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# Public Engagement in Development-led Archaeology: a Survey

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A Landward Research Occasional Paper

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and Doug Rocks-Macqueen

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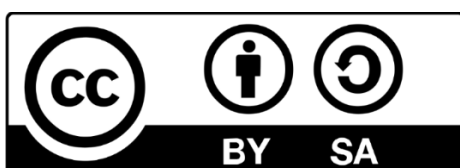
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### **Roles of Authors:**

Hilary Orange designed and carried out the survey as well as writing the first draft of this paper. Poppy German undertook the analysis in R and created all of the figures and tables. Doug Rocks-Macqueen created the R code, wrote some of the discussion and edited the document into its final form. All contributed to the final editing and review of the document.

Special thanks to Kenneth Aitchison for also reviewing and helping to edit the final document.

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## Executive summary

This report was produced following an online survey in 2013 of UK development-led archaeologists. The survey was one element within a wider project on public engagement in development-led archaeology carried out by Hilary Orange in 2012-13 and its aim was to gather data on the challenges that these archaeologists face in carrying out public engagement activities. The development-led sector is important to discussions on public archaeology due to its scale of work. In 2011, Fulford estimated that around 90 percent of all archaeological investigations in the UK were carried out by development-led archaeologists (2011, 33).

The data presented in this report draws on the responses of 181 individuals. It provides insights into attitudes to public engagement and how it is practiced in development-led archaeology. Key findings are:

- most do not view public engagement as an archaeological skill;
- over 70% had never received training in public engagement;
- there is a range of opinions on what activities constitute public engagement;
- public engagement is not always seen as a specialist/professional undertaking;
- there is significant undertaking of public engagement activities;
- most of those activities take place during work, but for some public engagement was only done on their own time;
- money and non-disclosure agreements are barriers to public engagement;
- such work is usually acknowledged in a variety of forms, the most common being social media.

## Introduction

From October 2012 to June 2013, Hilary Orange worked with Archaeology South-East (ASE) to explore the challenges which commercial archaeologists faced in incorporating public engagement activities within their project work. ASE provides technical services, consultancy and research for a wide range of public and private sector clients, but chiefly for construction companies and/or their agents (Perring 2012). The project was funded through a UCL Advances (now called UCL Innovation and Enterprise) Knowledge Exchange Associate (KEA) Fellowship scheme whereby post-doctoral scholars are hosted by businesses. Each KEA acts as a conduit for the transfer of knowledge from UCL to industry, with projects tailored to meet the needs of each business. The aims of the fellowship were twofold: to build engagement capacity within ASE and to conduct research on engagement within UK commercial archaeology.

The history of development-led archaeology in the UK has been well covered by Aitchison (2012), Everill (2009) and Orange and Perring (2017), amongst others. Background data on development-led archaeology in the UK is published in the five-yearly labour market reports *Profiling the Profession* by Landward Research. The 2012-13 report (Aitchison and Rocks-Macqueen 2013) is contemporaneous with this report. The authors estimated around 2800 archaeologists working in the development-led sector in 2012-13, of these 15 individuals had designated education or outreach posts (2013, 43, 179). In brief, development-led archaeology in the UK involves the contracting of professional archaeological services primarily to the construction industry and has operated since the early 1990s within the framework of government planning policy, in turn creating interactions between clients, curators, archaeologists and communities. Companies attract contracts for archaeological works through a process of competitive tendering which tends to result in trade-offs between time and cost. The sector's foremost concern is the delivery of tangible, closely defined and measurable outcomes that enable developers to comply with the conditions set on a grant of planning permission. The relative value of different forms of archaeological service therefore impacts on company systems in terms of prioritisation, planning and resourcing. Time-effective project management and low profit margins can lead to the de-prioritisation of marginal types of service, such as public engagement (Aitchison 2012, Southport Group 2011: 12, Orange and Perring 2017).

Several surveys on attitudes to public engagement in archaeology have previously been carried out in the US and Canada. Birch (2006) interviewed consulting archaeologists and government personnel in the province of Ontario, Canada about their general attitudes toward public archaeology. A survey by Rocks-Macqueen in 2008 questioned the perceptions of archaeologists working in New Mexico (2012). The survey of development-led archaeology by Orange, carried out in 2013, then fits in within this sequence and is presented in this report. A subsequent survey of archaeologists working across different sectors in the UK was carried out by Richardson in 2015 and published by Landward Research in 2018 (Richardson et al. 2018).

Taken together, the survey findings show some similarities. Generally, public engagement is challenged by the cultural and economic systems within which individuals and teams operate. Birch (2006) concluded that the system of cultural resource management in Ontario lacked policies and practices that enabled meaningful communication with the public. Rocks-Macqueen concluded that public archaeology is strongly supported in an abstract sense, but fares less well when it comes to actual implementation (2012, 118). Richardson et al. similarly conclude that engagement is generally viewed positively, but those working within commercial/development-led archaeology were less likely to agree that public engagement was beneficial to their work (2018, np). These surveys show that an old 'problem' continues. The questions regarding what contract archaeology does and who it does it for have been discussed by various authors since at least the 1980s (Kristiansen 2009, Southport Group 2011, Perring 2015, Raab et al. 1980). Rather their value is in showing how attitudes might be changing as well as steps taken toward the integration of public archaeology within practice, despite the inherent challenges. This survey adds to that body of work.

## Methodology

The data presented in this paper were collected through an online survey. The survey went live on 1 May 2013 and closed on 30 June 2013.

The survey was targeted at permanent staff within development-led archaeology organisations in the UK. The survey collected semi-anonymous data, individuals' names were not requested, but information on their job titles and the broad geographic region in which they worked was. Each survey response had a unique id, however when results are displayed in this report no individual's id or consecutive answers can be seen, therefore helping to anonymise responses. The survey was hosted on the *SmartSurvey* platform which had several advantages. Individual respondents could start and stop the survey as they wished and skip any questions that they did not want to answer.

20 questions were asked, the majority were multiple-choice, while four questions allowed for write in responses – some subsequently converted into categories. The final question was a further thoughts write in question and those comments are presented at the end of this report in Appendix 1. A limitation of the data is that it is subject to self-selection bias, as respondents chose whether to participate or not. In terms of recommendations (if a similar survey were to be run again), the survey could have been better designed to accommodate archaeologists who worked as freelancers or were self-employed. The survey had been designed for individuals working in organisations. Question 5 ("*In which geographical region does your company mainly work in?*") with a multiple choice of options was also problematic for those who worked in companies with national/international remits.

The survey was distributed via social media platforms (*Twitter* and *Facebook*) and by email through professional networks. Messages were sent out on relevant listserv lists and posted in fora, such as BritArch and BAJR. The results of the survey, in the form of a *SmartSurvey* report, was distributed through relevant lists including Britarch, BAJR and IfA (now CIfA). 181 people responded to the survey. As 2812 archaeologists were estimated to be working in the development-led sector in 2012-13 (Aitchison and Rocks-Macqueen 2013, 43), the data represents a small sample, 6.4%. The dataset was subsequently shared on the *figshare*

platform ([https://figshare.com/authors/Hilary Orange/529529](https://figshare.com/authors/Hilary%20Orange/529529)) on 30 July 2013 and results have been partially published (Orange 2013, Orange and Perring 2017).

A discussion between Hilary Orange and Doug Rocks-Macqueen at the end of 2018 led to this collaborative publication. Though due to the other commitments the Landward Research staff were not able to finish their portion of the project until 2020.

The published data were re-examined and analysis run on them. Using the software R each column of data was compared to every other column to derive p-values which were used to evaluate possible patterns between responses. To accomplish this work in R, two libraries were used, openxlsx and plyr; the code is in



Appendix 2: R Code. This required the data to be cleaned. Cells with null values would throw errors in R so they were replaced with 'UNANSWERED' text values. There were four free text questions (questions 1, 7, 13, 20), two of which (7, 13) had their answers examined and categorised by Poppy German. The results of questions 1 were too ambiguous to be categorised i.e. generic archaeologists titles, and thus not included in the further analysis. The final question asked for long form responses and was not appropriate for converting to categories. R was required as there was a total of 9453 combinations of responses and to undertake this by hand was not practical.

First developed by Ronald Fisher in the 1920s, the p-value provides an index of the evidence against the null hypothesis (that two variables are not related). Originally, Fisher only intended for the p-value to determine if further research into a phenomenon could be justified (Fisher 1925). He saw it as one bit of evidence to support further investigation, rather than as conclusive evidence of significance. This is how p-values are used in the paper, as an indication of the need for further investigation. Given drawbacks in p-values we used an arbitrary cut off point of  $R^2 = .01$  instead of the more commonly used .05. This lowered, but does not eliminate the chances of having false positives.

Any reader should take into account the following when reviewing these results:

1. P-values are indications of the need for further research, not indications of significance.
2. The survey is not a random sample of the target population. Any results are the representation of the respondents, but great caution should be taken when inferring they represent the views and experiences the target audience of development-led archaeologists. It may be that they are representative, but further surveys are needed to collaborate these findings.

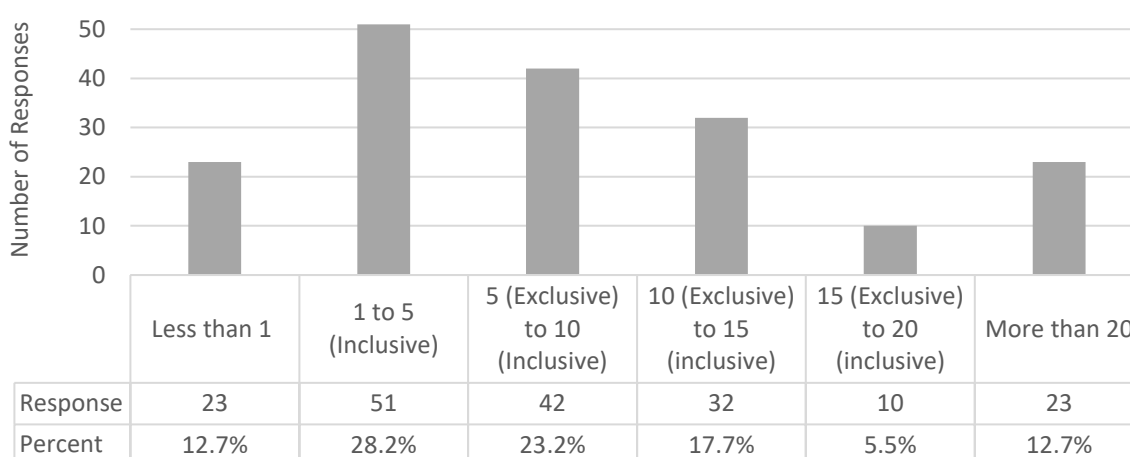
Essentially, the results of this survey are only indicates and are not confirmations.

## Results and Discussion

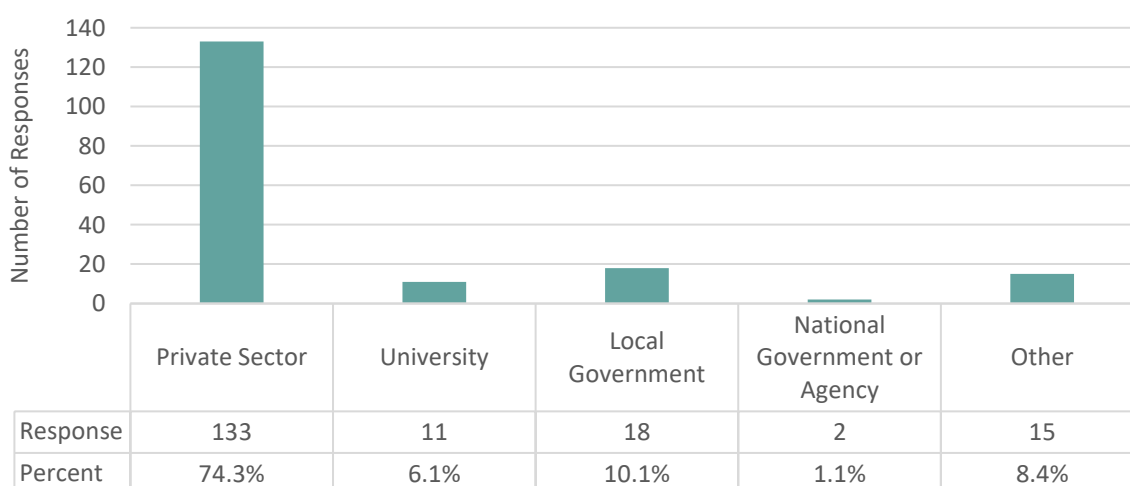
Results present the responses to questions by logical groupings and not the necessarily in the order they were asked in the survey. Question 1 and 20 are not presented here, but in Appendix 1.

The first set of questions, reviewed here, were used to gather information on the respondents to better understand their background. These data could be used in the future to calibrate responses with other surveys i.e. similar respondent profiles mean results are likely similar between surveys. The highlights are: a majority have worked for their current employers for 10 years or less (Figure 1); a majority work for non-public organisations (Figure 2), a third of the employers are charities (Figure 3); they work all over the country (Figure 5); it was almost evenly split on the respondents who did or did not have public engagement in their job description (Figure 4) and Facebook was the dominate social media platform used by the participants (Figure 6).

