID-19 pandemic, innovation in the sample build is required if previous levels of response to the ESS are to be achieved. A critical review of the ESS bridging module is required and consideration could be given to reviewing the current placement of the module at the end of the GOS. Any significant changes may be best informed by qualitative research conducted with in-scope graduates.

## Sample and data collection workflow strategies

With a complex set of workflows now used for ESS sampling, optimising how and when these workflows are used has become a key part of the operational strategy. Prioritising workflows based on periodic review of the relative cost effectiveness of each additional workflow is crucial to building sufficient sample.

Review and revision of the existing ESS bridging module and additional sample build workflows should be conducted for the 2022 ESS. Some of the potential improvements include:

* Revising the pathways into the requested CATI follow up and ESS bridging module non-response follow up workflows as these have proven to be low yield and higher cost than the GOS partial completers and refusal conversion workflows.
* Allowing the survey invitation pack to be sent via the CATI follow up workflows and exploring increased follow up with graduates sent a survey invitation pack.
* Continued expansion of resources allocated to the refusal conversion workflow as it has proven to be the most effective sample build workflow.
* Further exploration and experimentation with customising the ESS bridging module script and workflow sample prioritisation for graduates with specific employment characteristics. For example, customising the script for graduates who worked in their organisation for many years.
* Reviewing how the ESS Boost workflow is conducted during the May round due to the limited fieldwork period.

## ESS resources on the QILT website

With the launch of the new QILT website, ESS resources made available for participants should be expanded and the site utilised during engagement with supervisors. A new participant facing ESS landing page will be in place for the 2022 ESS and provides opportunity for content that can drive graduate, supervisor, and industry engagement with the ESS. Acknowledging employers that have participated in the ESS on this page could build the profile and legitimacy of the ESS brand.

## Email engagement with supervisors

As the primary approach method for engagement with supervisors, continued efforts should be made to optimise the email contact protocol. An additional email reminder (Reminder 4, see Section 3.3.1) was successfully trialled in the 2021 ESS and should become a standard part of the contact protocol in 2022. Review of the delays between each email send should be conducted to further optimise response in each collection round. Deliverability testing of the email invitation and reminders should continue to ensure high response, with Reminder 2 being a candidate for a redesign due to relatively poor performance in the 2021 ESS.

Experimentation could be conducted with the overall look and feel of the ESS emails. There is potential for a more graphics based design to increase immediate engagement, better convey email intent and highlight key project information.

## Collection of contact details

Improvements should be considered to the collection of contact details in the ESS bridging module and all additional sample build workflows. The look and feel of the online contact details collection form should be consistent with industry standard webforms to provide a familiar user experience to graduates. The quality of telephone contact details (particularly international phone numbers) could be improved by updating country code display and implementing more sophisticated phone number validation checks. Improvements could be made to better encourage the provision of business names from graduates. Knowing the name of the employer has become an issue of increased importance when building legitimacy when engaging via the CATI workflow, as working from home has become common in many industries.

Hard bounce rates reported for the ESS Invitation email (see Section 3.3.2) are evidence for exploring options to further improve the collection and validation of supervisor email addresses.

## Employer and industry engagement

Engagement with employers and industry peak bodies could build ESS brand awareness and lead to improved graduate and supervisor engagement. Consideration could be given to targeting a limited number of employers, by study area or industry, for each major round of the ESS (November and May).

Graduates commonly perceive providing contact details for the ESS as a risk to their employment. By engaging with the human resource departments of major employers, it may be possible to overcome this misconception. Employers could communicate internally to graduates that the business is a ‘safe’ environment for the ESS, encouraging the provision of contact details and supervisor participation. Industry peak bodies could be contacted with offers of industry specific reports, or other industry tailored promotions and products, to broadly build awareness and encourage participation.

## List of abbreviations and terms

**ABS** Australian Bureau of Statistics

**ADIA** Australian Data and Insights Association

**ANZSCO** Australian and New Zealand Standard Classification of Occupations

**ANZSIC** Australia and New Zealand Standard Industrial Classification

**CATI** Computer Assisted Telephone Interviewing

**ESS** Employer Satisfaction Survey

**ESQ** Employer Satisfaction Questionnaire

**GAS-E** Graduate Attributes Scale – Employer

**GAS-G** Graduate Attributes Scale – Graduate

**GOS** Graduate Outcomes Survey

**ISO** International Standards Organisation

**NUHEI** Non-University Higher Education Institution

**QILT** Quality Indicators for Learning and Teaching

**SACC** Standard Australian Classification of Countries

**SES** Student Experience Survey

Appendix 1 Participating institutions

Appendix 2 ESS bridging module

Appendix 3 Briefing slides and interviewer handout

Appendix 4 ESS Brochure and survey   
invitation pack

Appendix 5 Refusal conversion and ESS boost scripts

Appendix 6 Survey invitations and reminders

Appendix 7 Small screen optimisation

Appendix 8 Core questionnaire

Appendix 9 Questionnaire screen shots

1. This table excludes a small number of responses in Food, Hospitality and Personal Services. [↑](#footnote-ref-2)