



The Role of University Student Volunteers in Festival-based Public Engagement

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This report presents findings from a study of the role of student volunteers and universities in festival-based public engagement. The research was commissioned by the National Coordinating Centre for Public Engagement (NCCPE), and was funded in part by the NCCPE's **v**inspired students project.

The NCCPE's vision is of a higher education sector making a vital, strategic and valued contribution to 21st-century society through its public engagement activity. It works to help support universities to improve, value and increase the quantity and quality of their public engagement and embed it into their core practice. The NCCPE is part of the national Beacons for Public Engagement initiative, funded by the UK Higher Education Funding Councils, Research Councils UK and the Wellcome Trust.

The NCCPE has been funded by **v**, the National Young Volunteers Service, to run the **v**inspired students project, which aims to provide evidence of the benefits of volunteering and to encourage universities to recognise the value of student volunteering as part of their core activity.

For more information about the NCCPE and **v**inspired students, please go to www.publicengagement.ac.uk

Executive Summary

This report adduces evidence from two surveys commissioned by the National Co-ordinating Centre for Public Engagement on the role of student volunteering and universities in festival-based public engagement. Conducted September –November 2010, one survey gathered the views of student volunteers and the other focused on festival organisers. Results show that student volunteers play a key role in making festivals effective spaces for public engagement. Many students are directly involved in festival organisation and the design and delivery of engagement activities. However, the most consistent finding in terms of student volunteers' role is that they inhabit the interstices of festivals, fulfilling crucial roles in the spaces between paid staff's capabilities and responsibilities. Moreover, student volunteers brought an enthusiasm to their subjects and to public engagement that festival organisers identified as invaluable for enhancing visitor experiences.

Key findings for the student volunteer's survey include:

- Student volunteer respondents are highly supportive of festival-based public engagement, with 91.7% indicating they would volunteer at a festival in the future, while only 3.3% of participants said they would not.
- The majority of respondents (75.4%) think that festival volunteering will help them in their future study or career, while just 11.5% do not.
- Universities and their various communication networks comprise a key hub for recruiting student workers and volunteers to the festival, be it through electronic mailing lists or student society involvement.
- The most common type of role (46.5%) respondents fulfilled within their festival experience was educational, followed by 'workshop or activity leader' (28.3%) and 'steward' (26.3%).
- 50.8% of respondents interacted with 1-99 festival attendees, 14.3% reported interacting with 100-499 attendees, 4.8% dealt with 500-999 attendees and a further 4.8% interacted with over 1,000 festival visitors.
- However, not all student volunteers had visitor-facing roles, as evidenced by the 25.3% of respondents who indicated that they had no contact with festival visitors at all. Given that interacting with visitors is a source of satisfaction for student volunteers replying to this survey, it may be wise for organisers to arrange for volunteers to spend at least some time in interacting with visitors.
- When students were asked why they got involved in working at a festival, most responses could be categorized as "skills/career development", defined as the opportunity to further one's experience and future career possibilities. Another frequent response included 'public engagement' goals of engaging publics with their favoured subjects.
- Overall, respondents highlighted the importance of good training and guidance from those organising activities that involve student volunteers. Good training and guidance is crucial both to ensure the effectiveness of volunteers' work and to ensure that volunteers have a satisfactory experience that builds new skills they can take forward into employment and other settings. For the most part, student respondents felt satisfied with the level of training they received; although there are domains in which improvement or expansion of the training provision was identified as a pressing need.

- Indeed, although most student volunteers had some form of training, there is evidence that this training needs expansion as few respondents had received detailed practical training or guidance for the roles they were fulfilling in the festival.
- Another common theme that arose out of this question was students' feeling that although they made a "small contribution" individually, this was an inherent part of the festival's "overall effectiveness".

Key findings from the festival organiser's survey include:

- Results show the hybridity of festival organisers' experience, frequently working across different festival types.
- Festival organisers rely on having at least some paid staff, however the majority of respondents employ five or fewer people.
- While the majority of festival organisers surveyed work with universities (65.7%), a substantial minority do not. Given the many benefits of working with universities (and their students) highlighted elsewhere in the survey, this minority of organisers and the festivals they organise could be a key focus for universities to expand their engagement activities for the benefit of their students and publics.
- Nevertheless, results from the festival organisers survey indicate that universities provide a great deal of support for festivals overall, most often by providing human resources in the form of unpaid student volunteers (69.6%) or speakers, artists and workshop leaders (60.9%) that form an integral part of the festival programme. Universities are also more likely to offer festivals free venues (56.5%) than venues for hire (47.8%), suggesting that festival events are valued and supported by the university at multiple levels.
- Festival organisers reported that the enthusiasm and expertise of volunteering students and staff comprised the most valuable aspect of engaging with universities in delivering their festivals.
- The least successful aspect of using student volunteers in festivals is the high level of training required for each iteration of the festival. A number of festival organisers have had to adjust their expectations of student volunteers' prior practical knowledge, starting the training at a basic level.
- Aligning with the results of the student survey, organisers overwhelmingly emphasised that the value of festival-based volunteering for students centred on what could be categorized as "skills development/employability", as well as for expanding students' range of professional contacts.

In sum, these results evince a widely positive experience festival-based volunteering for both organisers and student volunteers. From festival organisers' perspective, their events are able to have a much greater reach than would be possible without volunteers. From student volunteers' perspective, they are able to use their existing knowledge and develop new employable skills and experience to take into the employment market.

Introduction: Festival-based Public Engagement

In order to understand the perspectives of both students and organisers on the vital role of student volunteers within festival-based public engagement in the UK, two mixed methods surveys were designed and distributed to these two groups. The results reveal patterns of student volunteers' participation in festivals and their concomitant contributions to public engagement within festival contexts. Festival organisers are found to value the relationship with local universities in general and the contribution of student volunteers in particular. Moreover, both groups agree that public engagement experience within festivals helps student volunteers develop skills and expanded personal and professional contacts, which directly enhance their employability.

The history of UK festival-based public engagement could be traced back to the British Association for the Advancement of Science's annual conference, founded in 1831 to encourage discussion between scientists and other learned men to promote scientific progress (British Science Association, 2009). The annual conference was renamed a Festival of Science in the 1980s and is now the British Science Festival. Most festivals tend not to have high capital budgets, and instead bring together temporary exhibits, local museum activities, scientists, school pupils and publics to create a time-limited special event. Festivals may be managed by different types of organisations: museums and centres, universities, independent charities, research councils, local government or Government-funded agencies (EUSCEA, 2005, p. 13). The organisational structure influences certain features of the festival, including the number of students who help to deliver engagement activities.

Festivals exemplify the mix of aims and methods that defines contemporary public engagement practice (Holliman et al., 2009; Holliman & Jensen, 2009). In this context, Irwin's (2008) taxonomy of 'first', 'second' and 'third' order public engagement offers some clarity about the various forms such activities can take. Irwin defines 'first order' engagement as based on the aims of promoting science learning, 'awareness', greater interest in particular subjects amongst publics and increased numbers of children and young people interested in careers in those areas. Such first order aims predominate in festivals.

Considering these aims and objectives, it is noteworthy that distinctive public engagement formats are employed in festivals alongside more conventional methods of engagement that one might encounter in museums or school outreach visits. The engagement methods found within festivals include:

- 'Fairs', 'street presentations' and specialist kiosks
- Lectures
- Debate and dialogue events
- Museum activities and exhibitions
- Workshops
- Shows and demonstrations
- Ex situ activities delivered in schools

(Office of Science and Technology, 2004)

A defining characteristic of a special event or festival is its transience: "it would be difficult to induce and sustain the same sense of occasion and excitement if such an event was to be held more frequently" (Derrett, 2004, p. 33). Festivals typically take place once a year, and perhaps the reliability of their reappearance each year makes them an event which members

of the public may start to expect as part of the annual calendar of events in their locality. Festivals aim to serve awareness-raising ends and provide a way in which different groups can do something out of the ordinary and encounter new ideas and domains of knowledge and experience.

The word 'festival' denotes a special event for visitors, and thus the expectation that the event they attend will be different from other year-round attractions and exhibitions. Indeed, festivals tend to differ from activities provided by museums and science or cultural centres both due to their temporary nature and their focus on current practice and research. Festivals usually bring together a range of events in a time-limited period, allowing for a wide range of potential experiences within the science festival context. One consequence of this temporality is that investment may be made in a level of activity which would be hard to sustain for a longer period. For example, many festivals also have high levels of volunteer participation by academic staff and university students, which is a key focus of the present research.

Methods

Overview

Two in-depth mixed methods surveys were designed and distributed for this study. After carefully screening out of responses that were incomplete and unusable, the sample size for student volunteers was 108 and for festival organisers it was 47.

