

Surveying international university students: The case of the 5% response rate

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This article is a methodological critique of a survey process undertaken with international undergraduate students at the University of New South Wales, Sydney. Despite following best practice surveying protocols this research project initially achieved a 5% response rate. The research team had to change its approach part-way through the process to achieve a 45% response rate and attain valuable information needed to improve the overall student experience for the international student cohort in the faculty. This article concludes with lessons learned about surveying this unique student group - these methodological lessons are relevant for other research teams studying the higher education sector globally.

Introduction

By mid-year 2020, four months after the first peak of COVID-19 cases reached Australia's metropolitan areas, the fate of the university system for 2021 and beyond was looming (Maslen, 2020). Modelling from the Centre for the Study of Higher Education (Marshman & Larkins 2020) reported a financial impact in 2020 as A\$3-4.6 billion dollars in overseas student revenue losses with research-intensive universities taking the biggest hit (Birrell & Bretts 2020). International students, often referred to in media as 'cash cows' (Grigg, 2018), are now more than ever, forcing university administrators to rethink budgetary reliance on fee structures, that, in the past, have provided stability and deep pockets, but in a COVID-19 reality, detrimental budget deficits. For universities, offering an exceptional student experience in the best of times is challenging, but even more so in turbulent times as they maintain "consistent course delivery, ensuring strong student recruitment numbers, and providing clear communication to staff and students" (QS 2020, p. 10).

As universities scrambled to restructure themselves financially (Chrysanthos, 2020) and incorporate alternative modes of teaching, the survey has featured widely across Australian campuses asking students opinions about mandatory online instruction protocols, isolation circumstances, critique or praise for student support resources, and insights about future learning environments (see Macquarie University, 2020; University of Queensland, 2020; University of Newcastle, 2020; University of the Sunshine Coast, 2020). Surveys are created for several reasons: to gauge sentiments about an issue; to assess likes or dislikes about something; to numerically quantify opinions, and a host of other reasons (Babbie, 2004). For those at the coal face in the learning and teaching environment, the survey has been a quick and useful tool in vetting university students to share their ideas about the effects of the recent 2020 COVID-19 pandemic on student life, both virtual and on campus. Getting the 'instrument' right for the international student cohort is critical if university administrators and academic staff want to engage with and retain their international student presence – on campus, or virtually.

The research presented in this article was conducted in the Faculty of Built Environment at the University of New South Wales Sydney (UNSW), a member of the Group of Eight (Go8) coalition of research-intensive universities. A Faculty-wide quantitative and qualitative survey was distributed to all currently enrolled international students (N=753) in late 2017. The Faculty hosts 2367 undergraduate students (753 international + 1614 locals) and since its inception, 60 years ago, this was the largest survey conducted with international students within the Faculty. The article begins with a brief discussion on survey methodology and techniques that have been proven successful in social research in the past. It then outlines our research process, discusses insights gleaned from this case-specific example and provides recommendations for future research about and with international undergraduate university students that are applicable globally.

The survey: We have come a long way

Former Director of the US Census Bureau Robert Groves (from 2009-2012) outlined three distinct eras in the evolution of survey research (Groves, 2011). It was during the 1930s-40s that a theory of research design emerged giving guidelines of structure and rigour in data collection and analysis. In the 1960s-90s the survey method became ubiquitous; the questionnaire was no longer a tool strictly used by or for government bodies or academic institutions, and there was real value in this technique for marketers and all types of retailers. The 1990s onwards “witnessed the decline in survey participation rates, the growth of alternative modes of data collection, the weakening of sampling frames, and the growth of continuously produced process data from digital systems in all sectors” (Groves, 2011, p. 861). Groves stated that “survey research is not dying; it is changing... [it] has strengths and deficits that are reflections of the society that it measures... and must always adapt to those changes” (Groves, 2011, p. 870).

Up until 2003, most survey research dealt with telephone interview and paper surveys. Carini and colleagues’ (2003) research on undergraduate student survey responses investigating ‘mode of delivery’ found that “the Internet is a cost-effective method to enhance response rates especially among computer-savvy respondents such as college students, the vast majority of whom have Internet access either at home or [...] university” (Carini, Hayek, Kuh, Kennedy & Ouimet 2003, p.3). While this research was pre-*Facebook*, *iPad*, tablet and smartphone, it did propose a timely question of how researchers can remain relevant in their methodological approach when surveying younger, and perhaps more digitally literate generations. At the time of their research, they found that younger people were more likely to answer an online survey over a paper questionnaire.

