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# Social Impact Archaeology: Pontefract Castle and the Gatehouse Project

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## Summary

Archaeology is said to add value to development, creating a deeper sense of place, community identity as well as improving health and wellbeing. Accentuating these wider social values has been welcomed by a profession keen to broaden its public relevance and legitimacy and protect its seat at the table in modern cultural life, but how much, if at all, do the public actually benefit from developer-led archaeology? Benefits to individuals and communities from archaeology projects are often abstract, intangible and difficult to attribute, and the discipline arguably lacks a satisfactory frame of reference around which it can express and design for these additional social values. Drawing on the language of social impact investing, this article will explore how the UK-based collaborative platform, DigVentures, has addressed this challenge. It introduces a 'Theory of Change' and 'Standards of Evidence' framework to account for the impact of development-led archaeology programmes, illustrating the causal links between activity and change through the case of the Pontefract Castle Gatehouse Project. It is complemented by a short documentary film exploring the spectrum of digital and physical opportunities for participation by the public alongside a team of highly experienced professional field archaeologists, demonstrating how development-led archaeology can be designed to accomplish far more than answer a planning brief.

## 1. Background

[Pontefract Castle](#) has a rich and nationally important heritage; one of England's strongest fortresses throughout the medieval period and beyond, it played a crucial role in politics and the balance of power in the North of England (Figure 1). The site is mentioned in numerous historical sources, including by Oliver Cromwell, who described the castle as 'one of the strongest inland garrisons in the kingdom', and William Shakespeare, who in his play Richard III wrote of Pontefract Castle, 'Pomfret, Pomfret! O thou bloody prison'. Despite this national significance, relatively little is known about the archaeological resource and the recent discovery of a previously unidentified gatehouse indicates that much is still to be learned about the physical structure of Pontefract Castle.



ONLINE ONLY <https://intarch.ac.uk/journal/issue57/18/full-text.html#figure1>

Figure 1: Aerial 3D model of Pontefract castle with the Gatehouse trench in the centre foreground (hosted by Sketchfab)

In 2019, development-led archaeological investigations were undertaken in order to enhance access and to improve visitor access as part of their 'Pontefract Castle: Key to the North' project, supported by a £3m grant from the National Lottery Heritage Fund. When previously unidentified structures associated with a gatehouse complex were revealed during pre-development works, an additional application for NPPF Emergency Funding was made by the site custodians, Wakefield Metropolitan District Council (WMDC). Historic England (HE) granted this application on condition that archaeological research was undertaken alongside community participation, fulfilling WMDC and HE's overarching vision to increase public awareness during the site's redevelopment, and to improve understanding of Pontefract Castle and its environs.

Pontefract Castle is situated within an area of significant deprivation, with 18% of residents falling within the top 10% of most deprived in England (data taken from the Index of Multiple Deprivation based on the 2011 census). The 'Gatehouse Project, Pontefract Castle' therefore provided a major opportunity to stimulate the heritage-led regeneration of the site and its environs, engage the local community in their heritage, provide skills training and practical experience to the public, and build an audience and local appreciation for the castle's instrumental contribution to regional and national history. WMDC and HE undertook a public procurement exercise, with tender evaluation slanted towards the best archaeological design (rather than the lowest price), in line with the requirements of the [Social Value Act](#) for public sector bodies to consider the social, economic and environmental benefits of contracts they award. [DigVentures](#) proposed a creative approach to excavation, with an intelligently designed mix of professional excavation and public participation programmed over the course of an eight-week investigation, creating a breadth and depth of participation opportunities from informal site visits to structured field training (Figure 2). This blended model comprised six weeks dedicated primarily to servicing the commercial imperative and research brief, with public events running alongside, interspersed with two weeks of public participation and training in the trenches, in line with tuition based on [National Occupational Standards](#). What follows is a brief summary of how this toolkit was applied in the context of a development-led project at Pontefract Castle; a broader discussion of the theoretical basis of this approach has also been published for reference (Wilkins [2019a](#); [2019b](#)).



Figure 2: Local community participants digging at Pontefract Castle

## 2. Theory of Change and Standards of Evidence

While many project leaders can clearly justify the purpose of their work (the 'why'), there is much less certainty concerning the tools and methodologies they should use to measure the social impact of their work (the 'what' and 'how'). The DigVentures framework for measuring social impact has been informed by the work of two funding organisations in particular, combining the deep sector knowledge of the [National Lottery Heritage Fund](#) (NLHF) to provide guidelines on heritage programme outcomes ('what' to measure), and the standards of evidence devised by [Nesta, the UK Innovation Foundation](#) ('how' to measure). The result is a customisable evaluation framework comprising a toolkit of three interrelated tables enabling archaeologists to design participatory field research projects while simultaneously measuring the efficacy of their work (Figure 3).