Research Design

Given this is the first study of student and organiser perspectives on the role of volunteering in festival-based public engagement, a preliminary pilot testing phase was employed to gather feedback on proposed questions from both students and festival organisers. Also because this was a new research domain, the two surveys included open-ended items designed to explore respondents' perceptions in a relatively unconstrained manner to limit the risk of closing down useful but unforeseeable lines of response (see Jensen & Holliman, 2009).

Sampling

Student volunteers

The student volunteer sample ($n = 108$) was disproportionately female (71.7%), whilst only 28.3% of the sample was male. The majority of respondents (66.1%) were between the ages of 21 and 25, with 12.5% younger (age 19-20) and the remaining 21.4% older (age 26-31, plus one respondent aged 41).

Most respondents were British (83.3%), 5% were from other EU countries and 11.7% were from countries outside the EU. Most respondents were at postgraduate level (65.5%), with the remaining 34.5% studying for an undergraduate degree. Regardless of degree level, the majority of participants (92.9%) were studying full-time, with only 7.1% studying part-time. The majority of participants (90.7%) have worked at a festival prior to completing the survey. Finally, no respondents indicated that they had a disability.

Respondents to the student survey were asked in what type of festival they had been involved. Across the different subject-focused festivals, the most respondents had experience with 'science-, technology- or nature-related' festivals, with 'performing arts' representing the second largest category.

Table 1: Student Survey Sample Distribution by Festival Type

Festival Type	Percent
Science, technology or nature (e.g. Cheltenham Science Festival)	69%
Performing arts (e.g. Edinburgh Festival Fringe), or other music, theatre, dance etc. festival	28%

Children's / family (e.g. Belfast Children's Festival)	5%
Visual arts (e.g. Glasgow International Festival of Visual Art)	1%
Film (e.g. Encounters Film Festival, Bristol)	1%
Literary / books (e.g. Hay Festival)	-
Other	6%

Note: Total percentage exceeds 100% because respondents could select multiple categories.

Festival organisers

The sample comprised festival organisers ($n = 47$) that do not work exclusively on one type of festival. Although their responses showed a great deal of overlap in festival type, the largest category of respondents came from organisers of 'performing arts'-related festivals.

Table 2: Organiser Survey Sample Distribution by Festival Type

Festival Type	Percent
Performing arts (e.g. Edinburgh Festival Fringe), or other music, theatre, dance etc. festival	61.7%
Science, technology or nature (e.g. Cheltenham Science Festival)	42.6%
Children's / family (e.g. Belfast Children's Festival)	36.2%
Visual arts (e.g. Glasgow International Festival of Visual Art)	34%
Film (e.g. Encounters Film Festival, Bristol)	23.4%
Literary / books (e.g. Hay Festival)	17%
Other	12.8%

Note: Total percentage exceeds 100% because respondents could select multiple categories.

The second most common category was 'science, technology or nature' festivals. However, the fact that the percentages in the table above exceed 100% by such a wide margin shows the hybridity of festival organisers' experience, working across different festival genres.

Data Analysis

The data collected from open-ended items were analysed qualitatively to identify patterns and themes (see Strauss & Corbin, 1998). The results of this analysis are presented in the Qualitative Results section below. Closed-ended items were also included in the surveys. The data generated by these items were only analysed using descriptive statistics due to the relatively small sample sizes.

Where provided, qualitative results extracts from the student survey are appended with a respondent's: gender, undergraduate or postgraduate status and university type. University types were summarised as 'Russell Group' to indicate membership in this elite group of 20 research intensive UK universities (<http://www.russellgroup.ac.uk/our-universities/>), 'post-1992' to refer to the class of universities that were previously technically oriented institutions known as 'polytechnics' (this group heavily overlaps with membership in the Million+ group: <http://www.millionplus.ac.uk/members/index>) and 'pre-1992' to identify the other universities whose origins pre-date the 1992 expansion but are not within the Russell Group. The festival

organisers' qualitative extracts are appended with the type of festival they organise (this can include more than one category) and the size of the largest festival they organise.

Quantitative Results

Closed-ended survey questions were included in both surveys to quantify respondents' perceptions on a number of important variables.

Student Volunteer Survey: Quantitative Results

In order to understand the ways in which students are woven into the variegated tapestry of UK festival-based public engagement, a key research question for this project is: What roles do student volunteers play within festival-based public engagement? The results indicate that students filled a wide range of positions when working at festivals, and are tasked with varying levels of responsibility. The most common type of role (46.5%) respondents fulfilled within their festival experience was educational, followed by 'workshop or activity leader' (28.3%) and 'steward' (26.3%).

Table 3: Student Volunteers' Self-Reported Festival Roles

Categories	Percent
Educational Roles, e.g. staffing a stand, speaking to visitors	46.5%
Workshop or Activity Leader	28.3%
Front of house / Steward	26.3%
Production: sound, lights, staging, etc.	11.1%
Hospitality (e.g. bar work)	10.1%
Box office or ticketing	9.1%
Press or Publicity	9.1%
Other	11.1%

Note: Total percentage exceeds 100% because respondents could select multiple categories.

Only 11.1% of participants have worked in roles other than the categories identified above. When asked what 'other' roles students had filled when working at a festival, most responses could be categorised as "assistant" or "management" positions. The "assistant" category is defined as a position that involves either "pre-festival office preparation" (F, Postgraduate, Russell Group) or providing support to higher management or festival organisers during the festival:

Extract 1)

Runner for organisational involvement in event (M, Undergraduate, post-1992 University)

Extract 2)

Young People's Programme Assistant (F, Undergraduate, pre-1992 University).

The "management" category is defined as a position that involves taking on greater responsibility such as "event organiser" (F, Undergraduate, Russell Group) and "events

manager for concert live" (F, Undergraduate, Russell Group). These positions were more prevalent amongst student volunteers at Russell Group universities.

The finding that educational and other communication-related roles were the most commonly adopted by student volunteers aligns with the finding that most respondents reported interacting directly with members of the public visiting the festival. Indeed, 50.8% of respondents interacted with 1-99 festival attendees, 14.3% reported interacting with 100-499 attendees, 4.8% dealt with 500-999 attendees and a further 4.8% interacted with over 1,000 festival visitors. However, not all student volunteers had visitor facing roles, as evidenced by the 25.3% of respondents who indicated that they had no contact with festival visitors at all. Given that interacting with visitors is a source of satisfaction for student volunteers replying to this survey, it may be wise for organisers to arrange for volunteers to spend at least some time in such a position.

Interestingly, the majority of respondents (72%) had not been paid for any of their festival roles identified above.

Level of Public Interaction and Value of Experience

The majority of participants reported having done other volunteering outside of festivals whilst at university (76.7%). This suggests that volunteering at festivals correlates highly with student involvement in other volunteering opportunities at university. That is, students do not restrict their engagement and volunteering activities to festivals, even though festivals are a valued setting for such activities.

The majority of respondents (75.4%) think that festival volunteering will help them in their future study or career. 13.1% of participants are not sure, and just 11.5% do not believe it will help them in the future. Furthermore, in a resounding endorsement of festival-based public engagement from a student perspective, the majority of respondents said that they would volunteer at a festival in the future (91.7%). Only 3.3% of participants said they would not, and 5% were not sure.

Festival Organiser Survey: Quantitative Results

Festival attendance figures reported by organisers indicated that the majority (68.1%) of such festivals attracted 20,000 or less visitors. Only 2.1% of participants had worked at a festival with less than 1,000 attendees. 42.6% of participants had worked with 1,000-4,999 attendees, 12.8% with 5,000-9,999 people, 10.6% with 10,000-19,999 and 17% with 20,000-29,999 attendees. Only 2.1% had worked with 30,000-39,999 attendees, while 8.5% had 40,000-49,999 visitors and 4.3% reported having 100,000+ attendees at their festival.

In order to successfully manage student volunteers and address long-term support and administration needs, most ongoing festivals need to employ some paid full-time staff. The majority (55.3%) of festival organisers have 0-5 paid staff, 19.1% employ 6-10 staff members, 2.1% have 11-15 paid staff, 4.3% employ 16-20 people, 6.4% have 21-30 paid staff, 2.1% employ 31-40 people and 10.6% have 50+ paid staff.

In terms of paid roles for students, there was a relative paucity of such funded activities within festivals. However, festival organisers did report recruiting a range of individuals for paid roles, albeit at a low frequency level as can be seen in the table below.

Table 4: Student Status and Recruitment for *Paid* Festival Roles

Groups Recruited	Percentage Of respondents
Temporary work students	17.1%
Vacation time students	14.6%
Graduating students	9.8%
None	65.9%.

Note: Respondents could select multiple categories.

The majority of organisers had not recruited any students for paid roles (65.9%). Other than this however, the largest response category is comprised of the 17.1% of festival organisers who recruited temporary work students for paid roles.

