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# Boundaries and Three Points on a Virtuous Circle: Digital stories, public engagement, and teaching students

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**Abstract**

In this paper we describe a successful exercise that introduced our MSc students to 'digital stories', providing them with a fun learning activity, and which led to public engagement success. We recognise these as three points on a virtuous circle – each positively impacting on the other. Through describing this case study we highlight the need for boundaries to form a creative space. We believe that boundaries are a useful concept to consider for producing successful media interactions. The boundaries described in this paper could be used for other university teaching.

**Keywords**

Digital story, public engagement, video

**ACM Classification Keywords**

H5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

**General Terms**

Digital story, public engagement, video

## **Introduction**

This paper describes an exercise that was given to our MSc HCI students in their introductory week. We do not describe novel designs nor interaction techniques for broadcasting. Instead we focus on the challenges and benefits of producing successful visual media, in particular setting boundaries for the creative space.

The student exercise has three complementary interests for university staff: a growing interest in visual media for communication; a growing interest in public engagement activities; and providing useful and engaging exercises for students. These three points provide the points on a virtuous circle, which could also be useful for other university teaching activities.

## **Three points on a virtuous circle**

### *Digital stories*

A wealth of information can be found on digital stories on the Internet. They were introduced to us as a low cost way of making film, and they consist of a series of still images with a narration over the top. Their utility and low cost have already led them to wide use. Wikipedia reports use by museums to encourage people to record experiences, to build up cultural heritage; and use in public awareness and health campaigns (e.g. domestic violence, mental health and drug abuse campaigns). Projects that have aimed to use digital stories for knowledge sharing amongst rural communities have also been reported at CHI [1, 2]. Our intention was to equip students with the skills to use this technique in future work, and to create engaging digital stories for public engagement. Digital story skills could be used as a form of engaging communication to management, clients, scientists, or the public whether in a commercial or academic setting.

### *Public engagement*

Engaging the public with research has been increasing in importance. In December 2010, the UK's research funding bodies launched the *Concordat for Engaging the Public with Research*, which describes their commitment to engagement activities [3]. Its principles give engagement strategic importance and encourage better recognition and value of this work.

### *Teaching students*

We have a cohort of about 50 students that follow an MSc in HCI with Ergonomics annually. In their first week they take part in introductory exercises to course material and they also need to get to know their classmates. The students come from different backgrounds and so engaging group-work activities are desired. The digital stories exercise fitted these requirements, and provided valuable transferable skills in communication: in visual media and digital stories, but also in communicating a message to an audience and in peer review.

## **The boundaries to the exercise**

The introductory week for students is a busy time in terms of administration and course activities. Three contact points were arranged on three consecutive days with students expected to complete the work around these times. This timeframe was the first boundary.

The first contact point was an introductory lecture to explain what digital stories are, show an example, give advice, and split the students into groups that had appropriate technology available to them to complete the exercise. This consisted of a digital camera, an audio recording device, and computer with iMovie or MovieMaker. The challenge set to the students was to

make a digital story, which explains what HCI is to young adults (ages 13-16). The learning objectives for the students comprised group-work skills, presentation skills and communicating clearly what HCI is. The tone of the lecture was intentionally fun and relaxed. The example digital story shown was one the first author had created, which was by no means polished. We stressed that this was a learning process; it was unlikely that things would be perfect, and there was no formal assessment. The class would give feedback to each other and would select their favourite, which instilled some healthy competition. This introductory lecture lasted 15 minutes with a further 15 minutes for students to discuss preliminary ideas and meet their group. This first session set important boundaries; e.g., the topic, technology, length and type of presentation.

The following day students reconvened for group work. Staff met with them to discuss progress and issues. For example, one group wanted to use video rather than stills; and another group needed advice on finding a quiet area to audio record on campus. Groups were encouraged and challenged through discussion as they worked creatively within the exercise boundaries.

On the third day students submitted their films to staff prior to their screening. Before the screening, feedback sheets were distributed so each group could provide feedback on other groups' work. The sheets included a short space for open feedback and students were asked to consider three criteria for each film: impact, coherence and entertainment. Time between each film was allotted for this. At the end, students were asked to pick their favourite film for each of the three criteria. These votes were counted and the winning group was announced. The exercise closed with a wash-up session

reflecting on what they had learned, with a particular focus on communication skills (both within their groups and to the target audience for the films).

### **Post exercise**

After the exercise all the feedback was précised with additional feedback from staff members that attended the screening. Videos were put on the class intranet with the feedback sheets for students to access.

Later, the HCI students' own teaching appraisal indicated universal support for the digital stories exercise in meeting their needs in the first week of the course. It forced them to "break the ice" with new classmates; to think deeply about their own understanding of what HCI is; and to develop new skills in communication and in handling visual media.

The potential further use of the videos depended on their quality. The winning video, 'Why Buttons Go Bad', was of such high distinction that we contacted the UCL media team. They suggested it be shown on UCLTV on World Usability Day, which was just a month after the exercise was complete. The timing of World Usability Day and the exercise was more fortunate than planned. The video was accompanied by an associated press release and promoted through social media channels.

The second author is involved in ongoing public engagement work with 'The Campaign for Real Design', which aims to introduce user-centred design approaches to design and technology teaching in UK schools. The topic of these digital stories – explaining HCI to children – is key to this campaign. The campaign team are now exploring further uses of the

videos that have been produced, and considering ways that this exercise can be used within schools.

### **Discussion**

This exercise is considered a success for the students' learning, for teaching practice and as a public engagement exercise. The exercise was challenging, but not just due to the time pressure and working closely with new colleagues. There are challenges in multidisciplinary groups working together from different backgrounds and coming to a shared understanding. Just a few years ago this sort of exercise may have been impractical for non-specialists, but today's students have the technology and the technological literacy to use digital stories. This basic competence was far exceeded in the winning film, which led to its public engagement success.

Reflecting on producing films and this exercise we think that boundaries is an important concept. Without boundaries people can feel lost in choices of what to film, how long to film for, and how to film. Our exercise imposed boundaries for people to be creative within. These included the short time-frame for the work, and the topic, technology, length and type of presentation. Personal experience shows that it is seldom good to use a camera with no purpose or structure, in which case one should self-impose boundaries. Boundaries can be flexible, but importantly they provide a smaller and more manageable space for creativity to work within.

Future changes in the exercise will include: finding quiet space on campus to do audio recording, giving more time to the introductory session, and allotting more time for students to complete the exercise during the day. In terms of publishing we are also considering

a more formal written agreement so copyright and privacy are protected, and so that the further use of the films is explicit, agreed and non-verbal.

As an introductory and engaging group-work activity, which taught students valuable communication skills, and with external public engagement success, this has been a virtuous circle that we hope to repeat again. Beyond our exercise we hope that people from other universities and disciplines will use the boundaries set down in this paper to produce similar exercises.

### **Conclusion**

This paper describes a successful exercise: teaching students a 'digital story' technique through a public engagement activity. We describe three points of a virtuous circle and we use the concept of boundaries to restrict the creative space for people to work well. We believe that others could adapt these boundaries and create their own virtuous circles in teaching activities.

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