

## ***Robot Thought* venue 6: Aberystwyth / TQ@NEWI**

### **Successes, challenges and recommendations**

This document summarises the successes and challenges in developing, delivering and evaluating the *Robots Revealed* show and related LEGO workshop activities from the perspectives of the project partners. The show was developed following collaboration between the Aberystwyth robotics research group, Techniquet@NEWI and the University of the West of England. The results from the audience evaluation are provided in a separate document.

Two presenters, two roboticists (including the head of the research group) and the TQ@NEWI learning manager were interviewed. The evaluator's own observations and conversations with participants are also taken into account here.

### **Successes**

Interviewees identified a number of successes associated with the project:

#### **Partnership and activity development**

- A real success of this stage of the project was the collaboration between the roboticists and the presenters. The partnership was built on mutual respect for the different types of expertise the partners brought to the table.
- The fact that UWE had 100% confidence in the team was really motivating. The learning manager took a 'hands-off' approach and let the presenters take control of the show content. The presenters felt that involvement in the project motivated them to try and create the best show!
- Lessons had been learned following the less successful interaction with NMSI, where a roboticist delivered part of the show. This time, the team designed a programme that allowed partners to 'play to their strengths'.
- The roboticists said that an ex member of their team that has now pursued a career in public engagement helped build a level of interest in PE in the group.
- TQ@NEWI felt that the roboticists' workshop raised the profile of the programme and added extra value for visitors. The presenters also felt that developing the show in conjunction with the roboticists gave them confidence that the science they were presenting was robust.
- The roboticists highlighted several seemingly small details that made them feel valued and ensured the collaboration went smoothly. These included regular offers of cups of tea and help with transporting equipment.
- TQ@NEWI identified flexibility and good communication on the part of the roboticists as success factors. They were 'open to ideas' and 'always replied to emails'.
- The partners agreed that they were unlikely to have worked together had it not been for the *Robot Thought* project. One of the presenters said they probably would have done a show about robots at some point but it would not have been as good. They are hoping to collaborate again on future projects.

#### **The activities**

- The show was cited as a success by all interviewees and also went down well with audiences.

- It was an innovative approach that combined drama and demonstrations with an 'at home' set which helped reinforce the message that robots could be all around us.
- Having two presenters on stage meant that they could carry on the discussion if audiences were unresponsive initially.
- Having learned from the science museum experience, the combination of show and workshop allowed the presenters to deliver the show and the roboticists to operate the research robots. This made everyone's life easier, and ensured that the project was a positive experience for deliverers.
- TQ@NEWI 'themed' the centre on robots during half term with the three robots activities and other resources such as posters. This had not been done before and they felt it helped reinforce the project messages for visitors. They said it was something they would do again.

### **Project structure**

- The project structure appeared to be important in forging the strong partnership between the researchers and the science centre.
- An early meeting about the project gave the small centre plenty of time to consider the best way to release staff and facilitated their commitment. Although the meeting was seen as useful it was felt that not all of the content was 100% relevant.
- The presenters visited the robotics lab and the roboticists visited the science centre during the planning phase. This helped spark ideas and made sure everyone was clear about spaces available etc.
- The roboticists took it in turns to cover the workshop over half term which meant each individual committed to 2 days delivery. This was felt to be an acceptable level of commitment.
- Presenter training helped further build the presenters' confidence and developed their facilitation skills.

### **Challenges**

The interviewees identified a number of challenges:

#### **Working within a small science centre**

- Committing three presenters from the science centre was a challenge because this represented a large proportion of the total staff. While it was agreed that this was worthwhile, it was a challenge that involved other members of staff working outside their roles to cover for the presenters.
- The centre needed to start planning quite far in advance to free up the presenters' time. The difference in lead time between this and previous legs of the project led to some delays in communication between TQ@NEWI and UWE initially, although these were soon ironed out.

#### **Communication and logistics**

- As well as the point related to lead time mentioned above, there was a miscommunication that led to confusion about the evaluator's follow-up interview and whether it would take place in person or on the phone.
- From this experience (although I can't speak for colleagues at UWE) I realised it is a challenge to ensure assumptions aren't made about later legs of the project based on experience gained from earlier on.

- Logistically, borrowing equipment from Techniquest in Cardiff and having to order props through NEWI caused problems and unnecessary stress for the science centre team. Unfortunately there is little that can be done to address these challenges!
- The journey from Aberystwyth to Wrexham was quite long which was a challenge for the roboticists, however they felt that the extra help offered with transporting equipment and the impact of the project made this worthwhile.

### **Adapting the show for small audiences**

- On one day, the presenters had a particularly small audience and found the show challenging to deliver. The main difficulty was in starting a meaningful discussion when audiences weren't keen to participate.

### **Recommendations**

1. **Build on the success of this partnership.** Success factors here included the science centre making a real effort to free up the presenters' time to work on the project and the presenters and researchers each playing to their strengths with their activities. This ensured the optimum combination of 'knowledge transfer' and utilising existing expertise.
2. **Ensure communication is clear throughout.** A recommendation for any project – but a couple of slip-ups happened here; perhaps experience from previous legs can lead to complacency?
3. **Consider ways the show could be adapted to suit different types of audience.** The presenters had a difficult time when the audience was smaller than they were used to – brainstorming a couple of alternative ideas in advance could have helped here.