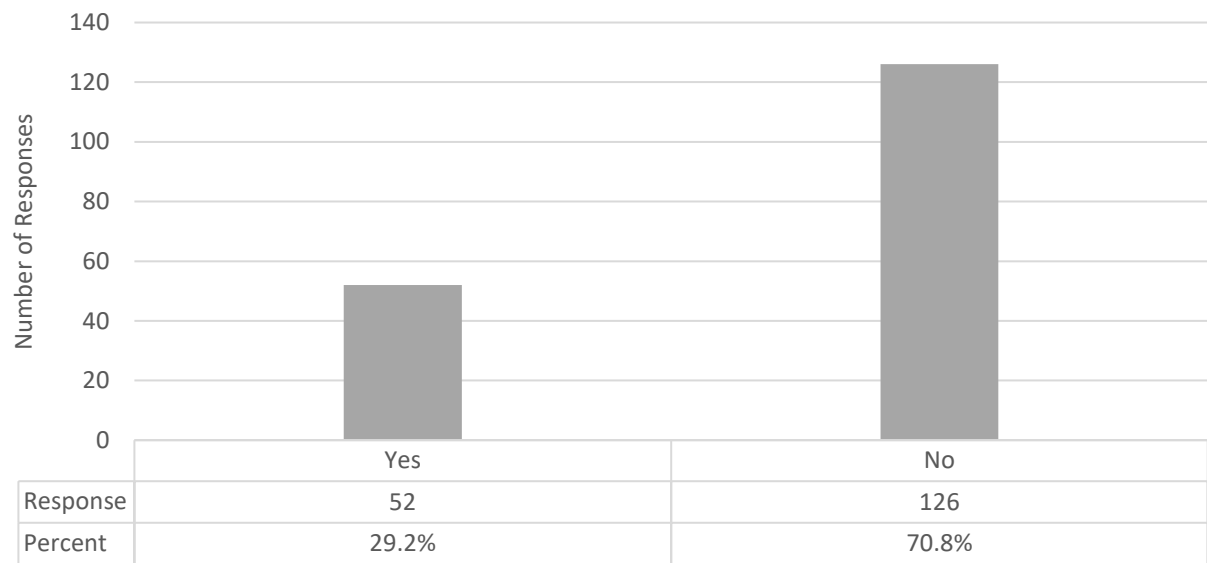
*Figure 1: Number and percentage of responses for Question 2, how long have you worked for your organisation? (Years)*



*Figure 2: Number and percentage of responses for Question 3, what type of organisation do you work for?*



*Figure 3: Number and percentage of responses for Question 4, does your organisation have charitable status?*



*Figure 4: Number and percentage of responses for Question 6, is public engagement included in your job description?*

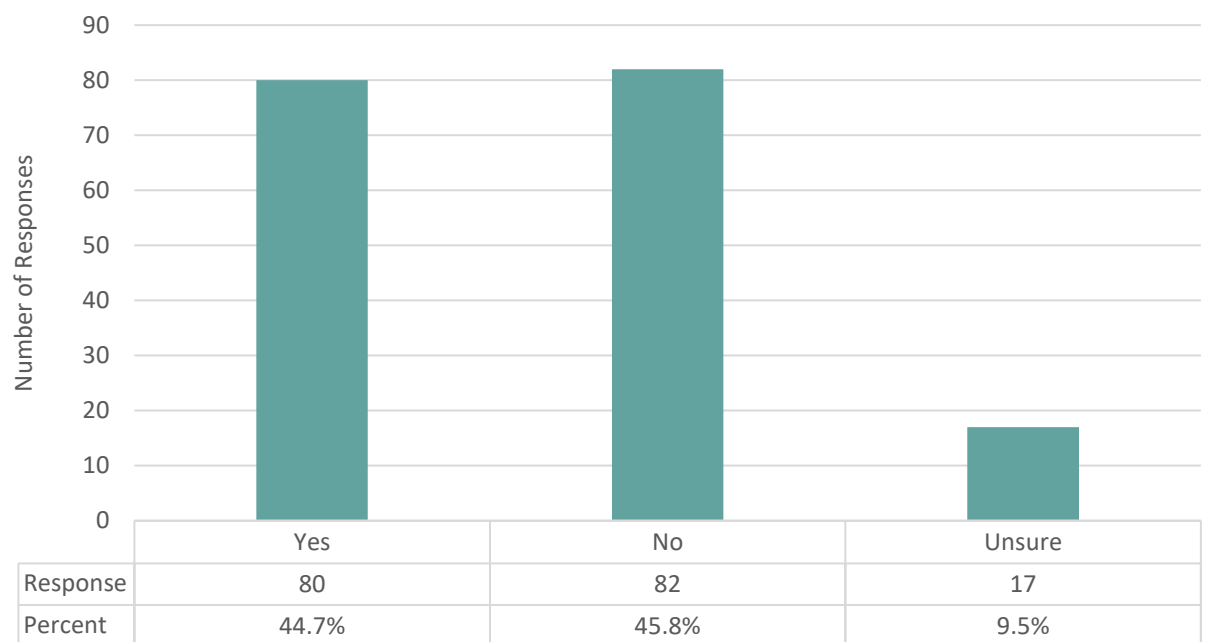


Figure 5: Number and percentage of responses for Question 5, in which geographical region does your company mainly work in?

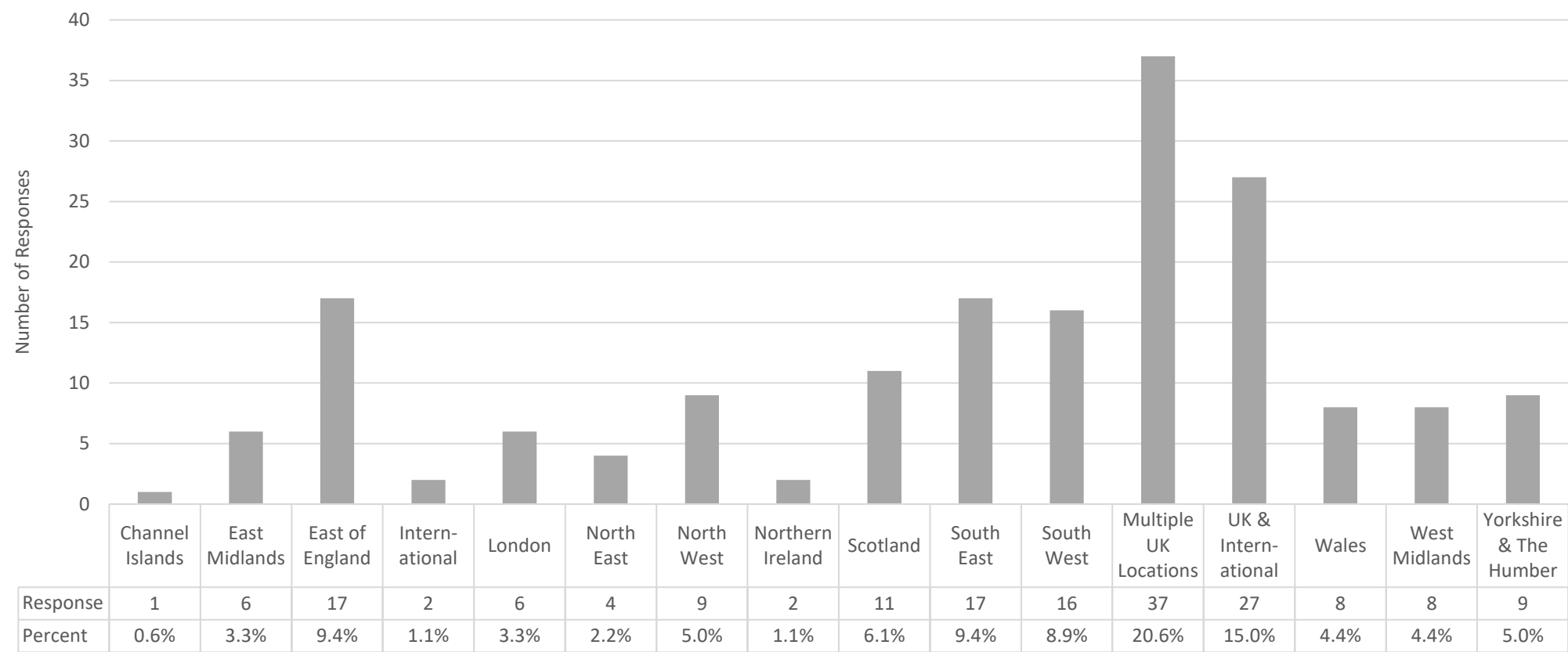
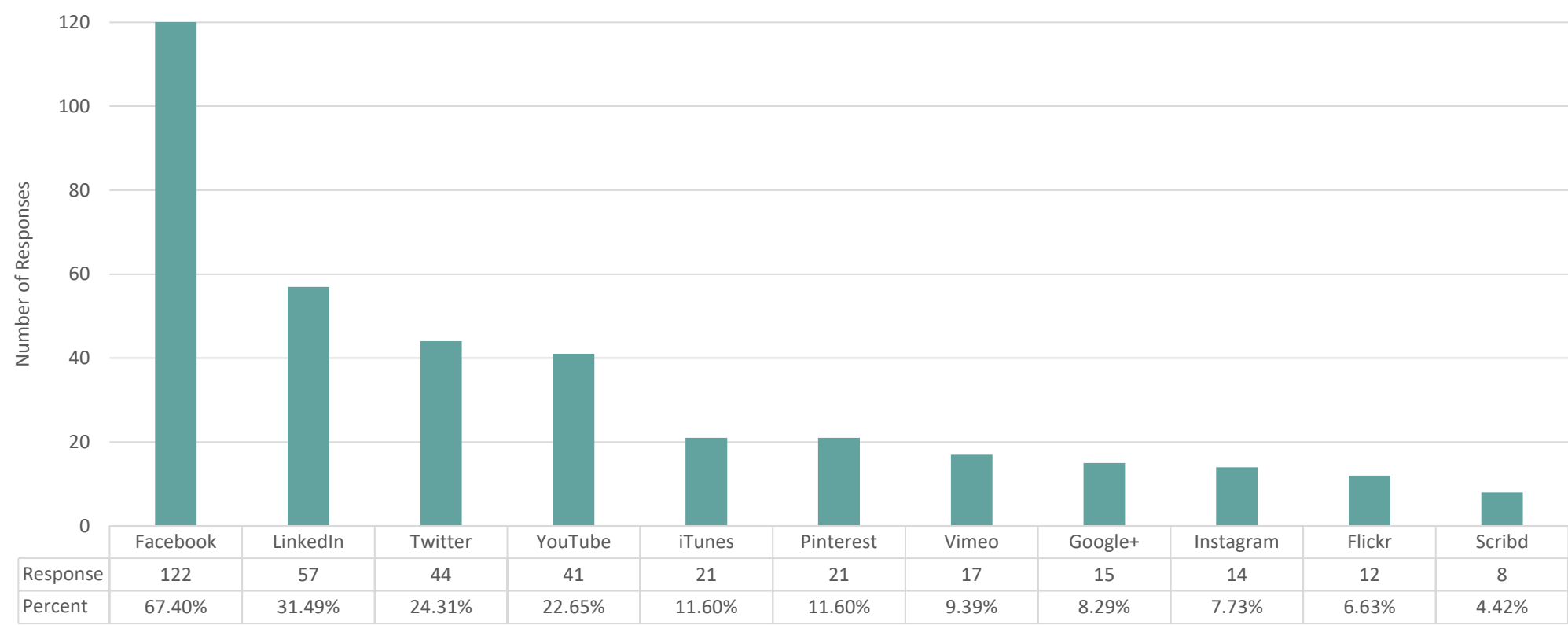


Figure 6: Number and percentage of responses for Question 19, do you use any of the following social media platforms on a regular basis (say, once a month)?

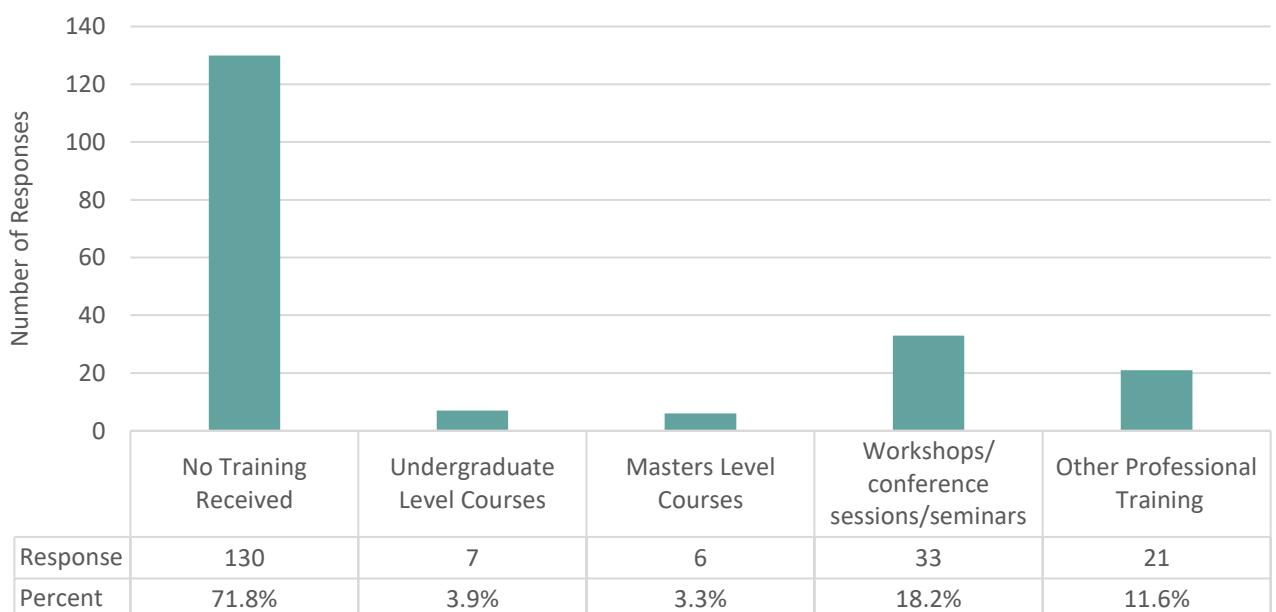


The next set of results are on the respondents' perceptions and experiences with training in public engagement. More than half of the respondents do not see public engagement as an archaeological skill (Figure 7). If it is not seen as an archaeological skill then it is unlikely to be offered as widespread training by organisations or include in University-based curriculums, at least those concerned with archaeology. This is indeed played out in answers to another question, eight, with ~72% of respondents reporting never receiving training in public engagement and for those that have received training, it is more one-off training than part of or formal courses (Figure 8). Those that want to see it taught as a core archaeological skill will have an uphill battle doing so.

*Figure 7: Number and percentage of responses for Question 9, Do you see public engagement as being:*



*Figure 8: Number and percentage of responses for Question 8, have you ever received any training in PE?*



Respondents were asked several questions about their thoughts on different aspects of public engagement. The responses to question seven, *“Off the top of your head, what does the term ‘public engagement’ mean to you?”*, shows the vast differences in archaeologists’ views on what ‘public engagement’ is (Figure 9). While ‘talking to the public’ was the top response, only a quarter of respondents mentioned it. This was a free text response question so respondents were not promoted with choices, but had to write in what they thought. It is quite possible, when presented with a list, most respondents would agree to most, or even all, of the listed possibilities as being public engagement. However, the diversity and lack of dominating concepts, when unprompted, does indicate there is not an agreed concept of what public engagement is. Anyone using the term in development-led archaeology would be advised to include some sort of clarifying language to avoid confusion, one person’s idea of engagement may not be another’s.

Respondents were also asked about their perceptions on 11 other topics through agree/disagree questions (Figure 10). For the majority of the questions most responded with some form of agreement. However, there were three exceptions to this. While more thought that public engagement enhanced their career prospects than didn’t, a plurality responded they didn’t know. Possibly an indication that public engagement is not thought about in terms of career prospects for the respondents. Awareness of external public engagement networks was mixed with almost equal numbers being aware of and not. The other exception was that a majority disagreed with the idea that public engagement is best left to trained professionals. This raises interesting questions about the perceived ease in undertaking public engagement, potentially even how public engagement is valued. Is it seen as a specialist activity, one requiring professionals?

In terms of what respondents thought would get them more involved in public engagement the clear leader was having more money to do so (Figure 11). This was followed by relief from other workloads. The rest of the answers clustered between ~20-10% and given these small differences should be seen as being probably equal in importance to the respondents. This was one of the few questions that did not have relatively close clustering of responses. With 60% of respondents viewing money as the primary barrier this was a rare question with a clear majority choosing one answer.

The last question asked respondents what aspects of public engagement they thought their organisation needed to develop. Half thought that writing popular publications/articles was an area that needed to grow (Figure 12). Most of the other possible areas fell in a tight 20% range (~45-25%) with only one or two percentage points separating some of them.

Figure 9: Number and percentage of responses for Question 7, off the top of your head, what does the term 'public engagement' mean to you?

