Improving Response Rates to an Alumni Survey in East Africa

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ABSTRACT

Feedback from students and graduates is essential to inform ongoing quality improvement in higher education. However, African universities often face implementation issues in alumni surveys, including technological barriers and difficulties in tracking graduates, particularly those from earlier cohorts and rural alumni. Innovative strategies are needed to locate alumni and obtain a good response rate across widely dispersed, rural and remote areas. This paper reports on strategies used to increase response rates in an East African online alumni survey in a context of limited computer/Internet access. The survey aimed to assess the impact of nursing graduates over a 15 year period (2001–2016). Strategies focused on locating and communicating with graduates and providing solutions to barriers associated with computer/Internet access. Better engagement with alumni was achieved using mobile technologies and social media networks. Facilitating access to online surveys by taking technology to alumni or providing hubs for online access encouraged survey participation. The strategies discussed in this study are particularly relevant for clustered or networked alumni populations (e.g. nurses) in low income and limited resource settings.

Keywords: Higher education, programme evaluation, alumni survey, online survey, impact measurement, East Africa

BACKGROUND

Surveys of university students and graduates are important to assess the quality, relevance and impact of teaching and learning [1, 2]. This feedback is central to programme development and ongoing quality improvement in higher education across all sectors, including nursing education. Alumni surveys also provide information on the long-term benefits and impacts of

programmes [3]. There are considerable benefits in seeking alumni feedback for programme evaluation and improvement purposes [4, 5]. However, African universities often experience implementation issues in alumni surveys, including difficulties tracking graduates and achieving valid response rates, particularly with earlier graduate cohorts [3, 6].

Common survey types include student satisfaction surveys, graduate destination/tracer surveys, employer satisfaction surveys and alumni surveys that assess course value, university engagement and social or economic impact [3, 7]. The present paper discusses a tracer survey that intended comprehensive coverage of nursing alumni to assess the long-term impact of an education programme. Tracer study methodology is described in the *Tracer Study Manual* [8]. Although alumni surveys yield important information, there are logistical challenges in surveying this population, particularly as they are more difficult to define than a 'captured' student population [9]. University graduates are mobile and may be widely dispersed. This eliminates face-to-face approaches and limits the value of mail-out approaches, particularly where postal services are limited or unreliable. Therefore, alumni surveys predominantly use electronic self-completed formats (e.g. emailed link to an online system). The availability of current/active email addresses is critical in contacting alumni about the survey. However, alumni that have opted out of receiving university emails will not be captured. Many other alumni may also be excluded if current contact email addresses or phone numbers are unavailable; especially alumni from earlier programmes who did not have email addresses or whose email addresses have changed. The use of smartphones, tablets or other devices may also impact on factors such as survey access, completion and data quality [10].

Reporting the total number of respondents is important to establish confidence in estimates derived from the survey sample [11]. Therefore, alumni surveys should report the percentage of all living alumni that responded, and the percentage of alumni who received the questionnaire and responded. The first measure reflects the coverage rate, whereas the second is the response rate. The respondent group should also be representative if inferences are to be made. Representativeness is considered more important than the response rate, but the response rate impacts on representativeness [11], meaning assessing respondents' representativeness of the population is essential. This is based on determining whether respondents covered all programmes and included sufficient numbers of different demographic groups. Survey results can be weighted if a detailed set of these characteristics is available [7]. Otherwise, claims of representativeness should be substantiated, results expressed in terms of respondent percentages and no claims made about total effects. A previous study suggested that despite alumni surveys typically having low response rates, the results may be as representative as those with higher response rates [12].

Cultural factors may also affect survey responses, especially as culture may influence how questions are interpreted and answered [13]. For example, traditional African communities mainly rely on oral communication, which increases the importance of face-to face contact [14]. However, Africa comprises many diverse ethnic groups, with more than 2,000 distinct languages [15], and consideration of cultural factors adds another challenging dimension to implementing alumni surveys in the East-African context.

The School of Nursing and Midwifery–East Africa (SONAM-EA) at Aga Khan University aimed to survey all living graduates to assess the impact of the School's nursing education programme, including benefits enabled by the funding received from a sponsor partner. This 15-year partnership had an output of 2,138 nurses at diploma, bachelor's and specialist graduate diploma levels. A key issue in the initial stages of the impact evaluation was the low response rate associated with barriers such as non-current contact details and no

computer/Internet access. This paper discusses the strategies implemented to overcome these barriers, based on the survey context.

METHODS

Aga Khan University conducts a biennial online alumni survey covering programmes, student experiences, university resources, connection with the university and outcome measures. SONAM-EA used this survey to gather quantitative information from alumni to evaluate the impact of nursing graduates from 2001–2016. Demographic questions were modified and additional nursing-specific questions were included (e.g. current nursing specialty, employment change after graduating, intentions for further study and improvements in nursing practices, patient outcomes and/or professional competence). The initial response rate was low, at around 10.9%.

