THE BRAIN ARCHITECTURE GAME

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LINKING EXPERIENCES TO THE BRAIN

Pretest

TEA4.A.5c: analyze the impact of heredity and environment on the developing child

60.7% Average % Correct

Posttest

TEA4.A.5c: analyze the impact of heredity and environment on the developing child

63.3% Average % Correct
THE GAME HELPS STUDENTS APPRECIATE THE IMPACT OF EARLY CHILDHOOD EXPERIENCES ON OUTCOMES ACROSS THE LIFESPAN.
EXPERIENCES ON EARLY BRAIN DEVELOPMENT

- what promotes it, what derails it, with what consequences for society

Toxic Stress
WHO DEVELOPED THE GAME

The science behind the game

The genesis of the The Brain Architecture Game emerges from the unique partnership between developmental scientists of the National Scientific Council on the Developing Child and communication scientists at the FrameWorks Institute. Over the course of a decade-plus collaboration, supported and hosted by the Center on the Developing Child at Harvard University, these organizations have worked together to translate the science of early brain development for the public and policymakers. Through an active schedule of outreach efforts and a suite of science translation products like Working Papers and explanatory videos, metaphors such as Brain Architecture and Toxic Stress have influenced the way people talk about early childhood policy across America and around the world.
Optimizing the Circuitry...

Stress hormones affect brain development.

Cumulative stress alters gene expression.

Brains & skills are built over time.

Healthy brain development.

The brain game!

Toxic stress can derail healthy development.

Healthy brain development.

Stress affects brain development.

Language, hearing, vision.

The game of early life development.

Adverse early life experiences change the way you see the world.

BRAIN ARCHITECTURE in ACTION

Judy Cameron

27 October - 1 November 2013 | Edmonton, Alberta

Symposium 2013 | ACCELERATING INNOVATION: Telling the Brain Story to Inspire Action

Alberta Family Wellness Institute
WHY PLAY THE GAME

The brain architecture game can be played in small or large groups in about 75-90 minutes.

If you’re wondering whether The Brain Architecture Game would be appropriate for your outreach or education event, here are some things to consider.

- **Introduces core concepts from developmental science.**
  
  Players will leave with an understanding that the architecture of the brain is built starting in the earliest years of life, and that experiences shape the structure for better or worse.

- **Easy to understand and simple to play – but hard to forget.**
  
  By engaging players in a carefully designed, hands-on group experience, the game helps people see and feel the implications of the science of early brain development.

- **Establishes a strong, shared frame for productive conversations on a range of early childhood issues, policies, and programs.**
  
  A facilitated discussion concludes the game. The shared concepts and vocabulary help people focus on shared, civic responsibility for creating the environments in which young children develop.

- **Works for small or large events.**
  
  The game can work with groups as small as 4 players, and has been played effectively in conference-style settings with groups as large as 300. People should be seated at tables of 4-6 players. You’ll need one game set per table.
How does it work?

Your goal is to build a brain that is as tall as possible, which represents functionality, and as sturdy as possible, which represents the ability to withstand stresses.

Groups of four to six players work together, drawing Life Experience cards to gain materials for brain building.

Positive experiences earn a pipe cleaner and a straw for support.

Negative experiences? Pipe cleaner, but no straw.

After the initial period of early childhood brain development, weights must be hung from the structure of the brain when life hands out stressors. Will the foundation withstand these weights, or will it collapse?

Afterward, groups use the notes in their Life Journals to discuss the experiences that strengthened, or weakened, the architecture of their developing brains.
This guide includes instructions for everything you will need to put together a complete version of the game for a group of 4-6 people. Start with the materials checklist and be sure to review the detailed materials overview and directions below the checklist.

Materials Checklist

- **1 deck of Life Experience Cards**  
  Buy • Download | 56 cards per deck
  - Explain there are eight years and cards need to be kept separate.

- **Life Experience Card Dividers**  
  Download from Required Materials

- **30 pipe cleaners**  
  12 inches long, 6mm thick, multicolor ok

- **25 drinking straws**  
  7.5-8.5 inches long, bendable side ok, multicolor ok

- **10 weights**  
  9 to 11 grams each

- **10 ornament hooks OR big paper clips**  
  (used to hang weights)

- **1 six-sided die**  
  16mm suggested size or larger

- **1 Life Journal**  
  Provide clipboards if the students are on the floor.

- **1 pen or pencil**  
  For writing in the Life Journal

- **1 Game Rule Book**  
  Try to print in color
  Download from Required Materials

- **1 plastic bag OR drawstring bag**  
  To store the weights and die

- **Something to hold all the materials**  
  For transport and setup

Plan for including time for:

- **Introductory Video(s)**  
  Download for free!  
  See Media Resources

- **Questions for post-play discussion**  
  Review Dr. Cameron’s Expert Moderator Advice  
  Found on website

- **Evaluation**  
  Email us for access to our surveys
What is your genetic starting point?

1  2  3  4  5  6
The Brain Architecture Game: Do-it-Yourself (DIY) Version

Buy The Brain Architecture Game for $99.

With this purchase, you will receive professionally designed, full-color PDF files for the Life Experience Cards that can be used to print either at home or with a commercial printer, allowing you to play the game with as many players as needed.

You’ll need to assemble other materials to complete your game kit. Visit the Do-it-Yourself (DIY) Guide for more details.

$99.00 – Add to Cart

Available Discounts
30% for Canadian Users: use coupon PALIX at checkout
15% for beta version subscribers: use coupon that was emailed to you

Payment Options
Paypal, credit/debit card, or online banking (US only).
We accept US and international payments.

If you do not have a Paypal account, choose the second option below the Paypal login screen at checkout. It is labeled “Pay with an online bank account, debit or credit card, or PayPal Credit”.

If you have questions about payment, email us.
Materials Overview with Directions Below (top or click to expand 'i' for more)

Chromebook: The Chromebook, Classroom, supports the Brain Architecture Game. Get a set of cards (one per student). There are 7 categories:
- 1: Whole Brain
- 2: Brain Cells
- 3: Brain Structure
- 4: Brain Function
- 5: Brain Health
- 6: Brain Disease
- 7: Brain Injury

How do I play this game?

To play, students will need a Chromebook, Classroom, and a Brain Architecture Game. Each student will need a set of cards, which can be downloaded from the Brain Architecture Game website.

Where do I download?

Download the Brain Architecture Game cards from the Brain Architecture Game website. Each category contains 5 cards, totaling 35 cards. The cards are available in PDF format for printing.

Download Brain Architecture Game Cards

For each page in the game, students will need the following:
- A set of cards
- A Chromebook or Classroom

Clearing Directions:

If you need help in clearing directions, please contact your teacher or refer to the directions provided in the Brain Architecture Game game guide.

Instructions:

1. Download the Brain Architecture Game cards from the Brain Architecture Game website.
2. Print the cards using a printer.
3. Distribute the cards to each student.
4. Distribute the Brain Architecture Game to each student.
5. Follow the directions provided in the Brain Architecture Game game guide.

For more information, visit https://dev.thebrainarchitecturegame.com/
SUPPLIES

Plastic straws- Walmart # 0001117900200  100 ct $2.38

Pipe Cleaners- School Specialty- Walmart online #1271011 Set of 1200  ~$12.50