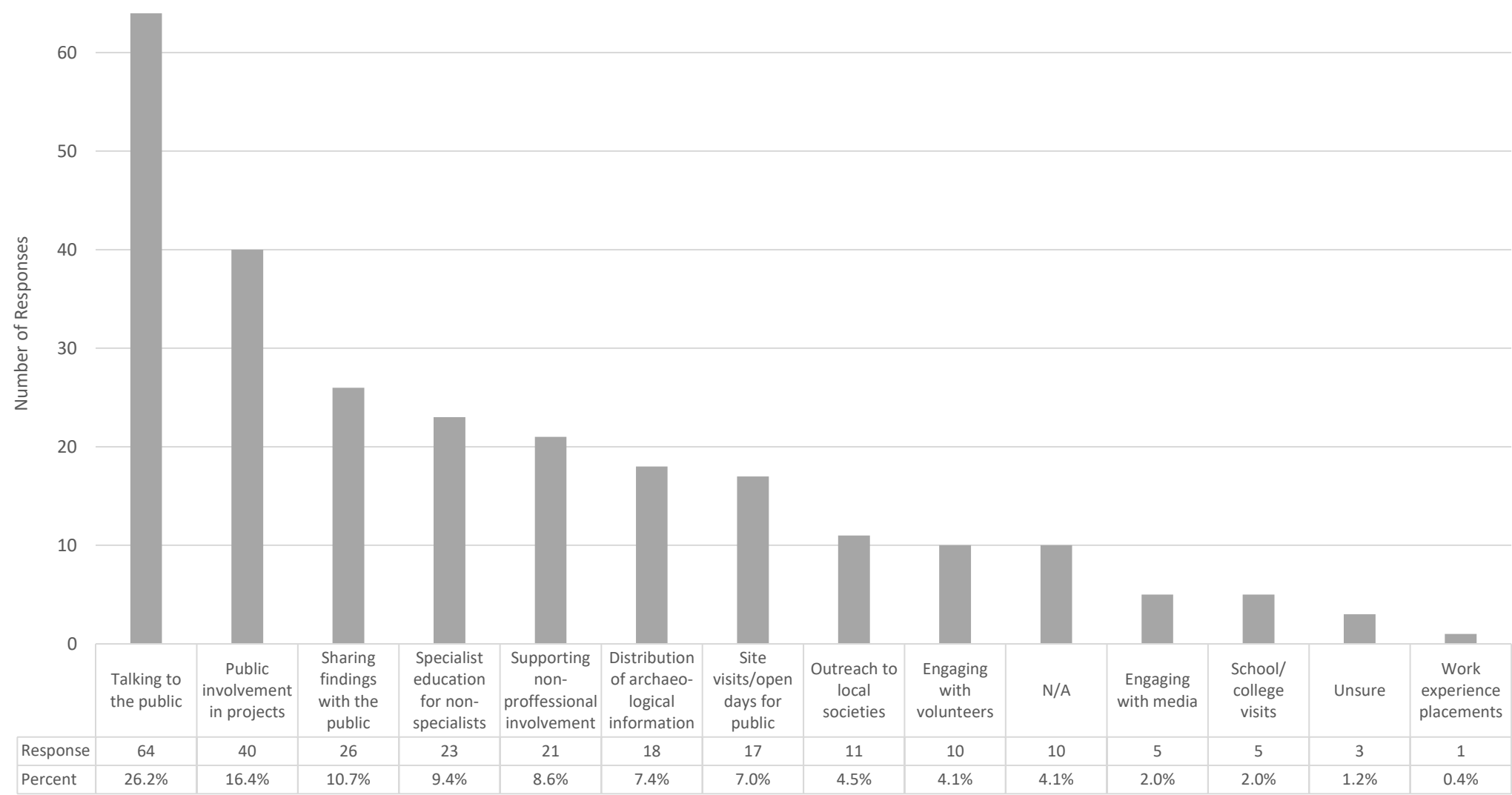




Figure 10: Number and percentage of responses for Question 17, do you agree or disagree with the following statements? From left to right, the coloured bars represent “Strongly Agree”, “Agree”, “Neither agree nor disagree”, “Disagree” and “Strongly Disagree” respectively.

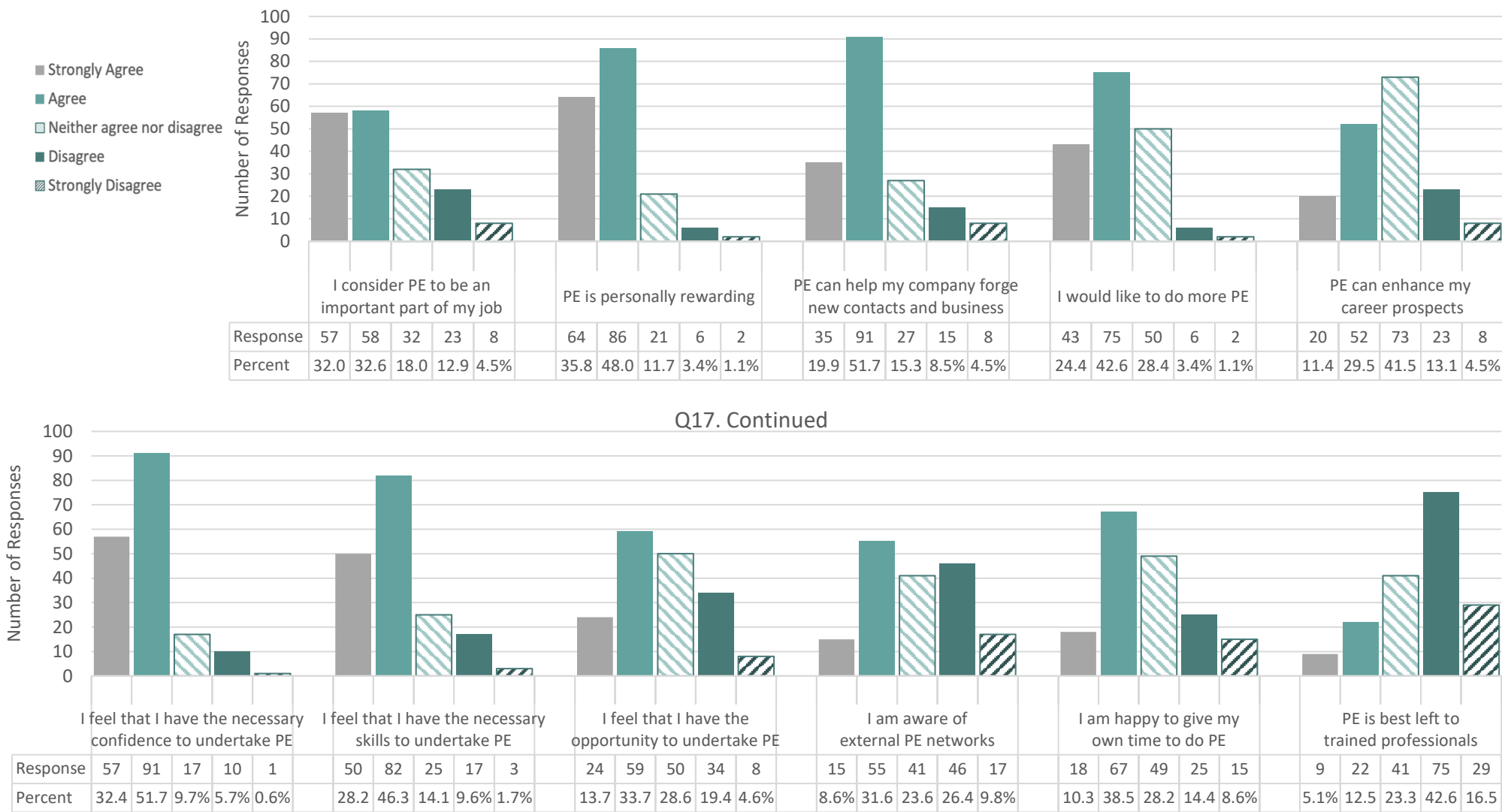


Figure 11: Number and percentage of responses for Question 18, would any of the following motivate you to get more involved in public engagement?

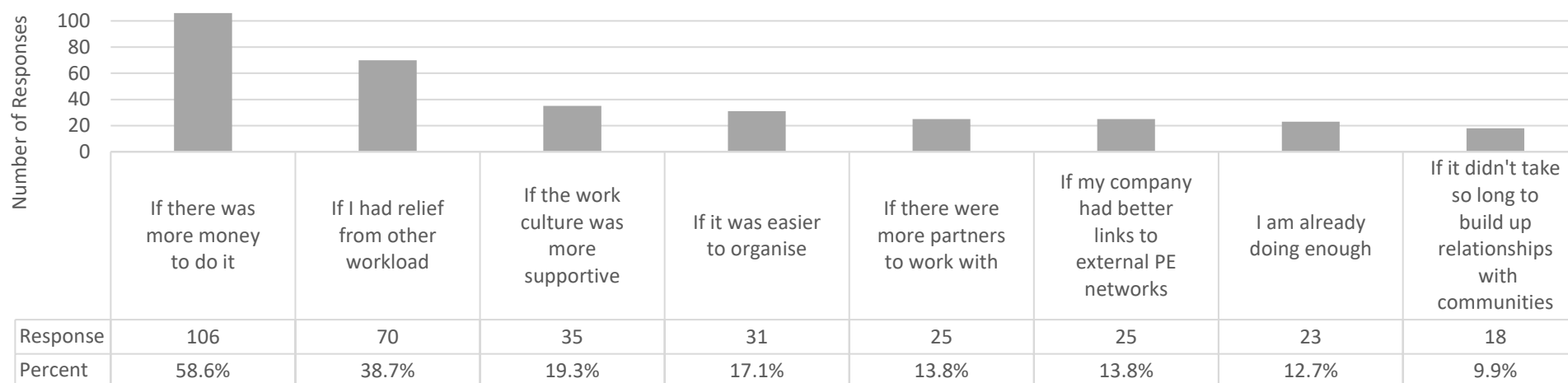
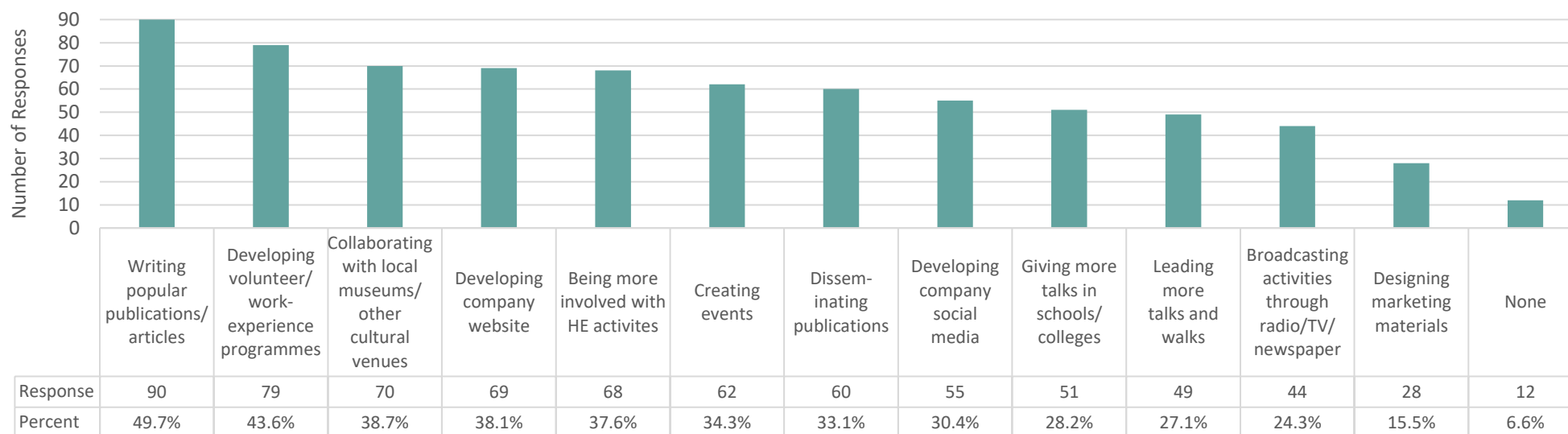


Figure 12: Number and percentage of responses for Question 15, in your opinion, what are the most important areas of PE for your organisation to develop? Please choose UP TO FIVE from the following list:



The next set of results examined are questions that looked at the activities of the respondents in the preceding two years (2011-12). They participated in a range of public engagement activities, with two-thirds reporting that they have given talks to societies or special interest groups (Figure 13 & Figure 14). This was an outlier in the pattern of responses in that there were not groupings of responses, but a range of participation from around two-thirds down to roughly 6%, for participating in historical re-enactments.

These activities include both those undertaken for work and on the respondent's own time. A further question helped clarify how much of the public engagement was on the respondents own time. The majority of respondents reported that less than 20% of that work was in their own time (Figure 15). However, future work is needed to better quantify this impact. 100% of one hour of public engagement is less than 10% of 100 hours. Potentially, development-led archaeology undertakes public engagement activities quite often and might be the leading sector on this or it could be an occasional undertaking, further data is needed.

One dynamic that needs further investigation is that 10% of respondents undertake this work for free at least 90% of the time. This sort of undertaking would imply that there is no connection between their engagement work and the rest of their paid work. Do they undertake this work because they enjoy doing it? Is it an expectation of the workplace to move up in positions? A combination of both?

Another question asked about public engagement experiences over the preceding two years was the methods used to record these types of activities. Photographs were the most popular method for recording activities, but there is quite a range in methods employed (Figure 16). Less than a third of the participants had used formal feedback methods, but given the range of activities this is not necessarily surprising; one would not gather written feedback from talking with a journalist.

When asked about why respondents have not been involved in public engagement activities there was no one dominate reason. Public engagement not being part of their job role was the highest response, but with only 20% of the responses, 18 in total (Figure 17), not actually a significant barrier for most of the respondents. Most respondents did not list a reason why they have not been more involved in public engagement, implying they had no barriers to doing so, though future surveys should clarify this.

Figure 13: Number and percentage of responses for Question 10, over the last TWO years (2011-2012) have you been involved in any of the following PE activities in connection with your work? Please include work-time AND own-time activities. (Continued in Figure 14)?

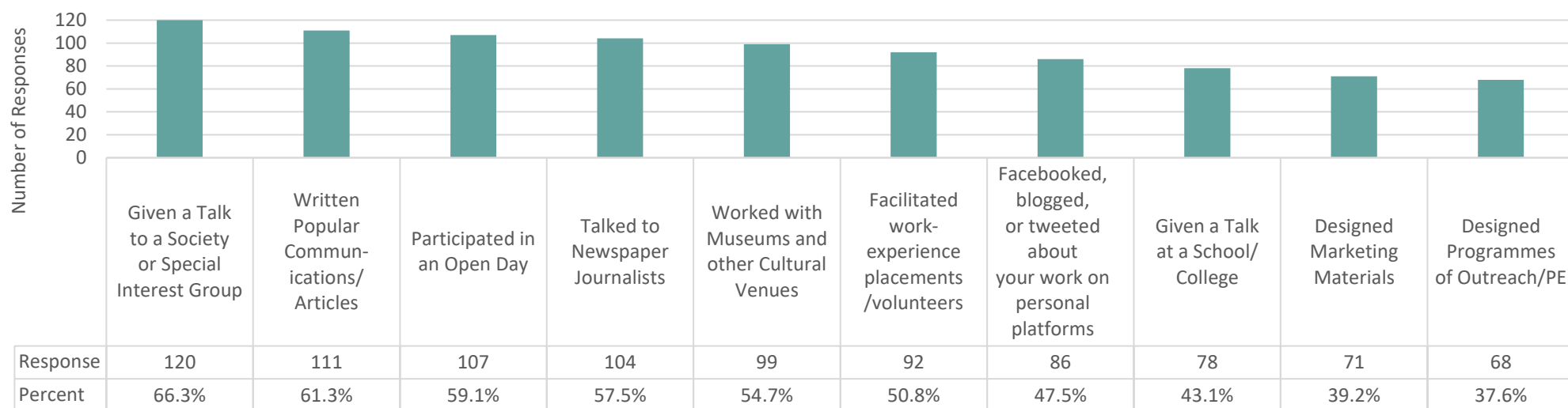


Figure 14: Continued breakdown of number and percentage of responses for Question 10, over the last TWO years (2011-2012) have you been involved in any of the following PE activities in connection with your work? Please include work-time AND own-time activities?