Babbie (2004), Zutshi, Parris and Creed (2011) and Moy and Murphy (2016), like many others, argued that data collection via the survey method has been impacted dramatically by technological advances. Although the three main delivery modes of survey research have historically been face-to-face, mail and telephone (Zutshi et al., 2011), these methods decreased in use because of increasing costs of labour, and the decrease in costs of efficient distribution and analysis through other modes. Digital platforms or web-based links embedded in an email or on social media have changed the way researchers conduct

surveys. An example of this would be embedding a questionnaire in an email, a survey program (e.g. *Survey Monkey*) or a link on a social media post connecting the participant to a web-based survey. The introduction of tablets, *iPads* and large screen mobile phones has also improved access to surveys, proving that survey creation and distribution can be quick, paperless, and more recently, portable, with endless design options visually appealing to a potential responder (Fan & Yan, 2010; Wolfe, Phillips & Asperin, 2014). However, as argued by Burke and James (2006, p. 18), “if internet users become overwhelmed by survey requests, they will be likely to become much more selective about those in which they participate.” Adams & Umbach (2012) added to this by suggesting that “ambivalence towards surveys are indicative of survey fatigue” (p. 579) which has led to an increase in nonresponse rates amongst university students.

The evolution of sophisticated survey research techniques has made it possible to reach a wider pool of participants in a shorter amount of time. Online survey technology has also provided a greater number of ‘non-researchers’ with an easily accessible platform and free-to-use survey templates to conduct surveys. However, this could be leading to a point of oversaturation, lack of confidence in the survey as a reliable instrument, and with the absence of interviewers, there is a limited capacity to establish legitimacy (Berzelak & Vehovar, 2018). Universities often incorporate end of semester surveys to query student satisfaction and evaluate teacher’s pedagogy (Adams & Umbach, 2012). For example, one full-time student is asked to answer a minimum of 20 surveys per year at most Australian universities, which is why many survey administrators struggle to achieve a healthy response rate. In the wake of our ‘new normal’, the online survey has become the go-to instrument for quick information from a purposeful sample. In the university sector, surveys directed to both students and staff, are shaping, on-the-fly, curriculum restructures for a temporary and/or hybrid online environment post COVID-19.

Whether one is an academic employed in a university, a hobbyist, or an on-the-street surveyor conducting market-research, the logistics of participant sampling, questionnaire creation, distribution, cost, and often low response rates (Carini et al., 2003) pose many questions about the value, process or reliability of a survey as a stand-alone instrument. This is especially pertinent for online surveys; a meta-analysis by Manfreda, Bosnjak, Berzelak, Haas & Vehovar (2008) found a ‘unanimous’ expectation of lower response rates with online surveys in comparison to other survey modes, based on 45 comparisons of online versus other modes.

Surveys: Their changing value

Surveys have been a useful tool for universities worldwide to identify these needs and expectations (Carini et al., 2003) and then to provide a policy and procedures response to these findings. Most have done this through successful evaluation based on feedback about teaching, course content, teacher quality and student support services (Nair, Adams & Mertova, 2008). Universities are no different to private industry or governmental departments; they too want to assess, gauge, quantify, and interpret motivations and expectations of their customer, the student. Equally, the demand for faculties to demonstrate and document their contribution to student learning, and administrative

departments to validate their processes in university operations, the survey has become a 'ubiquitous artefact' of daily practice on university campuses (Tschepikow, 2012, p. 448).

As discussed in our research findings below, response rates can often prove disappointing, which is unfortunate because a response rate "has become one of the primary yardsticks for judging successful survey research" (Frohlich, 2002, p. 56). Nair, Adams and Mertova (2008) instituted several techniques to increase their response rate with university students. They were able to increase their response rate from 30 to 50 percent by contacting the non-responders (via a call centre) and through extensive faculty and student reminders delivered electronically and with posters. Firstly, students were sent an email about the survey; secondly, key points about the survey's importance to students were highlighted; and thirdly, the value of the information they would be providing was reiterated. This was enough to increase the response rate from 30 to just over 50 per cent. This thorough protocol worked in 2008 when digital surveys were *de rigueur*.

Frohlich (2002) suggested the following techniques for improving response rates: ensure relevance of the survey (i.e. what is in it for them?), decrease the respondents' effort (i.e. the survey should be easily accessible), repeat contact with participants (Anderson, Krakowieki, Vittoriano, CyBulski & Alderks, 2013) and seek endorsement from others (Rao, 2009) (i.e. use those in positions of authority to encourage participation). In a different context, Harris, Day, Young, Potiriadis, Southern and Dunt's (2005) research on medical general practitioners applied a model of *Bells* (getting attention from potential participants), *Whistles* (reminders) and *Carrots* (incentives) — these stages of survey distribution consisted of techniques such as personal visits to potential participants, personalised reminder letters, and weekend away or restaurant vouchers. As researchers in a publicly funded institution we must ensure a 'value proposition' of the spending of public monies. In our context, ethically, we would not be granted the resources to offer such incentives, with such extensive effort and cost. It begs the question, to what extent in a higher education context do we want and are we willing to pay for this feedback?

