

BioLit	Shakespeare, Evolved	17 days	April 26
--------	----------------------	---------	----------

<b>Standards Academic Rigor</b>	<p><u>Standards/Topics the project will cover:</u></p> <p><b>Biology:</b></p> <ul style="list-style-type: none"> <li>● The Nervous System <ul style="list-style-type: none"> <li>○ HS-LS1-2. Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. (Such as movement due to neuron stimulation, nutrient and water uptake, etc...)</li> </ul> </li> <li>● Evolution of Emotion <ul style="list-style-type: none"> <li>○ HSLS41. Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence.</li> <li>○ HS-LS4-2. Construct an explanation based on evidence that the process of evolution primarily results from four factors: 1. the potential for a species to increase in number, 2. heritable genetic variation of individuals in a species due to mutation and sexual reproduction, 3. competition for limited resources, and 4. proliferation of organisms that are better able to survive and reproduce. (Note: Does not include genetic drift, migration, nor co-evolution)</li> <li>○ HS-LS4-3. Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait. (Note: Does not include allele frequency calculations)</li> <li>○ HS-LS4-4. Construct an explanation based on evidence for how natural selection leads to adaptation of populations.</li> <li>○ HS-LS4-5. Evaluate the evidence supporting claims that changes in environmental conditions may result in: 1. increases in number of individuals of some species; 2. emergence of new species over time; 3. extinction of other species</li> <li>○ GROUP BEHAVIOR: Animals, including humans, having a strong drive for social affiliation with members of their own species and will suffer, behaviorally as well as physiologically, if reared in isolation, even if all of their physical needs are met. Some forms of affiliation arise from the bonds between offspring and parents. Other groups form among peers. Group behavior has evolved because membership can increase the chances of survival for individuals and their genetic relatives.</li> </ul> </li> </ul> <p><b>English:</b></p> <ul style="list-style-type: none"> <li>● Shakespeare’s The Taming of the Shrew <ul style="list-style-type: none"> <li>○ 9-10.W.9. Draw evidence from literary or informational texts to support analysis, reflection, and research</li> <li>○ RI09-10.03. Analyze how the author unfolds an analysis or series of ideas or events, including the order in which the points are made, how they are introduced and developed, and the connections that are drawn between them.</li> </ul> </li> </ul> <p><u>The Literacy Task will be a real-world piece of writing that looks like:</u></p> <ul style="list-style-type: none"> <li>● Compare and contrast the characters in 10 Things I Hate About You and Taming of the Shrew</li> <li>● Character analysis using evolutionary psychology to explain a character’s behavior?</li> </ul> <p><u>One specific <a href="#">Literacy Scaffolding</a> piece to help the students:</u></p> <ul style="list-style-type: none"> <li>● Graphic organizer to complete while viewing 10 Things I Hate About You</li> <li>● Character analysis outline?</li> </ul> <p><u>The Numeracy Task will be a real-world, math-related task that includes:</u></p> <ul style="list-style-type: none"> <li>● Hardy-Weinberg Equilibrium</li> </ul>
-------------------------------------	--

<p style="text-align: center;"><b>Roll Out Authenticity</b></p>	<p><u>Entry Event:</u></p> <ul style="list-style-type: none"> <li>● Groups present quick skits about someone unable to understand and control their emotions</li> </ul> <p><u>Entry Document:</u></p> <ul style="list-style-type: none"> <li>● Sonnet</li> <li>● Groups are assigned an emotion to analyze based on a survey about emotions they took earlier: <ul style="list-style-type: none"> <li>a. Anger</li> <li>b. Anxiety</li> <li>c. Embarrassment</li> <li>d. Envy</li> <li>e. Grief (Heartbrokenness)</li> <li>f. Contempt/Disgust</li> <li>g. Pride</li> <li>h. Love</li> </ul> </li> </ul> <p><u>Driving Question:</u></p> <ul style="list-style-type: none"> <li>● How do we apply concepts of evolutionary psychology from the Taming of the Shrew to our daily lives?</li> </ul> <p><u>Group Dynamics:</u></p> <ul style="list-style-type: none"> <li>● Groups will be chosen based on the emotion they struggle the most</li> <li>● Students will work in groups of four. They will choose a partner and we will match partner pairs. In addition, they will also be assigned to a “partner group” to assist each other with filming of the modernized scene.</li> <li>● Group roles include: ??</li> <li>● Group contracts will be developed by students (no copying templates!!)</li> </ul>
<p style="text-align: center;"><b>Benchmarks Applied Learning</b></p>	<p><u>Checkpoints/project pieces students will complete, include target due dates:</u></p> <ol style="list-style-type: none"> <li>1. Understand the basic anatomy and physiology of the brain</li> <li>2. Read &amp; comprehend the Taming of the Shrew (ToTSh)</li> <li>3. Apply neurotransmitters to scenes as we read the play (Use neurotransmitter graphic organizer)</li> <li>4. Choose a ToTSh scene to analyze and recreate based on the emotion that is chosen/assigned</li> <li>5. Analyze a character’s behavior using evidence from evolutionary psychology</li> <li>6. Create a modernized version of the scene for the final product</li> </ol>
<p style="text-align: center;"><b>Scaffolding/ Workshops Active Exploration</b></p>	<p><u>Some activities that the project will include to develop content knowledge are:</u></p> <p><input checked="" type="checkbox"/> Guided Questions for Research - <i>Provided for research on the group’s chosen emotion</i></p> <p><input type="checkbox"/> On-Site Data Collection (<i>Field Trip</i>)</p> <p><input type="checkbox"/> Art Interpretation</p> <p><input type="checkbox"/> Online Data Collection</p> <p><input type="checkbox"/> Experimental Data</p> <p><input checked="" type="checkbox"/> Online Resources in Project Briefcase - <i>Provided for additional assistance with ToTSh and neurotransmitter research</i></p> <p><input checked="" type="checkbox"/> Student to Student Jigsaw - <i>Student experts will educate their peers on evolution of emotion</i></p> <p><input type="checkbox"/> Expert Interviews</p> <p><input checked="" type="checkbox"/> Expert Presentations - <i>Matzner will visit the class for a workshop on human evolution</i></p>