#### Q10. Continued

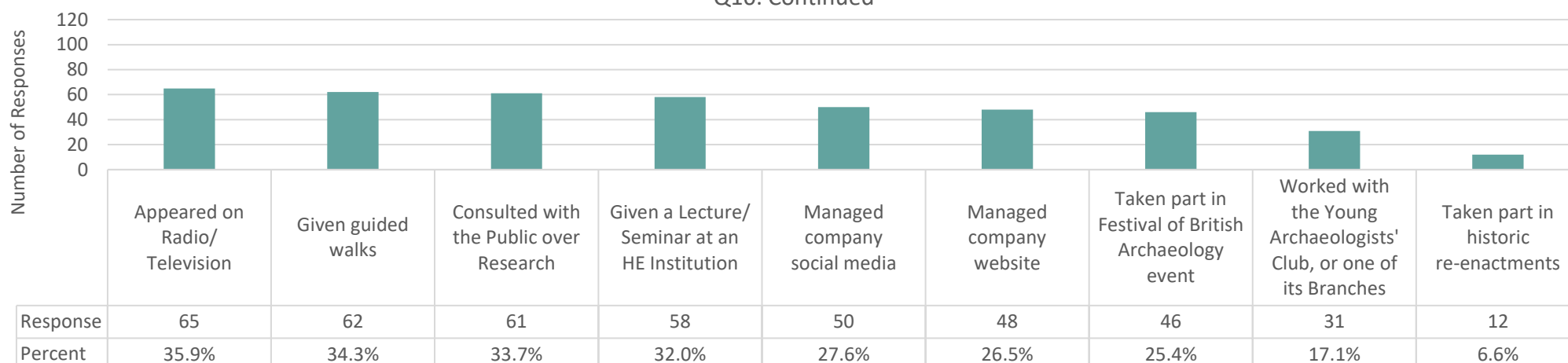


Figure 15: Number and percentage of responses for Question 11, approximately what percentage of the PE work that you've done in the last TWO years (2011-2012) has been in your own-time?

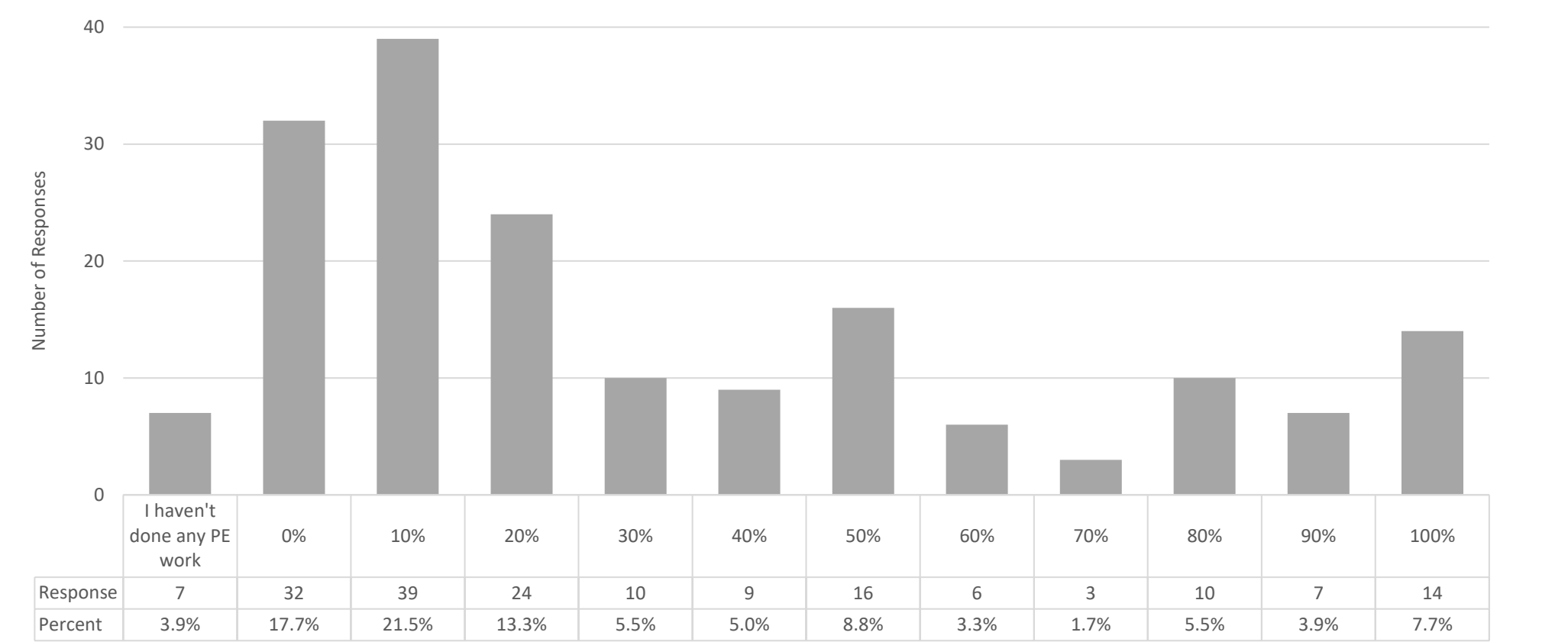


Figure 16: Number and percentage of responses for Question 12, over the last TWO years (2011-2012) have you been involved in recording PE activities in any of the following ways?

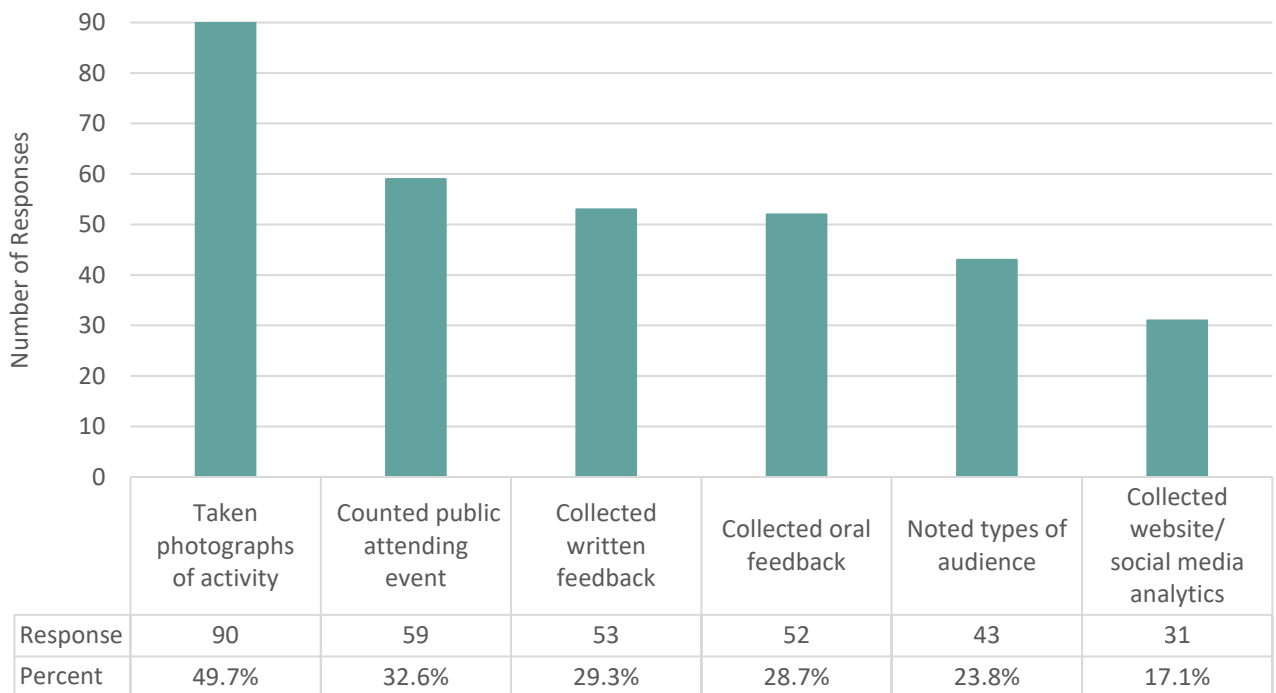
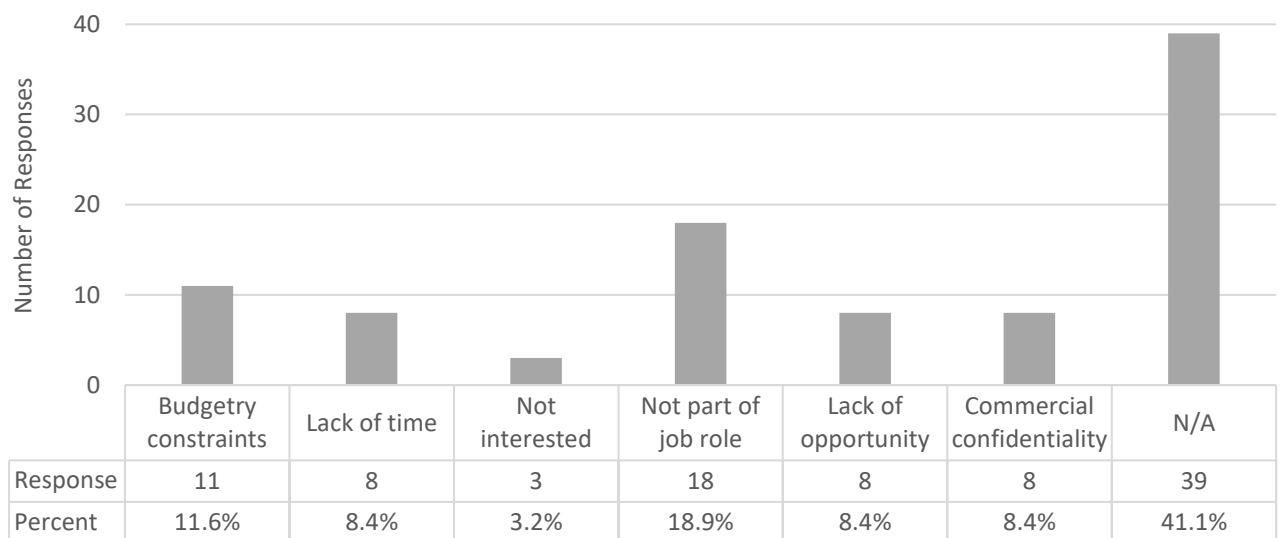


Figure 17: Number and percentage of responses for Question 13, is there any particular reason why you haven't been involved in PE activities over the last two years (2011-2012)?



The last questions were about experiences, but without specifying a timeframe of the preceding two years. Respondents were asked about their knowledge of outputs resulting from their project & activities. Social media recognition was the most common output, but the spread is interesting. Almost all of the other possible answers clustered within a 20% range (~30-10%) (Figure 18).

The last question was about their experience with what impedes public engagement, again beyond a two year time frame asked in the other questions. There were three dominate reasons: no money to do so, client confidentiality, and short project time-frames (Figure 19). Almost all of the rest of the answers fell into another 20% range grouping (between roughly 35-15%). Though there were a few answers at the very low end that fell outside this grouping. Client confidentiality is likely the result of many developers having standard terms and conditions that include confidentiality clauses.

Figure 18: Number and percentage of responses for Question 14, are you aware of any of the following outputs resulting from your project & activities?