The following section describes our survey process and the stages we had to go through to get a near 50 per cent response rate.

Our research design

Our process was typical for survey research following broad guidelines, with a clear purpose, logical sequencing of statements and questions and balancing content with brevity. As academic staff we had ample access to students, institutional support, personalised emails and we are a known research presence in the Faculty. The students were a convenient sample, perhaps, but as Magro, Prybutok and Ryan (2012, p.2) stated, "in an academic institution where research is commonplace, students are often the guinea pigs for various research studies utilising sample survey methods". We were aware of this perception from both the academic community and student body and therefore made every effort to present the relevance of the study. The reader will see that the challenges encountered presented an opportunity to venture beyond normal distribution protocol. Findings proved to be more than a snapshot of international students' experiences; the

process showed that effective survey design and distribution to an international student cohort is especially challenging. Higher education is now a business and has matured into receiving student critique with intent to make change and respond to the metrics. Universities are keen to offer the best product possible and need evidence (like from this survey) to support their business ideas and the student experience.

The questionnaire

The questionnaire, entitled *Built Environment International Undergraduate Student Survey*, contained 32 Likert-scaled questions addressing: the student's arrival in Australia; the extent to which they interacted with faculty academic staff, interacted with other international students in the faculty and local/Australian students in the faculty; and whether they used UNSW support services such as the Learning Centre, Counselling Centre or the Library. All questions were based on a 4-point strongly agree-strongly disagree Likert scale, with a 'not applicable' response option. A further 11 questions covered more personal topics including: program and year of study, length of residence in Australia, how they obtained information on settling in Sydney, marks achieved, their stress levels, and overall satisfaction with their university experience. Several open-ended questions asked respondents to tell us: what they wished they knew before arrival in Australia, external pressures that international students struggle with, and then, some qualitative questions asking participants to suggest services the Faculty could provide. These topics were of high relevance to students and their learning experience. This ensured the survey's relevance to the student population (Frohlich, 2002; Lindsay, 2005; Adams & Umbach 2012). The survey finished with a question asking for contact details to participate in a focus group, should students be willing.

An online survey platform, *Key Survey*, was used. It covered six screens, thereby limiting scrolling (to reduce survey fatigue - Burke & James 2006; Zutshi, Parris & Creed 2011) and was accessible on mobile devices as well as computers. As noted below, it was later released in paper form as three A4 pages. Zutshi et al. (2011, p. 673) found that length of survey is not reflective of response rates, as many online versions can be 'disguised' so as not appear lengthy and time-consuming.

The questionnaire was presented in Australian English. Due to the numerous languages spoken by the international student cohort in the Faculty, and the limited resources available to translate the questionnaire, and subsequently the answers, English was the most viable and cost-effective language in which to create the survey. It should also be noted that international students must attain an overall International English Language Testing System (IELTS) score of at least 7.0 to attend the Faculty. This benchmark is considered by international standards as having a 'command' of the language and being able to "generally handle complex language well and understand detailed reasoning" (IELTS 2020). Moy and Murphy (2016) stated that researchers "need to craft items that all respondents will interpret in the same manner and are willing and able to answer accurately" (p. 21). We argue that is an ideal outcome, generally, for survey research but unrealistic when factoring in an international audience, students' country of origin, and social expectations to respond to questions in a 'desirable manner' (Berzelak & Vehovar

2018), English language capacity and how many years they have attended university — in other words, the longer students have attended university, the more exposure they would have to survey participation requests.

The survey was pre-tested by six final-year international students. They were asked to provide verbal comments and written comments to chief investigators regarding readability and ease of understanding. Following their comments, some of the questions were modified and rephrased. This exercise proved beneficial as it was noted early on that the survey should have brief yet clear instructions to navigate the survey easily; this finding supported earlier research (Clayton, Applebee & Pascoe, 1996).

The participants

The participants were full-time, currently enrolled international students in the Faculty of Built Environment, UNSW Sydney. Students from every year of undergraduate candidature were represented, as well as students from each program: architecture, landscape architecture, interior architecture, construction management, city planning, industrial design and computational design. There was a mix of male and female participants. To avoid concerns over anonymity, country of origin, gender and age were not requested on any of the questionnaires. This survey was not developed to reach one specific nationality (see Rao 2009 for research design strategies based on national cultures [Mexican, in this case] that influence survey outcomes and see Du & Wei, 2015 for international Chinese student-specific research).

Data collection

Data collection was carried out in three stages. In the first stage, emails were sent to all undergraduate international students in the Faculty of Built Environment inviting them to complete the survey online. In the second stage, a focus group was held with students who had indicated interest in their survey responses. In the third stage, following poor response to the email invitation and a suggestion in the focus group, the chief investigators attended 28 undergraduate classes in person to hand-deliver paper copies of the surveys to students which were completed on the spot. These stages are described below.

