

How Neurobiology Shapes Temperament

Classroom Activities

GOALS

- 1. Help students explore and understand their own temperaments and how neurobiology influences their reactions to various stimuli.
- 2. Consider and debunk common stereotypes about temperaments.

Activity #1

This icebreaker activity physically demonstrates where people fall along the introvert/extrovert spectrum. To make it more introvert-friendly, post the list you'll be reading out loud during the activity so that students have a chance to consider their answers before you begin.

Designate one side of the room as "Yes Please" and the other as "No Thanks." Tell students that you will be reading a list of activities one by one and that they will physically place themselves along the continuum according to their individual responses. Limit your list to 10–15 activities and include something from each category.

Early into the activity, students may wonder about an option for "Sometimes." This will be a good time to discuss the idea that these traits fall along a continuum. It is also a good time to clarify that you are asking about a preference and not an absolute rule. It is not that you never want to go to a party with friends, it is that your preference is to socialize one-on-one.

CLASSROOM

- → Participating in ice-breaker activities
- → Volunteering in class discussions
- → Reading work aloud in class
- → Working with partners
- → Working in groups on projects
- → Having discussions about topics online

LEADERSHIP/PUBLIC SPEAKING

- → Running for class president
- → Joining the debate team
- → Editing the school newspaper
- → Running for class vice president or secretary
- → Being in the school play

FRIENDSHIPS

- → Going to a movie with a group of friends
- → Going to a party with friends
- → Having a friend over to watch a movie
- → Going shopping with friends
- → Participating in a group chat
- → Talking on the phone

ATHLETICS

- → Joining the soccer/basketball/lacrosse team
- → Joining the cross country/swim team
- → Performing in school pep rallies/sporting events
- → Doing yoga at home
- → Going to a yoga class
- → Running or biking with a parent or friend

HOBBIES

- Writing for the school newspaper
- > Reading at home
- → Writing a blog
- Drawing, painting, or photographing on my own
- → Taking an art class
- → Listening to music alone
- → Participating in a book club
- → Playing video games with friends
- → Playing video games in online forum



Activity #2

The Student I/E Assessment should serve as a starting point for thinking about preferences for learning, working, socializing, recharging, and spending their free time. Students may struggle with the fact that there is not an option in the middle—that they have to answer yes or no. You can choose whether you want to discuss this issue before you administer the assessment, or wait for it to arise organically. If you've done the icebreaker activity above, you may have already addressed it. If not, you can discuss the fact that these questions are asking about preferences, not absolute rules.

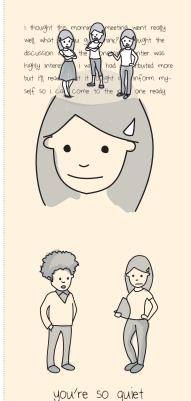
- 1. Students take the I/E Assessment.
- 2. As a follow-up, try the lemon juice test (description below) to demonstrate a physical response to a stimulus, then discuss how it is related to an introverted personality. Your RAS system controls your body's response to various stimuli, like taste and social situations. If your system is more sensitive, it will react more strongly to those situations (produce more saliva, be more overwhelmed by sounds/noise). Introverts have more sensitive systems.

The Lemon Juice Test

- a. Tie a thread in the center of a cotton swab.
- b. Put one side of the cotton swab on your tongue for 20 seconds.
- c. Place 5 drops of lemon juice on your tongue, swish and swallow.
- d. Put the clean end of the swab on your tongue for another 20 seconds.
- e. Hold the thread and see whether the post-juice end of the swab hangs lower (i.e. has more saliva).
- 3. In pairs, students discuss the following questions: Based on your results, what kinds of activities feel right for you? Were there any surprises? What are some of your strengths as an introvert or extrovert? What else do you want to know about introversion/extroversion?
- 4. What are results for the class? Do people agree with their results? You can graph these if you like, to help students visualize the distribution of temperaments.

Extension Activity

Interview someone who knew you as a baby or young child to see whether your personality has changed over time. What were you like as a baby or toddler? Could other people hold you or just family? Did you cry often? Were you an explorer or did you stick close to your family? Did you enjoy birthday parties? Could you entertain yourself? Compare their impressions of your early personality to what you've learned about your personality now.





Activity #3

After taking the I/E Assessment, you should be ready to discuss how society values the different traits of extroverts and introverts. A way to start this discussion is to examine the following definitions of introvert, extrovert, and ambivert. (These are from Merriam Webster and offer interesting discussion points as their definition of introvert has negative connotations.)

Introvert

A shy person, a quiet person who does not find it easy to talk to other people

Extrovert

A friendly person who likes being with and talking to other people; an outgoing person

Ambivert

A person having characteristics of both introvert and extrovert

Friendly

- 1. Acting like a friend, kind and helpful
- 2. Showing support and approval

Shy

Feeling nervous and uncomfortable about meeting and talking to other people

Quiet

The quality or state of being quiet or calm

Using the Think, Pair, Share technique, ask students to consider how well these definitions explain individual types and whether they seem to be positive or negative. Ask them to consider whether there are stereotypes of introverts and extroverts at school and in our culture.

Give them a few minutes to think and let them know they are welcome to write down thoughts if it is helpful. Have each student pair with another to talk. Eventually, expand the discussion by asking pairs to share their conversations with the larger group.

QUESTIONS FOR DISCUSSION

Are shy people unfriendly? Are most introverts shy and extroverts friendly? Do you think there is an Extrovert Ideal in our country? Generate words and stereotypes that are associated with introverts and extroverts. Name commonalities, such as anxiety before big events.

Activity #4

This activity is designed to help students move beyond stereotypes by inviting them to consider "Declare Yourself" types of statements from introverted leaders. In fact, our world is filled with quiet leaders!

Post some quotations about introverts and extroverts around the room. Ask students to respond to the quotes in writing on the paper. Once they have had a chance to write down their thoughts, they can share with a partner, and then with the larger group.

POSSIBLE QUOTATIONS

"I am a proud introvert. Now, introversion is NOT being shy. You can be a shy extrovert. Being introverted just means that being in environments with lots of people and high energy drains you, and your alone time is like recharging a battery. Introverts might come across as shy, but really, we're just observing the people in the conversation and thinking before we add our ideas." TAYLOR SWIFT

"Speaking is not an act of extroversion. It has nothing to do with extroversion. It's a performance, and many performers are hugely introverted."

MALCOLM GLADWELL

"I'm probably the most introverted extrovert you'll ever meet."
NIKKI COX

"Don't underestimate me because I'm quiet. I know more than I say, think more than I speak and observe more than you know."

MICHAELA CHUNG

"I was introverted, shy. But if you win a lot you need to be extroverted, or they'll think you're arrogant."

ALBERTO TOMBA

For more quotations, see:

http://www.goodreads.com/quotes/tag/introverts