This paper reports the pragmatic steps taken to improve the response rate, using a range of means suited to the environment, such as reaching out to alumni and providing technological support. Strategies to communicate with alumni also aimed to reflect the oral culture, and emphasised personal or face-to-face contact where possible. Literature on graduate tracking, tracer studies, alumni surveys and online survey technologies was searched to identify approaches to improving responses. Search terms included combinations of 'alumni survey', 'Africa', 'tracing survey', 'online' and 'response rate'.

Survey Context: Technology Development in East Africa

Information and communications technology (ICT) development in East Africa is poor. Kenya ranked 129 on the ICT Development Index in 2015 and 2016, with Tanzania and Uganda ranked lower [16]. Although telephone penetration in East Africa is increasing with countries implementing telephony and broadband strategies [17-19], most coverage is 2G. Kenya's mobile phone network runs east–west along the road from Mombasa through Nairobi to Eldoret. Off this major route, there is coverage along the coast north and south of Mombasa, to the north of Nairobi and in centres south of Eldoret and Nakuru [20]. In Uganda, a 3G network covers most urban centres and 2G covers most of the country [21]. In Tanzania, 3G coverage is limited to major urban centres, with 2G along most traffic routes [22]. In 2014, 16.9% of Kenyan households had Internet access (ranked 79 of 133 developing countries listed), Uganda (6.2%) was ranked 107 and Tanzania (4.1%) was ranked 116 [23].

Barriers to online surveys in East Africa include Internet access with sufficient bandwidth, ownership of appropriate devices (PC or laptop, smartphone) and design of systems to accept more available devices.

Procedure

The Aga Khan University Student Affairs Office started survey emails in early March 2016, with the survey released on 17 March 2016. Alumni were emailed an invitation and link to the survey, with a short deadline (as appropriate for email-based requests). Several follow up emails were sent and the timeline was extended twice, with a final closing date of 13 May 2016. A thank you email was sent to respondents on 24 May 2016. Based on advice from the Alumni Office that the number of respondents was low, SONAM-EA sought to extend the reach of its connection to alumni so there was a sufficient number and distribution of responses to ensure the survey was representative and could support robust analysis.

STEPS TO IMPROVE THE RESPONSE RATE

Email Follow-up

An email was sent to all SONAM-EA alumni following the university communication about the survey. This email provided a closer connection to alumni and additional detail, and referenced the previous university communication to ensure consistency. The email also anticipated likely challenges and suggested solutions. For example, an anticipated barrier was lack of computer/Internet access; therefore, arrangements were made to reserve computers on campus for alumni to complete the survey and provided an environment conducive to survey completion (e.g. providing IT support and a cup of tea). Independent administrative staff was engaged to ensure an environment that did not unintentionally pressure alumni regarding the nature of their responses. Email and mobile telephone contacts for SONAM-EA staff that alumni could voluntarily contact if they needed extra help were provided. The link to the online survey was included in all follow-up emails so alumni could start the survey without needing to search for the initial email.

Short Message Service (SMS) Contacts

An SMS text was sent to all alumni communicating the importance of the previous university email and encouraging them to respond. The SMS also informed alumni of available computer/Internet options to support participation, and reminded them of timelines. This SMS was sent to all captured alumni contacts at a cost of about USD 10. However, some alumni were not reached as contact numbers had changed.

Meeting With Leaders

A meeting was arranged with the alumni association leader, with the aim of using her networks to extend awareness about the survey. The alumni association leader was briefed about the importance of the survey, and asked to remind alumni committee members of the opportunity for colleagues to participate.

Assessing Non-Response

The initial low response rate was associated with challenges related to email communication, including: emails going to spam/junk folders, emails undelivered because addresses had changed, blocked emails, and alumni assuming the email was a hoax or not seeing the email because they took long to access their account. Comments from alumni included 'what email?'; '…you mean that hoax was real?'; and '…eeh I thought it was a junk mail'. Others indicated that they did not understand what the email was about. Therefore, attention was focused on reaching alumni and communicating with them about the survey.

Mobile Phone Calls

We categorised alumni mobile telephone contacts into two network provider categories (MTN and airtel), and loaded bundle talk time to facilitate calls to alumni. Bundle talk time was affordable (approximately USD 10 for 1,000 talking minutes). Calls were made to alumni with a known phone number, starting with former class leaders because they usually hold knowledge of class groups and contact details for their cohorts. In addition, they often belong to various forums and can reach out to colleagues. The team also made calls to alumni in leadership positions to seek their assistance in reminding alumni they worked with about the survey, and explain that the emails were not spam or a hoax message.

Taking Technology to Alumni

Following feedback regarding major difficulties in accessing computer/Internet services, the SONAM-EA team arranged technological access for alumni at their workplaces around Kampala city (about a 10 km radius), where the campus is located. Facilities visited included the public

national referral hospital (Mulago hospital), four high-volume city faith-based hospitals (private not for profit) and two private-for-profit hospitals. These facilities were selected as they were cluster locations of five or more alumni. Where possible, visits were timed to coincide with day/evening shift change time.