Stage 1: Email invitation to online survey

Following UNSW ethics approval, a list of all undergraduate international students currently enrolled in UNSW Sydney's Built Environment Faculty (N=753) was sourced from the Faculty Student Centre Manager at the beginning of the second semester of the academic year (July 2017). The chief investigators composed an invitation email with survey URL (see Appendix), which was then sent from the Faculty's Student Centre. Frohlich (2002) warned that email lists are "rarely perfectly accurate" (p. 56); however, as the Student Centre is the main administrative body for the Faculty, the chief investigators had a high-level of confidence that the list was 'clean'. Although this administrative arm of the Faculty could be considered a 'gatekeeper' of information (Lindsay, 2005), its ongoing support was invaluable to both us as a research team and to the students as they would

recognise the sender's email address. As such, it was expected that that students pay close attention to emails coming from it as they deal with course administration, marks, and overseas student issues.

Wolfe et al. (2014, p. 138) believed that "respondents are in control, so it is up to the researcher(s) to provide some benefit or reward to the participants to compensate them for their time and personalize the plea, to collect reliable, valid and usable data." Some university surveys use monetary incentives to entice cash-strapped students to participate, however Porter and Whitcomb's (2003) null findings on their efficacy prompt a rethink of this practice in survey distribution. Singer and Couper (2008, p. 670) noted that university ethics committees warn that monetary incentives could "bias the findings... sometimes answering affirmatively without necessarily verifying". Our process did not offer any monetary reward or prize to complete the survey nor did we offer any non-monetary incentives as these can often be perceived as not adding any value. Students were reassured that their participation was voluntary, and they would not be disadvantaged if they did not take part.

The invitation to complete the survey was sent to all 753 students on the list in the seventh week of semester from the Student Centre email address. This 'explode', or 'broadcast message' resulted in 24 responses over the next seven days, with 52 click-throughs to the survey from emails and six incomplete surveys. Sending reminders to complete a survey was once considered time-intensive (Clayton et al. 1996), but with modern technology, the effort is greatly reduced. Directors from each of the Faculty programs sent a reminder email to students shortly thereafter as most students would know the name of their program director or at least acknowledge a degree of importance based on their honorific and position in the Faculty. Lecturers were also emailed and asked to remind students to check their emails and complete the survey. The research team personally sent a follow-up reminder email nine days after the first email. All these follow-ups resulted in 14 further responses and five more incompletes. This was an overall response rate of 5 percent. Zutshi's et al. (2011) historical documentation of survey research indicates that follow-ups (telephone or other methods) were instrumental in increasing the response rate, however, this was not the case here. Eleven of the survey respondents provided their contact details (email and/or phone) and indicated they were willing to participate in a focus group. Commonly used in conjunction with surveys, focus groups can be used as a means of further exploration and interpretation of survey findings, as is the case here (Cameron, 2005).

Stage 2: First focus group

The 11 respondents who provided their contact details to participate in a focus group were emailed by a chief investigator inviting them to participate; two replied and agreed to participate. A follow-up email and phone contact by a chief investigator solicited four more participants, a total of six students. The focus group, held on 28 September (during the week-long mid-semester break, to avoid clashes with classes), explored questionnaire topics in more detail.

The focus group also considered the low response rate to the survey, which prompted much discussion. One focus group participant suggested the research team distribute surveys in-person to classes to increase the response rate. This suggestion was directly linked to the fact that students receive numerous emails a day often generated from an unknown source. They emphasised that students do not know who we are, which might affect the response rate. The researchers concluded that it was important to be actively participating with the students to bring in a human element. Echoing Frohlich (2002) and Nair, Adams and Mertova (2008), engaging with potential respondents and explaining who we are, why we are doing the research, and why it has value to them, was critical for improved results. Students are likely already overwhelmed with many phishing or spam emails (Manfreda et al., 2008; Dillman, 2000; Wolfe et al., 2014) or those originating from off-campus survey solicitors (Adams & Umbach, 2012); our survey would be yet another email to contend with.

As seasoned researchers, we thought we had already adequately represented ourselves, explained the purpose of the research and provided an easy method of completing the survey. We had gone through ethics protocol, we had pre-tested the readability of the questionnaire, we had composed a thoughtful and informative introductory email from an 'important' and 'legitimate' email address, and we had made the survey easily accessible online. And yet still, it did not work. We took the focus group participants' advice to rework the questionnaire so that it could be distributed in paper format and began to map out class distribution through the campus. This was undertaken in Stage 3.