Figure 3: The DigVentures evaluation framework, a toolkit consisting of a theory of change, standards of evidence and project specific evaluation matrix

In response to a commission by the NLHF to assess the efficacy of their approach to evaluation, Hewison and Holden (2004) refined the notion of Public Value to encompass three interlocking kinds of Cultural Value: intrinsic, instrumental and institutional. These three concepts were then refined into an operational outcome framework designed to encompass the range of intrinsic (outcomes for heritage); instrumental (outcomes for people); and institutional values (outcomes for communities and society) that characterise NLHF grant-aided projects (Clark and Maer 2008). Exactly how a specific set of activities result in the achievement of desired goals can be pictured as a 'Theory of Change' (Figure 4), an approach that requires organisations to clearly articulate their social mission: why they exist, what change they are making, and who they are making it for.



Figure 4: DigVentures 'Theory of Change'

The DigVentures Theory of Change is divided into three rows, each dedicated to a separate outcome theme following the NHLF Cultural Value model, from the intrinsic outcomes for heritage more readily associated with research excavation to the instrumental outcomes for people and communities. This model describes the joined-up thinking between the activities our organisation undertakes (Figure 4, columns 1 and 2) and how this is hypothesised to realise the broader mission (Figure 4, columns 4 and 5). Outputs are a measurable unit of product or service, such as a community excavation (Figure 4, column 3); outcomes are an observable change for individuals or communities, such as acquiring skills or knowledge (Figure 4, column 4). Social impact, 'conceived as the difference that ventures make to people's lives over and above what would have happened in the absence of that venture' (Nesta [2017](#), 7), is the effect on outcomes attributable to the output, measured against two metrics: scale, or breadth of people reached; and depth, or the importance of this impact on their lives.

If the first hurdle is defining the 'what' to evaluate, the next challenge is to implement a robust methodology managing the practicalities of 'how' to measure. The credibility of a Theory of Change rests on the level of certainty that organisational activities are the cause of this change. In order for this certainty to be achieved, the correct data must be collected to isolate the impact of the intervention, and equal attention paid to the detail of this process as to the excavation strategy. By progressing through five steps of ascending surety, Nesta's 'standards of evidence' framework has been designed to provide a structure around measuring impact, ensuring that evaluation strategies are appropriate to the stage of development of a variety of different products, services and programmes (Puttick and Ludlow [2012](#)).



	STANDARDS OF EVIDENCE	EXPECTATION	SUGGESTED METHOD	OUTCOMES FOR HERITAGE	OUTCOMES FOR PEOPLE	OUTCOMES FOR COMMUNITIES
Level One		Providing an academically rigorous framework, whilst ensuring that impact measurement is appropriate to the stage of development of a variety of different products, services and programmes.	Steps needed to ensure correct evidence is collected to determine whether or not an initiative is making a positive difference.	Intercultural benefits relating to the research dividend and evidence base for the management of archaeological sites and landscapes.	Individual benefits for participants and platform users, enabling the voluntary sector to scale in a sustainable and ethically responsible fashion.	Wider social impacts received by those who may not be direct participants, but benefit through increased awareness, value, income and local stakeholder focus.
Level Two		A low threshold, appropriate to very early stage innovations, which may still be at the idea stage. Involving little more than a clear articulation of why the intervention is needed, what it will aim to achieve and why this is better than what currently happens. Project teams will be able to give an account of impact, providing a logical reason why their intervention could have an impact and why that would be an improvement on the current situation.	A clear rationale to show why the product/service would have an impact, and why that would be an improvement on the current situation. Articulated as a theory of change and logic model, linking activities, outputs, outcomes to hypothesised impact.	A fully illustrated Project Design, signed off by statutory stakeholders, outlining key archaeological research questions, roles, procedures, steps and outputs.	A training or activity plan, linking activities to outputs, outcomes and impact, and an explanation of how the outcomes could be measured.	A training, activity, evidence development and/or heritage resource management plan, linking activities to outputs, outcomes and impact, and an explanation of how the outcomes could be measured.
Level Three		At Level 2 projects will be gathering data that show some change amongst those receiving or using the intervention. At this stage, data can begin to show that there is a change in the measure of the outcome among the recipients of the product or service, but that may not be sufficient to provide evidence of direct causality.	Pre and post-survey evaluation, cohort/panel study, and regular internal surveying.	Assessment Report, Management Report, base-lined against previous investigations.	Evaluation survey for participants to quantify demographic, socio-economic characteristics and spatial data, followed up with a post-survey qualitative evaluation using a separate questionnaire methodology to determine any change as a consequence of taking part.	Evaluation survey for site visitors to quantify socio-demographic, socio-economic characteristics and spatial data, followed up with a qualitative study using a separate questionnaire methodology to determine any changes that took place as a consequence of the visit.
Level Four		At Level 3 projects will be able to demonstrate that they are causing the hypothesised impact, by showing less impact amongst those who don't receive the product/service.	Robust methods using a control group, or evaluating a random selection of participants, begin to isolate the impact of the product/service. All product/services at level 3 will be well documented, with necessary skills, training and other delivery requirements outlined clearly, so enable effective replication in alternative places, situations, contexts etc.	Analytical report, synthesising specialist reports with previous work locally, regionally and nationally, to determine significance, importance and potential of the site.	Meta-analysis of evaluation results with those derived from projects delivering similar community-based activities, including both archaeological/heritage and other unrelated intervention science projects.	Meta-analysis of evaluation results with those derived from projects delivering similar community-based activities, including both archaeological/heritage and other unrelated intervention science projects.
Level Five		At Level 4 projects can explain why and how the intervention is having the impact observed and evidenced so far, supported by an independent evaluator to validate the findings. They will also assess the extent to which the intervention can deliver impact at a reasonable cost, and whether it can be replicated and purchased in multiple locations.	Robust independent evaluation that overcomes and validates the nature of the request, this might include endorsement via commercial standards or industry knowledge, underpinned by a documented methodology of delivery and processes, sign on costs of production and acceptable price point for customers.	Quality assured by the Chartered Institute for Archaeologists (CIA) under the Registered Organisations scheme, and involving independent site inspections and inventory audit.	External audit of quality of training programmes and activities by CIA, The Archaeological Training Provider Register of Professional Archaeologists, its Report and National Occupational Standards.	External audit of community programming and impact by specialist consultancy, undertaken independently of project team.
Level Six		At Level 5, projects will be able to demonstrate that the product/service could be operated up by someone else, anywhere else and scaled up, whilst continuing to have positive and direct impact on the outcome, and whilst remaining a financially viable proposition. For a service, this will establish whether it can be delivered by different staff in different locations.	Evidence will be derived from multiple evaluations of the product/service in different settings (at least two evaluations, one of which will be independent) to demonstrate that the product/service can be used in different settings (which could be in different settings geographically) and/or with different types of product/service users. Appropriate methods at this level will include multiple replication evaluations, future scenario analysis, or fidelity evaluation.	An excavation manual, underpinned by a broader operations manual and 'culture deck', detailing how the DigVentures project model should be applied in differing contexts.	Analytical and training manual, underpinned by a broader operations manual and on-line spectrum of engagement, detailing the participant's journey from digital supporter to experienced field digger.	An audience engagement and communications plan, underpinned by a broader operations manual and tailored 'culture deck', detailing how the intervention should be applied with clear and measurable level-sets.