The roles that these students fulfil are highly varied. Of those organisers who offer paid roles for students, the largest category was 'steward'.

Table 5: Festival Organisers' Allocation of *Paid* Student Roles

Categories	Percent
Front of house / Steward	78.6%
Workshop or Activity Leader	50%
Educational Roles, e.g. staffing a stand, speaking to visitors	42.9%
Helping develop festival programme	42.9%
Box office or ticketing	35.7%
Production: sound, lights, staging, etc.	35.7%
Hospitality (e.g. bar work)	28.6%
Press or Publicity	28.6%
Performing Artist	21.4%
Speaker	7.1%
Other	7.1%

Note: Total percentage exceeds 100% because respondents could select multiple categories.

There were only two festival organiser responses to 'other' paid roles that students fulfil at their festivals. These roles include "administration" and work placement positions:

Extract 1)

They tend to be administration roles, (which could contribute to any of the above checked areas, although they're not usually hands-on during the festival) (Science, Technology or Nature; 20,000-29,999)

Extract 2)

We had an events management intern doing her industrial placement and working on a variety of jobs (Performing Arts; Visual Arts; Film; Children/Family; Science, Technology or Nature; 10,000-19,999)

Thus, although relatively scarce, paid student roles in festivals are spread across a diverse range of festival planning, operations and publicity.

Unpaid roles

Unlike the response pattern for paid roles above, the majority of organisers do indeed recruit students for unpaid roles in their festivals (84.6%). To achieve this, they draw from the same mix of graduating students, vacation time students and temporary work students as for paid roles, but at a much greater frequency as can be seen in the following table.

Table 6: Student Status and Recruitment for *Unpaid* Festival Roles

Groups Recruited	Percentage of respondents
Temporary work students	56.4%
Graduating students	33%
Vacation time students	28.2%
None	15.4%.

Note: Total percentage exceeds 100% because respondents could select multiple categories.

Amidst these different student statuses, a wide range of unpaid student roles were called upon by festival organisers. This range is evident in the following results table, which identifies the distribution of unpaid student roles by festival organisers.

Table 7: Festival Organisers' Allocation of *Unpaid* Student Roles

Categories	Percent
Front of house / Steward	81.8%
Educational Roles, e.g. staffing a stand, speaking to visitors	51.5%
Production: sound, lights, staging, etc.	45.5%
Hospitality (e.g. bar work)	42.4%
Workshop or Activity Leader	39.4%
Box office or ticketing	39.4%
Press or Publicity	33.3%

Performing Artist	30.3%
Helping develop festival programme	24.2%
Speaker	9.1%
Other	9.1%

Note: Total percentage exceeds 100% because festival organisers allocate unpaid student volunteers to multiple roles within the festival.

The 'Other' unpaid student roles identified by organisers included "administrative" roles such as "office administration" (Performing Arts; 1,000-4,999) and "database" work (Performing Arts; Visual Arts; Children/Family; 1,000-4,999), as well as roles that provided support to the running of the festival such as "Driver" (Performing Arts; 1,000-4,999) and "Artist Liaison" (Performing Arts; 1,000-4,999).

Working with Universities

The majority of festival organisers (65.7%) work with higher education institutions (HEIs) when organising the festival. However, the level of HEI participation and support varies by festival.

Table 8: Festival Organisers' Reported Level of HEI Support for Festival

Category	Percent
HEI helps recruit students for unpaid roles at festival	69.6%
HEI provides artists, speakers or workshop leaders	60.9%
HEI provides venues for free	56.5%
HEI provides venues for hire	47.8%
Festival is organised by an HEI	43.5%
HEI helps recruit students for paid roles at festival	17.4%

Note: Total percentage exceeds 100% because respondents could select multiple categories.

These results from the festival organiser survey indicate that universities provide a great deal of support for festivals overall, most often by providing human resources in the form of unpaid student volunteers (69.6%) or 'speakers, artists and workshop leaders' (60.9%) that form an integral part of the festival programme. Universities are also more likely to offer festivals free venues (56.5%) than venues for hire (47.8%), suggesting that festival events are valued and supported by the university at multiple levels.

Qualitative Results

In order to expand upon the quantitative findings and develop a more in-depth understanding of student volunteering's role in festival-based public engagement, a number of open-ended questions were included in both surveys. These data were particularly useful given the lack of prior research on this topic. Qualitative results are reported below, beginning with the student volunteer survey findings.

Student Volunteer Survey: Qualitative Results

Publicity and Recruitment from Student Perspective

When students were asked how they found out about the role, most responses could be categorised as "university adverts" or "word of mouth"; that is, marketing materials distributed through a university in any format. Answers in this category were most often specifically related to e-mail notifications, as in the following extracts:

Extract 1)

I received an email from the festival requesting volunteers through my university (no demographic details [provided](#))

Extract 2)

Leeds Metropolitan's partnership with festival republic – email sent out to students to apply for the role (M, Undergraduate, post-1992)

As can be seen in the extracts above, student volunteering opportunities in festival were communicated through a variety of university networks. Other answers in this category of 'university adverts' were also related to involvement in student societies, such as "through Cambridge student society (CHaoS)" (Russell Group). These responses indicate that universities and their various communication networks comprise a key hub for recruiting student workers and volunteers to the festival, be it through electronic mailing lists or student society involvement.

The other major means for learning about volunteering opportunities is 'word of mouth'. In addition to hearing about roles "from others who had volunteered previously" (F, Postgraduate, Russell Group), friends were cited as a major reason for getting involved:

Extract 1)

A friend that worked at the museum let me know about it (no demographic details)

Extract 2)

Through a friend who found out about the opportunity through RAG (M, Postgraduate)

Finally, professionals in fields relevant to a given festival were also a frequently cited 'word of mouth' influence on student involvement:

Extract 1)

I volunteer at an English Heritage site called Goodrich Castle and my Volunteer Manager was recruiting volunteers for the festival and told me about the position (no demographic details)

Extract 2)

[I heard through] word of mouth – Dance Teacher told us to apply (F, Undergraduate, Russell Group)

These results demonstrate the importance of festival organisers accessing existing social and professional networks in order to effectively recruit student volunteers.

Student Volunteers' Contribution to Festivals

When asked about the ways in which student volunteers contribute to festivals, responses focused on "support/facilitation", positive "interaction/engagement" with attendees and general "enthusiasm".

"Support/Facilitation" encapsulates contributions to the general mechanics or running of the festival. Generally, respondents indicated that volunteers were vital to the running of the festival.

Extract 1)

Volunteers run all the activities we organise. From speakers to people at the entrance, it's all volunteers. (F, Postgraduate, Russell Group)

Extract 2)

Volunteers help set up the Festival and make sure all the programmes run smoothly (F, Postgraduate, Russell Group)

Indeed, student volunteers provided an essential range of basic support activities that enhanced festival-based public engagement.

The day to day running required bodies on the ground. Student workers/volunteers filled this roll. (M, Postgraduate, Russell Group)

As in the following extract, respondents highlighted the fact that festivals would be much less effective without such crucial student volunteer support.

Volunteers at the festival where I worked proved to be the face of the festival, as they are present at every single event as the front line of staff representing the organisation. The volunteers had to do work that other staff members would not have had time to do, but if those tasks had been neglected, the festival would not have been half as successful. (F, Postgraduate, post-1992)

In fulfilling crucial interstitial roles at festivals, student volunteers are often in 'visitor-facing' positions, providing direct support and information to enhance the visitor experience.

Moreover, those who cited "interaction/engagement" as a contribution generally emphasised effective communication as a vital part of this engagement with attendees:

They're generally able to communicate knowledge and enthusiasm for their subject in an engaging and accessible way. (M, Postgraduate, Russell Group)

In particular, student volunteers were seen as providing an enthusiastic and youthful perspective on their topics when they were presenting or demonstrating. This was seen as especially valuable for engaging children and young people.

Extract 1)

All volunteers are very keen and truly motivate the public as they really do care about what they are demonstrating or helping with. Volunteers are mostly students or young post doctoral researchers, so children and teenagers engage in the activities very easily, and become interested in the topics as they see people closer to their age explaining the concepts. (F, Postgraduate, Russell Group)

Extract 2)

I think having students on hand at a science festival makes it easier to talk to other students that come to see the talks / stands etc. We are closer to their age and

closer to their educational level so can remember what the visiting students are currently learning. I think volunteer students offer a good interface that appears less scary than talking to a leading lab head or lecturer. (F, Postgraduate, Russell Group)

This idea that student volunteers are easier and less intimidating for some festival visitors to approach was a recurring theme. Moreover, the more basic fact that their presence allowed for greater contact and communication between visitors and, in this case, active scientists has been identified as of great value from visitors' perspective in prior research (Jensen 2010).

