# The Future of the Brain

Teach the Future

**Description and Rationale:** In this 5-day unit for middle schoolers, students will read, analyze, discuss, and write about complex texts while considering possibilities for the future of the brain. Students will compare various possible futures and consider the evidence supporting both. This unit allows students to work in groups, explore a controversial and engaging topic, and consider multiple possibilities for the future.

**Unit Objectives:** Students will be able to read, analyze, discuss, and write about complex text, makes evidence-based arguments, and consider possible futures from multiple points of view.

**The Future of the Brain:**
A 5-day mini unit that uses close reading, writing and discussion skills to investigate possibilities of intelligence amplification in humans

**5-Day Overview:**
Day 1: Unit Intro/close read article #1 as a group and individually
Day 2: Close read article #2 in small groups
Day 3: Jigsaw discussion about article #2
Day 4: Close read article #3 individually/prepare for Socratic Seminar
Day 5: Socratic Seminar

[TEACHING NOTE: Students unfamiliar with close reading/annotation/Socratic Seminar might need more time. This mini-unit may be extended into a more complete unit by incorporating the short story "Flowers for Algernon" and connecting it to the ideas of intelligence amplification. Numerous articles and TED talks exist about the brain, and teachers can feel free to adapt this unit accordingly.]

**Attached Supplemental Materials**:
- Supplemental 1: Blank student handout/Teacher version: "Will a futuristic brain implant make monkeys smarter?"
- Supplemental 2: Blank student handout/Teacher version: "Humans with Amplified Intelligence Could Be More Powerful than Artificial Intelligence" Section 1, Section 2, Section 3
- Supplemental 3: Blank student handout/Teacher version: "Being Human in a Post-Human World"

- Supplemental 4: Blank student handout/Teacher version: Socratic Seminar Preparation and Notes
- Supplemental 5: Student Discussion Stems
- Example Annotation Guide

| STANDARDS ADDRESSED THROUGHOUT | | |
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| **Reading Standards** | **Writing Standards** | **Listening and Speaking Standards** |
| CCSS.ELA-LITERACY.CCRA.R.1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.<br><br>CCSS.ELA-LITERACY.CCRA.R.2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.<br><br>CCSS.ELA-LITERACY.CCRA.R.4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.<br><br>CCSS.ELA-LITERACY.CCRA.R.6 Assess how point of view or purpose shapes the content and style of a text.<br><br>CCSS.ELA-LITERACY.CCRA.R.8 Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence. | CCSS.ELA-LITERACY.CCRA.W.2 Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.<br><br>CCSS.ELA-LITERACY.CCRA.W.9 Draw evidence from literary or informational texts to support analysis, reflection, and research.<br><br>CCSS.ELA-LITERACY.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.<br><br>CCSS.ELA-LITERACY.CCRA.W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.<br><br>CCSS.ELA-LITERACY.CCRA.W.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. | CCSS.ELA-LITERACY.CCRA.SL.2 Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.<br><br>CCSS.ELA-LITERACY.CCRA.SL.4 Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.<br><br>CCSS.ELA-LITERACY.CCRA.SL.5 Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.<br><br>CCSS.ELA-LITERACY.CCRA.SL.6 Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate. |

| CCSS.ELA-LITERACY.CCRA.R.9 Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take. | CCSS.ELA-LITERACY.CCRA.W.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences. | |
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## DAY 1

**Agenda**
- **Hook/Opening:** Imagine we could improve our brains?
- **Close Reading:** *The Week* article
- **Discussion/Closing/Assessment**: Writing response and multiple choice questions

**Necessary Materials:**
- Supplemental 1: Blank student handout/Teacher version: "Will a futuristic brain implant make monkeys smarter?" (included)
- Example Annotation Guide (included)
- Highlighters or Google Docs for annotation
- Projector or document camera

**Reading Standards**

CCSS.ELA-LITERACY.CCRA.R.1
Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

CCSS.ELA-LITERACY.CCRA.R.2
Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

CCSS.ELA-LITERACY.CCRA.R.4
Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

CCSS.ELA-LITERACY.CCRA.R.9
Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

**Writing Standards**

CCSS.ELA-LITERACY.CCRA.W.2
Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.

CCSS.ELA-LITERACY.CCRA.W.9
Draw evidence from literary or informational texts to support analysis, reflection, and research.