Figure 5: DigVentures 'Standards of Evidence'

Following this model, the DigVentures standards of evidence framework details the required evidence burden (Figure 5, column 1); the suggested method for collecting evidence (Figure 5, column 2); and how this specifically relates to the outcomes for heritage, people and communities (Figure 5, columns 3, 4 and 5) as detailed in the DigVentures Theory of Change. Evidential standards begin with Level 1 (Figure 5, row 1), where practitioners are able to give an account of hypothesised impact, providing a logical reason why project activities could have an impact on outcomes, and how that would be an improvement on alternative provision. For a project to achieve Level 2 (Figure 5, row 2) practitioners will be gathering data that show some change among participants, but this may not be sufficient to provide evidence of direct causality. At Level 3 (Figure 5, row 3) practitioners will be able to demonstrate that they are causing the hypothesised impact, by showing less impact among those who don't participate in



the project or receive the product/service. Progressing to Level 4 (Figure 5, row 4), practitioners can explain why and how the project is having the impact observed, with results potentially independently verified. Finally, at Level 5 (Figure 5, row 5), the project methodology is robust and well-evidenced enough to be scaled and operated by other teams or organisations, while continuing to have positive and direct impact on the outcome and remaining a financially viable proposition.

These two tools are the basis of the DigVentures social business model, providing rapid feedback to understand social impact in real time, enabling the organisation to pivot activities if target communities are not being reached, or quickly scale up activities that successfully engage target groups. This framework is utilised in the design of all projects, where social impact is devised through a third tool – a project-specific evaluation matrix (Figure 6) drawing on the relevant sections of the Theory of Change that align with specific project activities (Figure 6, column 1). The hypothetical linkages between measurable outputs (Figure 6, column 2) and potential outcomes for heritage, people and communities can then be determined (Figure 6, column 3). The level of certainty that these outcomes were a direct consequence of either the particular archaeological methodology or the community activities, rather than something that would have happened anyway, can be assessed against the standards of evidence matrix (Figure 6, column 4).