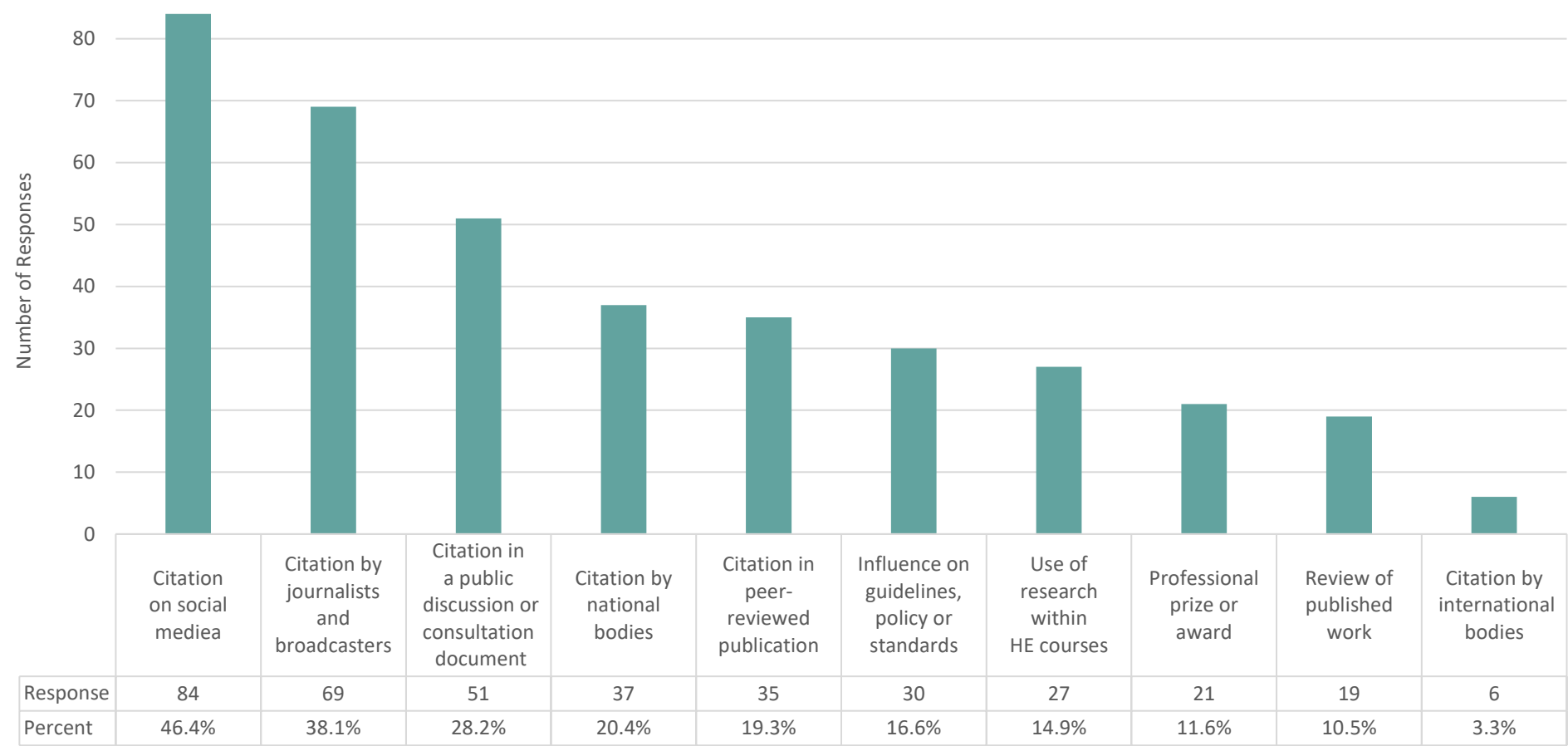
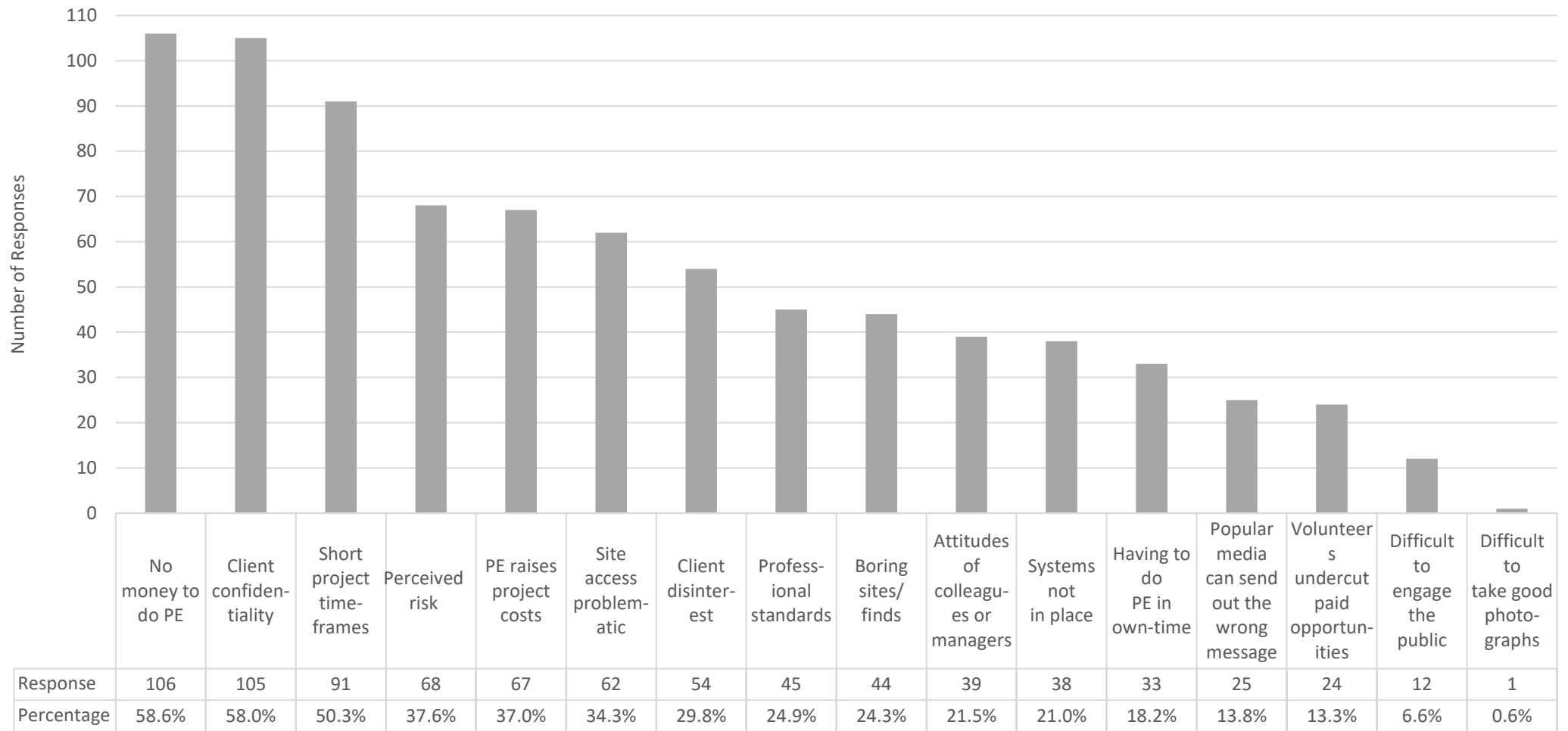




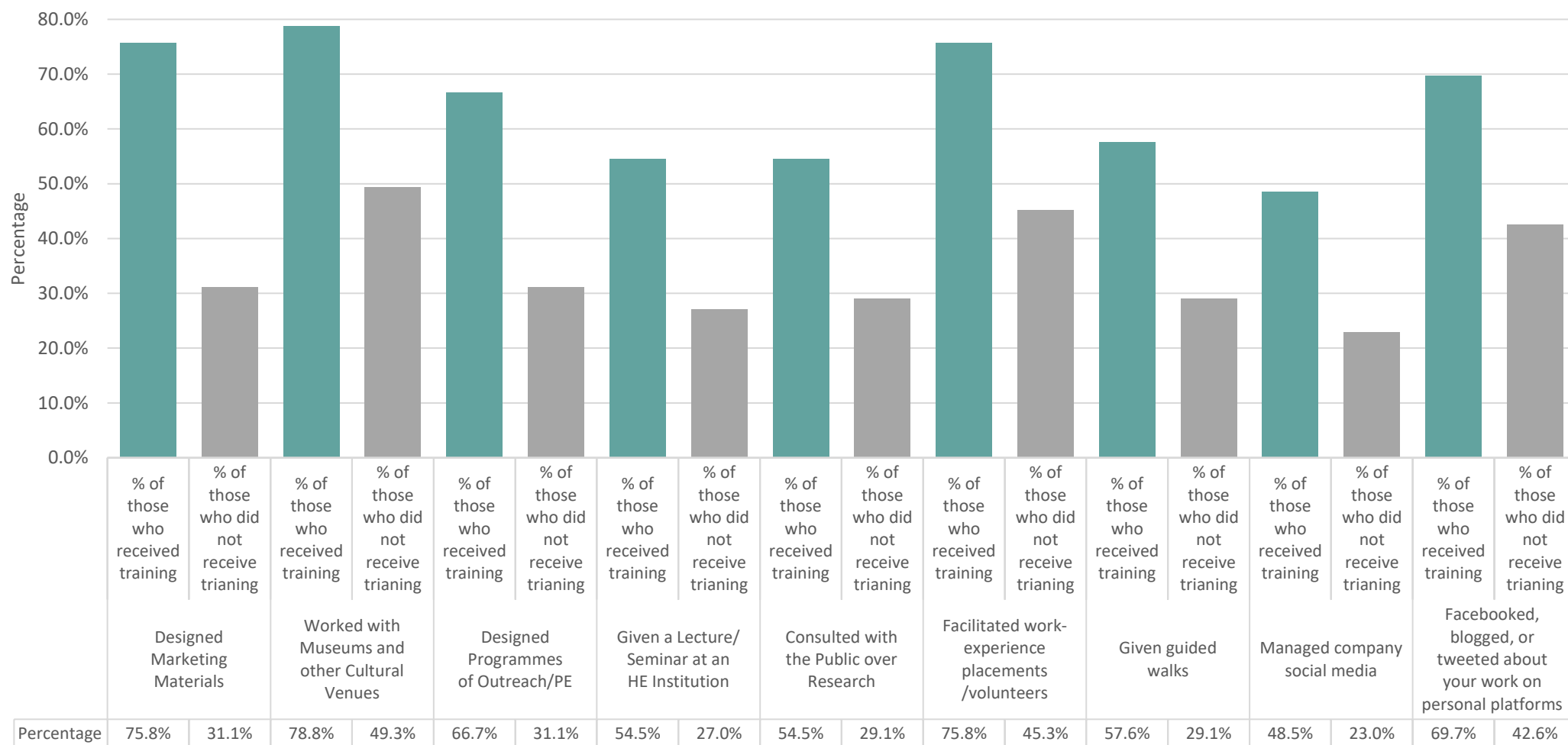
Figure 19: Number and percentage of responses for Question 16, in your experience, what are the top factors that impede PE within commercial practice?  
Please choose UP TO FIVE from the following list:



A total of 9453 combinations of responses to the questions were examined. Only 801 of those combinations had  $R^2$  values of lower than .01 and had a enough responses to not cause low response errors in the software i.e. less than five responses. The key findings of this analysis was:

- The only type of training that correlated with being involved in PE activities was “Workshops/conference sessions/seminars”. Correlation was shown between participants receiving this training and being actively involved in 9 out of 19 PE categories, as well as recording 1 out of 6 PE activities. This correlation is illustrated in the following Figure 20.

Figure 20: Correlation between receiving training via workshops/conference sessions/seminars and being actively involved in PE activities.



- Those who have undertaken the following in connection with their work:
  - Worked with museums or other cultural venues
  - Worked with the Young Archaeologists' Club
  - Given a talk to a society/special interest group
  - Designed programmes of outreach
  - Facilitated work-experience placements/volunteers.

were the most involved in recording PE activities. Correlation was shown between these types of work and all of the categories for Question 12, *"Over the last TWO years (2011-2012) have you been involved in recording PE activities in any of the following ways?"* This relationship is shown in the following Figure 21 and Figure 22.

Figure 21: Correlation between undertaking PE activities in connection with work and recording PE activities. From left to right, the bars represent the following PE recording activities: “taken photos of activity”, “counted public attending event”, “collected oral feedback”, “collected written feedback”, “noted types of audience” and “collected website/social media analytics” respectively. The light grey dataset represents those who had not undertaken the respective PE activity in connection with their work.

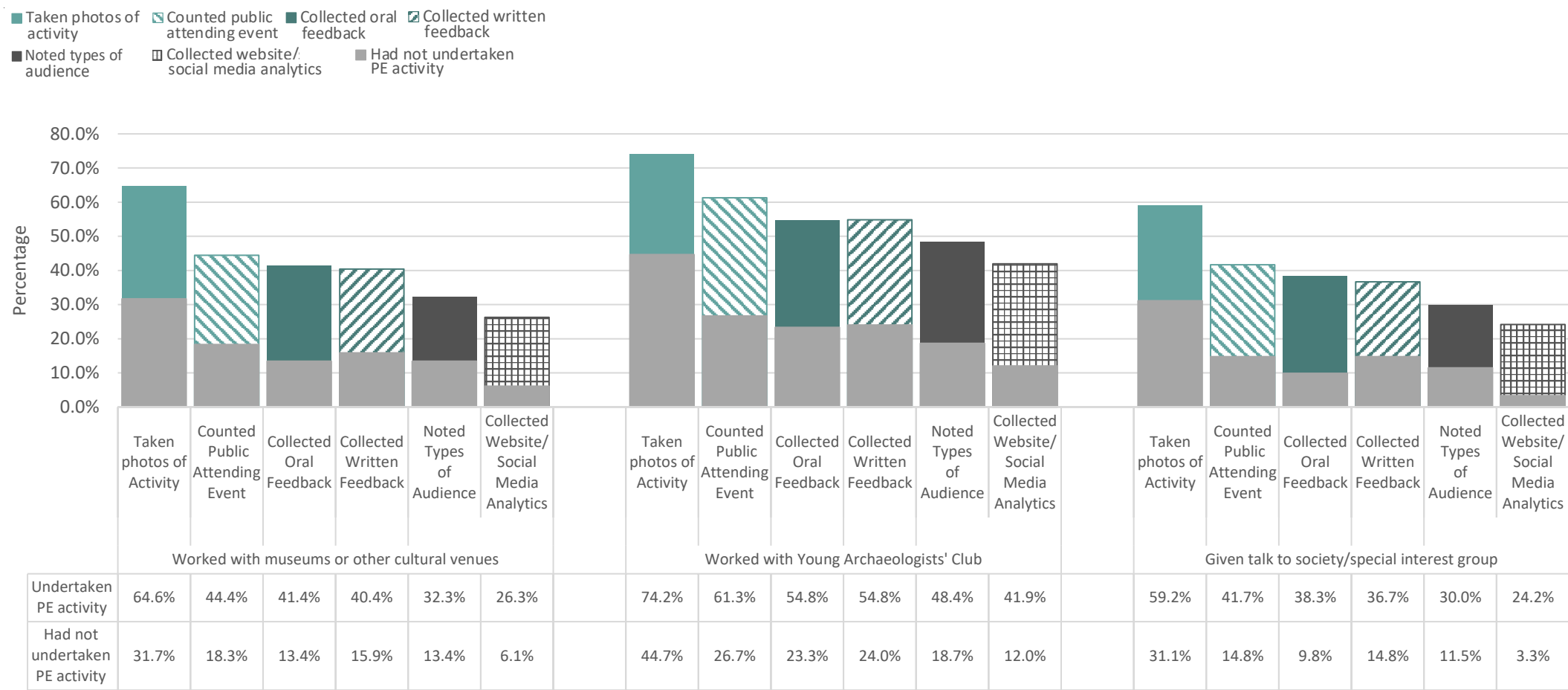
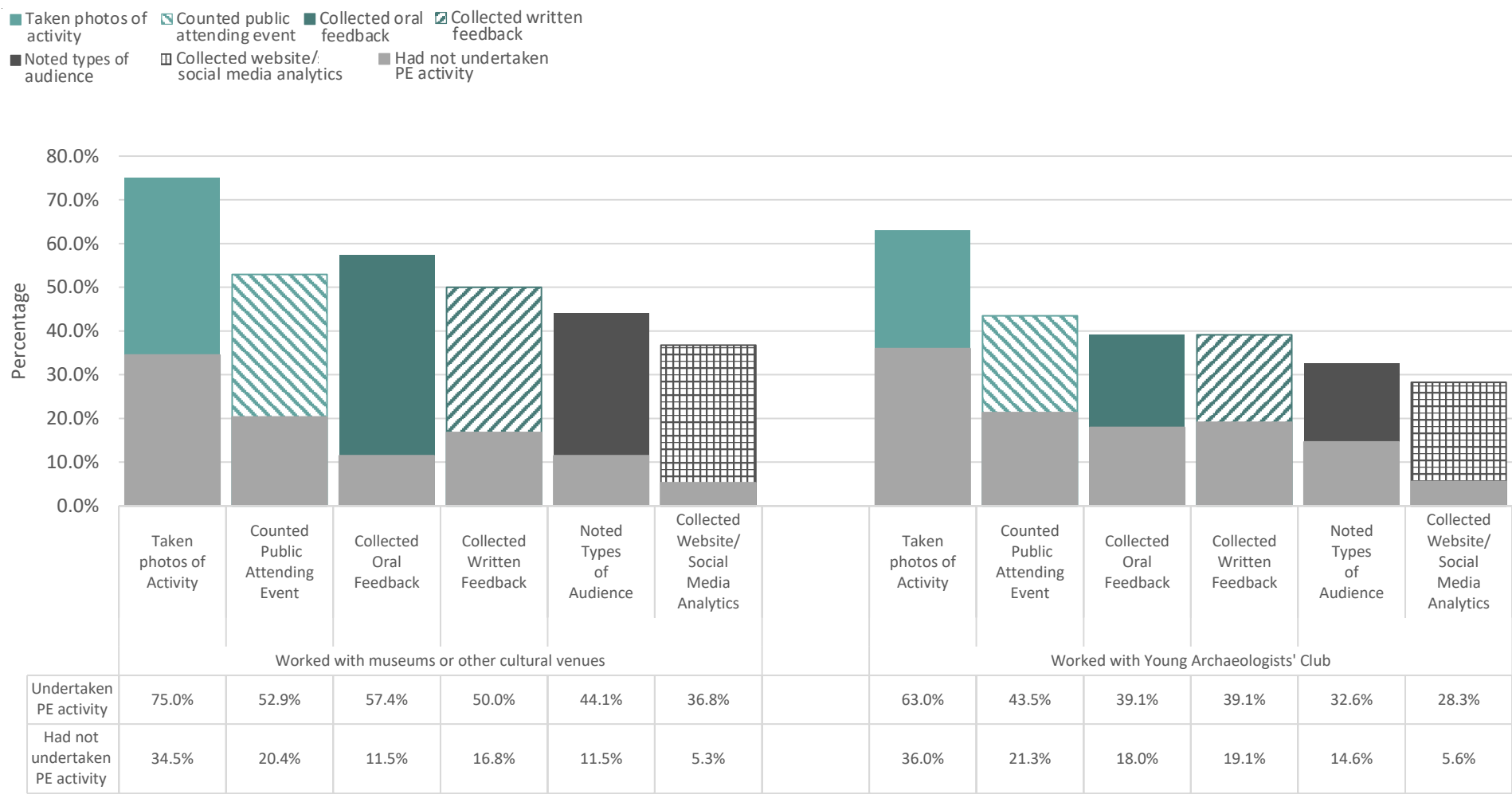


Figure 22: Continuation of Figure 21, showing correlation between undertaking PE activities in connection with work and recording PE activities. From left to right, the bars represent the following PE recording activities: “taken photos of activity”, “counted public attending event”, “collected oral feedback”, “collected written feedback”, “noted types of audience” and “collected website/social media analytics” respectively. The light grey dataset represents those who had not undertaken the respective PE activity in connection with their work.



