Topic or concept: This assignment asks students to consider the important role that habit plays in learning; students study the neuroscience of habit, and then put this knowledge into practice by replacing one (unwanted) habit with another, preferred habit, and reflecting on their experience in a weekly journal.

<ul> <li>Basic objectives for preparatory work:</li> <li>Describe the effect of habit on the brain, as reflected in assigned videos.</li> <li>Relate this information to a personal example.</li> <li>Reflect on Blaise Pascal's theory that repeated action produces belief.</li> </ul>	<ul> <li>Advanced objectives for classwork &amp; after class work:</li> <li>Learn about the role of neuroscience on education.</li> <li>Discuss the role of habitual action on our activities and beliefs.</li> <li>Choose an unwanted habit to replace with a preferred habit.</li> <li>Demonstrate your self-awareness as an educational subject through personal activity tracking, as well as oral and written reflection.</li> <li>Analyze your experience to demonstrate the degree to which you have internalized knowledge about the effect of habit on the brain.</li> <li>Reflect on the role that keeping a journal has on personal accountability</li> </ul>
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	Time planned	Activity and rationale	Resources needed
Pre-Class	20 minutes	Watch Andrew Curran's TED talk to familiarize yourself	Andrew Curran TED talk, <u>https://youtu.be/p6t8GKdBX04</u>
Activity		with the neuroscience of education; then watch Nir Eyal's TED talk to reflect on the role of habit in our daily lives.	Nir Eyal TED Talk, <u>https://youtu.be/11dYx_rW_Ks</u>
Pre-Class	5-10 minutes	In 2-3 sentences, summarize the role that habitual action has on the neural pathways of the brain, and	Paper and pen, or a computer.

	Time planned	Activity and rationale	Resources needed
Activity Pre-Class Activity	5-10 minutes	<ul> <li>illustrate this fact with a personal example of habitual behavior in your own life. Summarizing the assigned material will help to solidify your knowledge of it.</li> <li>Contribute to the shared Google doc: reflect on the meaning of the following statement from Blaise Pascal: "Kneel down, say your prayers, and you will believe." This will give you an additional method of reflecting on the relationship between our habitual actions and our beliefs—will new actions lead to new beliefs? If that is true, do we justify our current habits with outdated or misguided beliefs?</li> </ul>	Computer
In-Class Activity	20 minutes	Mini-Lecture on Andrew Curran's insights into how we can use neuroscience to improve learning. I will also introduce the specifics of the Habit Assignment.	Power Point Presentation Handout (Habit Assignment)
In-Class Activity	20 minutes	Small Group Work: Students will discuss the Blaise Pascal quote, referring to the Google Document. One group member will take notes and report back to the class during whole group discussion. Whole Group Discussion: Individual groups will report on their discussions of Blaise Pascal; then, the class as a whole will reflect on how this insight might be useful for the Habit assignment. Small group and whole group discussions should lead to a lively discussion about the	One student should take notes on the Blaise Pascal discussion and prepare to share with the class after the group work. All students should identify and write down the habit they want to replace.

	Time planned	Activity and rationale	Resources needed
In-Class Activity	25 minutes	relationship between belief and habit. Gallery Walk: Students will consider one or two habits they might use for the assignment and a replacement habit (this is the basis for the advanced work). Each student will write (anonymously or not) their habit ideas on the whiteboard, and then the class will consider each one (Is the proposal viable? What challenges might the student encounter? Has the student chosen the strongest possible "replacement habit"? This exercise will help us to see this assignment as a communal one— one through which we can help each other to achieve our goals by offering support and, if needed, feedback.	Dry Erase Markers
End of period	10 minutes	We will review what students have to do for the advanced work portion of the habit assignment, and I will answer any questions students have.	Assignment (on Canvas)

# Flipped AFTER CLASS Work Plan Template

Advanced learning objective	Activity and rationale	Instructions to students
<ul> <li>Demonstrate your self- awareness as an educational subject through personal activity tracking, as well as oral and written reflection.</li> </ul>	Students will keep a weekly journal (writing in it once a week, for about 5 minutes) about their effort to replace one unwanted habit with a preferred habit. This exercise will help students keep focused on their efforts to change the unwanted habit. It will also give them material for later reflections on the role of personal activity tracking on making change.	<i>Example:</i> Keep a weekly journal about your effort to replace the unwanted habit with the preferred habit. Though you don't have to write more than a few sentences each week, you should choose a specific day and time to write in your journal.

Advanced learning objective	Activity and rationale	Instructions to students
<ul> <li>Analyze your experience to demonstrate the degree to which you have internalized knowledge about the effect of habit on the brain.</li> </ul>	Each week, I will solicit feedback from students about how their shift in habit is going. Students will have a chance to share challenges, and get feedback from peers and from the professor about any roadblocks. This process will help students stay focused on the assignment. It will also help students who are not having success (sometimes during or after these discussions, students will choose to change to another habit or try a new approach).	Each week, you should come to class prepared to discuss how your effort to replace an unwanted habit is going. You may also want to offer suggestions or advice to students who share that they are having difficulties.
<ul> <li>Reflect on the role that keeping a journal has on personal accountability</li> </ul>	As part of the final assignment, students will not only turn in their journal, but they will turn in a short, written reflection about the role that keeping a journal had on their effort to replace an unwanted habit. The purpose of this is to gather evidence to support a claim about whether or not journaling was useful in replacing an unwanted habit with a desired one.	During the last week of the semester, you will turn in your journal and reflection, and we will discuss the experiment as a class.