	<b>ACTIVITIES</b> The processes and tasks undertaken by the organisation	<b>OUTPUTS</b> A quantifiable unit of 'product' or 'service' measurable once completed	<b>OUTCOMES</b> Observable change for heritage, individuals or communities	<b>STANDARDS OF EVIDENCE</b> Data collection and analysis being undertaken to demonstrate the positive difference made by an intervention
<b>For Archaeology and Heritage</b>	Stakeholder consultation with national and local heritage bodies, societies and local authorities Archaeological investigation of nationally significant site Accessible archaeological archive	Scheduled Monument Consent Archaeological Project Design Archaeological Assessment Report with recommendations Archaeological Archive	Through our work, heritage will be identified, interpreted and better explained better managed and in an improved condition	Level 3 – Analytical report, synthesising specialist reports with previous regional, national and international work to determine significance, importance and potential of the site.
<b>For Individuals</b>	Half-day family friendly DigCampersons CMA endorsed half-day Finds Lab workshops CMA endorsed half-day excavation skills training Heritage skills workshops	Excavation and finds rooms skills training for 81 YAC members 163 DigCamp participants (children under 12 and their parents) Excavation and finds rooms skills training for 132 participants 20 Participants in photogrammetry and creative skills workshop	By taking part in our work: A wider range of people will be involved in archaeology and heritage people will have greater wellbeing people will have learnt about the archaeology and heritage of Pontefract Castle, leading to changes in ideas and actions people will have more skills in excavation and finds processing, giving greater confidence to get involved	Level 3 – Field school training programme quality assured and endorsed by CMA Level 2 – Project evaluation report including survey data for Finds Lab, DigCamp and project participants to determine changes for individuals as a consequence of taking part, and highlighting scalability, implementation and ability to meet local needs.
<b>For Communities (Society)</b>	Education programmes for primary schools Daily site tours during archaeological investigation Published web content and static social posts Traditional broadcast and print media	372 school pupils from six local schools benefit from tailored education content Daily site tours reach new and more diverse audiences (438 people) Visitor numbers of Pontefract Castle increase by 138% to 14,016 500,000 combined impressions across Facebook & Twitter 7,000 unique microsite views Coverage by BBC, Look North, BBC, Radio Leeds, Wakefield Express, Pontefract and Castleford Express	As a consequence of our work: more and a wider range of people will be involved in heritage people have learned about archaeology and heritage, leading to change in ideas and actions the local area will be a better place to live, work or visit	Level 2 – Collection of evaluation survey data for participating schools, visitors to the archaeological site, temporary exhibitors, writing to quantify audience demographics and determine any changes which took place as a consequence of the visit

Figure 6: Project-specific Evaluation Matrix

Doing good in any way is clearly a positive contribution to society, but a lack of clarity about what difference archaeology programmes achieve and for whom, and no agreed methodology for collecting evidence to support often highly aspirational claims, is arguably undermining the profession's ability to design and deliver high impact work. DigVentures has addressed this challenge by adapting and amending Nesta's five-stepped evidential standards to align with more archaeologically relevant impact themes (heritage, people and communities). Certain aspects of the Nesta framework that might be very difficult to create for heritage projects (such as the requirements for control or



comparison groups to help isolate causality) can therefore be replaced by more appropriate measures (such as independent auditing by our governing body – the [Chartered Institute for Archaeologists, CIfA](#)).

This frame of reference provides the latitude to design new project initiatives without crushing experimental work under the weight of evidential expectation. An entirely new product or process can be appropriately evaluated at level 1 on the standards of evidence by collecting isolated anecdotal evidence that a pilot project caused a positive change in the world. But evaluation can also be proportionately scaled to level 2 and beyond, such as when the level of public investment is much higher, or where the burden of proof that innovative initiatives are a significant improvement on existing provision. Rather than present a 'gold-plated case study', a 'ladder' approach to evidential standards could ultimately demonstrate that innovative projects can deliver scalable impact at a reasonable cost, meaning that they can be replicated and implemented in multiple locations.

The following sections describe how an innovative approach to community-based archaeological research was undertaken in the context of a development-led planning brief. It will demonstrate how the DigVentures impact methodology enabled the project to be designed to ensure that both the 'community' and 'archaeology' outcomes were delivered with equal importance, and that the appropriate impact evidence was collected to demonstrate the project's overall contribution to social value.

### 3. Outcomes for Archaeology and Heritage



Figure 7: Community participants supervised in the drawbridge pit by professional archaeologists





Fieldwork was undertaken initially between 30 September and 3 November 2019 to investigate parts of the gatehouse structure exposed during an earlier archaeological watching brief at Pontefract Castle, located at the base of the Victorian steps leading from the visitor centre into the castle's inner bailey (Casswell *et al.* 2020). The community excavation was conducted in two stages: the first three weeks comprised hand and machine excavation by a team of professional archaeologists, followed by a two-week programme of excavation, recording and finds processing involving members of the local community (Figure 7). Based on the results of the work in 2019, a second phase of excavation was undertaken in 2020 targeted to reveal the full stratigraphic sequence within the previously identified drawbridge pit. This phase of work comprised hand excavation of sealed deposits exclusively within the drawbridge pit and was completed by a team of three professional archaeologists (Figures 8 and 9).