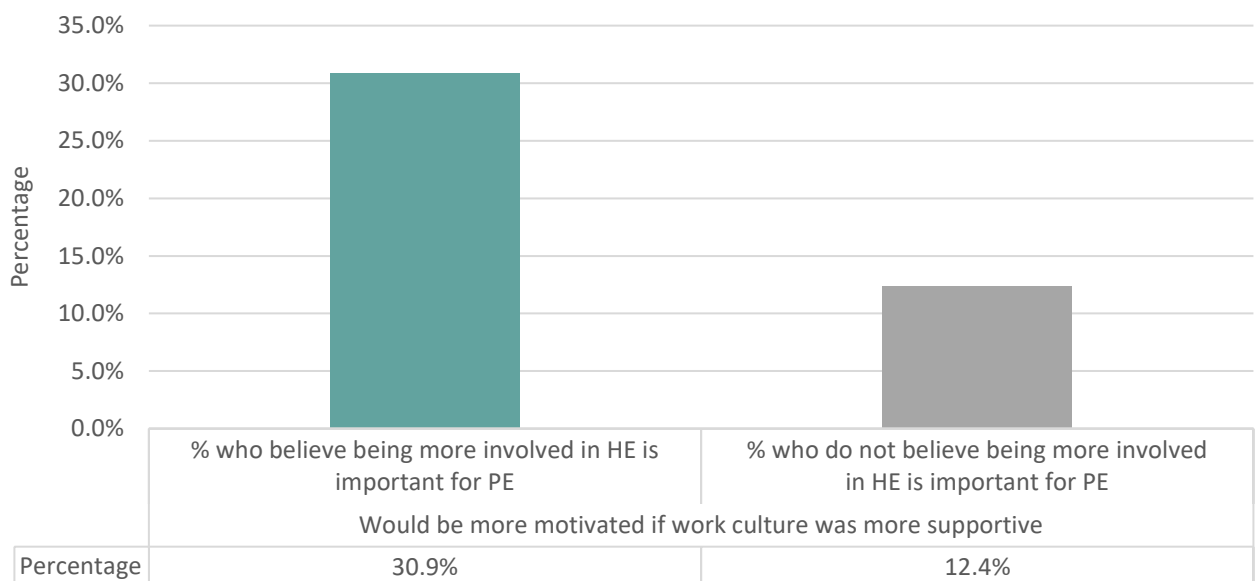
- There is a correlation between each category for Question 12. This means that respondents who were involved in one method of recording PE activities were likely involved in other methods. A breakdown of number of PE recording activities selected by each participant can be found in the below Table 1.

	Number of Answers
<b>0 PE Recording Activities</b>	66
<b>1 PE Recording Activity</b>	32
<b>2 PE Recording Activities</b>	27
<b>3 PE Recording Activities</b>	19
<b>4 PE Recording Activities</b>	13
<b>5 PE Recording Activities</b>	11
<b>6 PE Recording Activities</b>	13
<b>Total (n=)</b>	<b>181</b>

*Table 1: Breakdown of counts for number of PE recording activities checked. “PE recording activities” refers to those outlined in Question 12.*

- Those who have had a citation in a public discussion or consultation documents showed no correlation with having a citation by international bodies. They were, however, likely to have had project outputs from all other categories of Question 14, *“Are you aware of any of the following outputs resulting from your project & activities”*.
- Respondents who received citation by journalists and broadcasters showed no link to receiving citation by peer-reviewed publications or international bodies, nor of their research being used within higher education courses. There appears to be siloing of public engagement work to specific audiences.
- Correlation was found between believing that being more involved with HE activities is important for PE, and that they would be more motivated to be involved in HE if their work culture was more supportive. The following Figure 23 illustrates this correlation.

*Figure 23: Correlation between respondents believing that being more involved with HE activities is important for PE and that they would be more motivated to participate in PE if the work culture was more supportive.*



- People who thought that attitudes of colleagues or managers were a hindrance to PE also thought that problems gaining access to sites were a hindrance and that they would be more motivated to participate in PE if the work culture was more supportive. This is an area that could use further research to better understand the mechanism that causes this.

There was a correlation between those who thought that the company website is an important area of PE for their company to develop and also thought that their company should develop social media. However, this should probably be viewed more as a combined need for more digital engagement in any form that separate issues.

There were further correlations, but ones we did not find insightful:

- Those who thought that it was important for their organisation to create more events used Twitter regularly.
- Those who used Twitter regularly also used Facebook, iTunes and LinkedIn regularly.

That those who use one type of social media use others is not particularly enlightening in the goals of this survey and the correlation between Twitter and more events could be a response bias. As Twitter was one of the avenues of dissemination and it has a network affect this result could just be because one person, or several people, retweet the survey link to their network(s) of like-minded individuals.



The team also examined those responses with p-values in the more traditional range of .05 or less. Though we have higher scepticism that these are results worth further investigation and consideration.

- Those who had received no training were involved with more PE activities than those who had received any type of training. Results showed that participants who had not received training had been actively involved with 4 out of 19 PE categories.

This could be a result of false discovery rate with p-values. Given that over 70% of the respondents had no training it could be a low response rate of those with training plus the natural error rate of p-values is causing this correlation.

The rest of the responses are not particularly insightful in terms of better understanding public engagement in development-led archaeology. Many are correlations within questions which is not unexpected – most respondents check multiple answers on most questions:

- Those who had written popular publications/articles over the last two years were most likely to have been involved with other PE activities, showing correlation with 6 out of 19 other PE categories.
- Those who collected oral feedback over the last two years were more likely to be aware of significant project outputs than those involved in other PE recording activities. Those who participated in this recording activity correlated with the following project outputs:
  - o Citation by journalists and broadcasters
  - o Citation on social media
  - o Citation by national bodies
  - o Use of research within HE courses
- There is a correlation between being cited in peer-reviewed publications and being cited by national bodies, journalists and broadcasters.
- Those who believed broadcasting activities through radio, TV or newspapers were important to PE also thought developing volunteer/work-experience programmes was important.
- Respondents who thought it was important to give more talks in schools/colleges likely also believed developing the company social media and website was important.

- Correlation was found between believing it was important to develop volunteer/work-experience programmes and that PE was impeded due to it being difficult to engage the public and professional standards making it difficult to involve amateurs.
- People who stated it was important for PE to create events (i.e., Festival of British Archaeology, site open days, etc.) were likely to believe that short project timeframes impede this.
- There was a link between those who believed site access to be problematic and that PE was impeded due to systems not being in place.

## Final Discussion

To reiterate p-values are only used as a tool to help indicate areas of further examination, not as a rigorous mathematical proofs. P-values were used because it is not practical to examine roughly 10,000 possible correlations by hand. The survey did not collect a random sample of the population and was a relatively small sample so it may or may not be reflective of the views and experiences of all development-led archaeologists. Further surveys are needed to confirm the findings of this survey.

The survey was designed from the standpoint that public engagement in development-led archaeology *is* of value to public life. Respondents were not asked if they should do less public engagement or if the company they worked for should stop offering engagement services. This does alter the outcomes by way of questions asked, but matches the goal of the project from which it came out of.

How might this study be used and who might it be useful to? While we have peppered this paper with caveats about drawing conclusions from the data it still does provide several areas for further research and action. This is by no means a conclusive list, in fact just our top three, and we hope that any reader finds more than what we have listed to be worth engaging with:

- A focus on overcoming the barriers to public engagement. This report has highlighted two significant ones, funding and non-disclosure agreements in development-led archaeology. While future surveys would need to confirm these, the results were high enough that they are unlikely to be the result of response bias. While their relative importance might change in a different survey, they would still likely be issues and, as such, are worth addressing now. Development-led archaeology is derived from regulations and so, potentially, solutions could be found by changing such regulations. For example, changes to planning guidance to make the funding of public engagement a requirement could address that issues. Not easily achieved as it will likely require significant lobbying by the whole sector. Though it might be possible to address issues through other means. Encouraging development organisations to stop using non-disclosure agreements in their

contracts with archaeologists could reduce that barrier. These are two possible solutions to lowering the barriers to undertaking public engagement in development-led archaeology in the UK, but they are not the only two. We hope that with these issues highlighted others will come forward with solutions and implement them.

- For England, in 2010, revised planning guidance (PPS5, DCLG 2010) placed an emphasis on identifying the significance of heritage assets through consultation with local communities and the same emphasis continued within subsequent guidance, the National Planning Policy Framework (NPPF), introduced in 2012 (DCLG 2012). However, these emphases do not appear to have made it into practice. Over two-thirds of respondents did not consider public engagement to be an archaeological skill. Again, a significant number that is unlikely to be the result of sampling bias. Similarly with the lack of training in public engagement. Public engagement has not been embedded in archaeology as a key skill. This is an area that could use further investigation to understand the mechanics of what is causing this.
- We, of course, have many questions yet to be answered. How do such surveys, or academic research on public archaeology more generally, feed back into the reality of work in the sector? What kinds of data and research would be most valuable and useful in the future? While we have advocated further research, perhaps it is time to move on from just collecting data on what archaeologists do and why they do it, to consider questions on the difference that the sector makes and who it makes a difference to. Now that a decade has passed since the introduction of PPS5 and the system is set to be changed yet again in England, such questions are timely. How might impact data be successfully collected and measured across the sector?

# Appendix 1: Respondent Comments

Responses to question 20, *“And finally, please use this space to make any comments about the survey.”* Lightly edited for some typos.

1	answer to question 5 is wrong and I can't actually tick anything. I work for an international organization and we work nation-wide in this country and world-wide in collaboration with other colleagues.
2	In my job it is as much about creating opportunities for others to do these things, so while my team do lots of all the things identified, my direct contribution varies from low upwards.
3	Good luck!
4	Professional archaeologist are not trained as teachers, so there can be a skill/training issue. The most successful projects have a bottom up approach with top down support.
5	Finding time to complete HLF Grant applications, also PE time consuming and labour intensive
6	Interesting
7	I'm in the US but have worked in the UK. My answers mostly based on my US experience.
8	Very hard to do PE on commercial sites, many developers don't want the public to know what's on the site, that they have 'destroyed' it or there are timescale issues - a lot of the work we do is considered rescue archaeology, we quickly go in and out of a site, there could also be H&S and access issues. The only clients that we have worked with that actively want to do PE are the government bodies such as NI Road Service - but even then cost is an issue and we are limited to what we are allowed to do. Also our margins are so tight at present that we can't even afford to allow staff to work on magazine articles in work time.
9	There is a space for Perceived risk (Insurance/H&S) but not one for actual risks. Regardless of what Southport may say having 100 untrained people on a large infrastructure site with compulsory HSE training and drug testing as well as anything up to 100 machines is not a perceived risk but actually a very dangerous situation. Not all PPE and HSE training is lip service and untrained people can die in accidents.
10	PE appears misunderstood (and possibly confused with PR) by senior/older staff members who seem to not regard it as important, certainly their actions give this impression.

11	I'd certainly like to hear about the results of the survey and see how the survey feeds back into the reality of PE in the context of the commercial sector
12	I wish you well with your survey. Why is it that as a profession Archaeologists are uniquely expected to give up their own time to engage with the public? Why are the same Archaeologists not screaming at the client that, hey we do good work here, it is important, and moreover, kudos will come your way from your finds. Oh yes being silly now, you see the client hates to think that any excavation which the press picks up on will immediately result in negative press i.e. why did you destroy the Iron Age houses (please insert your own example)? We didn't is the reply, until we actually did our works we were completely unaware of them! That's what we do. We save on record what we can and within our present knowledge of what is available so that in some undefined future we can recreate the whole Shebang, because scientific techniques will have improved. Utter bollocks of course, because scientific techniques are chasing an undefinable goal with a lot of hope attached as far as Archaeology is concerned. In the meantime artefacts continue to degrade to mush thanks to the chemicals that modern farming requires. Dr who? but any chance?
13	No comments
14	well done! We need to discuss these issues!
15	Public engagement takes a lot of time and patience - which does not always pay off on the side of the individual or the institution. The patience and time to keep something worthwhile going is a problem. Some people see doing social media as soft-work and so it is expected to be done on own time.
16	a tick box for self-employed, rather than other would be good for independent specialists who don't work for a company
17	nice and concise, quick to fill in.
18	I find that developers often discover that PE is good PR for them - though only in hindsight.
19	I feel that the tone of the survey assumes that PE is integral to commercial archaeology. Whilst this may be true of some areas of work, such as the museum sector and may be essential for some groups/firms with charitable status to retain their status, it is not necessarily considered integral or even wanted in many firms where fieldwork is the main income stream. PE in fieldwork has the potential to make an organisation, and indeed archaeology as a whole, look unprofessional in the eyes of clients, who will fail to see why volunteers should be allowed on their building sites. In their eyes, archaeology is either a profession or it is not, they wouldn't allow volunteer architects or volunteer JCB drivers on their sites so they are unlikely to want to allow volunteer archaeologists and I fail to see why they should. This may seem harsh but it is the

	reality of fieldwork on building sites, which, after all, accounts for the vast majority of excavations undertaken in the UK today.
20	It doesn't cover the general problem of disinterest of clients. Confidentiality is not as much of a problem as indifference to potential the benefits to developers
21	I am a freelancer, so slightly different world to some archaeologists. I'd like to do more, and make money through it, but getting more time to do more is hard.
22	Good survey, I look forward to seeing the results; it will be interesting to see how these results (predominantly concerning 'real' PE) compare to Lorna's survey on the use of social media for PE. Happily for me I am about to change jobs to work for a commercial and curatorial unit which is a charitable trust so I am optimistic that for me personally there will be more opportunities to develop PE there. Sadly for the company I am leaving, I suspect the work/income pressures, together with the relatively low level of commitment to pro-active PE, will mean that the relatively rosy picture I have painted here may not be the case in the future.
23	my job is public engagement.
24	question 18 is not good as ultimately much pe does not happen because of the client. clients being able to see the value of pe would unlock more opportunities than most of your options put together
25	It will be interesting to find the results especially with regard to PE in own time that is hidden as part of company time (but not paid). Also whether people feel that this work should be 'left to professionals'. Best of luck!
26	Very interesting survey, would love to see the results!
27	Canterbury Archaeological Trust takes great pride in our outreach activities and we invest a great deal of staff time in engaging with the public
28	Until LPA archaeological advisors embrace PE and forge links with local networks through which PE might be delivered, there is little scope to generate meaningful PE practices within the commercial sphere.
29	It seems to assume a need for more need for PE which I don't necessarily agree with.
30	I'm not sure public engagement needs to be part of everything we do in the sector - would be good if your survey can distinguish where it is appropriate and what people can do to take small steps, if not the whole hog (? mixed metaph.)