A team was established to visit each site and provide practical support to facilitate alumni participation. This team comprised an IT person, administrative staff and a stand-by faculty member. Pre-visit preparation included obtaining appointments, confirming venues (e.g. a central place convenient for alumni to attend) and making mobilisation efforts. The team aimed to schedule visits to coincide with shift change (arriving 2 hours before and leaving 2 hours after shift change), so nurses could participate before or after their shift. This strategy was helpful. Before each visit, the team identified a group contact person (alumni) who agreed to assist in mobilising colleagues. Follow-up messages (SMS or phone calls) were sent to that person to ensure they had the necessary details about the appointment and could convey this information to colleagues.

The team provided resources to facilitate survey completion, including laptops, internet modems (dongles), long cables for power sources, lists of contacts in the facilities, and a mobile hand set with an affordable bundle calling ability; in essence, technology was taken to the alumni. Additional challenges included poor computer skills among older alumni and those who had left the university some time ago. Therefore, independent technology support was made available to assist them entering, opening or closing the survey.

Using Other Opportunities
This survey coincided with semester duration, meaning faculty attended various hospitals for clinical placement sessions. Clinical placements were in large hospitals that employ a sizeable number of alumni; for example, the national referral hospital employs about 1,000 nurses, of which about 10% are alumni. Faculty used this opportunity to follow up with alumni who worked in these facilities and explain the importance of their feedback and that the survey was genuine.

Using Respondents to Encourage Non-Respondents
The survey included 47 questions, some with multiple parts, which might have made participation less attractive. In addition, some alumni had not received or read the relevant communications. Therefore, we asked alumni who volunteered information that they had responded to the survey to share their experience with colleagues to encourage them to respond. This helped to dispel misconceptions about length and complexity of the survey. Verbal feedback indicated that some alumni were encouraged to complete the survey by their colleagues.

Targeting Non-Respondents
Towards the end of the survey period, bi-weekly updates on the response rate were requested from the university. This was useful to understand improvements in the response rate, which were assumed to be attributable to the interventions undertaken. The university electronic system was able to identify non-respondents, and issue follow-up email communications to target non-responders.

Mobilising Students
Finally, some current students who worked with alumni were equipped with modems (dongles) to help alumni without Internet access. In addition, data packages were purchased for some students' mobile phones (about 10) so they could provide hotspots to help alumni

access the survey. This cost about USD 30 (USD 3–4 for each mobile phone). The students involved were reminded of the need for independent and non-coercive voluntary participation in the survey.

Final Response Rate

Overall, we achieved 549 responses, representing 25.7% of our 2,138 graduates. This was more than double the initial low response rate (10.9%). As only around 30% of SONAM-EA alumni could be contacted, this represented an overall response rate of approximately 75%. This represents an improved response rate compared with a previous study that reported an average alumni response rate of 40% (range 35–69%) across six institutions in the US [12].

DISCUSSION

Alumni connection and feedback are important for the delivery of education that is 'fit for purpose' and best designed to prepare work-ready graduates; nursing education is no exception. Active involvement of both users (students and graduates) plus employers [24] is an important bridge between the university and world of work. An alumni survey is one way of securing active connection and input. Forging a closer relationship between the university and the market is a well-documented mechanism to ensure quality programmes and curricula. Tracking and involving alumni provides a strong platform from which the university can maintain more current databases and move to the next step of a shared framework for programme evaluation and ongoing development. In the context of the present study, establishing an up-to-date, accurate register of alumni and implementing strategies to support computer/Internet access were central to achieving a representative response to the online alumni survey. The most common methods that alumni use to keep in touch with their university are via social and professional contacts, including attendance at conferences, membership of professional associations and collegial contacts. Therefore, use of professional and social networks [4, 5] enhances connections with alumni and provides ongoing opportunities to update contact details. SMS and personalised email messages during data collection also served to encourage participation, as did involvement as advocates of professional leaders and alumni who had completed the survey. Currently, there is a paucity of experience and/or published best practice guidance in East Africa regarding graduate tracer studies and how best to enhance response alumni response rates. However, the present authors noted that the University of Duisburg-Essen (UDE) has recently collaborated with the Kenyan Commission for University Education (CUE) and the Inter University Council for East Africa (IUCEA) to develop model tracer studies and train middle-level university managers in their use [25]. It is hoped that publications related to insights gained throughout the UDE, CUE and IUCEA project will emerge, and when combined with experiences highlighted in this study, will inform best practices in optimising alumni responses to graduate tracer studies in low and middle income countries.

CONCLUSION

This survey experience demonstrated a number of ways prospective respondents can be supported to access an appropriate level of technology, such as taking technology to events attended by alumni and to locations where clusters of alumni are present. This requires engaging with networks and employers, and scheduling and promoting sessions when technology is available. Establishing such contacts and securing feedback is an important step in aiding the university to develop a shared approach to programme evaluation and ongoing quality improvement. The strategies successfully used in this scenario have direct relevance to universities conducting alumni surveys in Africa and other parts of the developing world that are challenged by poor access to computer/Internet services.

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