Figure 8: Post-excitation ortho-image and plan of the Pontefract Castle drawbridge pit indicating depth below ordnance datum

Beginning with outcomes for archaeology and heritage, activities contributing to the archaeological research were designed in a conventional fashion, following Historic England's [MORPHE project model](#) (Management of Research Projects in the Historic Environment, 2012) as a condition of permission to excavate under Scheduled Monument Consent. Four aims and 16 objectives were defined in the Project Design (Casswell *et al.* 2019) devised in accordance with priorities articulated in the Historic England Research Agenda (2017) and Historic England Corporate Plan (2018-21). These aims were achieved through a number of traditional field and archaeological science activities, including aerial and ground-based photogrammetry; auger survey; archaeological investigation; palaeoenvironmental assessment (pollen and plant



macrofossils); faunal assessment; and finds assessment (pottery, metalwork and struck flint).

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Figure 9: Post-excavation 3D model of Pontefract Castle drawbridge pit (hosted by Sketchfab)

Seven distinct phases of activity were observed within the trench. The earliest represented by a casing wall which predated the construction of the gatehouse in the 14th or 15th century. The gatehouse structure is now understood to have been aligned north to south, forming a barbican passage bridge over the moat, within which was a large drawbridge pit. Mason's marks found inside this pit and on the surviving external elevations of the building indicate the gatehouse was likely constructed as part of a larger scheme of castle renovation commissioned in the 14th century. Layers investigated from within the drawbridge pit demonstrated a gradual accumulation of deposits from as early as the 14th through to the 17th century.

Masonry of a different construction technique was found abutting one of the gatehouse towers. This structure has tentatively been interpreted as part of a redans built prior to the Civil War sieges in the 1640s. Further evidence for the sieges was found within the drawbridge pit where significant layers consisting of large stone rubble fragments indicated the castle's demolition. Numerous lead musket balls dating to this period were also found from these deposits. Later episodes of robbing activity were evident around many of the walls, dating from the demolition of the gatehouse in 1649 through to the mid 19th century. By the 1880s much of the castle was subject to archaeological recording before the entire area was landscaped. At this time much of the upstanding gatehouse remains were remodelled to fit the aesthetic of a late Victorian romantic ruin.

During fieldwork, weekly meetings were held between the DigVentures team, Neil Redfern (HE Inspector), Ian Sanderson (West Yorkshire Archaeology Advisory Service) and representatives from WMDC to ensure the direction of the project was in accordance with the research aims and objectives. Resulting outputs (Project Designs and Reports) determining the significance, importance and potential of the archaeology were also signed off by this stakeholder team, a governance structure that ensured that claims made regarding heritage outcomes (better identified, interpreted and managed) could be firmly evidenced (level 3). In addition to all DigVentures' work falling under the quality assurance of the Chartered Institute for Archaeologists, these additional checks and balances ensure that civic participation can be scaled to meet demand while still maintaining the commitment to quality archaeological research.

These intrinsic outcomes for heritage are familiar ground for archaeologists, where collegiate peer review forms the basis of quality assurance strategies. A social impact model, however, will design participatory activities with an eye to both intrinsic and instrumental outcomes, ensuring that the time volunteers spend digging increases the quality of the historic environment whilst also benefiting individual participants. As these outcomes are often abstract, intangible and difficult to attribute, data collection strategies to evidence impact should be designed and incorporated into fieldwork from the outset. This is articulated in the DigVentures impact toolkit through the project specific evaluation matrix (Figure 6), where the wider instrumental project outcomes are separated between project participants (outcomes for people) and site visitors (outcomes for communities and society). Two complimentary quantitative and qualitative



data collection strategies were then implemented for both groups; participants were interviewed pre- and post-experience (99% completion rate, or 347 in total), and visitors completed a questionnaire following their experience (24% completion rate, or 104 in total).

## 4. Outcomes for People



Figure 10: Finds room activities for children and families

Outcomes for people were achieved with a combination of activities designed to ensure that 'a wider range of people will be involved in archaeology and heritage'. To help decrease perceived barriers to participation, accessible half day sessions were offered including Finds Lab Workshops, Dig Experiences and DigCamps (Figure 10 and 11), all of which followed DigVentures' ClfA-endorsed Field School curriculum, including:

- Guided tours (5 October until 3 November) – 438 participants
- Educational sessions for school classes (8–17 October) – 372 children from six schools
- Excavation and finds room training for YACs (12 and 13 October) – 81 YAC members
- DigCamp in the trench and the finds room for children and parents (19, 20 and 26 October–3 November) – 163 participants
- Excavation and finds room training for adults (21 October–3 November) – 132 participants
- Two photogrammetry workshops (2 November and 26 November) – 10 participants
- Two creative workshops (3 November) – 10 participants



Figure 11: Parent and child DigCamp excavation of the Victorian deposits

The quantitative analysis of project participants was derived through digital data at point of sign-up, such as age, gender and professional background, with socio-economic categories based on the [Office for National Statistics](#) (ONS). This was followed by more in-depth qualitative analysis (a pre- and post-experience interview) designed to reveal 'whether or not people will have learnt about heritage, developed skills, changed their attitudes and/or behaviour, and had an enjoyable experience'.

