

## 12. Exploring Free Will—draft

### Overview

This activity leads students through an inquiry into the nature of their thoughts, where thoughts come from, and to what extent they have control over the formation of their thoughts and opinions. The inquiry begins with a question—“Can computers think?” This question is explored and leads to the fundamental question of “what is thinking?” A key difference between humans and computers is agreed to be the fact that humans have “consciousness” and computers do not, however a secondary distinction remains that computers are programmed and humans are not—humans have free will. This assertion is then explored in a survey and students discover that they are in fact “programmed” more than they realize, and in many cases their thoughts, opinions, or even mental models of reality are handed down to them by culture and their environment—parents, teachers, media, friends, etc. They have less “free will” than they may have realized. The activity concludes with a concentration exercise (Vipassana meditation) that provides students with a concrete tool by which they can become more aware and clear regarding their thinking generally, critically and in the formation of their opinions. Connections are made to politics, advertising, teaching, propaganda and the media.

### Topics

- ❑ Psychology—consciousness and cognition
- ❑ Science—brain and nervous system function
- ❑ Social Studies—propaganda
- ❑ Media studies—advertising and journalism

### Big Ideas

- ❑ An individual’s thoughts, opinions and beliefs about reality are to a large extent formed from and influenced by external sources, sources that the individual is often unaware of.
- ❑ Becoming more aware of how our perception and thinking occurs can help us learn who we are, act from a deeper sense of truth, and become more effective leaders, teachers and citizens.
- ❑ Mental models are so important for people to feel comfortable that when they learn of something that contradicts their mental model, they will often convince themselves it is false, even when presented with overwhelming evidence that it is true.

### Contexts for use

This activity is ideal to follow SS2. A Brief History of the Past 2000 years. In that activity students explore the historical evolution of mental models and modernity.

## Prerequisites and support

Access to the following DoRight lessons:

E1. Let's Talk About It—Socratic Seminar guide

E2. What's Really True?

## Objectives

### Student learning

Understanding of the big ideas listed above.

## Activity Script

### A. Introduction

Explain to students that you are going to have a discussion that will explore some big ideas about whether or not we have free will (a big question philosophers have grappled with over the years). The result will be some important insight into their ability to understand how and why people think they way they do (cognition, philosophy and psychology), and how that knowledge can be used to help them become a strong leader and teacher. It can also help them understand more clearly the big question, “who am I?” from the self reflection in the lesson “Going In.”

### B. Inquiry #1—Can computers think?

Lead a discussion through the following questions:

#### 1. Can Computers Think?

Pose the question and have students examine both sides, some may say yes, some no. Write ideas on the board. To push the ideas further and test students' assertions, consider exploring whether a computer is thinking in the following circumstances:

- If a computer composes a beautiful piece of original music.
- If a computer says it loves you and really means it.
- If a computer beats the world chess champion at a game of chess.
- If a computer writes an original novel as complex as Tolstoy's *War and Peace*?

Ultimately you should arrive at the conclusion that this question depends on the meaning of thinking. To help explore what the meaning of thinking is, examine the next question:

#### 2. What is the difference between you and a computer?

Students will inevitably point out that computers are programmed, and that humans are not--humans have free will to do what they want. Humans also have feelings and love. While the latter is true, the former can be challenged, and this sets up the primary inquiry regarding free will. Do we really have free will?

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As some form of debate about the difference between humans and computers unfolds with students, stir the pot with the following idea and question:

- The human brain is nothing more than a biological computer. Our brains are made from billions of brain cells that act like computer chips, sending electrical signals down long fibers to other brain cells. Between the tips of each fiber is space called a “synapse.” Depending on the chemicals in the brain at the time and how thoughts are being formed, electrical impulses jump across the synapse to other cells. (Consider drawing a diagram of how brain cells act in relation to each other, noting the synapses) So given this situation, isn’t the human brain (you) basically the same as a computer?

Again, students may see this but still cling to the idea that humans have free will.

- Defining question: Suggest to students that there is one question that will gain complete agreement. Ask them:
  - a) “Does the computer sitting on the table over there (point to the computer, assuming there is one in the room...) **know** that it is sitting on the table?  
<students will universally respond “no”>
  - b) Do you **know** that you are sitting in your chairs?  
<students will universally respond “yes”>Conclusion: Therein lies a key difference—a sense of being, or existence. People have it, but do computers have it? What is this “knowing?” This awareness of being, or knowledge of being is called **consciousness**. It can be fascinating to wonder just how and why our brains (arguably biological computers) have consciousness while computers do not.  
Where does consciousness come from?  
<this question can be highly provocative with many students and stimulates significant reflection.>
- Even though we have established that we have consciousness and computers do not (a key difference), students will still also insist that computers are programmed and humans are not. Explore this idea in Inquiry #2

### **C. Inquiry #2—Are humans programmed or do they have free will?**

Let’s explore whether or not we are programmed like computers, or if we actually have complete free will to think as we please. This is a provocative question. Students will cling to their notion of independent free will. As the teacher you will challenge their idea with the White Bear Suppression inventory.

