**Using Games based on giant dice and time restrictions to enable creativity when teaching Artistic or Creative Subjects**

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**Introduction**

This case study draws on some experiments I have been doing in the use of dice in the ideas generation phase of a creative project. It draws on workshops I have run with creative technology students at Goldsmiths, with a range of adults at the Counterplay Conference in Aarhus (Denmark) and the Playful Learning Conference at Manchester Metropolitan University, in workshops for museum professionals I have co-led with Rachel Briscoe and in teaching Drama and Performance students at London South Bank University.

I use large inflatable dice with plastic pockets that A4 sheets can slot into (see figure 1). I normally use 2 to 3 dice, each with a different category that the project needs to take into consideration. For example for creating urban games there might be a dice with locations, a dice with numbers of players and a dice with possible technologies. Or for devising a performance piece there might be a dice of themes, a dice of “use of space”and a dice of uses of sound or of performance style etc. They are six-sided dice, so that if I am using 3 there are 216 possible combinations.

**What do dice do?**

**Dice Give Parameters**

In my experience, and as Ian Bogost elopquently argues in *Play Anything* (2016), restrictions enable creativity rather than stifling it. When presented with an open brief, such as “devise a playful interaction for a public space” there are so many possibilities that the mind can freeze. However, when given three parameters to combine in this playful interaction, for example “devise a playful interaction using balls to take place in a park where players work in pairs” or “devise a playful interaction using motion sensors to take place in a town square where you play as an individual” then the mind sets to work thinking about how to combine these elements.

In addition to enabling creativity, the use of parameters can allow the teacher or facilitator to guide ideas towards elements they wish to explore or to resources that are available. Or it can allow her to adjust parameters to stretch or stimulate different groups. For example, when I worked with creative technology students at Goldsmiths, the same game of creating playful interactions for public spaces involved two technology-based dice, one for “inputs” (e.g cameras, microphones, pressure sensitive pads, buttons, phones/tablets, wearable tech) and one for “outputs” (e.g projection, lighting, sound, things move, liquid-crystal display screen, web or text message based outputs).

**Dice Make it Fun**

It is hard to take throwing a big blue squishy inflatable dice too seriously. It is not something you are habituated to doing in a classroom or conference room and so it can put you into a more playful frame of mind. The suspense of waiting to see how it lands and the accompanying “oohs” and “aahs” all add to the fun. The fun of dice in the classroom is also exemplified in my favourite television series, *The Wire*. In Season Four Presbo finally engages his class in mathematics through the use of dice.

**Dice create a game-like situation**

Being involved in a game whilst attempting to design a game gives you a direct, lived experience of what playing (one kind of) game is like, that you can draw on in the process of creating a game or playful interaction.

**Dice stop you trying to find the perfect solution**

The search for perfection can be a terrible block. Dice can prevent you doing this by forcing you to combine elements that you might not want to combine; elements that you might think could never combine into something brilliant. This can remove the pressure to find the perfect idea - and this is one of the best ways to help you find a good one.

**Things I use in combination with dice**

**Something to bond groups**

Before we start playing with the dice I like to do something that helps a group bond with each other and invites them to begin to talk to each other. If we are short of time this might be as simple as sharing their own names and coming up with a team name (see figure 2). If I have a little longer I like to do a game that causes everyone to speak, such as the “two truths one lie” game. In my experience, once someone has spoken once in a group, they are much more likely to have the confidence to speak again.

**A structure that encourages people to generate many ideas**

I like to begin a session with several fairly quick rounds of throwing the dice and coming up with ideas (see figure 3). I do this because it warms up participants, because it encourages people to believe that ideas don’t have to be perfect (how could they be when you’ve had hardly any time to think about them?) and it prevents groups getting stuck on their first idea, which can sometimes be the best but often is not. I went to a weekend hackathon recently which began with some keynotes where people discussed projects (which had a number of similarities) and then participants worked in teams over the rest of the weekend to come up with an idea, develop it and pitch it. There was no structure to encourage divergent thinking, or to quickly generate many ideas, so most teams devised projects that were fairly similar to each other and to the projects described in the keynotes.

**Time pressure**

Theatre director Anne Bogart coined the term “exquisite pressure” to discuss how she uses time in the rehearsal room She says “When we are not given the time to think or talk too much (because someone has set a time limit) wonderful work often emerges; what surfaces does not come from analysis or ideas, but from our impulses, our dreams, our emotions.” (Bogart and Landau, 2005, p138). This has become a cornerstone idea in my artistic practice, facilitation and pedagogy. It is especially useful at the ideas generation phase of a project.

**A playful and warm facilitation style**

One of the best ways to encourage playfulness among students or participants, in my experience, is to embody it myself. I have also found that it is vital to respond warmly when teams share ideas, especially the early ones. This helps participants feel confident about their own creativity, which in turn can help them to be more creative.

**Points (sometimes)**

Sometimes when I use dice for generating ideas in a classroom or workshop I award points for the ideas that groups come up with. This has certain advantages and potentially certain disadvantages. The advantages are that it can produce more focus and commitment in some individuals and that it can make the whole session feel more like a game, with the benefit of giving participants a lived experience of being inside a game that they can draw on when in their creative process. The main disadvantage is that it might make some teams and individuals feel at the end of the game that they have failed and might cause them to doubt their creativity. When I do use points I manage these disadvantages either by saying that the points are not very important and celebrating all the ideas at the end or by offering a range of prizes at the end in addition to the main one (most original idea, best teamwork, best presentation skills etc.)

**Music**

When students or participants are in the process of coming up with ideas, I often play music at a low level in the background. This can help create an upbeat atmosphere and fill any silences which can be creative but which might otherwise produce a sense of awkwardness.

**Using Dice over longer and shorter time frames**

I most frequently use dice in workshops or brainstorming sessions that last between one and three hours. However, the theatre company that I am part of, fanSHEN, uses them in its creative process over much longer time frames. During these periods we might work for 45 minutes after each throw of the dice and then pick certain ideas to develop for two hours or more. We might begin a development process with a wider range of parameters on each dice but narrow the parameters as we go on and decide what we are most interested in. For example, in one development period our “technology dice” started out including a range of possibilities, one of which was “phones.” As we progressed we decided we were especially interested in phones so made the whole dice about the different things phones can do (text messages, augmented reality, GPS etc.)

**Bibliography**

Bogart, Anna & Landau, Tina (2005). *The Viewpoints Book: A Practical Guide to Viewpoints and Composition*. London: Nick Hern Books.

Bogost, Ian (2016). *Play Anything: The Pleasure of Limits, the Uses of Boredom & The Secret of Games*. New York: Basic Books.