Gender profiles for participants were broadly balanced, with 54% female and 46% male, with the youngest aged 4 and the oldest 76. Participants represented a variety of full-time occupations (39%) and retirees (10%). The remainder were students, either of compulsory educational age or those attending university (48%), or people in long-term unemployment (3%). Those in full-time employment were divided into categories based



on ONS classifications, illustrating that digging and finds lab opportunities were taken up by a significant number of people with low income, as well as young people (Figure 12). Examples of professions included photographer, vets practice manager, radiologist, translator, home-schooling mother, technician, local government officer, accountant, bar staff and librarian. The high number of 'under 16' and '35-44' age profiles and 'students' can be accounted for by the high take-up for family-oriented Dig Camps providing activities for parents and children. Taking this into consideration, all age groups and socio-economic backgrounds were well represented in the data, with a marked improvement on existing community archaeology provision compared with the typically retired, over 65 local civic society groups (Wilkins [2020](#), 33).

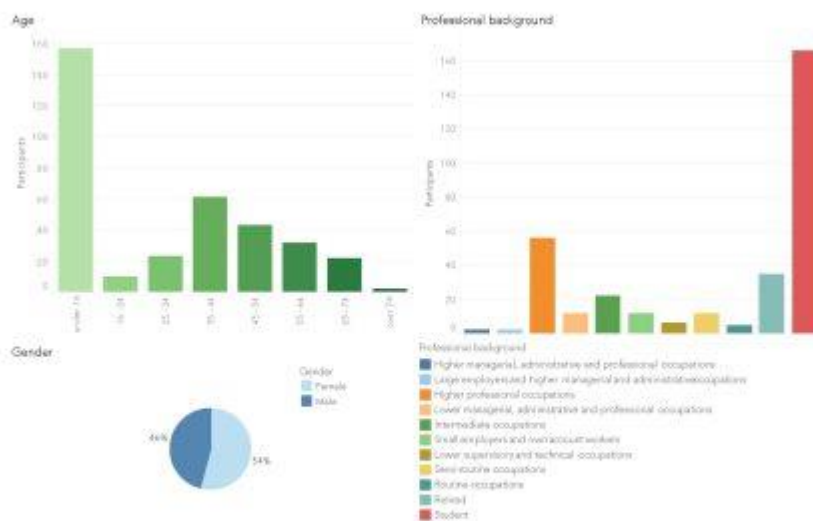


Figure 12: Age, gender and socioeconomic background of project participants

In addition to widening the demographic and socioeconomic range of participation (when compared to existing community archaeology provision), the project attracted an overwhelmingly new audience for archaeology, with 80% of participants having never taken part in archaeology activities before. Pre-experience interviews were completed with all project participants to help understand why each had decided to get involved in something entirely new to them, and provide a baseline understanding against which the impact of the experience could be determined through post-experience interviews. Participants answered in their own words, and the response were coded into ten categories in order to be visualised into charts (see Wilkins and Ungemach [2020](#) for a comprehensive analysis of this motivational and experience data). In summary, 50% of participants described themselves as 'passive consumers of archaeology' who embraced the opportunity to finally get hands-on with their interest. Contrarily, 20% of participants joined a friend or family member who was interested in the project, but they did not have pre-existing interest in archaeology themselves. Some 17% of participants also took part in the project because they are interested specifically in Pontefract Castle and/or the excavation was local to them.



Post-experience 'exit' interviews were also undertaken for all participants, indicating how initial perceptions of archaeology changed and providing evidence for wider social outcomes, such as learning, skills acquisition and wellbeing. Participants were asked to summarise their highlight of the project in their own words, with responses then codified into five categories in order to visualise the results. The most important consideration for 68% of participants was the experience of real archaeology, and the opportunity to get hands-on experience with finds and in the trenches. Closely related to this was the 'thrill of discovery' for 23% of participants, indicating an overwhelmingly positive experience for first time participations. A closer assessment of interviewees answers (often elicited through follow up questions) reveals that in addition to having a good time (such as 'This was the best day ever!'), more subtle impacts could be clearly discerned.

Further analysis of participant responses indicates a positive change in their perception of archaeology, history and Pontefract Castle, meeting the 'learning about archaeology and heritage, leading to change in ideas and actions' outcome. Rachel, a 41-year old dinner lady, was surprised by how the experience had gripped her: 'I'm not really much interested in history, but this made it really fun'. Stephen, a 45-year old care manager, described how the experience had positively challenged his assumptions: 'I found it different to what I thought it would be. I learnt that archaeology is more than just finding things'. This broader understanding of the principles of archaeology was also supported by other participants, such as Joanne, a 35-year old events officer remarked on 'learning so many things and honing my skills', indicating that the broader understanding of archaeology was also by the outcome that 'participants will have developed skills'.

The experience had cause for some individuals to become more reflective of their own behaviour in the present: 'It really made me think about what people will find from us and how much unnecessary rubbish we leave behind for archaeologists to find' (Kristina a 38-year old PR consultant). Others similarly reflected on how excavating had made them feel: 'digging and the thought of finding something that no one else has touched for ages' (Dianne, a 41-year old planning consultant).