Bring different viewpoints and different ways to explain scientific ideas, different opinions on what's going on in science at the moment, can explain things in person and answer questions on matters that may not be explained so well by the media. Provide a human contact to issues that may otherwise appear quite removed from the public. (F, Postgraduate, Russell Group)

Another aspect of student volunteers' unique contribution to festival-based public engagement is the crucial affective quality of enthusiasm. "Enthusiasm" is defined as those responses that highlight a genuine willingness to be involved, excitement about and dedication to a particular subject. Respondents indicated that this general enthusiasm is important across all facets of the festival and often is linked to good subject knowledge:

[Student volunteers are] generally in good spirits and want to be there so [they] may be more enthusiastic than paid staff. Also, those who volunteer often support the organisation that they volunteer on behalf of (e.g. Oxfam in my case) so will be dedicated and, perhaps, knowledgeable about the cause. (M, Postgraduate)

This general enthusiasm combined with relevant knowledge about the applications and implications of a topic were seen as particularly valuable for visitors.

In the case of the science festival I volunteered at, the majority of volunteers (including myself) had a science background, so they were able to bring a genuine passion for the subject, plus 'real life' examples of how science works in their roles. (F, Postgraduate, Russell Group)

Thus, students' enthusiasm and participation comprised a crucial aspect of effectively engaging festival visitors.

Extract 1)

They bring enthusiasm to the spread of ideas. (F, Postgraduate, Russell Group)

Extract 2)

A great supporting network and encouragement for the kids to enter science (F, Postgraduate)

Importance of Students Volunteers' Contribution to Festival

When students were asked the importance of their own contribution to the Festival, responses generally centred on their ability to enhance "interaction/engagement" and "facilitation", and make a "small contribution to overall effectiveness".

"Interaction/Engagement"-related contributions include communicating with attendees, promoting science or other topics, and the general impression provided to the visiting public. Generally, responses focused on student volunteers' enthusiasm about their subject and their ability to harness this enthusiasm and interest in their audiences:

Extract 1)

I think volunteers are very important – they engage members of the public in conversation about the stand and help them get more out of it than they would if they just had posters etc to look at (F, Postgraduate, Russell Group)

Extract 2)

My personal contribution is small (it could be fulfilled by any willing scientific minded under- or post- graduate) but the impact of having enthusiastic young people talking about science on children is positive for school children. (F, Undergraduate, Russell Group)

As highlighted previously, student volunteers' participation was seen as particularly important for effectively engaging younger audiences.

Extract 1)

I developed and ran a workshop for year 9 and 10 pupils. This was not crucial to the festival, but I believe that it made a big contribution for the pupils involved - feedback indicated that they enjoyed the high level of interactivity. (F, Undergraduate, Russell Group)

Extract 2)

I was really pleased with the positive feedback from my talk, and I feel that I made a worthwhile contribution in that my talk was uniquely aimed at a young age group without relenting on conceptual content. (M, Postgraduate, Russell Group)

As discussed in the extracts above, student volunteers were identified as being in a position to deliver content in ways younger audiences respond to.

In terms of "Facilitation", students generally cited their ability to provide support for a range of activities, as well as providing labour at reduced cost. Respondents were able to see the importance of their role to the overall running of the festival:

Extract 1)

[Student volunteers are] very important because there were many schools coming to the science festival and to have the volunteers present was a great help as it helped save time and effort. If there were no volunteers the festival would have been chaotic and there would be a lot of confusion. (F, Undergraduate, pre-1992)

Extract 2)

Very [important]. Without student volunteers the festival would not be able to run as we undertook a considerable amount of tasks on a daily basis. Also the festival would not be able to afford to pay staff for the amount of hours and tasks we did. It also spreads the word of the festival to others and encourages an interest in a younger generation. (F, Postgraduate, pre-1992)

As with the extracts above, the following respondent recognized the economic aspect of student volunteers' role.

Valuable input to festivals that don't have the budget to pay for a fully professional team, ie. to run a stage. So, financially important. Also, investing in new talent is so important if the industry is to continue and progress. (F, Postgraduate, post-1992)

Finally, one respondent emphasized that student volunteers work freed up 'core staff' for more specialist duties.

The work in preparation to the festival helped the core staff to concentrate on more important issues such as dealing with the BBC, finalising contracts and the like. And

during the festival, I helped with office-based tasks too which enabled the core team to event manage the larger concerts without things such as transport schedules and programmes getting behind schedule. (F, Undergraduate, post-1992)

Another common theme that arose out of this question was students' feeling that although they made a "small contribution" individually, this was an inherent part of the festival's "overall effectiveness":

Extract 1)

I feel as part of the larger group of volunteers I made a significant contribution to the festival, my duties were different each day, which was good as it kept it interesting, but makes it difficult to be specific about my contribution as I was involved in a small way in a huge number of things that went on at the festival. (F, Postgraduate, pre-1992)

Extract 2)

Individually I was a small cog in a large machine, but collectively the volunteers were vital to ensuring the city-wide science activities not only ran smoothly, but truly came alive and actively engaged the public in a topic that is often dismissed out of hand. (F, Postgraduate, Russell Group)

Crucially, respondents were able to see the link between their contribution and the larger success of the festival.

My contribution in its own little quota forms a part of the whole picture to make the event an outstanding success. (M, Postgraduate, Russell Group)

Indeed, without student volunteers the size and scope of some festivals would be 'untenable'. Moreover, as discussed previously, these volunteers were seen as offering a level of enthusiasm that could effectively engage publics.

I think, quite genuinely, the science festival would be untenable without the army of volunteers to inject the passion and charisma that science is lacking in the eyes of many members of the public.

Hence, student volunteers understood the importance of their role in the delivery of festival-based public engagement.

Impact

When students were asked what kind of impact their work had on attendees, the overwhelming response was the positive "impression/interaction" that they had had on the public, other students, school pupils and children. This included creating enthusiasm and interest around particular topics:

I hope I made a positive impact and made them think about a career in science. (F, Postgraduate)

Indeed, respondents highlighted the value of demonstrating to audiences that their subject is fun and interesting.

Extract 1)

I have hopefully encouraged the school groups I worked with to realise how much fun science can be. (F, Undergraduate)

Extract 2)

Hopefully showing how much fun science can be. Giving attendees an insight into something they wouldn't come across otherwise (F, Postgraduate, Russell Group)

Finally, one respondent indicated that empowerment was the hoped for outcome for those he engaged.

It is my hope that child attendees who saw my presentation have left feeling more able to ask questions about the world around them. I also hope that parents who also attended the talk leave feeling more able to answer questions that their children might ask them about the world around them. (M, Postgraduate, Russell Group)

Motivations for Festival-based Public Engagement

When students were asked why they got involved in working at a festival, most responses could be categorized as "skills/career development" motivations, defined as the opportunity to further one's professional experience and future career possibilities. The following extracts evince this pattern, with a festival providing the opportunity for relevant work experience:

Extract 1)

I am interested in pursuing a career in arts admin and thought the festival would be good experience. (F, Undergraduate, Russell Group)

Extract 2)

Because I had just completed a post-graduate diploma in arts management and wanted to gain as much work experience as possible. Plus I have a particular interest in festival and event management and wanted to see what it takes to run a music festival. (F, Postgraduate, post-1992)

As can be seen in the extract above, some respondents envisioned the possibility of running their own public engagement festivals in future, building on skills developed as a student volunteer. This motivation is also evident in the following extract.

I think to be useful in science you need to be able to communicate your topic effectively and to all age ranges with all educational backgrounds. When the opportunity to volunteer at CSF came up I thought it would be a great opportunity to work at my communication skills and also experience public engagement first hand. (F, Postgraduate, Russell Group)

In addition to skill-building and employability, the following extract shows a recognition of the social capital development opportunities for volunteers.

To meet scientists, gain experience of running a science festival, be involved in science communication (F, Postgraduate)

Aside from career development-related benefits, many respondents volunteer in festivals for intrinsically motivated public engagement reasons.

"Public Engagement" motivations were defined as an interest or enjoyment in educating the public/community about a particular subject, and "giving something back" In these cases, the festival offered a means of achieving their public engagement goals:

Extract 1)

I was involved as a representative of a student society (The Triple Helix) - the festival fitted very well with our aims (promoting science in society) and offered an excellent opportunity for us to run a workshop for pupils from a range of schools. The festival staff were very supportive and provided all the resources we needed. (F, Undergraduate, Russell group)

Extract 2)

Volunteering has always been a major interest for me. I enjoyed the work as it allowed me to give something back and it is great to see how my effort can beneficial other people. (F, Postgraduate)

This idea of “giving something back” has come up in other research on the motivations for public engagement (Holliman & Jensen 2009). From a theoretical perspective, these aims have been defined by Irwin (2008) as ‘first order’ public engagement, which seeks to “inspire”, “educate” or “interest” publics in a particular topic.

