



PBL Creation Challenge, PBL Lounge

Contact email: admin@pblounge.org

Grade: Various

Postcard

Overview This project is focused on the human mind, how it works, the types of intelligence humans have, and why some incredibly gifted and talented people have "islands of genius" in a narrow area such as music, art, calendar calculations or mathematics. While some of these people—such as prodigies—are without mental or physical impairments, others are either born with a mental impairment, such as Savant Syndrome, or incur the impairment as a result of a brain injury. After studying about the human brain its anatomy, how it works, the types of intelligence and motor skills that each portion of the brain controls, students can choose deeper inquiries into various areas involving anatomy, psychology, music, math and more.

Driving Question What is the science underlying islands of genius and how do those affected cope with their "uniqueness"? How does this compare to others with physical and mental impairments?

For this PBL, additional areas of inquiry may include:

- 1) What is the difference in learning between prodigies and those with impairment such as Savant Syndrome?
- 2) How do these individuals "know" things that they have never learned?
- 3) What is the genesis and current status of research with respect to "ancestral" or "genetic" memory — the concept of the mind having factory-installed software?
- 4) What is the status of research into the belief that all humans are born with factory-installed software but the way in which it is accessed (absent a brain injury or defect) is unknown?
- 5) How does society treat these special people? Are they welcomed or seen as odd?
- 6) What emotional challenges do these special individuals have? Do they experience extreme loneliness or rejection? Do they have normal relationships? Are their emotions different than ours?
- 7) How can students help these special people feel more adjusted, wanted, admired?
- 8) How does this learning apply to students we know that are not prodigies or Savants but simply different or impaired in other ways?

PBL Unpacked (on page 2)

As identified using "Unpack My PBL" within www.pblounge.org

For **additional resources** provided with this PBL, follow links beneath the **Islands of Genius** thumbnail on the [PBL Creation Challenge](#) page within the [PBL Lounge](#).



PBL Unpacked

As identified using "Unpack My PBL" within www.pbllounge.org

WANTS

NEEDS

Public Project

- Performing:* Musical Performance
Demonstration Performance
Speech/Spoken Word Performance
- Interacting:* Event
Show/Program
Film/Documentary
- Producing:* Portfolio/Presentation Board
Other Student-created Content
- Revising/Iterating:* Execute Multiple Drafts
Create Storyboard
- Presenting:* Participate in a Rehearsal
Utilize Visuals
Leverage Media Technologies

Media Produced

- Digital Media:* Video Media
Audio Media
- Computer-based:* Multimedia-software Generated
- Print or Other Media:* Other Student-produced Media
Journal/Diary
- Technical Writing:* Script for Film, Documentary, Play
Article/Script/Essay (Non-fiction)
Autobiography/Biography
Interview Questions

Real World Exploration

- The Physical World:* The Human Body
- Humans in the World:* Family, Friends & Relationships
Student Related Issues
- Of the Mind:* Implications of Decisions

Authentic Industries & People

- Career & Technical:* Arts & Entertainment
Education
Health Services
Human Services

Questions & Themes

- Challenging Problem:* Self Awareness
Reveal the World
Build a Better World
Express the Intangible Visually
Compassion for Others
Assist Others
- Themes:* Community Outreach
Humanitarian
Research-based Work
Field-based Work

Project Parameters

- Project Timeframe:* More than 8 Weeks
- # of Project Members:* Individual
Small Group
- Grade Level:* Middle School
High School

Authentic Connections:

- Peers
- Parents
- Community Members
- Industry Representatives

Success Skills

- Creativity:* Brainstorm
Change
Elaborate/Expand
Envision
- Communication:* Engage Creatively
Role-play
- Collaboration:* Technical Presentation
Terms, Concepts or Calculations
Develop Trust
Encourage Others
Influence through Leadership not Authority
Maximize Strengths of Team Members
Work Fluidly to Meet Deadlines
- Critical Thinking:* Analyze
Clarify Meaning
Critique Reasoning of Others
Quantify
Manage People or Deadlines
Persuade
Model with Math
Rational, Objective Decision-making
- Instilled Citizenship Values:* Habits of Mind & Heart
Express Empathy/Compassion
Personal Responsibility
Interact Respectfully In-person/Online
Social Responsibility

Areas of Knowledge & Understanding

- Arts:* Film Studies; Music Studies
- Communication:* Non-verbal; Translation; Technical Writing
- History:* Local; World
- Literary Studies:* Creative Writing
- Mathematics:* Basic Math
- Sciences:* Anatomy
- Social Sciences:* Psychology



LOUNGE