Stage 3: In-person distribution

The Faculty Student Centre manager provided a list of every core class offered in all undergraduate programs in the faculty with information on the time, days and location of classes. In total, 28 individual classes were visited by the chief investigators in which they personally distributed paper questionnaires to the international students who had not yet completed one via the online link provided in Stage 1. The chief investigators contacted the course coordinators for each of these classes by email, and asked permission to attend their classes, hand-deliver surveys and wait while students completed the surveys during class time. This was time-consuming, and thus costly in terms of person-hours involved. In class, we introduced our research and positioned ourselves as researchers explaining that this was a Faculty-funded education grant with clearance from the University ethics committee to investigate international student experiences in our Faculty. This process of establishing 'authority or trustworthiness' is supported by Lindsay (2005) as best practice.

The students generally took longer than expected to fill in the survey (around 10-15 minutes, as opposed to the 5-10 minutes recorded when pre-testing the survey), even though we had been conscious of producing, through numerous iterations, a survey that could be easily read and quickly completed. It was observed in-person that some respondents had to translate our plain-language survey into their language. This added length to completion time and perhaps was an impediment to response rates. There was an incorrect assumption on our part that our students had a good working knowledge of English and would have been able to answer the questions. Notably, some students took this opportunity for feedback very seriously through detailed qualitative responses.

We may not have accessed all students in this final stage. The fact that the semester was ending impacted attendance in many classes as many students, especially in practical design courses, are likely to work on assignments rather than attend lectures or studios. The in-class survey distribution also relied on international students to volunteer, which some may not have done. Despite these difficulties, a further 302 surveys were received, bringing the total to 340 and giving a response rate of 45.2 percent.

Second focus group

Over 20 per cent of the paper-survey respondents gave contact details to participate in a second focus group (65 respondents). However, contact by a chief investigator via email, then text message, resulted in one response. Although this person agreed to participate, the focus group was cancelled as there were no other responses. There are likely several reasons for this: firstly, it was nearing the end of the academic year and students may not have had the time or the inclination to attend a focus group. Secondly, many of the contact details were hand-written and therefore difficult to read; emails bounced when sent or telephone numbers were incorrect. Given that respondents were not required to give contact details (the question asked them to give contact details if they were *willing* to participate in a focus group), suggests that either they did not fully read or understand the question or felt pressure from the presence of the chief investigators being in the room (Holbrook, Green & Crosnick 2003).

Data cleaning

Another aspect to the findings was uncovered through the data cleaning process. Upon entering the paper surveys into *Key Survey* analysis software, it was found that several respondents had 'missed' questions, especially in the latter part of the questionnaire. It should be noted that there was no time pressure to return the survey to the researchers or return to class activities. Adams and Umbach (2012, p. 577) suggested that non-responses can increase "the potential for error and [are] a threat to external validity", indicating that overall results may be biased if non-response rates are high, especially for quantitative questions. Additionally, non-responses could suggest an overall 'error' in the survey design, which could result in producing inflated or deflated findings (Adams & Umbach 2010). The research team decided to include most of these surveys, given that respondents had responded to more than three quarters of the questions, and consequently included five online surveys that had been completed to a similar level. As researchers, we saw the care and time that students took to translate whole sentences and individual words to give accurate feedback and decided that these answers should be included even if some questions were missed. The total number of surveys received was therefore 345, a response rate of 45.8 percent. Within these surveys each quantitative question was answered by between 329 and 345 respondents.

We also considered potential causes behind missed questions. Curran (2014, p. 4) described missed questions as a problem related to 'carelessness' or inattentive responding. A further consideration was the possibility of respondent fatigue where respondents might, for instance, answer all Likert questions with the same answer option

(Dillman, 2000; Groves, Presser & Dipko, 2004; Adams & Umbach, 2012); or, it could possibly be that students took ‘short-cuts’ because answering all questions took too much effort (see satisficing, Heerwegh & Loosveldt, 2008). Respondent fatigue was checked in two stages: first, two Likert items where responses would be expected to be opposite (‘I rely heavily on other international students for emotional support and friendship’ and ‘I feel isolated from other international students’) were flagged if a respondent agreed with both items. Secondly, these responses were reviewed manually to determine if the respondent should be removed from the dataset, based on their pattern of responses and recognising that, respondents may feel both isolated from other international students and rely heavily on them for support. This resulted in the removal of 9 respondents from the dataset. The final dataset therefore contained between 314 and 336 responses to each quantitative question; therefore 2.6 percent of responses overall were deemed to be at least partially subject to respondent fatigue.

Lessons learned

The following section discusses our findings and summarises recommendations on rethinking survey design and distribution for international higher education students.