Extract 1)

I thought it was a really nice way to give something back. I'm sure at some point some kind of mentor got me excited about science, and it's important that young people have a good experience with science from a young age. (F, Postgraduate, Russell Group)

Extract 2)

I'm very interested in the work I do and I think it's important to share this with people. I think its important to get people interested and involved in things that are usually considered specialist - when actually anyone can take part! (F, Postgraduate, Russell group)

As can be seen in the extract above, festivals offered an excellent opportunity to ‘share’ specialist knowledge with publics.

Training and Guidance for Student Volunteers

According to student responses, most received some guidance in their role. Generally this was a “role/festival explanation” comprising a brief verbal (sometimes including written materials) explanation of roles, procedures, equipment use and the layout of the festival site.

Extract 1)

Tour of site, introductions to staff, shown where equipment is kept and where our stewarding stations will be, dinner and team building session! (F, Postgraduate, post-1992)

Extract 2)

We were shown around the majority of venues on our first day, and what the different roles would involve during events there. We were also given a pack of written information about the procedures at each venue. (F, Undergraduate, Russell Group)

Most respondents indicated that practical or hands-on training was generally not provided, however in a couple of cases it was.

Extract 1)

We were provided in advance with a How-To pack, giving information about the key venues and guidelines on how to carry out the main tasks at the festival (ie selling merchandise, checking tickets, working backstage) and how to deal with situations such as fire alarms, customer complains, first aid emergencies and the like. We were also given tours of each venue before the festival began, and were given a briefing before each concert so that we were fully informed before the audience arrived. (F, Undergraduate, post-1992)

Extract 2)

[My training included] information about my duties and responsibilities, advice on how to deal with the public and on awareness of child protection issues. Also audio and visual equipment training.(F, Postgraduate, Russell Group)

Thus, a degree of direct practical training in specific skill areas was sometimes offered when this was integral to the volunteering role.

However, a minority of respondents indicated they only received written instructions. In the following extract, it is reported that these written instructions were furnished by e-mail:

We were emailed some material before we arrived on the Child Protection Policy and an outline of the jobs we would be doing and what they would involve. (F, Postgraduate, pre-1992)

Students also cited "previous training" in other roles or environments that provided experience and knowledge they could bring with them into the role they were undertaking at the festival:

I attended an Outreach workshop at the University of Cambridge (but this was as a volunteer, it was not part of training to help in the Festival), and I had a colleague to guide me through the first time I organised a full event. This last "training" was particularly helpful. (F, Postgraduate, Russell Group)

As can be seen in the extract above, there is a great deal of variation in the scope and depth of relevant public engagement training available to student volunteers, both within the festival context and outside of it.

From the respondents' perspectives, prior public engagement training was transferable into their roles in festivals

Extract 1)

From Famelab I gained science media training and experience (M, Postgraduate, Russell Group)

Extract 2)

I was just given a previous training by the school on how to prepare for the stall etc and where to make the arrangements. (F, Postgraduate, pre-1992)

When students were asked if this training was sufficient, the responses were generally positive. Such respondents were satisfied with the scope and depth of training they received.

Extract 1)

Yeah, it was quite sufficient for the role I played (M, Postgraduate, Russell Group)

Extract 2)

Definitely i knew exactly what to do in case of a fire, maintaining health, safety and security (F, Undergraduate, pre-1992)

Although satisfied by the training they received, there were some respondents that indicated that personal qualities such as 'instinctive', 'common sense' and 'creative freedom' over and beyond this training were necessary to fully succeed in your role:

Extract 1)

Although you still had to learn a lot 'on the job', there wasn't enough time for any more training prior to the festival. It was sufficient so long as you were happy using your own initiative at times. (F, Undergraduate, Russell Group)

Extract 2)

Yes, a lot of being a volunteer is common sense anyway (F, Postgraduate)

Extract 3)

Yes; but it also left room for a lot of creative freedom. (F, Postgraduate, Russell Group)

Students also indicated that although training was sufficient, there were some key “gaps” that could have been addressed:

Extract 1)

We didn't really need to be trained for most of the tasks that we completed. *However it would have been helpful if the volunteers were shown how to cash up merchandising profits*, as there were mistakes made almost every day. (F, Postgraduate, pre-1992; emphasis added)

Extract 2)

Yes. Perhaps *more knowledge about how to deal with complaints* would have been helpful. (F, Postgraduate, Russell Group; emphasis added)

Thus, there are specific specialist skills that need to be addressed through training. Overall, the responses to this question highlight the importance of good training and guidance from those organising activities that involve student volunteers. Good training and guidance is crucial both to ensure the effectiveness of volunteers' work and to ensure that volunteers have a satisfactory experience that builds new skills they can take forward into employment and other settings. In general, this need for training appears to be recognised based on the present data, with relatively small-scale domains in which improvement or expansion of the training provision was identified as a pressing need by student volunteers responding to this survey.

Key Skills in Festival Volunteering

When asked whether any prior skills, knowledge or experience helped with their festival role, students cited previously developed “communication skills” as one of the most important skills. This is defined as effective presentation, listening, written and spoken communication skills:

Extract 1)

Having lectured for University courses was a big help. I've had to get up in front of crowds of dozens to hundreds of people and tell them stuff so often that it is no longer intimidating for me. (F, Postgraduate)

Extract 2)

Teaching undergraduate science tutorials and giving presentations (F, Postgraduate)

Extract 3)

Experience of teaching undergraduates and thinking on my feet to answer unexpected questions (F, Postgraduate, Russell Group)

As can be seen in the following extracts, having the patience and confidence to listen to public questions and try to answer them was seen as particularly impertinent.

Extract 1)

Being able to talk to people, having patience to listen to their questions and try to formulate a helpful answer (F, Postgraduate, Russell Group)

Extract 2)

Good communication skills, confidence with dealing with the public. (F, Postgraduate, Russell Group)

In addition to “good communication skills”, specific “subject knowledge” was also considered an important skill that enabled students to better perform a Festival role. However this emphasis in subject knowledge was specific to students volunteering at science festivals:

Extract 1)

The majority of volunteers were either practising scientists, or came from a scientific background and I definitely think this was one of the key elements that helped the festival be so successful. (F, Postgraduate, Russell Group)

Extract 2)

Knowing the areas of science we would be discussing was useful in case we needed to brush up on the basics and think about how to discuss it through different levels from GCSE to University. (F, Postgraduate, Russell Group)

Indeed, in the following extract an undergraduate respondent discussed her accumulated scientific knowledge and its source in detail.

I was engaged with science through my GCSE's and A levels and studied Physics and Chemistry to A level. I also have done general reading of pop-science over several years. (F, Undergraduate, Russell Group)

Therefore, it is clear that student volunteers at science festivals believe relevant subject matter knowledge to be an important prior factor in being effective at engaging publics in festivals.

Value of Festival-based Public Engagement for Student Volunteers

When students were asked if they gained any new skill from the festival experience, "communication" skills was the most cited key skill:

Extract 1)

Communicating complex ideas to the public in a straightforward way (M, Postgraduate, Russell Group)

Extract 2)

Ability to engage small groups comprising of a mixture of ages and a mixture of prior knowledge. (F, Postgraduate, Russell Group)

As a corollary to gaining enhanced capabilities in terms of communicating 'complex ideas' in 'straightforward was, increased confidence was also cited as a valuable gain.

I think volunteering at the festival really helped me think about and improve on explaining science to all levels of prior knowledge and also helped me to improve my confidence in chatting to people about the topic and not being afraid to say 'I'm not sure but I know some good websites you could look at for anymore questions'. The public don't expect you to know everything and usually if they are curious enough to come to a festival then they are keen to research topics alone. (F, Postgraduate, Russell Group)

In at least one case, this experience of communicating science in festivals led to employment in the field of science communication for respondents.

It definitely gave me a taste for working with, and explaining scientific concepts to groups of young people. In fact, I went straight out and applied for teacher training and start my placement as a trainee secondary school science teacher in September! (F, Postgraduate, Russell Group)

Skills associated with "organisation", such as time management, budget management, "event organisation" (M, Postgraduate, Russell Group), were also frequently emphasised as important skills gained from work or volunteering. The following extract identifies a full range of skills development in this domain:

Extract 1)

Time management, budget management, people management (in the sense of ensuring volunteers were assigned to the tasks that best suited their knowledge in the topics being presented and their time table, etc). (F, Postgraduate, Russell Group)

Extract 2)

[Developed increased] understanding of logistical organisation needed. (M, Postgraduate, Russell Group)

Student volunteers could see that these organizational skills had direct professional relevance:

[I gained] a huge amount- socially and professionally. Mainly- learning all of the stages of event planning, the attitude and focus needed, how to make festivals commercially viable, how to involve volunteers in the fairest, most developmental way. (F, Postgraduate, post-1992)

As can be seen in the extract above, student volunteers recognized the professional value of the communication and organizational skills they developed during their festival experience.