Several participants described experiencing positive mental and physical health benefits, aligning with the outcome that 'participants will have greater wellbeing'. Jacqui, a 54-year old retiree described being 'generally not a very patient person, but I find this very therapeutic'. Similar positive effects were observed by Carole (65), a retired teacher: 'Being ... with good company. It's a really good social exercise'. Being part of a team and working towards a common goal also gave participants also a sense of achievement and ownership. Lynda (65), a retired teacher described feeling 'like I've been very useful [cleaning finds] and hopefully someone will now be able to do some good analysis'. This sense of achievement also resulted in strengthened self-confidence, as observed by Ian (62), retiree: '[I enjoyed] seeing how much I achieved at the end of the day'. This effect was both visible in the finds room and the trench, as Ann (76), a retiree, described the positive feeling 'Seeing the process [was fun] – standing back and looking at the area we cleaned and you can see what a difference we actually made'. At the other end of the age spectrum, one parent remarked on the similar effect the experience had on her child: 'Evie is very shy, so to see her comfortable enough to answer questions was fantastic' (Beckie, a 36-year old Retail Buyer).

In addition to field skills training and finds room activities, an artistic programme was devised to run alongside the excavation as part of an AHRC-funded PhD scholarship by Jodie Harris, aiming to expand the range of potential participants through creative sketching workshops. By offering opportunities to engage aesthetically with the



excavation, this experimental intervention was designed to extend audience reach beyond typical consumers of archaeology, and reveal how artistic activities might add value to the experience of those already interested in the subject. Benchmarked against the DigVentures evaluative framework, evidence that the project was responsible for the changes observed for participants was assigned to both level two and three, as some well-established elements of the activity programme (such as ClfA-endorsed training) ran alongside innovative experimental activities (such as creative art activities designed to attract new audiences). Although these activities all fall within the outcomes for people theme, this illustrates that projects are multifarious, and the impact of some activities will be better evidenced than others.

## 5. Outcomes for Communities and Society

Alongside structured activities for project participants, other lighter touch opportunities were provided for site visitors to ensure that the project delivered outcomes for communities and society. Interpretation boards were placed alongside the trench-side fence, and observers were encouraged to talk to and interact with the team and drop into the adjacent Finds Room to see what had been discovered. These more informal audience activities were supplemented with structured, hour-long tours of the trench and finds room, detailing the history of the site, explaining the research process, and highlighting the day's latest finds. Visitors were encouraged to complete a short evaluation form after their experience (24% of those visitors who took part), to understand the impact the project made on the wider community.

In response to this additional archaeological programming, a substantial (138%) year-on-year increase in visits to the castle were recorded during October 2019 (14,810, up from 6800). Given that 67% of visitor survey respondents stated that the dig was their main reason for visiting Pontefract Castle, it is not unreasonable to assign a large part of this uplift to the archaeological programming, supporting the wider project outcome that a 'wider range of people will be involved in heritage'. This audience was predominantly local, with 62% of visitors living within 10 miles of the site, 19% within 50 miles, and the remainder (including a small group of Australians) travelling from further afield (Figure 13).

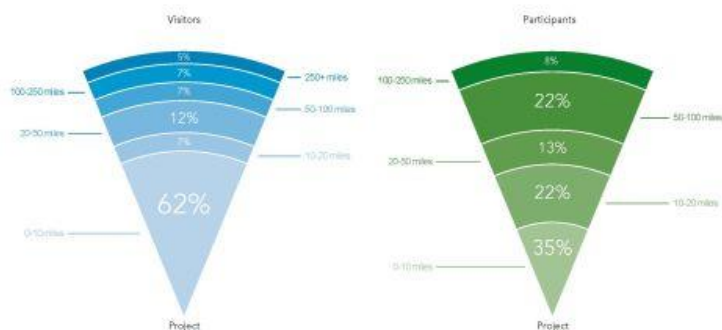


Figure 13: Average travel distance to site for visitors and participants

Many of these visitors were surprised to have stumbled upon 'an actual dig in progress' in the first place, and by 'the sheer scale of it all', 'the depth of the drawbridge pit' and how 'much more [there is] to discover'. Many also put forward what they learnt on the tour, such as 'that Cromwell hadn't destroyed the castle', 'how far back the town existed' or 'the amount of knowledge you can find from the dig' in general. Of those surveyed, 80% of respondents had never taken part in a site tour or visited an archaeological site before. These visitors described an improved perception and impression of archaeology (34%) or were strengthened in their pre-existing interest in the discipline (66%). A further 77% of respondents found archaeology to be more exciting as a consequence of their visit, and when asked whether they would like to get more involved with archaeology in their local area, 80% agreed, of which 34% showed a very strong interest in future involvement (Figure 14).