#### 1. Conduct White Bear Suppression Inventory

This takes only several minutes and provides quick insight into thought control, or human programming.

Explain to students that you are going to conduct a quick experiment with them to learn about whether or not they are programmed. Explain:

“In a minute we are going to have 30 seconds of silence, and during that time, when I say go, I want you to try not to think of a white bear, don’t think of any

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aspect of a big, fluffy white bear, do you understand? Such as a polar bear you would see romping around the ice with its cubs. You should not even think about not thinking of a white bear, no thought whatsoever, of a big, white fluffy bear, or anything to do with a big white fluffy bear. Got it? Whatever you do don't think of the white bear. Ok, on your mark, get set, GO! <wait 30 seconds>

Students will invariably fail the test. Conclusion: They were just programmed by the teacher! Indeed, humans aren't really so much in control of what goes on in their minds, or are they? To explore it further conduct the thought survey.

## 2. Student survey on thoughts

Pass out the WBSB sheet to students and have them answer the survey questions as honestly as they can. Students should score their responses as indicated to obtain a single numerical score.

Make a frequency bar graph on the board and have students come to the front of the class and place an "x" in the column for their number. (The horizontal axes values will range from 0-75. Set it up so that each vertical column covers an interval of 5 values.)

Discussion: Notice that most of the class scores in the higher range, above the median.

Based on the nature of the questions, what does a high score indicate?  
<someone with less control over his or her thoughts>

What can we conclude from what we see?

<that our class scored high, and consequently we really aren't as in control of our thoughts as we may have thought.>

## 3. Conclusion:

People are much less in control of their thinking and actions than they realize. This is a big issue for us as leaders who are trying to help create a sustainable future by leading and teaching adults and others. This issue of human programming is a large field of study in psychology and comes into play in many areas of life, particularly advertising, sales, marketing, politics and political campaigns, and so on. This idea is central to what it means to become a critical thinker. *In final conclusion, post on the wall or otherwise emphasize **the three big ideas listed at the beginning of this lesson.***

## **D. A tool for clear thinking and experiencing thoughts—Vipassana mindfulness meditation**

### **A note to the teacher:**

When introducing this activity to students you should consider framing it to them as a "concentration exercise." While the activity is essentially instruction in Vipassana mindfulness meditation, its goal and net effect is that of increasing awareness, ability to concentrate, relaxation, and sharpening perception. The term "mediation" can be misconstrued by some to have religious connotations and can be problematic in school situations. Use your judgment here. Also note that a growing body of scientific research on mindfulness meditation supports its positive effects. It has been used with

powerful results in many settings—by sports teams to improve performance, in therapy to help cure addictive behaviors, as well as in prisons to help rehabilitate convicts.

## **Background information on Vipassana or “mindfulness” meditation**

While the end result of this type of meditation is an increased ability to concentrate, ironically, the process involved actually deemphasizes the process of “concentrating” in a traditional sense. This type of mediation does not use a mantra or directional tool to “focus” on anything, but instead emphasizes “watching” and “noticing.” The primary orientation for noticing is the feeling of the earth we sit on, the infinite sky, and our breath. All other noticing will occur within that theater.

In the deeper sense, mindfulness meditation can be a powerful means to facilitate a profound letting go and emptying of goal oriented being. It is in fact, about learning to experience pure being. Our ego-based personalities have to a large extent obscured our pure being over our lifetimes but we can, through a delicate and subtle process, unlock the hold of the obscurations, letting them gradually drop away to reveal our essential self, our original face, our pure being ness, and gain greater insight into the nature of our conceptual mind, thoughts and emotions.

## **Implementation**

Setup the room with very soft light and you may use some soft meditative music in the background. Generally, music is not used in this type of mediation, and you may consider turning it off during the silent portion.

Students may sit in chairs with their feet flat on the floor and backs upright or in cross-legged positions on the floor. They should NOT lie down. Their eyes can remain closed or slightly open at a 45-degree angle looking downward in a soft gaze. In all cases they should hold a relaxed, upright posture.

## **Meditation script**

*Read the following script to lead students through the meditation. Use a soft and relaxed voice, heeding the pauses as indicated.*

First we will take a minute to simply relax into our space—take a deep breath, really deep, and slowly exhale with your mouth wide open. Take another deep breath, again slowly exhaling

Breathe---deep, using your diaphragm, enjoy it, like you’re taking in a bite of a delicious cake, you want more, take another deep breath savor it.

Now just let the breath fall into a natural rhythm, and notice it. Just notice it. In this meditation there is nothing to accomplish, nothing to do, no problem to solve, nowhere to go. This is a zone of utter goallessness. It is a joyous sanctuary and gift.

Continue to watch your breath, you can either choose to notice your tummy going in and out, or notice the air coming in and out of you nostrils, either way, whatever you choose. Your body, as you breathe, is much like a swinging door—imagine your mouth or

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nostrils, or body for that matter, as a swinging door, see this, as the breath goes out, then in, out, and in.

The outward breath extends out without bound, infinitely outward, to the end of the universe.

And the inward breath does the same, extending into your inner space, to your infinite, inner depths.