When asked whether they would work/volunteer at a festival in the future, and what they would say to someone who was thinking of getting involved, students overwhelmingly cited "enjoyment" as the primary reason. That is, the festival experience was viewed as "fun", "exciting", "enjoyable" and "worthwhile":

Extract 1)

I hope to continue doing this every year - it's great fun. I would highly recommend getting involved to other students (M, Postgraduate, Russell Group)

Extract 2)

I love the excitement that working at a festival brings - the run up can be very rewarding as you build a picture of every event, and once it actually starts, it's a real privilege to meet and work with so many great musicians, and every day is different. It's hard work and can be really tiring, you won't necessarily get on with everyone as the festival goes on (staff, audience, performers alike) - but if you can just get on with it (and make sure you find time to eat), it's the best time ever! (F, Undergraduate, post-1992)

Within these very positive responses about the value of participating in festival-based public engagement, developing social capital (meeting new people) was emphasized.

Extract 1)

I would definitely recommend it, it was great fun and a worthwhile experience. The high standard of concerts at least made it worth it, and I learnt a lot from the festival staff as well as making friends. (F, Postgraduate, pre-1992)

Extract 2)

I would definitely work at a science festival again: very enjoyable, staff were friendly and guest speakers were pleasant/talks interesting. Great opportunity to meet other people interested in learning new things about your subject. Got to watch many exciting talks/demos for free. A great opportunity for students looking to gain experience in science communication/teaching (F, Postgraduate, pre-1992)

As can be seen in the extracts above, skill-building and learning were also valued outcomes for student volunteers. These responses show that the reaction to volunteering at a festival is overwhelmingly positive.

As identified previously, "skills development" was also regularly cited as a reason for getting involved. This involves learning new skills, further developing existing skills and gaining more depth and breadth of experience:

Extract 1)

I will definitely like to do it again in order to get more skills and experience, even to widen my scope of such things. (M, Postgraduate, Russell Group)

Extract 2)

It would be great fun and great opportunity to develop personal skills. (F, Postgraduate, Russell Group)

Thus, respondents highlighted the intertwining value of volunteering at festivals for both skills development and expanding one's network of personal contacts.

Extract 1)

I would definitely volunteer again, as it allowed me to not only gaining new skills and friends, it also offers a great way of accumulating life experience. (F, Postgraduate)

Extract 2)

It would help increase my personal event experience that it would be worth taking on a role at a festival as they seem to have their own way of doing things and handling customers (M, Undergraduate, Post-1992)

These extracts highlight festival-based volunteering was viewed as a valuable experience, not only for its fun and enjoyable qualities but also for developing career-relevant skills and networking.

Festival Organiser Survey: Qualitative Results

The Role of Paid Student Workers in Festivals

A fundamental question for understanding festival organisers' use of student volunteers is their reasons for recruiting volunteers in the first place. In particular, why do they not make greater use of paid student workers for the festivals? Unsurprisingly, when organisers were asked why they do not recruit paid students, the overwhelming response was "insufficient funds" (Literary; 1,000-4,999) or "budget" (Performing Arts; Literary; Children/Family; less than 1,000). Organisers across the range of festival types identified a "lack of funds" (Performing Arts; Child/Family; Science, Technology or Nature; 1,000-4,999) for paying student workers; that is, they had "no money for it" (Science, Technology or Nature; 20,000-29,999). This was the reason for heavy reliance on volunteers, as can be seen in the following extracts.

Extract 1)

We don't have enough funding to pay volunteers, but we do have a great unpaid volunteer scheme (Performing Arts; 1,000-4,999)

Extract 2)

Budget restrictions. The people staffing the event are members of university staff. (Performing Arts; Children/Family; 1,000-4,999)

These results indicate that if sufficient funds were available, the festivals would recruit paid students to work for them. That is, the use of student volunteers in festivals is largely an adaptation to insufficient funds rather than being pursued as an end in itself, for example, to offer students work experience and communication skills. Rather these outcomes are epiphenomenal to the primary driver of economic necessity.

Further insight can be gleaned on this topic of paid versus unpaid student work through the reasons a small minority of festival organisers cited for *not* recruiting unpaid students to work

in their festivals. These reasons centred around the “value” that festival organisers get from paid student workers, particularly in terms of their dedication, retention and reliability:

Extract 1)

We pay all our students (89 students included in the above staff numbers) as they need money for their time. It makes them value the work and be more reliable. The University want us to pay [because] it helps with retention (Science, Technology or Nature; 20,000-29,999)

Extract 2)

We find that reliability and commitment is greater from paid staff (Performing Arts; Visual Arts; Literary; Film; 1,000-4,999)

Thus, paying student workers was viewed by these respondents as a means of gaining more reliable support for the festival.

Other organisers indicated that they pay their students in order to provide equal opportunities for underprivileged students who need the money and want to get involved:

Extract 1)

I pay all students as many take holidays from paid work to get involved and I do not wish to exclude those students. (Performing Arts; 5,000-9,999)

Extract 2)

They need paid positions to justify time. They have loans and need [part-time] jobs. (Science, Technology or Nature; 30,000-39,999)

One respondent indicated that the festival’s timing in relation to the academic year comprised the main reason they do not recruit unpaid students to work in the festival:

The festival takes place in the week after students return so very limited time to secure volunteers however this is something we are looking into. (Performing Arts; Children/Family; 1,000-4,999)

Hence, organisers identified a range of reasons for paying students for their festival work.

Using Unpaid Student Volunteers in Festivals

Shifting gears to the recruitment of unpaid student volunteers, organisers were asked why they recruit students for volunteer positions. Responses included a multitude of positive reasons for both students and organisers, as well as highlighting students’ effectiveness at roles in festivals.

Extract 1)

They are extremely good at the job, our students are amazing and they are a very obvious and valuable resource to us. They are real scientists and make our festival what it is - good for their communication skills - good for their self confidence and employability - cheap staff - good role models for young children - easily accessible, easy to train, easy to scale staff numbers to need (Science, Technology or Nature; 20,000-29,999)

Extract 2)

Because we all benefit from their involvement. They have strength and energy that other volunteers may lack. They gain excellent skills by working with us. (Performing Arts; Visual Arts, Children/Family; Science, Technology or Nature; 1,000-4,999)

Indeed, respondents emphasised how well-suited university students are for roles in festival-based public engagement.

We don't exclusively recruit students - all of our positions, both paid and unpaid, are open to anyone. However, they tend to appeal to students who are looking for short-term experiences that match their ambition and add value to their CV. We find that students who seek out these experiences tend to be enthusiastic, proactive and able to apply initiative, which is particularly important during the festival when things are frantic! (Performing Arts; Visual Arts; Literary; Science, Technology or Nature; 1,000-4,999)

Moreover, students' ability to engage effectively and enthusiastically with attendees was identified as a crucial aspect of their value to the festival:

Because having volunteers who actually care about the key focus of the festival (natural science) means that they will engage with visitors in a more meaningful way. (no demographic details)

It is noteworthy that the response above aligns very well with student volunteers' views expressed in the student survey for the present project. In addition, a festival organiser suggested that university students offered school groups a valuable experience for raising aspirations.

Logistics of helping school groups to go to particular parts of campus. Able to provide assistance during workshops. Good for school pupils to interact with real undergraduates to find out more about going to university and to raise their aspirations. (Performing Arts; Visual Arts; Film; Children/Family; Science, Technology or Nature; (50,000-9,9999)

As can be seen in the extracts above, festival organisers identify a wide range of valuable contributions that unpaid student volunteers make to festivals.

Student Volunteers Contributions to Festival-based Public Engagement

Organisers were asked what they feel have been the most successful aspects of involving students in their festival. The responses were generally positive and focused on "public engagement", defined as the ability to communicate effectively with the visiting public, enhance visitor experience and promote an overall positive impression to visitors:

Extract 1)

We recruited a large pool of students to staff our Science Sunday event and I had excellent feedback from the audiences with regards to the students, many of whom are very new to public engagement activities. (Performing Arts; 5,000-9,999)

Extract 2)

Their youthful enthusiasm enhances the experience for the visitors. As we believe that person to person contact is a better way to learn than hands-on exhibitions we need a lot of these people - in fact our business model revolves around them. We employ around 120. (Performing Arts; Children/Family; Science, Technology or Nature; 10,000-19,999)

These responses indicate that student involvement in festival-based public engagement activities is perceived to be very successful.