31	Hope that PE becomes as usual as a desk study!
32	Many of my projects are small and/or confidential and/or dull (in terms of what is of historic interest/what's being changed etc) and PE is not appropriate as there is very little interest. I do however worry about public accountability - I think taxpayers might just rather we got on with it with minimum fuss. Which we do I guess.
33	A valuable survey, wish I could contribute more but PE is not something that I want to get involved with, although I see the benefit.
34	I enjoy a DIY attitude in public engagement. An old fashioned open day is simple to organise, cheap and usually hugely popular. I am sceptical that doing more research on this is going to get more archaeology done and more people involved or engaged. I do see value in understanding issues and audiences, but I hope that your research results in getting down and doing some public archaeology events, too.
35	The survey misunderstands the nature of commercial archaeology. The risks to visitors to excavation are real. We are professionals so why should we do things we are not paid to do?
36	Really interesting survey, I look forward to the results.
37	From a purely professional (income-generating) point of view the contribution of HLF funding has been important in providing paid employment during the recession when commercial work has declined dramatically (I am self-employed so this is important!). PE is also enjoyable and one can cut through the patronising attitudes and practices of the museum profession to give the public some insight into the complexities of archaeological practice, data and ethics without having to pitch everything at the level of a 12 year old.
38	Thank you for organising the survey. I feel that some public engagement is valid - and is not new! Think back to the crowds at the Temple of Mithras or Yorvik excavations. I feel that this is a normal part of our work as passionate researchers wanting to share discoveries and excitement, loving an audience and enjoying teaching. Community archaeologists (i.e. one per county) act as very useful coordinators, enthusers and bridges between arch. societies/units/universities. HOWEVER, I am very wary of the emerging 'public engagement' industry, which appears to be a rather self-serving movement designed to employ archaeologists in a shrinking market, and also, more importantly, designed to salve our public consciences. As a sector, we need to be very honestly aware of our motivations. Short term engagement with 'communities', e.g. one- or two-year grant funded programmes run as part of PhDs, internships or postdocs, are not going to produce long-term relationships and profound change. However, they will provide plenty of fodder for ticking 'community outreach' boxes on grant funding and research impact assessment forms, and provide academics with a lot of spurious, statistically insignificant 'data' for supposedly 'engaged' and 'grassroots' socially-conscious work. Clearly we'd all like to see ourselves as warm, rounded humans, but I feel that real social work (i.e. professional and informed by sound economic and clinical research) is best divorced from archaeological research.

	<p>If they are moved to do so, archs should volunteer for truly worthy causes after hours. I feel quite strongly about this - way back, I did a qualification equivalent to an NVQ in youth social work, with 100s of 'contact hours' of genuine social 'engagement' as part of this. Organising an open day, or a WEA lecture, is not comparable to dealing with child neglect, abuse and poverty on a daily basis, or gaining the trust of vulnerable adults over the course of several years. I couldn't cope with real social work. That is part of the reason that I became an archaeologist.</p>
39	<p>As a small archaeological partnership, our public engagement is guided by the contracts we are awarded. To us public engagement it is about promoting archaeology and the interests of the client. Several of the questions were hard to answer as we are self-employed and things such as job descriptions don't apply, we do whatever the next client asks of us.</p>
40	<p>Q9 - does not work - it is about mentality and having the will to do the work not whether an archaeologist or not</p>
41	<p>Government/EU funded organisations make a big fuss about PE in their strategies/frameworks but in reality there is very little money is made available for quality PE. Also the lack of imagination in these organisations is a problem.</p>
42	<p>This is a long overdue survey on an important aspect of archaeology. Look forward to seeing the results.</p>
43	<p>Q.18 I would answer no instead of already doing enough; Q.16 there should be an option of volunteers not having required training cards</p>
44	<p>PE seems never to be included in working briefs as a</p>
45	<p>This issue has been raised all my career that stretches back to 1979 and there has never been any money to do it. What personally angers me is that this is within the stated remit of units with charitable status as public benefit; but it is used as window dressing to get around not paying corporation tax on profits as companies like mine have to. No doubt the big units will plead poverty but go to the charities website and see how much money they are sitting on. One outreach worker for the amount of turnover is frankly abusing the system and little more than tax avoidance.</p>
46	<p>Trained professionals undoubtedly are essential for much of PE; however most archaeologists can undertake and support PE within their existing role (if provision of time is made).</p>
47	<p>I'd like to see consultation on how public engagement is written into curatorial briefs.</p>
48	<p>It is an interesting aspect of the industry which requires attention however in the competitive market in which we operate I think it is an uphill battle to get companies to engage more with the public when costs are simply too high</p>



49	I have worked as a professional directing volunteers but it did 't fit into the above categories. I have no objection to PE but I cannot afford to do it voluntarily as I have children and I also have to work outside of archaeology in order to supplement my income. Sadly I don't earn enough from archaeology to be able to give any back. My employer has specialist who cover the outreach commitments so I only get involved when extra diggers are required.
50	As a freelance I can assist others doing PE such as Access Cambridge Archaeology in addition to engaging the public wherever possible in development led projects
51	Good survey, hope it provides some useful data.
52	Q6 the answer is (a) and (b) you need archaeological and non-archaeological skills, I undertake 90% of PE in own time - not sure this answer registered correctly.
53	While I enjoy occasional work with the public I think it is more important in my own speciality to educate archaeologists. And I do quite a lot of that in Europe.
54	What about the informal public engagement like giving advice/help to local amateurs
55	We should distinguish between PE as a career option and PE as being an everyday part of what an archaeologist does regardless of company policy or funding
56	I work in EIA. My clients consult extensively with the public, and my work is used as material for that. I don't personally have any involvement, nor do I wish to as major projects are very politically sensitive. I don't think I'm the kind of person your survey is aimed at particularly; however, I filled it in as a representation from the many heritage workers who are not and probably never will be involved in public engagement for a variety of very good reasons.
57	10 minutes of my life I'll never get back. Much better to stop analysing stuff and just get out there and lead the way.
58	I didn't feel that the survey allowed the respondent to fully elucidate their personal experience and what percentage of their time was divided between HE, schools, societies, or the general public.
59	you need to look at why commercial archaeological companies are undertaking public engagement: (money/personal interest etc), I would also look if there is a driver behind this in the commercial world i.e. with the advent of NPPF we are seeing public dissemination/involvement included more frequently at multiple levels from the county curators. I would also have liked to see some questions about training of staff in suitable public engagement. Would also be interesting to look at the 'value that commercial orgs place on PE. Cynically are uni departments only doing it because it fits into the next REF more?

60	Look forward to seeing the results.
61	I do generally think it's a good idea, but for someone else to do
62	It's all about the funding I'm afraid.
63	Excellent - although some Q's may be more tailored to Archaeological work as opposed to the wider remit of heritage consultants which is the perspective I have answered from as we are not archaeological contractors. I thought the Qs were intriguing and I look forward to seeing the results.
64	It seems to be a bizarre feature of archaeology that there is a lot of pressure to involve the public. My professional peers (structural engineers, heritage architects, geotechnical engineers, ecologists and the like) have absolutely no requirement to share their professional activities with the public...whilst I enjoy speaking to day schools and the like PE can be an unnecessary burden on hard pressed archaeologists working to tight timetables in the commercial sector. It is something that should be expected only for those projects or archaeological units funded from the public purse - you would not expect a builder to give up his evening to talk for free, so why should a private sector archaeologist?
65	Including such diverse types of activity, from writing books/articles to having volunteers on site makes this survey a bit clumsy - more precise questions needed!
66	Public support for archaeology is vital for its continuation. If people don't care about our heritage then they won't mind when archaeology sites get hammered by greedy developers who are always looking to save money and pushing the government to 'reduce red tape' so they can make more profit. If commercial units fail to engage the public then commercial archaeology will become irrelevant. Council planning conditions need to include an element of PE on appropriate sites and sometimes do, but it should be the norm and not a rare occurrence. Perhaps a review of the whole funding process is also required!
67	The main reason I support PE is to ensure archaeology has a sufficiently high profile to ensure it is an integral part of the planning process. I'm fed up with being told to engage with people who then try and tell me how to do my job. Comparison with the way engineers and surveyors work suggests we are doing the developers work for them in engaging in PE. A large scale development usually has a PR budget, and it is with the managers of that budget we should be engaging.
68	Your presentation to the IfA - albeit without slides was great. PE in the conventional sense - not yours I know, but site visits and newspaper articles is best built from the ground up i.e. encouraged by curators/consultants and contractors in dialogue with developers especially post-Localism - not enforced through Southport type approach

69	There is one fundamental problem that lies at the heart of the whole PE question, and it flows directly from the fact that 90 or 95% of the field archaeology that is carried out in the UK is undertaken by *commercial* units, on the back of the planning system, and the clients, usually developers, who employ those units are driven by their corporate DNA to minimise costs at every turn. The vast majority resent even the archaeology that they are forced to do, even though, as a *proportion* of their total costs, it usually amounts effectively to peanuts. Unless and until the planning system has *built into it* the power to *COMPEL* developers to fund PE activities, designed by and at the discretion of the local authority archaeological officer, nothing will change, even though, in practice, such rules are likely in practice only to affect the larger, more 'prestige' development projects. Finally, your Para. 16, above, can you *PLEASE* correct the spelling of the word 'impede'. Thanks.
70	This is really an old chestnut. I have done a lot to try increase community participation in archaeology over the years, but it is difficult to do this with commercial development led projects.
71	I would like to add, in order to elucidate some of my replies, that I do not really consider it part of my job as an archaeological consultant/ contractor to be involved with public engagement, though I do consider it very much part of my life as an archaeologist. I have always spent a great deal of my time as a speaker/ lecturer, guide, etc. to amateur groups, either as a paid tutor (as I was for many years for the WEA and for the University of Leeds) or more usually unpaid. I am, I suppose, fortunate in that I can do as I please, this being my own business, but cases where I feel it appropriate to expect my clients, usually developers, to involve themselves in outreach are rare. This, I am afraid, is a necessary consequence of the unfortunate Thatcherisation of British archaeology, which so many of the profession have so eagerly welcomed.
72	Outside of university departments, archaeology was once almost the sole preserve of the amateur and the volunteer. In the rush to professional status, there is a very grave danger that we will forget the origins of archaeological work and lose the interest and involvement of the non-professional. We have the example of architecture to guide us. This was once almost entirely an amateur activity.
73	Archaeology is a vital contributor to society, culture and the economy; good archaeology PE adds value to development and to society at large. Commercial archaeologists could get far more involved in PE if Curators would ask them to include in their method statements ('written schemes of investigation') their proposed public engagement strategy.
74	PE is vital. Without it we will lose support and justification
75	It probably looks through the wrong end of the telescope. Rather than addressing the problem in terms of what professionals can do it could have asked what is stopping the public from being more involved. Current archaeology used to have articles to assist people who excavated and did

	other work whilst now it is a collection of press releases from archaeological contractors saying how good they are.
76	Question 9 - PE is both an archaeological and non-archaeological skill
77	Good survey questions. Good luck.
78	One way that PE might become more widespread is if examples of good practice were available.
79	Made me think about this aspect of my work, which I enjoy

## Appendix 2: R Code

This is code used. It R ## starts a comment. For this we have included text in red to signify file paths removed from this code as they are machine specific.

```
install.packages("openxlsx") ##if you have not installed openxlsx use this to do so
install.packages("plyr") ##if you have not installed plyr use this to do so
library(openxlsx) ##use library
library(plyr) ##use library

options(max.print=1000000) ##to avoid any printing errors resulting from too many lines of
results presented

Dat <- read.xlsx(' path to excel sheet with data ') #read excel sheet
dataout = NULL ##create empty variable to add data to
wb <- createWorkbook() ##create the excel workbook
##use this function to test every column against every other column
apply(combn(ncol(Dat),2), 2, function(x) {
  test <- chisq.test(Dat[, x[1]], Dat[, x[2]])
  ##set warning as NA for now
  warn <- "NA"
  ##if p value is within range then do more
  if ( (test$p.value < .01) ) {
    yesno <- "yes"
    warn <- "yes"
    ##catch possible errors and manage results
    possibleError <- tryCatch(
      chisq.test(Dat[, x[1]], Dat[, x[2]]),
      warning=function(w)w
    )

    if(!inherits(possibleError, "warning")){

##create a human readable title for the spreadsheet that will hold the info
title = paste(strtrim(gsub('[/]', ' ', colnames(Dat[x[1]])), 12), strtrim(gsub('[/]', ' ',
colnames(Dat[x[2]])), 12), sep=" vs ")

##add the worksheet
```

```

        addWorksheet(wb, title)

##This next bit of code is commented out, as well as the path further below. This is to run
two different outputs, one of numbers and one of which contributes the most to the P
value. Run this code twice commenting and uncommenting the different sections to get the
desired results

        ##writeData(wb, title, test$residuals^2/test$statistic)
        writeData(wb, title, test$observed)
        warn <- "no"
    }

} else {
    ##if not in the p-value range, mark as not of interest
    yesno <- "no"
    warn <- "yes"
    ##catch any warnings to keep it running, without this it will throw an error
and stop
    possibleError <- tryCatch(
        chisq.test(Dat[, x[1]], Dat[, x[2]]),
        warning=function(w)w
    )
    if(!inherits(possibleError, "warning")){
        warn <- "no"
    }
}

##the next code creates a summary row that gets added to a final summary sheet
out <- data.frame(
    "Row" = colnames(Dat)[x[1]],
    "Column" = colnames(Dat[x[2]]),
    "Chi.Square" = test$statistic,
    "df"= test$parameter,
    "p.value" = test$p.value,
    "Significant" = yesno,
    "warning" = warn
)
dataout <-<- rbind(dataout,out)

```

```
})  
##add the summary sheet to the excel doc  
addWorksheet(wb, 'summary')  
writeData(wb, 'summary', dataout)  
##save the final excel document  
saveWorkbook(wb, file = " path to file /observed.xlsx", overwrite = TRUE)  
##as above run the code twice and change the files to get the different results  
##saveWorkbook(wb, file = " path to file /contribution.xlsx", overwrite = TRUE)
```

## Appendix 3: Data

Q2. How long have you worked for your organisation?

