

## **Assignment: Ethical Analysis 2** **due 10/30, 11:59 pm**

Using the Ethical Analysis Framework that we reviewed and practiced in class, you will analyze the problem of cognitive enhancements in education.

The primary questions are: Should students be able to use cognitive enhancement technologies in education settings? If so, which technologies, under which conditions or restrictions? How should universities and other educational institutions regulate this - what should the policies be? You may discuss biomedical, physical, or digital enhancements (or some or all of them, if you think you pull off doing so while remaining focused on a single thesis).

The expected length is 2-4 pages in a standard single-spaced, 11 or 12 point font report style. If you have more to say, it's OK to submit a longer analysis (but not more than 8 pages, please). Remember to focus on content and clarity of writing before worrying about length.

1. Check out the following sources to get a sense of the potential enhancements. You don't have to read them all, but you may find them helpful.

- Bostrom and Sandberg (2009): [www.nickbostrom.com/cognitive.pdf](http://www.nickbostrom.com/cognitive.pdf)
- Shook et al (2014): <http://journal.frontiersin.org/article/10.3389/fnsys.2014.00228/full>
- Maslen et al (2014): <http://jlb.oxfordjournals.org/content/1/1/68.full>
- Sarewitz and Kalas (2006): [archive.cspo.org/documents/FinalEnhancedCognitionReport.pdf](http://archive.cspo.org/documents/FinalEnhancedCognitionReport.pdf)
- Kurzweil (2012): [http://www.slate.com/articles/technology/technology/2012/11/ray\\_kurzweil\\_are\\_you\\_still\\_you\\_if\\_your\\_brain\\_is\\_enhanced\\_with\\_neural\\_implants.html](http://www.slate.com/articles/technology/technology/2012/11/ray_kurzweil_are_you_still_you_if_your_brain_is_enhanced_with_neural_implants.html)
- On pharmaceutical cog-enhancers: see <http://blogs.discovermagazine.com/sciencenotfiction/2011/03/03/cognitive-enhancers-are-not-cheating/#.Vhb-paR43Vc>
- On implants: <https://www.washingtonpost.com/news/innovations/wp/2014/03/20/brain-implants-because-youve-always-wanted-to-think-more-like-einstein/>
- On stimulators: <http://www.wired.com/2013/03/cognitive-enhancement/>

You can also check out Wikipedia's articles on neuroenhancement and human enhancement to get a sense of the field, but I wouldn't use those as a source.

*You may refer to these examples in your analysis, but strive to address the ethical issues more generally, thinking beyond the specifics of the examples here.*

3. Do your own research. What questions do you have that these articles haven't answered? As you go through the rest of the process, you will likely need to do more research on specific questions or possible consequences.
4. Decide what you want to focus on and what aspects of this situation you want to draw out. Don't try to include every single thing that you've learned. (You wouldn't be able to fit that in 4 pages.)
5. Use the ethical analysis framework to organize your thoughts and develop your analysis.
6. Write your own cogent ("clear and understandable") essay presenting your analysis. It should include all of the key information that you organized in your framework process, but should not just be linearly presented as those information sequentially.
7. Think about what conclusion you drew and use that as a thesis statement, then create a narrative structure that will let you support that thesis using the information from your analysis. You probably want to write an outline first to organize the general order in which you'll present the information, and what you'll say, before you write the final essay.
8. Start this assignment soon! Feel free to come by office hours to talk about your notes from the ten-step process, review your outline, or ask me to look through parts of an early draft with you. It's OK to ask a friend/peer to read and comment on your draft, but they should not rewrite it for you. Indicate any editing help you received.
9. Please be very careful about any quotations or wording you'd like to borrow from your sources, and quote and cite those sources appropriately, consistent with the course policy. You should also cite your sources for any specific facts, findings, or sources of expert opinions (but you don't need to cite sources for general knowledge).
10. Include a bibliography (list of references) that is easy to read and has full bibliographic information (not just URLs, even if you found a source online) Don't forget to cite the sources listed above.

In general, you need:

- A consistent way of showing within the text what to look at it in the bibliography; for APA style, this is to use (author, year) in parentheses:  
    "Some believe banking should be ethical (Peyret, 2013), while others..."
- A bibliography that includes author, title, place of publication, and date, along with other useful information like URL or place of publication; example below.

Peyret, P. (2013, October 1). Of Bitcoins and Ethical Banking. Retrieved November 1, 2014, from [http://www.huffingtonpost.com/patrice-peyret/of-bitcoins-and-ethical-b\\_b\\_4051361.html](http://www.huffingtonpost.com/patrice-peyret/of-bitcoins-and-ethical-b_b_4051361.html)