Student "enthusiasm", defined as willingness to get involved, energy and passion about a particular subject/role, was also cited as a successful aspect of student involvement.

Extract 1)

The enthusiasm and energy that they bring (more often than not) and their open-mindedness and general willingness to try different things and take on a variety of

jobs. (Performing Arts; Visual Arts; Literary; Science, Technology or Nature; 1,000-4,999)

Extract 2)

They do it because they want to and they are prepared to do almost any tasks given. The audiences love to see the students having a good time and their enthusiasm is contagious (Performing Arts; Visual Arts; Children/Family; Science, Technology or Nature; 1,000-4,999)

These responses indicate that students are willing to be flexible in the tasks that they carry out, and offer an affective boost to the festival staff as a positive source of enthusiasm.

In addition to their valuable role in the delivery of festivals, organisers also identified opportunities for students themselves to benefit from the experience. Indeed, just as students themselves reported in the student survey, organisers noted that student volunteers gain experience and develop career-relevant skills. Organisers identified specific examples of student volunteering leading to employment:

Extract 1)

Some [student volunteers] have been offered jobs, others have had their work viewed on the Glastonbury home page with 100,000's of viewings. (Science, Technology or Nature; 1,000-4,999)

Extract 2)

I have recruited a festival administrator -6 months' paid work - for all the triennial festivals I have organised. All of the administrators have gone on to successful jobs, some in the arts, others [going] into trainee management roles. (Performing Arts; Visual Arts; 1,000-4,999)

These specific examples highlight the value of student volunteering in festivals for developing students' employable skills.

Directions for Improvement in Student Volunteers' Festival Roles

Organisers were asked what the least successful aspects of student involvement in their festival had been. The most common response could be categorized as "dedication/responsibility". This is defined as ability to follow through on commitments and being a reliable member of the working team. These characteristics were seen as the most frequent failing of unpaid student volunteers and this was therefore considered the least successful aspect of their involvement:

Extract 1)

[The least successful aspect is] their dedication - sometimes turning up one day and not the next or turning up late etc (Science, Technology or Nature; 5,000-9,999)

Extract 2)

The [least successful aspect of student volunteering in festivals is the] same as all volunteers: they are hard to pin down and difficult to give more than the simplest jobs to. (Performing Arts; children/Family; Science, Technology or Nature; 1,000-4,999)

While this problem of potential unreliability is not universal amongst student volunteers, the fact that festival organisers cannot know the reliability level of a particular volunteer in advance can limit the range of tasks they can allocate to new volunteers. The following extract highlights this concern over predictability.

There have been occasions of student volunteers being unreliable - the ones that were reliable were great but it's difficult to tell in advance. (Performing Arts; Visual Arts; Film; Literary; Children/Family; 1,000-4,999)

Shifting to less successful aspects of using student volunteers in festivals that can be modulated by the actions of festival organisers, a lack of prior training and experience was identified as a problematic dimension of relying upon student volunteers. This lack of practical knowledge and experience was identified as a frustration for festival organisers.

Extract 1)

They [student volunteers] come with serious gaps in their experiences of office life! (Performing Arts; Visual Arts; 1,000-4,999)

Extract 2)

Frustrating lack of administrative 'savvy' on behalf of some students. (Performing Arts; Visual Arts; Film; Literary; Children/Family (1,000-4,999)

Indeed, it is clear that some festival organisers have had to adjust their expectations about the scope and quantity of training required for student volunteers to be able to effectively operate. This pattern of adjusting expectations to the substantial training needs of student volunteers can be seen in the following extracts:

Extract 1)

[The least successful aspect of using student volunteers was] not realising how much training we could/should do with them. It should be an amazing way of getting them some [of the] experience they want but without any training they have sometimes struggled to pull together the best events. (Science, Technology or Nature; 20,000-29,999)

Extract 2)

[The least successful aspect of using student volunteers is the] occasional assumptions by Festival organisers about a group of students' ability or confidence to deal with unexpected situations eg losing an artist at the station; issues of communication between teams, between team and Festival organisers, with public. (Performing Arts; Visual Arts; Film; Literary; Children/Family; 5,000-9,999)

Exacerbating this issue of a high threshold of training needs amongst student volunteers is the inherently transitory nature of this volunteer workforce, with minimal retention of volunteer workers from year to year. This means that new training has to be in place every year.

Using students, you have to train up new people year after year, and there is no retained knowledge within the team. (Performing Arts; 1,000-4,999)

These responses indicate that the onus falls on the festival organisers to train their student volunteers from a very basic level of practical knowledge. Furthermore, this training must run every year because few students return to volunteer year after year.

Value of Festival-based Volunteering for Students

Aligning with the results of the student survey, organisers overwhelmingly emphasised that the value of festival-based volunteering for students centred on what could be categorized as "skills development/employability".

[Student volunteers] had complete ownership of their areas, and different people could get involved in different ways. Students used their chance to display project management skills, and some just had the opportunity to practice their English (we had approx 20% international volunteers). Various skills were demonstrated and honed throughout the process. I would have loved to develop the model more. (Science, Technology or Nature; 100,000+)

In addition to straightforward professional skills development and experience, many of respondents also highlighted other concomitant benefits of festival-based volunteering for students such as networking opportunities:

Extract 1)

[Student volunteers] gained experience of a working environment for those who work in the office. Experience of event management - we try to offer them an experience that matches their ambitions, or to offer a wide range of jobs that enables them to experience different areas of event management. [The festival experience offers] added value for their CV - contacts - at a festival they meet a huge range of people from a wide variety of backgrounds - festival speakers, workshop leaders, technical production staff, press & marketing staff etc as well as each other - and they build up friendships and networks that persist after the festival has finished. (Performing Arts; Visual Arts; Literary; Science, Technology or Nature; 1,000-4,999)

Extract 2)

Science students [gained] experience of science communication. Meet new contacts. Build up experience on CV. Some festival volunteers went on to gain employment as science explainers at Centre for Life afterwards. (Performing Arts; Literary; Children/Family; less than 1,000)

Indeed, as can be seen in the extracts above, building personal and professional contacts was seen as an important benefit of student volunteering in festivals that accrued alongside other employable skills development.

They meet new people, gain experience in event organising, communicating subject knowledge to the public and generally gaining experience for their CV. (Performing Arts; 1,000-4,999)

Furthermore, festival organisers were informed by students directly about the value of the experience for their employability.

They say they use it for their CV as practical experience. I often find students studying the more (academic) subjects such as history, English lit etc are looking for ways to make their degree more appealing to employers and are often interested in marketing as a career choice. (Children/Family; 20,000-29,999)

These responses indicate that festival organisers are attuned to a number of benefits that students get out of their festival involvement, which may make them more employable in the future.

The Relationship between Festivals and Universities: Successful Aspects

Organisers were asked what the most successful aspects of interacting with universities had been for the Festival. Some responses indicated that the university's contribution was essential to the very existence of their festivals.

MASSIVELY important to us - we wouldn't exist without them. We have approximately 50 scientists/researchers who come to the Festival and set up stands/ exhibitions/ workshops/ activities and give talks, and this is the core of the Festival. (no demographic details)

Other festival organisers emphasised the value of universities' provision of unpaid volunteer speakers and related content.

Extract 1)

Amazing speakers giving their time for free (Science, Technology or Nature; 20,000-29,999)

Extract 2)

Access to cutting edge research and researchers (Performing Arts; 5,000-9,999)

Moreover, the role of student volunteers was highlighted as a crucial contribution linked to universities.

The enthusiasm of students. The natural links they are able to bring to younger audiences (Performing Arts; Visual Arts; 1,000-4,999)

Universities' ability to help with recruitment and promotion was also identified as a key contribution to festivals, for example, through assisting with advertising, sourcing volunteers and other related activities:

Extract 1)

Help recruiting student volunteers, help with PR and marketing the festival (secondment for PR coordinator last year) (Performing Arts; 1,000-4,999)

Extract 2)

Finding artists and speakers (although, with a few exceptions, we tend to identify and approach the individuals directly rather than having them put forward by the university) - recruitment of student volunteers for the festival period - we have also worked with universities to provide projects that form part of the students' formal learning, which have been of great benefit to both the students and the festival - we also offer a student bursary scheme for visits to the festival (Performing Arts; Visual Arts; Literary; Science, Technology or Nature; 1,000-4,999)

The following extract also highlights the promotional value of university involvement in festivals.

The promotion, the financial backing and the name of the University behind the festival which has helped attract sponsors, funders and increased ticket sales (Science, Technology or Nature; 5,000-9,999)

Venues and overhead costs covered by universities were also considered an important aspect of their relationship with festivals:

Extract 1)

Venues: we hire / borrow venues from them routinely. Funding: We get a limited (<£30k / annum) funding from universities (Performing Arts; Children/Family; Science Technology Nature; 10,000-19,999)

Extract 2)

Being able to keep our costs down through cheap or free venue hire. (Performing Arts; 1,000-4,999)

Indeed, both through limiting or underwriting costs and providing volunteer staff, universities were seen as important sources of support by festival organisers.