### **GUIDED PRACTICE**

Class: HUM 10 Date assigned: TBA Date due: TBA Time estimate to complete this assignment: 10 minutes a week for the semester, plus 10 minutes a week during class, and an additional 30 minutes for a final, written reflection.

### Overview/Introduction

Neuroscience offers us insight into how memories and actions get hard-wired into our brains through templates. However, neuroscience also offers us insight into how we can choose to rewire our brains through daily activity. This means that through becoming aware of our current habits, and making an effort to both reflect on and change our habits, we can exert some degree of control over how we live and think about our lives.

### Learning Objectives

**Basic objectives** 

- Describe the effect of habit on the brain, as reflected in assigned videos.
- Relate this information to a personal example.
- Reflect on Blaise Pascal's theory that repeated action produces belief.

#### Advanced objectives

List 3-4 learning objectives that you expect students to need help mastering.

- Learn about the role of neuroscience on education.
- Discuss the role of habitual action on our activities and beliefs.
- Choose an unwanted habit to replace with a preferred habit.
- Demonstrate your self-awareness as an educational subject through personal activity tracking, as well as oral and written reflection.
- Analyze your experience to demonstrate the degree to which you have internalized knowledge about the effect of habit on the brain.
- Reflect on the role that keeping a journal has on personal accountability

#### Preparatory Activities and Resources:

- Watch Andrew Curran's TED talk to familiarize yourself with the neuroscience of education.
- Watch Nir Eyal's TED talk to reflect on the role of habit in our daily lives.
- Based on these videos (as well as any other preparatory work you have done), write 2-3 sentences summarizing the role that habitual action has on the neural pathways of the brain. Then illustrate this fact with a personal example of habitual behavior in your own life.
- Contribute to the shared Google doc: reflect on the meaning the following statement from Blaise Pascal: "Kneel down, say your prayers, and you will believe."

#### Playlist of Resources

Videos on Neuroscience and Habit:

Andrew Curran Live, https://youtu.be/p6t8GKdBX04

Nir Eyal, "What Makes Some Technology so Habit-Forming?", https://youtu.be/11dYx\_rW\_Ks

Judson Brewer, "A Simple Way to Break a Bad Habit," <u>https://www.ted.com/talks/judson\_brewer\_a\_simple\_way\_to\_break\_a\_bad\_habit?utm\_campaign=ted</u> <u>spread&utm\_medium=referral&utm\_source=tedcomshare</u>

#### **Readings about templates and habit-formation**

Andrew Curran, *The Little Book of Big Stuff About the Brain*: The True Story of Your Amazing Brain, Chapter 2, pp. 25-48.

Charles Duhigg, The Power of Habit: Why We Do What We Do in Life and Business

### Exercises: Please complete by (TBA—before class)

#### **Exercise 1: Reading/Viewing Response**

Watch Andrew Curran's TED talk to familiarize yourself with the neuroscience of education; then watch Nir Eyal's TED talk to reflect on the role of habit in our daily lives. You should also feel free to consult the "playlist" for additional videos and readings on this topic.

In 2-3 sentences, summarize the role that habitual action has on the neural pathways of the brain, and illustrate this fact with a personal example of habitual behavior in your own life.

#### Exercise 2: Contribute to the shared Google Doc

Reflect briefly on the meaning of the following statement from Blaise Pascal: "Kneel down, say your prayers, and you will believe." Answer the questions: What do you think Pascal means with this statement? What is the relationship between action and belief that Pascal is suggesting? Do you agree of disagree? Can you give an example to support your position? This exercise will give you an additional method of reflecting on the relationship between our habitual actions and our beliefs—will new actions lead to new beliefs? If that is true, do we justify our current habits with outdated or misguided beliefs?

#### **Questions?**

You can always contact me via email (<u>tova.cooper@sjsu.edu</u>) or come to my office hours. Alternately, you can post questions or respond to others on the Canvas Discussion Board.

#### **ADVANCED PRACTICE**

Class: Humanities 10 Date assigned: TBA Date due: TBA Time estimate to complete this assignment: 10 minutes each week (through the end of the semester) for journal entries; 30 minutes for reflecting on the value of the journal in completing this assignment.

## Learning Objectives

#### Advanced objectives

- Demonstrate your self-awareness as an educational subject through personal activity tracking, as well as oral and written reflection.
- Analyze your experience to demonstrate the degree to which you have internalized knowledge about the effect of habit on the brain.
- Reflect on the role that keeping a journal has on personal accountability
- Hopefully, replace an unwanted habit with a desired one, and move onto a new habit by utilizing the same method!

### Activities & deliverables

Weekly, in-class Feedback: Each week, students will report on their progress, solicit feedback (if desired) from classmates, and provide feedback to other students.

Weekly Journal Entries: Each week, on a specific day, students will write for 5-10 minutes about their progress (or lack thereof).

Final Journal Reflection: At the end of the semester, students will not only turn in their journal, but they will turn in a short, written reflection about the role that keeping a journal had on their effort to replace an unwanted habit. The purpose of this is to gather evidence to support a claim about whether or not journaling was useful in replacing an unwanted habit with a desired one.