	<p><input checked="" type="checkbox"/> Laboratory Data Collection &amp; Analysis - <i>Students will conduct labs to explore the function of nerves.</i></p> <p><input type="checkbox"/> Primary Sources/Books</p> <p><input type="checkbox"/> Evaluation of Variety Sources/Viewpoints</p> <p><input checked="" type="checkbox"/> Role Play Simulation - <i>Modernizing a scene from Shakespeare</i></p> <p><input checked="" type="checkbox"/> Direct Instruction Workshop - <i>Particularly for brain and nerve anatomy, as well as for script writing</i></p> <p><input type="checkbox"/> Other/Explanation: _____</p>
<p><b>Community Partner Adult Connections</b></p>	<p><u>Name, profession, contact info, and how expert will be used in the scope of the project:</u></p> <ul style="list-style-type: none"> <li>● Dr. Steven Matzner, Biology professor, Augustana University: matzner@augie.edu</li> <li>● Dr. Loretta Bruening, Author, <i>Meet Your Happy Chemicals</i>: loretta@innermammalinstitute.org</li> </ul> <p><u>Community partner will be used for:</u></p> <p><input type="checkbox"/> Roll Out</p> <p><input checked="" type="checkbox"/> Feedback - <i>In-class workshop and Skype interview, respectively</i></p> <p><input type="checkbox"/> Evaluation</p> <p><input type="checkbox"/> Excursion</p> <p><input type="checkbox"/> Will Use Product</p>
<p><b>Presentations Assessment</b></p>	<p><u>The product will include:</u></p> <p>Presentation:</p> <ul style="list-style-type: none"> <li>● Perform/film modernized scene from <i>Taming of the Shrew</i> that depicts a social situation likely to occur at New Tech <b>with your assigned emotion emphasized</b>. Product may include (but are not limited to) these student-suggested products: <ul style="list-style-type: none"> <li>○ Reality TV show</li> <li>○ Animation</li> <li>○ Music video</li> <li>○ Play or movie</li> <li>○ Choose your own adventure novel</li> <li>○ Graphic novel</li> </ul> </li> <li>● Extra credit: Have characters use Conversations 101 skills ideally in their social situation</li> </ul> <p><u>Each student needs to show Mastery of:</u></p> <ul style="list-style-type: none"> <li>● Taming of the Shrew</li> <li>● Basic anatomy and physiology of the brain</li> <li>● Evolution of human emotion via natural selection</li> </ul> <p><u>Presentation type:</u></p> <p><input type="checkbox"/> Gallery Walk</p> <p><input checked="" type="checkbox"/> Board Room</p> <p><input type="checkbox"/> Online</p> <p><input checked="" type="checkbox"/> Video - This could be an option for groups.</p> <p><input type="checkbox"/> Print</p> <p><input type="checkbox"/> Small Group</p>

On-Site

Other:

We were so cute :)

## Task List

- Mel's Tasks:
  - Week 1 -
    - Entry document - sonnet
    - Sample final product - Illustrator and 10 Things
    - Final product rubric
    - Group contract
    - Introductory emotions guided research questions
    - Thinking Caps and brain anatomy
    - Nerve anatomy labs
  - Week 2
    - Literacy Task: How the Mind Works analysis
  - Week 3
    - Preparation for community partners
    - Evolution of emotion of emotion activities
    - More detailed guided research questions assigned/chosen emotion
  - Week 4
    - Neurotransmitters Charades
    - Illustrator workshop
    - Progress checks
    - Scaffolding for presentation outline
- Create assessments as we go thru the project
  - Brain anatomy and physiology
  - Brain evolution
  - Taming of the Shrew
  - Scriptwriting
- Jay's Tasks
  - Entry event - skit prompts=anger, anxiety, embarrassment, envy (see emotions above)
  - Final product rubric
  - Make groups based on the Emotions survey
  - Pin the tail on Shakespeare
  - Scaffolding for checks for understanding
  - Character graphic organizer
  - 10 Things I Hate About You (compare and contrast assignment + graphic organizer)
  - Learn Movie Maker to teach film editing
  - Extra credit for this project
  - Project reflection (end of project)
- Grade Breakdown