The HE [higher education] institution provides venue[s] and recruits members for the outreach work, [and] contributes towards funding (Performing Arts; 20,000-29,999)

In addition to these contributions, festival organisers also indicated that logistical, planning and coordination aspects of the festival were also supported by universities:

The University of Leeds was critical to the organisation, volunteer recruitment, implementation and success of the event. The community and the University really pulled together to make it possible (Performing Arts; 1,000-4,999)

In at least one case, these forms of support were channelled through a student ambassador scheme and student volunteers.

Newcastle Uni[versity] runs a Science Ambassador scheme with CRB checked undergrads which can be hired for £7 hour. They have experience helping run events as are used by the Uni[versity] to run their public lectures and some schools outreach. We are planning on using these students in our 2011 festival as 'festival team leaders' to manage small groups of volunteers and ensure venues have festival branding, evaluation etc. (Performing Arts; Literary; Children/Family; less than 1,000)

As can be seen from these responses, festival organisers identified key contributions from universities, both in terms of providing logistical and staff resources.

The Relationship between Festivals and Universities: Problematic Aspects

When asked what the least successful aspects of a Festival's interaction with universities, most responses revolved around difficulties negotiating the highly varied university landscape to identify individuals who would like to participate in festival-based public engagement.

Co-ordination of the different relationships with a university is a problem. Universities tend to be huge and bureaucratic, and departments do not interact with each other very well so, instead of dealing with a university centrally, we're often dealing with several different departments as if they were separate organisations. There is some fabulous research going on, but finding out about it can be a challenge. Also we often find that each university works in a different way, so something that has been successful with one won't necessarily work for another (or, more often than not, it's difficult to find the person who would be responsible for it). Another challenge that remains (although less and less) is persuading universities of the value of public engagement. There are exceptions, again, but sometimes you really have to search hard for that one person who is willing to champion public engagement and see the value of their academics' participation in the festival (Performing Arts; Visual Arts; Literary; Science, Technology or Nature; 1,000-4,999)

This difficulty festival organisers face in finding their way through university systems and identifying people they can work with to ensure the best outcomes for the festival is also identified in the following extract.

The Festival is organised from within the University, although occasionally breakdown in communication and the rigorous application of University systems make it feel that it is organised despite the University! eg not opening gates for public access when requested and agreed. (Performing Arts; Visual Arts; Film; Literary; Children/Family; 5,000-9,999)

Indeed, the relationship between the various components of the university was viewed as a major barrier for festival organisers' attempts to marshal the university's potential contributions for the benefit of the festival's public engagement activities.

The university is a massive beast which moves very slowly and inefficiently: although individual departments are effective the university as a whole is awful. (Performing Arts; Children/Family; Science, Technology or Nature; 1,000-4,999)

These responses indicate that universities are often complex institutions with which to work, resulting in more inefficient action as a result of bureaucratic decision-making. Other respondents also indicated that universities often provide “insufficient support” to the festival:

Where individuals working on the Festival are not supported by the University, Universities demanding full conference fees from a small group, lack of communication within University with regards to reaching other staff/students e.g. as speakers/volunteers or audience (Science, Technology or Nature; 20,000-29,999)

In addition to a lack of logistical support, concerns about the quality of speakers suggested by the university were raised by one festival organiser.

Many events suggested are, in my view, of insufficient quality. [There is a systemic issue with university life not helping academics become really good 'popular' communicators - they just don't have the time to give to become good. Universities are fractured and difficult to deal with, there is rarely any central point of contact. (Performing Arts; Children/Family; Science, Technology or Nature; 10,000-19,999)

Indeed, overcoming this problem of interacting with the highly variegated organisational structure within universities was identified by festival organisers as a key direction for future development of the university-festival relationship to enhance engagement opportunities for publics. This was also identified as an issue for affiliated institutions within the university such as museums.

[I would like to have] more and closer working relations across the University's museums engaging in the opportunities that Festivals provide for public engagement. (Performing Arts; 10,000-19,999)

Thus, festival organisers face significant challenges in marshalling the willing actors within university departments, research groups and affiliated organisations to fully participate in the engagement opportunities furnished by their festivals.

Developing the Festival-University Relationship

When asked in what ways festival organisers would like to collaborate with universities, responses were primarily focused on universities opportunity to serve the community through festival-based public engagement.

At base, deep down, they should realize their obligations to the community at large. They should look on the festival as good PR and terrific recruitment (Science, Technology or Nature; 20,000-29,999)

Within this context, university students comprise an important aspect of the relationship between festivals and universities.

Extract 1)

We want to interact with all communities in the city and the university are one of the biggest communities in the city and they should be represented. We want students to get involved in the planning, programming, site build/break and event management. (Science, Technology or Nature; 50,000-9,9999)

Extract 2)

To further involve students in community activities & events (Performing Arts; 1,000-4,999)

Understandably, there was also a desire for festivals to be accepted as a regular part of the academic year, so that all local universities would be prepared to fully participate in festival-based public engagement.

I would have liked for the Festival to be recognised as an annual event and that it would have formed part of the public engagement offering from the 4 local universities. (Science, Technology or Nature; 20,000-29,999)

Although most respondents reported already receiving student volunteers and venues from local universities free of charge, other Festival organisers cited such material and staff support as a continuing need.

Extract 1)

Student helpers and event spaces (Science, Technology or Nature; 5,000-9,999)

Extract 2)

Involve students as audiences, stewards, and provide performance platforms. Would love to use University venues, and liaise with University to tailor aspects of festival to suit interests of students. (Performing Arts; 20,000-29,999)

Festival organisers hoped universities would engage more closely with the festival to provide venues, speakers and guidance. However, as signalled in the extracts above, collaborating with universities through their "students" was considered particularly important. Some festival organisers had specific plans for enhancing student volunteers' role in their festivals:

We would like to use Newcastle University students from their 'science ambassador' scheme in our 2011 festival as 'festival team leaders' to manage small groups of volunteers and ensure venues have festival branding, evaluation etc. (Performing Arts; Literary; Children/Family; less than 1,000)

Other respondents hoped to expand the range of universities whose students volunteered in their festivals.

Developing stronger links with a variety of universities would be something we could look at - so many of our volunteers come from Durham University, because they promote the volunteering at our festival so strongly, but I think this means that students at other universities are missing out. (Performing Arts; 1,000-4,999)

Overall, despite the challenges, festival organisers clearly value the contributions universities make to their public engagement activities, with student volunteers comprising a particularly crucial aspect of such contributions. If anything, organisers are seeking greater participation from universities and student volunteers, as well as smoother channels of communication to enrol interested academics and students in festival-based public engagement.

Discussion

This study of students' and organisers' perspectives on festival-based public engagement identifies important overlaps in the perceived value of festival-based student volunteering. Clearly, students and festival organisers have a shared interest in maximising festival volunteering. Students gain skills and experience, while the festival gains knowledge, enthusiasm and manpower that can benefit visiting publics. The question then is how these benefits for students, publics and festivals can be maximised. It is important that students are able to learn of the opportunities to get involved in festival-based public engagement. Universities can support this goal by creating clear lines of communication to advertise worthwhile volunteering opportunities to their students. At the same time, festival organisers need to provide their student volunteers with ample training to ensure that they will be able to operate effectively in their festival roles and gain employable skills in the process. Of course,

this need for greater training raises the question of resources. It is important for both universities and funding bodies to understand that the provision of volunteering opportunities within festivals is also resource-intensive. Some efficiencies can be found by providing joint training for volunteers across different festivals and other organisations. Ultimately however it must be understood that if they are to be used most effectively, student volunteers are not free labour. Staff time, training and resources are required and these activities require funding and careful planning and attention.

Festivals are a key site for public engagement in the UK, engaging hundreds of thousands of citizens every year with new domains of knowledge and enquiry. But given the limited resources available to these festivals, how can they deliver effective large-scale public engagement? The present study investigates the possibility that student volunteers and the judicious facilitation of their involvement makes large-scale festival-based public engagement possible in the absence of sufficient resources to hire an external provider to manage the event. The public engagement value of festivals (Jensen 2009) combined with the value students find in their experience working in festivals indicates that these activities are worthwhile for all concerned. By developing public engagement skills in their student volunteers year after year and providing publics with access to new ideas and experiences, festivals and universities are working together to contribute to a more culturally and scientifically engaged society. This report identifies the shared perspective of students and organisers working together to optimise festival engagement experiences for publics across Britain.

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