- Students, and arguably, higher education administrators, are more generally thinking of students as clients and customers — clients with rights. There is an assumption from administrators that students *want* to give us feedback: “The metaphor of a student as a consumer or customer is widely used within contemporary higher education, and impacts on the ways in which students, academics and institutions behave” (Tight, 2013, p. 1). Contrary to Tight’s (2013) concept of students as ‘co-producers’ of knowledge production and dissemination, we would argue that students may not want or have the ability to be so conjoined with an organisation, and instead, prefer to just ‘buy’ the product than be responsible to give continual feedback to the higher education experts.
- The audience should know who the researchers are, and therefore there must be a concerted campaign to communicate the identity of the researchers and their position in the faculty — this personalises the process, which may improve the response rate. Somewhere in the process the students must know a name or a person associated with the research (e.g. the researchers themselves, the program director, or their lecturer) — this adds to the legitimacy of the research (Tschepikow, 2012) and that time spent taking the survey will potentially have beneficial outcomes. In other words, the survey results must speak to the students. This establishes a solid foundation for any future communications that would occur from the researchers to the students.
- Get buy-in and support from the whole faculty, including lecturers and tutors who have regular contact with students and can use their pre-established relationships to encourage participation. This de-institutionalises the research — it is not about the institution but rather the people. This assists in both response rates and building rapport and engaging with students, through lecturers or tutors explaining the significance and application of the findings. This recommendation is reflective of the

research design initiated by Rao's 2009 outcomes supporting cultural nuances and incorporating 'survey endorsements' (p. 172), or contact names, to support the said research project.

- Higher education should not view all international students as one cohort. For a fine grained analysis of the student experience based on international background, the survey and the process could be tailored to reflect cultural values and differences which may result in several versions of the same survey (see Rao, 2009).
- Email is not always the best way to contact students, due to the number of emails students receive and the fact that their preferred modes of communication vary. Screen time has evolved from checking emails and surfing the web to using *Instagram*, *Facebook*, *WeChat*, *Vimeo* and *Face-time* — completing a survey for a big slow-moving institution is likely not their priority. Additionally, students are time-poor when asked to do so many tasks.
- Fosnacht, Sarraf, Howe and Peck (2017, p.1) argued that “due to the prevalence of survey data in higher education research and assessment efforts, it is imperative to better understand the relationship between response rates and data quality”. We, like many survey researchers, were heavily influenced by ‘the chase’ for a high response rate, perceiving it as a measure of research success (Frohlich, 2002). Upon reflection there is no reason to think we would get a different set of results had we received a higher response rate. We were not satisfied with a five percent rate, but certainly with a forty-five percent rate after the face-to-face data collection intervention. Fosnacht et al. (2017) suggested that surveying a smaller random sample of students could mitigate survey fatigue — this approach would require more strategic discussions about planning campus-wide surveys at a smaller scale.
- The timing of the survey should be carefully considered. The survey was initially run in the middle of the second semester, with the second round in the last week of class. Attention should be paid to avoiding exam time, mid-semester breaks or any holiday clashes. In the context of a design-based faculty, response rates to all surveys are traditionally lower in the last semester of the year when students are producing capstone projects and final design projects.
- The pre-test was about readability. However, it should have also covered preferred modes of survey distribution, opinions on the relevance of the questions asked, and discussions around how the survey findings might best contribute to students' experience. A focus group with target respondents should be held before survey distribution, and the discussion used to inform questionnaire design and distribution. The benefits to students of participating need to be clearly set out in the questionnaire, and these could be based on the pre-focus group findings and what they perceive to be benefits.
- Having in-person distribution in this case was a major reason we received a satisfactory response – an increase from 5 percent to 45 percent. But this too also has its

drawbacks in terms of staff hours spent organising and attending classes and the potential of students completing the survey a second time. Students may have perceived pressure from the chief investigators being in the room to rush the survey or to answer a certain way, especially when sitting beside friends (LaPierre, 1934; Holbrook, Green & Krosnick, 2003). The Dillman et al. (2009, p.16) mixed-mode research strategy supports our process confirming that “an attempt to collect data by another mode, can increase response rates substantially”.

