

## Student Devised Assessment – The Ethics of Biobanks

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There are a number of reasons for which I chose to create this particular product for my student devised assessment (SDA). Firstly, I wanted to take the opportunity to do something different to my usual coursework, which mostly consists of essays and practical reports. A poster seemed like a nice contrast to this; a medium that strongly emphasises aesthetic elements and text that is short and easily digestible, rather than elaborate or highly technical. It is also a medium that is flexible enough to accommodate many different aspects of the course. Topics such as how genetics are visually presented in films would have been difficult to present in a more textual form, such as an essay.

I also felt a poster played to my strengths. I have some experience using image manipulation programs, albeit as a novice, and so I was able to create some of the graphics I needed myself. This meant I had greater control over what the final product looked like than if I was relying on images sourced from the internet.

The reason I decided to focus on ethics was because this was the element of the course that most attracted me to it in the first place. I enjoyed debating at school and Critical Thinking at AS-level, and wanted the opportunity to engage in those areas again. I narrowed this down to biobanks, as they incorporate many different and complex ethical questions. They are also an excellent example of ‘Science and Society’ interacting with one another, and so they felt like an appropriate topic for this course.

The aim of the project was to promote thought. This was for two reasons: firstly, the solutions to ethical problems, by their nature, can usually only be justified with long and intricate arguments. This would not have been appropriate for a poster, which generally become hard to digest when they use have large and complicated bodies of text. As such, trying to present my own solutions to these problems was not a viable option, and so I chose to focus on encouraging others to think about their own solutions. Indeed, when bullet-pointing the ethical observations I wanted readers to think about, I was careful to include even those that I did not personally find convincing.

Secondly, it captured on of the core aspects of the course. Debate and the consideration of different opinions has been important throughout, and I wanted this to be part of my SDA as well. Indeed, I would argue that it is the only reliable method for tackling these topics – or at least, the one that is most likely to produce solutions that are truly beneficial to all stakeholders.

The target audience of the poster are those with an academic interest in ethics and how they apply to scientific practice. Students would probably be the most appropriate category of people for this SDA, however it can easily be presented to any individual who is curious about ethical challenges or genetics in general.

The aesthetics of the poster were designed to incorporate some of topics that we studied during our examination of *GATTACA*. Primarily, this is reflected in the use of colours. The 'language of colour' in the film is used to convey a number of concepts, including characters' internal dilemmas and society's attitudes (Tu, 2016). From the options of red, green, yellow, and blue, I chose to use the latter as the principle colour for the poster. I had originally intended to focus on red and green, however I later decided against this. I wanted the poster to promote debate rather than a positive or negative attitude towards biobanking, and both of these colours felt like they would bias it. Red carried too much of a negative valence; green, too much of a positive valence. By contrast, blue gave the poster a more neutral tone, and so I opted to go with that.

I then used colour theory, a prevalent concept in fields such as photography and graphic design, to guide my choice of a secondary colour (Gibson, n.d.; Kliever, n.d.). I chose a warm orange, as this was the complimentary colour for the shade of blue that I chose to use. Furthermore, this orange-blue (or amber-teal) contrast has been a staple of films and television for decades (Cima, 2015; Plunkett, 2015), and so I feel this has done a good job of promoting the interdisciplinary aspect of the module.

Additionally, the use of form in *GATTACA* encouraged me to consider this when producing the graphic design for the background of the poster. In the film, form is used to convey a number of concepts – for example, the helix design of the staircase in Jerome's house to mimic the structure of DNA (Walters, 2017). There is a language of shape as well as a language of colour. Likewise, I chose to use graphics that would give the poster a clean, crisp, scientific aesthetic, by making use of layered geometric shapes.

Of course, topics from the course are also embedded in the written content of the poster. Perhaps the most obvious example of this is the focus of the poster itself – ethical principles. Indeed, not only did we have a lecture specifically on ethics, it was of course involved in almost every session we had. More specifically, the text explores topics such as ownership, the rights of donors, and the challenge of balancing scientific progress with the need to preserve autonomy and privacy.

I identified ethical considerations by collecting and reading a number of academic papers on the subject. Even when the focus is narrowed down to biobanks, this generated a very large list of topics (e.g. Philips, 2016), and so it was necessary to be selective in which I featured in the poster. Forensic access to research banks and DTC services seemed to involve the best variety of questions that also had the potential to generate interesting debates. This was because, not only were they complex and relevant to the course, but they also captivated wider debates about modern society, such as the right to privacy and the effects of consumerism.

## References

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