	Number of Answers	% of Answers
<b>Less than 1 Year</b>	23	12.7
<b>1 to 5 Years (Inclusive)</b>	51	28.2
<b>5 (Exclusive) to 10 Years (Inclusive)</b>	42	23.2
<b>10 (Exclusive) to 15 Years (inclusive)</b>	32	17.7
<b>15 (Exclusive) to 20 Years (inclusive)</b>	10	5.5
<b>More than 20 Years</b>	23	12.7
<b>Total (n=)</b>	181	

*Table 2: Breakdown of number and percentage of response for Question 2.*

Q3. What type of organisation do you work for?

	Number of Answers	% of Answers
<b>Private Sector</b>	133	74.3
<b>University</b>	11	6.1
<b>Local Government</b>	18	10.1
<b>National Government or Agency</b>	2	1.1
<b>Other</b>	15	8.4
<b>Total (n=)</b>	179	

*Table 3: Breakdown of number and percentage of response for Question 3.*

Q4. Does your organisation have charitable status?

	Number of Answers	% of Answers
<b>Yes</b>	52	29.2
<b>No</b>	126	70.8
<b>Total (n=)</b>	178	

*Table 4: Breakdown of number and percentage of response for Question 4.*



Q5. In which geographical region does your company mainly work in?

	Number of Answers	% of Answers
Channel Islands	1	0.6
East Midlands	6	3.3
East of England	17	9.4
International	2	1.1
London	6	3.3
North East	4	2.2
North West	9	5.0
Northern Ireland	2	1.1
Scotland	11	6.1
South East	17	9.4
South West	16	8.9
Multiple UK Locations	37	20.6
UK & International	27	15.0
Wales	8	4.4
West Midlands	8	4.4
Yorkshire & The Humber	9	5.0
Total (n=)	180	

Table 5: Breakdown of number and percentage of response for Question 5

Q6. Is public engagement included in your job description?

	Number of Answers	% of Answers
No	82	45.8
Unsure	17	9.5
Yes	80	44.7
Total (n=)	179	

Table 6: Breakdown of number and percentage of response for Question 6.

Q7. Off the top of your head, what does the term 'public engagement' mean to you?

	Number of Answers	% of Answers
Talking to the public	64	26.2
Site visits/site visits/open days for the public	17	7.0
Work experience placements	1	0.4
Engaging with the media	5	2.0
Outreach to local societies	11	4.5
School/college visits	5	2.0
Public involvement in projects	40	16.4
Specialist education for non-specialists	23	9.4
Supporting non-professional Involvement	21	8.6
Engaging with volunteers	10	4.1
Distribution of informative archaeological materials	18	7.4
Sharing archaeological findings with the public	26	10.7
Unsure	3	1.2
N/A	10	4.1
<b>Total (n=)</b>	<b>244</b>	

*Table 7: Breakdown of number and percentage of response for Question 7*

Q8. Have you ever received any training in PE?

	Number of Answers	% of Answers
Yes	130	71.8
No	51	28.2
<b>Total (n=)</b>	<b>181</b>	

*Table 8: Breakdown of number and percentage of response for Question 8.*

Q9. Do you see public engagement as being?

	Number of Answers	% of Answers
Archaeological Skill	64	36.0
Non-Archaeological Skill	97	54.5
Unsure	17	9.6
<b>Total (n=)</b>	<b>178</b>	

*Table 9: Breakdown of number and percentage of response for Question 9.*

Q10. Over the last TWO years (2011-2012) have you been involved in any of the following PE activities in connection with your work? Please include work-time AND own-time activities.

	Written Popular Communications/Articles		Designed Marketing Materials		Worked with Museums and other Cultural Venues		Talked to Newspaper Journalists	
	Number	%	Number	%	Number	%	Number	%
Yes	111	61.3	71	39.2	99	54.7	104	57.5
No	70	38.7	110	60.8	82	45.3	77	42.5
Total (n=)	181		181		181		181	

	Appeared on Radio/Television		Given a Talk at a School/College		Worked with the Young Archaeologists' Club, or one of its Branches		Given a Talk to a Society or Special Interest Group	
	Number	%	Number	%	Number	%	Number	%
Yes	65	35.9	78	43.1	31	17.1	120	66.3
No	116	64.1	103	56.9	150	82.9	61	33.7
Total (n=)	181		181		181		181	

	Designed Programmes of Outreach/PE		Given a Lecture/Seminar at an HE Institution		Participated in an Open Day		Consulted with the Public over Research	
	Number	%	Number	%	Number	%	Number	%
Yes	68	37.6	58	32	107	59.1	61	33.7
No	113	62.4	123	68	74	40.9	120	66.3
Total (n=)	181		181		181		181	

	Facilitated work-experience placements/volunteers		Given guided walks		Managed company website		Managed company social media	
	Number	%	Number	%	Number	%	Number	%
Yes	92	50.8	62	34.3	48	26.5	50	27.6
No	89	49.2	119	65.7	133	73.5	131	72.4
Total (n=)	181		181		181		181	

	Facebooked, blogged, or Tweeted about your work on personal platforms		Taken part in Festival of British Archaeology event		Taken part in historic re-enactments	
	Number	%	Number	%	Number	%
Yes	86	47.5	46	25.4	12	6.6
No	95	52.5	135	74.6	169	93.4
Total (n=)	181		181		181	

Table 10: Breakdown of number and percentage of response for Question 10.

Q11. Approximately what percentage of the PE work that you've done in the last TWO years (2011-2012) has been in your own-time?

	I haven't done any PE work		0%		10%		20%	
	Number	%	Number	%	Number	%	Number	%
Yes	7	3.9	32	17.7	39	21.5	24	13.3
No	174	96.1	149	82.3	142	78.5	157	86.7
Total (n=)	181		181		181		181	

	30%		40%		50%		60%	
	Number		Number		%		Number	
Yes	10	5.5	9	5	16	8.8	6	3.3
No	171	94.5	172	95	165	91.2	175	96.7
Total (n=)	181		181		181		181	

	70%		80%		90%		100%	
	Number		Number		%		Number	
Yes	3	1.7	10	5.5	7	3.9	14	7.7
No	178	98.3	171	94.5	174	96.1	167	92.3
Total (n=)	181		181		181		181	

*Table 11: Breakdown of number and percentage of response for Question 11.*

Q12. Over the last TWO years (2011-2012) have you been involved in recording PE activities in any of the following ways?

	Counted public attending event		Noted types of audiences		Collected oral feedback		Collected written feedback	
	Number	%	Number	%	Number	%	Number	%
Yes	59	32.6	43	23.8	52	28.7	53	29.3
No	122	67.4	138	76.2	129	71.3	128	70.7
Total (n=)	181		181		181		181	

	Taken photographs of activity		Collected website/social media analytics	
	Number	%	Number	%
Yes	90	49.7	31	17.1
No	91	50.3	150	82.9
Total (n=)	181		181	

Table 12: Breakdown of number and percentage of response for Question 12.

Q13. Is there any particular reason why you haven't been involved in PE activities over the last two years (2011-2012)?

	Number of Answers	% of Answers
<b>Budgetary constraints</b>	11	11.7
<b>Lack of time</b>	7	7.4
<b>Not interested</b>	3	3.2
<b>Not part of their job role</b>	18	19.1
<b>Lack of opportunity</b>	8	8.5
<b>Commercial confidentiality</b>	8	8.5
<b>N/A</b>	39	41.5
<b>Total Answers</b>	94	

*Table 13: Breakdown of number and percentage of response for Question 13.*



Q14. Are you aware of any of the following outputs resulting from your project & activities?

	Citation in a public discussion or consultation		Citation in peer-reviewed publication		Citation by journalists and broadcasters		Citation on social media	
	Number	%	Number	%	Number	%	Number	%
Yes	51	28.2	35	19.3	69	38.1	84	46.4
No	130	71.8	146	80.7	112	61.9	97	53.6
Total (n=)	181		181		181		181	

	Citation by national bodies (such as EH, NT etc.)		Citation by international bodies (such as ICOMOS, UNESCO etc.)		Use of research within HE courses (seminars, course content, reading lists)		Review of published work	
	Number	%	Number	%	Number	%	Number	%
Yes	37	20.4	6	3.3	27	14.9	19	10.5
No	144	79.6	175	96.7	154	85.1	162	89.5
Total (n=)	181		181		181		181	

	Influence on guidelines, policy or standards		Professional prize or award	
	Number	%	Number	%
Yes	30	16.6	21	11.6
No	151	83.4	160	88.4
Total (n=)	181		181	

*Table 14: Breakdown of number and percentage of response for Question 14.*

Q15. In your opinion, what are the most important areas of PE for your organisation to develop? Please choose UP TO FIVE from the following list:

	None		Broadcasting activities through radio/tv/ newspaper		Developing company website		Developing company on social media	
	Number	%	Number	%	Number	%	Number	%
Yes	12	6.6	44	24.3	69	38.1	55	30.4
No	169	93.4	137	75.7	112	61.9	126	69.6
Total (n=)	181		181		181		181	

	Being more involved with HE activities (open days, lectures, seminars, research groups etc.)		Disseminating publications		Writing popular publications/articles		Developing volunteer/work experience	
	Number	%	Number	%	Number	%	Number	%
Yes	68	37.6	60	33.1	90	49.7	79	43.6
No	113	62.4	121	66.9	91	50.3	102	56.4
Total (n=)	181		181		181		181	
	Giving more talks in schools/colleges		Leading more talks and walks (for local societies, interest groups, NT etc.)		Creating events (Festival of British Arch., site open days etc.)		Collaborating with local museums/other cultural venues (over archives/exhibitions/events etc.)	
	Number	%	Number	%	Number	%	Number	%
Yes	51	28.2	49	27.1	62	34.3	70	38.7
No	130	71.8	132	72.9	119	65.7	111	61.3
Total (n=)	181		181		181		181	

Table 15: Breakdown of number and percentage of response for Question 15

Q16. In your experience, what are the top factors that impede PE within commercial practice? Please choose UP TO FIVE from the following list:

	Attitudes of colleagues or managers		Boring sites/finds		Client confidentiality		Client Disinterest	
	Number	%	Number	%	Number	%	Number	%
Yes	39	21.5	44	24.3	105	58	54	29.8
No	142	78.5	137	75.7	76	42	127	70.2
Total (n=)	181		181		181		181	

	Difficult to engage the public		Difficult to take good photographs		Having to do PE in own-time		No money to do PE	
	Number	%	Number	%	Number	%	Number	%
Yes	12	6.6	1	0.6	33	18.2	106	58.6
No	169	93.4	180	99.4	148	81.8	75	41.4
Total (n=)	181		181		181		181	

	PE raises project costs		Perceived risk (Insurance/H&S)		Popular media can send out the wrong message		Professional standards (difficult to involve amateurs)	
	Number	%	Number	%	Number	%	Number	%
Yes	67	37	68	37.6	25	13.8	45	24.9
No	114	63	113	62.4	156	86.2	136	75.1
Total (n=)	181		181		181		181	

	Site access problematic (e.g. not having sole occupancy)		Short project time-frames		Systems not in place		Volunteers undercut paid opportunities	
	Number	%	Number	%	Number	%	Number	%
Yes	62	34.3	91	50.3	38	21	24	13.3
No	119	65.7	90	49.7	143	79	157	86.7
Total (n=)	181		181		181		181	

*Table 16: Breakdown of number and percentage of response for Question 16.*

Q17. Do you agree or disagree with the following statements?

	<div> <div>I consider PE to be an important part of my job</div> <div>PE is personally rewarding</div> <div>PE can help my company forge new contacts and business</div> <div>I would like to do more PE</div> </div>							
	Number	%	Number	%	Number	%	Number	%
Strongly agree	57	32	64	35.8	35	19.9	43	24.4
Agree	58	32.6	86	48	91	51.7	75	42.6
Neither agree nor disagree	32	18	21	11.7	27	15.3	50	28.4
Disagree	23	12.9	6	3.4	15	8.5	6	3.4
Strongly disagree	8	4.5	2	1.1	8	4.5	2	1.1
Total (n=)	178		179		176		176	

	PE can enhance my career prospects		I feel I have the necessary confidence to undertake PE		I feel I have the necessary skills to undertake PE		I feel I have the opportunity to undertake PE	
	Number	%	Number	%	Number	%	Number	%
Strongly agree	20	11.4	57	32.4	50	28.2	24	13.7
Agree	52	29.5	91	51.7	82	46.3	59	33.7
Neither agree nor disagree	73	41.5	17	9.7	25	14.1	50	28.6
Disagree	23	13.1	10	5.7	17	9.6	34	19.4
Strongly disagree	8	4.5	1	0.6	3	1.7	8	4.6
Total (n=)	176		176		177		175	

	I am aware of external PE networks		I am happy to give my own time to do PE		PE is best left to trained professionals	
	Number	%	Number	%	Number	%
Strongly agree	15	8.6	18	10.3	9	5.1
Agree	55	31.6	67	38.5	22	12.5
Neither agree nor disagree	41	23.6	49	28.2	41	23.3
Disagree	46	26.4	25	14.4	75	42.6
Strongly disagree	17	9.8	15	8.6	29	16.5
Total (n=)	174		174		176	

*Table 17: Breakdown of number and percentage of response for Question 17.*



Q18. Would any of the following motivate you to get more involved in public engagement?

	I am already doing enough		If I had relief from other workload		If there was more money to do it		If the work culture was more supportive	
	Number	%	Number	%	Number	%	Number	%
Yes	23	12.7	70	38.7	106	58.6	35	19.3
No	158	87.3	111	61.3	75	41.4	146	80.7
Total (n=)	181		181		181		181	

	If it was easier to organise		If there were more partners to work with		If it didn't take so long to build up relationships with communities		If my company had better links to external PE	
	Number	%	Number	%	Number	%	Number	%
Yes	31	17.1	25	13.8	18	9.9	25	13.8
No	150	82.9	156	86.2	163	90.1	156	86.2
Total (n=)	181		181		181		181	

Table 18: Breakdown of number and percentage of responses for Question 18.

Q19. Do you use any of the following social media platforms on a regular basis (say, once a month)?

	Facebook		Flickr		Google+		Instagram	
	Number	%	Number	%	Number	%	Number	%
Yes	122	67.4	12	6.6	15	8.3	14	7.7
No	59	32.6	169	93.4	166	91.7	167	92.3
Total (n=)	181		181		181		181	

	iTunes		Linkedin		Pinterest		Scribd	
	Number	%	Number	%	Number	%	Number	%
Yes	21	11.6	57	31.5	21	11.6	8	4.4
No	160	88.4	124	68.5	160	88.4	173	95.6
Total (n=)	181		181		181		181	

	Twitter		Vimeo		YouTube	
	Number	%	Number	%	Number	%
Yes	44	24.3	17	9.4	41	22.7
No	137	75.7	164	90.6	140	77.3
Total (n=)	181		181		181	

*Table 19: Breakdown of number and percentage of response for Question 19.*

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