- The choice of classes for distribution is also important, especially for disciplines not heavily lecture-based. Going to required core classes, as part of the curriculum, increased the possibility that every international student would be reached. This is important to ensure equity and opportunity to complete the survey.
- Offer the survey in other languages. Our survey was only available in English, with the expectation that students’ English was at a proficient level, due to the University’s language entrance requirement. Additionally, the pre-test flagged difficult areas or colloquial phrases that were changed accordingly. Despite these modifications, respondents appeared to have difficulty with the questionnaire, based on the lengthy completion time and the use of smartphones to translate observed during the in-person distribution. Translated survey questionnaires could have been provided digitally representing the top five foreign languages on campus. Objective student translators could potentially be used to reduce costs and encourage buy-in from the international cohort. Another possibility is completion in small groups with assistance from third-party researchers.
- A call for volunteers to generate a snowball effect (Wolfe et al., 2014) where a group of students are given a number of hard-copy surveys to distribute to their friends in other faculty programs or throughout the university, is also an option. However, with this comes a host of other issues questioning reliability, the extent to which surveying could be considered ‘random’, and the rigour that may or may not exist as a second-line researcher.
- Non-monetary incentives can be presented as a reward. Upon completion of the survey, with no prior indication, give the option to click on a link to receive a gift voucher. This value-added bonus feature could prompt a ‘word-gets-around’ snowball effect to initiate additional participants. This would only work with an online survey. On the other hand, and perhaps the more important discussion is: if the researchers view students as co-producers, there should be no need to have any incentive as they are direct beneficiaries of the results.
- The aesthetic appearance of the survey should not be underestimated. New formats incorporating stand-alone images, video vignettes, appealing colours and indicators telling the respondent how far along they are in the process, are all techniques to make the survey-taking experience lively, fast-paced and interesting. This is especially relevant to young, digitally-savvy, visually-adept learners (as they were in our case study – a design faculty).

While these points may be useful for future researchers administering surveys to international students, we should also recognise that higher education as a sector is guilty of over-saturating their students with surveys. Some university administrators view their international students as ‘key consumers’ of [the product of] higher education and continually ask their views about the product they are buying — this includes asking about everything from teacher performance to cafeteria food (Fosnacht, Sarraf, Howe, & Peck, 2017). A ‘regular’ commercial retail business would never consider surveying the same customer 15-20 times per year as most higher education institutions in Australia will do (this equates to asking one person to complete 60-80 surveys in a four-year undergraduate degree). No store nor service provider would ever think this intensity of surveying was best practice. It is therefore not surprising that there is an extremely low first response rate from students on most surveys. There is an underlying tension of universities retaining a tradition of being institutions of higher learning and knowledge exchange, versus being a business that needs clients (i.e. international fee-paying students) to add to its operating budget.

Conclusion

The first two decades of the 21st century demonstrated extreme growth and wealth for many universities across the globe ... but some would argue that “higher education was in trouble before the pandemic; COVID-19 could push some universities to the brink ” (*The Economist*, 2020, n.p.). Now more than ever, the extent to which universities rely on international student fees in the future could reshape what we currently know and experience as a university. Generally, uncertainty about a once-booming and highly lucrative international student market, their contributions on a physical campus, virtual platform or financial bottom-line, is unpredictable. The case of the 5 percent to 45 percent response rate has challenged us to reflect on how we engage with and think of our international students and how best to gather their invaluable insights as clients, customers and co-producers of higher education during and post-COVID. The University of New South Wales in Sydney is recognised as having a strong international student community domestically as well as overseas. Historically speaking, Australia has proven to weather the storm in dubious times – even during the global financial crisis (2007 to approximately 2009) that generated a slight dip in enrolments. Since then, the influx of international students has been consistent and these students, undoubtedly, continue to be current and future contributors to Australia’s higher educational sector (import and export).

COVID-19 has introduced new challenges with the international cohort, and, as presented here, how to best gather feedback from them via surveys still requires fine tuning and an approach that is not a one-size-fits-all. Currently, the Faculty of Built Environment asks full-time undergraduate students to take part in 18 course evaluations per year. Additionally, individual academic researchers often use students as convenient samples; they are a captive audience, but unfortunately, an audience who is oversaturated, time poor and perhaps not linguistic enough to completely understand the nuances of survey questions. Considering survey research with international university students in the future, administrations will need to evaluate if surveys are really the best way to gather opinions

and feedback from this cohort, whether or not course evaluations are needed for every course or could they be administered sporadically, and how will survey data be comparable or even relevant in 2020? No doubt there is enormous pressure for university administrations (all levels) to include student feedback about the myriad of services and educational experiences they have to offer, and students are pressured through 'reminders' to 'have their say'; this is important. However, universities must be mindful not to devalue themselves as institutions of higher learning through minutiae of endless surveying. While seeking input to alter or inform decisions about future student life, improve learning and the overall university student experience is vital, care must be taken to reduce survey load and ensure time spent by students on surveys is worthwhile, with clear impact.

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Appendix: Invitation email and online survey form

To all Undergraduate Built Environment International Students

Below is a link to a survey that just our Faculty is doing with our international, undergraduate students.

The faculty is aware that many of you are succeeding in your studies and we are very pleased with that! The faculty is also trying to improve what we can do to support you and improve your student experience in the BE.

This is a very short survey (should only take you 5 minutes) that is about you and what services we provide and the services you need to help you succeed here in the faculty.

We would be very appreciative if you would answer this survey. Your answers will be completely anonymous. [Our UNSW BE Ethics approval number is HC16498.] If you have any questions about this survey, please contact either Dr Christine Steinmetz (c.steinmetz@unsw.edu.au) or Dr Nancy Marshall [former address omitted]

Please note – this is not the UNSW SES survey. Our survey is just for our students. If you could do both – that would be great! Thanks for your anticipated support.