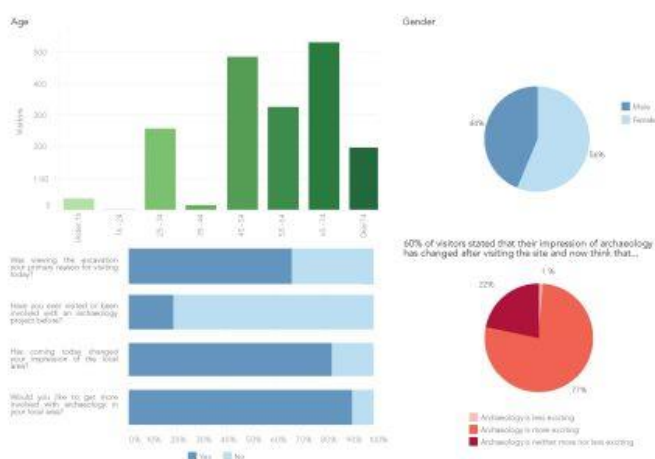


Figure 14: Age, gender and experience impact for site visitors

As well as changing opinions of archaeology more generally, visitors also described an improved perception of the immediate Pontefract locality, supporting the social outcome





that 'the local area will be a better place to live, work or visit'. In total, 83% of respondents claimed that their impression of the local area had changed, with one respondent clearly stating: 'Pontefract has more to offer than I thought'. Another noted that they 'hadn't been too impressed of [sic] Pontefract up till now, but now found it all very interesting'. People from further away admitted that they were 'not aware of the area' before their visit. Locally, the positive impact of the project went even further and provided visitors with a better understanding of the archaeology in their area, with people saying that they gained 'increased awareness of local history' as well as its former importance. Furthermore, Pontefract and its surrounding area has become a better place to live for visitors who now 'feel privileged to live here'!

The project's digital content also achieved a significant breakthrough during the initial five week dig period, achieving 500,000 combined impressions across Facebook and Twitter, and 12,000 post engagements (likes, shares or comments). A 3D virtual tour of the dig attracted 2500 views on Sketchfab, driving 7000 unique page views of the more in-depth archaeological content published on the [project microsite](#), including background information, dig updates, and archival site records. Traditional TV and print media also covered the project with news stories published by BBC Look North and BBC Radio Leeds and featured in articles by the *Wakefield Express* and the *Pontefract and Castleford Express*.

## 6. Conclusion – Social Impact Archaeology

Archaeological research responds to our primal need to discover, connect and belong; but the development-led archaeological sector has arguably struggled to channel this wider social value into accessible, participatory activities, and to therefore cement its position in civic life. In this era of increased localism, cultural distinctiveness and strong identity are essential for places to attract people and investment. Recasting financial spend on archaeology as an investment into the social, economic and cultural environment is a necessary step towards expanding the range of project outcomes and social value that we create.

The challenge for archaeologists is that we do not yet have a satisfactory frame of reference to capture these outcomes, and therefore evidence the potential of our work to facilitate this shift in the politics of rootedness and belonging. Benefits to individuals and communities from public-facing archaeology programmes are often abstract, intangible and difficult to attribute, following a continuum of intrinsic and instrumental outcomes. By untangling the 'string', this article has demonstrated how these outcomes can be separated into heritage, people and community themes, enabling archaeologists to begin to collect evidence that specifically shows causality across those different areas.

This short article has illustrated how DigVentures has approached this challenge with a theory of change and standards of evidence framework, illustrating how both 'community' and 'archaeological research' outcomes can be designed with equal consideration in a project ultimately driven by the need to discharge a planning condition. It should be read in concert with the companion piece to this work – a short documentary filmed and directed by DigVentures Community Archaeologist Maggie Eno. Further analysis of the Pontefract Castle evaluation data can be found in the site



assessment report (Wilkins and Ungemach [2020](#)), where impact evidence is expanded upon in the context of a traditional archaeological report

ONLINE ONLY <https://intarch.ac.uk/journal/issue57/18/full-text.html#video>

Pontefract Castle Gatehouse Project on Vimeo (this video has audio)

DigVentures was founded with a robust evaluation framework designed into our work as an essential step to scaling a model that usually accounts for over 1,000 dig participants a year, and in 2020 was scaled to encompass 8,456 digital and in-person participants from 90 different countries. The organising principle of this framework is that claims made regarding social impact of public participation in archaeology are as substantively evidenced as conclusions about the past drawn from the excavation itself. Increased evaluation requirements have recently been called out as just another form of audit trail for funders, or PR gloss for partners; but we see it as an opportunity for an organisation to learn, adapt, and improve their contribution to public benefit: a real-time process of equal importance to financial reporting for the health of an organisation. Just as a hole in the books would be dealt with as a matter of fiduciary responsibility, a similar rupture between the delivery of public benefit and the realities of archaeological working practice should require swift and decisive action. For other practitioners perturbed by an arguably growing deficit in archaeology's 'public benefit books', we hope that the DigVentures evaluation tool kit and Pontefract Castle case study will be of some guidance.

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