Those inner spaces and breaths may not feel quite as infinite as the outer ones. There is some interesting insight there about where your attention spends most of its time, but remember,

just notice, don't try to understand or *know* anything. Notice your *intention* to try to understand. We are letting go of all effort, trying, and striving, in this space. We are simply watching the show—watching and noticing, not jumping in to participate.

As you watch your breath this way, thoughts may arise in your mind. A flood of thoughts may come in, and emotions may wash through as well. Look at the thoughts and emotions. The thoughts are beautiful, a fabulous feature of having a mind and intellect. And they can be really busy. Notice how shiny they are. What shape they are. As we go through this meditation you may find yourself thinking all kinds of things--making a to do list for tomorrow, wondering what's for lunch, or even wondering what on earth you are doing here in this meditation, who might be looking at you, or whatever. That's fine, just look, but don't touch. Watch them, and as you do, gently bring the breath into the view again, without pushing the thoughts out. Whatever you do, don't try to get rid of thoughts. Watch the breath and thoughts together—you can watch the thoughts created by my words right now with the breath, side-by-side, noticing. Notice what you see, where this takes you—thought, breath...together. Notice the shape of each, the substance of each...

<pause>

You may notice the ephemeral nature of the thoughts, and the only reality of substance is your breath, the earth that supports you and the infinite sky above you—the thoughts are like fairies dancing among this reality—watch them dance, but in the end, they evaporate and dissolve, leaving a more essential you, your breath, the earth, the sky, pure being.

<pause>

Remember, you're not trying to accomplish, know or learn anything here, just watching. As we move forward in this meditation you fully surrender all effort to direct anything—there will be no *doing*—you will simply shift your attention to the breath, or include the in and out of your breath in your view as the various elements of your mind do their dance.

<10 sec pause>

You can imagine your mind as a beautiful and serene stream, and the thoughts and emotions that arise are simply leaves of all shapes, types and sizes floating down the stream—they come into your view for a period of time, and since you are not grabbing

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them or picking them up or touching them, just watching, they continue on in the current and slowly vanish from view.

As you watch the thoughts, you might not be able to resist grabbing on to one and savoring it, staring at it, actually thinking about it, with new thoughts, about the thoughts.

All this is good, and perfectly fine because remember, there is no goal here, right and wrong do not exist, we are simply seeing things as they really are, without our interference.

Don't be bothered if you get lost in the thoughts and grab on to many of them. Just reintroduce the breath and let nature take its course, let the river flow. Watch your breath along with the presence of the thought. The thought is there, the emotion is there, and so is the breath. Let them hang out indefinitely, and just watch what happens. Whatever happens, always come back to watching the breath, the flow to infinite outward, and infinite inward.

<20 second pause>

As your perception clears and the flood of thoughts lessens, turn your noticing to subtler levels—begin to notice your intentions, or even the very beginnings of thoughts, all while simultaneously keeping the breath in view, coming back to the breath.

What do they look like? What is their dynamic, their behavior? What are they made of?

While you notice this, take a similar look at your breath—just watch. Remember, you are not trying to learn anything, make any conclusions, any judgments, accomplish anything, or become anything. Leave all that for later. Right now you're off the hook, on vacation, watching the movie, or the river you're sitting by.

Now bring your noticing to even subtler levels. As you watch the breath and the dance of thoughts, they will begin to lose their edge and substance, and their density will lessen. As this unfolds, begin to notice the space between the thoughts, those spaces where there is absolutely no thought occurring whatsoever. As you do this you may suddenly have a thought about what no thought is, or the fact that you are noticing the absence of thought. That's fine, just notice that occurrence. But also notice, if even ever so fleetingly, those moments or spaces between the thoughts.

As the meditation proceeds, rest in the spaces between the thoughts, and surrender fully when they arise. Let yourself be in these spaces between the thoughts. All the while, come back to noticing the breath if you have strayed from that. Let the space between the thoughts become your refuge.

Now its time to have 10 minutes of silent sitting. Just relax into this process on your own and I will signal when we will come back to the group.

<10 minutes>

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Ok, when I count to three, you can slowly come back to the group and sit up and open your eyes. One..... two..... Three.

Namaste

**Followup discussion:**

In the short term, this exercise helps us free ourselves from subjective conditioning, and facilitates a more penetrating awareness of how our thoughts, opinions, emotions and intentions are generated. From this awareness comes empowerment of pure freedom to be ourselves and find ourselves. It also brings a heightened awareness of our ultimate unity with all of humanity and nature, the depth of our interdependence, heightened compassion, and from this, healthier, smarter, and more insightful decisions and behaviors for the well being of our global community.

As your practice of this concentration exercise evolves, eventually you will let go of using the breath—it is only a tool. Eventually you can find yourself sitting in extended spaces between all thought. In these spaces reality becomes pure and vision becomes perfectly clear, just as a glass of muddy water that has been allowed to settle becomes clear. These spaces bleed into how we live our daily life—they can become a default awareness that we end up in, often unwittingly. These spaces provide ultimate freedom, often referred to as enlightenment or nirvana.