Kind regards,

Christine and Nancy
[link omitted]

International undergraduate student survey

The Faculty of Built Environment here at UNSW is trying to understand what our international undergraduate students need to succeed in their studies. We would appreciate your ideas and survey response. This should only take you a couple of minutes to answer. Thanks!

Statement	Strongly agree	Agree	Disagree	Strongly disagree	Not applicable
ARRIVAL IN AUSTRALIA					
O-Week at UNSW was helpful					
Orientation in the Faculty of Built Environment was helpful					
UNSW generally was helpful in providing information about arriving to the university (other than O-Week)					
The UNSW website was helpful when settling in					
My parents were influential in my decision to study in Australia					
INTERACTING WITH BE ACADEMICS					
I find it easy for me to talk to my teachers					
I have adequate access to my teachers					
My teachers are friendly					
I understand what is expected of me in my classes					
I understand what is expected of my assignments					
INTERACTING WITH OTHER BE INTERNATIONAL STUDENTS					
I talk mostly with international students from my home country					
I prefer to do assigned group work with other international students					
I rely heavily on other international students for emotional support and friendship					
I feel isolated from other international students					
INTERACTING WITH BE LOCAL/AUSTRALIAN STUDENTS					
I socialise with Australian students					
I learn a lot about Australia and its culture from local students					

I feel confident when speaking with Australian students					
My English has improved since studying in the BE Faculty					
I feel welcome when interacting with Australian students					
SUPPORT SERVICES					
I need help with note taking in my classes					
I need extra help with understanding the lecture content of my classes					
I can easily get through all the required reading for class					
Additional tutorials in speaking English would help me with my studies					
Additional tutorials in helping understand the feedback on my assignments would help me with my studies					
Support in drawing/graphic skills would help me with my studies					
Support in writing skills would help me with my studies					
I would like opportunities for me to engage socially with other international students					
I would like opportunities for me to engage socially with Australian students					
UNSW health services, health/well-being counsellors are helpful to me					
UNSW Learning Centre and its website is helpful to me					
Faculty of BE Student Centre is helpful to me					
Faculty of BE Computing Unit [BECU] is helpful to me					

ABOUT YOU:

How long have you lived in Australia?

___ 0-1 year ___ 1-3 years ___ 3-5 years ___ 5-10 years ___ 10+ years

Where did you get most of your information from about settling in Sydney?

- Internet/social media
 Word of mouth
 Agency/Organisation
 Family and friends in Sydney
 I just arrived and worked it out myself
 Other _____

What are the TWO most important things you wish you knew before you arrived in Australia?

1. _____
 2. _____

What is your most common mark for your courses so far in your BE studies

- High Distinction
 Distinction
 Credit
 Pass
 Fail
 I just started here and don't have marks yet

On a scale of 1-10 where would you rank your stress level as a student at UNSW? (1 is I have no stress, 5 is I have some stress and 10 is I have extreme levels of stress)?

_____ (please put a number from 1-10 here)

What year of your undergraduate degree are you in?

- Year 1
 Year 2
 Year 3
 Year 4
 Year 5

What are the TWO things you think international students struggle with most at university?

1. _____
 2. _____

What are the TWO services you wish BE would provide to help you succeed in your degree?

1. _____
 2. _____

If the Faculty of BE were to offer a one day workshop on learning strategies, how much would you pay for this?

- Nothing
 \$1 - \$100
 \$100 - \$250
 \$250 - 500
 \$500- \$1000
 \$1000 +

Finally, how happy are you with the Faculty of BE and the university experience it is providing you?

- Very happy
 Happy
 Neutral
 Not very happy
 Really not happy

If you are willing to participate in a focus group with other international students on September 28 2017, please provide us with your name, email and mobile – we would love to hear more about what you need to succeed here in the BE Faculty.

Name _____
Email _____
Mobile _____

Thanks for your survey answers.

Dr Christine Steinmetz is a senior lecturer at the University of New South Wales Sydney in the Faculty of Built Environment. Her education research explores the social construction of place on university campuses, the undergraduate student experience, and improving learning outcomes and student well-being.
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Dr Sian Thompson is a research associate at the University of New South Wales Sydney in the City Futures Research Centre. Her current research portfolio involves investigating the design, management and personal factors influencing social connection in large apartment complexes. She has worked on several large surveys in the housing and education sectors.
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Dr Nancy Marshall, formerly at the University of New South Wales, is currently an associate professor at the University of Sydney in the School of Architecture, Design and Planning. Nancy's scholarship of teaching and learning research underpins her approach as both a teacher and as an educational leader and manager. Current research includes studying higher education contexts for students and universities.
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