

Using an Understanding of the Teenage Brain to Guide Instruction

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This curriculum unit is recommended for: OCS American History II

Keywords: Teenage, brain, whole-brain, memory

Teaching Standards: See Appendix 1 for teaching standards addressed in this unit.

Synopsis: A primary objective of history teachers is to have the students make a connection to the material, no matter how far in the past the event took place. When a connection is made, students are more likely to understand the significance of the topic and are more likely to remember it; not only for exams but long after they have had your class. The goal of this unit is to use an understanding of whole-brain instruction and the teenage brain to guide instruction to create a deeper connection to the material as well as increasing recall of the topic after it is initially taught.

I plan to teach this unit at the end of the current semester to the 7 students in my American History II OCS class.

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Using an Understanding of the Teenage Brain to Guide Instruction Victoria Natland

Introduction

I have been teaching for approximately 20 years so it's been quite some time since I took my teacher preparation courses in college. I have only the vaguest of memories of being taught anything about the human brain. I knew there was a left brain and a right brain but I could never recall which side was associated with creativity and which with logic. I remembered the medulla oblongata because I think it's a fun word to say and also recalled the cerebellum was associated with balance because I had a professor tell me that the two I's looked like a balance beam and that's how you could remember it. That's it, that's what I remember about the brain.

Even more surprising to me is that I don't ever remember being taught about how the teenage brain is different from an adult brain. Sure, I remember stuff about the socio-developmental stages but nothing about the brain. Anybody who has ever lived with or taught a teenager, knows that they are a unique breed and the word that comes to most people's mind is hormonal. I wanted to go deeper than just having an understanding that teenagers are moody and emotional. Specifically, I wanted to know exactly what was going on in those brains and then see if there was a way that I could adjust my instruction so that my teaching was more effective and meaningful to my students.

That being said, I have no desire to add "budding neuroscientist" to my many roles as a teacher. Instead, I wanted to gain a basic understanding of what changes the teenage brain is undergoing and use that to guide my instruction. Beyond that, I wanted to consider my students' mental health, especially after all of the school and life changes that resulted from the Covid-19 worldwide pandemic. The last year and a half has been really hard and I don't think it's bold to say that all of society has had their mental health affected because of it. I can't do anything about worldwide pandemics, increased fears of financial stability, worries about family health, or the effects of prolonged isolation. What I can do is use an increased knowledge of the teenage brain and whole-brain instruction to create a classroom environment that is safe, nurturing, and contributes to positive mental health as much as I possibly can.

Demographics

Garinger High School is home of the Wildcats and is located in East Charlotte. According to CMS Navigator information from this year, the student population is currently 1,650 students. The population is predominantly African-American and Hispanic although there has recently been a shift to having a higher percentage of Hispanic students. Specifically, the CMS Navigator Portal information provides the following breakdown: 38.5% African-American, 3.6% White, 52.1% Hispanic, 4% Asian, .2% American Indian, and 1.6% 2 or more. All of the students qualify for free lunch and Garinger has a much higher than average percentage of students that are English Language Learners (ELL). 32% of the students are classified as ELL with a wide variety of different languages spoken at the school; many of those students have only recently entered the United States and some have been in refugee camps before coming to Charlotte. 12.5% of the students at Garinger are classified and being a student with a disability (SWD) and

.8% of the students are AIG. The cohort graduation rate at Garinger is lower than the district state, it has been in the mid to low 60th percentile the last few years and was 63.9% for the 2020-21 school year. The most recent School Performance Grade (SPG) and EVAAS Growth Summary data is from the 2018-2019 school year and Garinger earned a SPG grade of a C and "Exceeded" for the EVAAS Growth Summary Data. EOC composite data indicates that only 28.5% of Garinger students were proficient on their EOC exams but the EVAAS data shows that our students are making tremendous growth during their years at Garinger.

OCS (Occupational Course of Study) students are students with disabilities who need a modified curriculum but are still able to graduate with a high school diploma. The majority of students have both reading comprehension and writing disabilities and are well below grade level in both areas. They often struggle with retention, staying on task for long periods of time, and higher level thinking. All students receive accommodations with the majority receiving read-alouds, having extended time, and being tested in groups of no more than 15. Due to retention difficulty, it is imperative to deliver instruction on key concepts multiple times throughout the Unit. Also, students struggle to maintain focus for long periods of times so it is best to have multiple activities for each class period.

Unit Goals

American History II starts in the late 1800's with the urbanization and industrialization of the Progressive Era and concludes with a unit entitled "The Information Age: The 1980's and Beyond". There is so much information presented in this course and it's extremely difficult to remember it all, especially if you are an OCS student who has trouble retaining information. The primary goal of this review unit will be to present information to both the left and right side of the brain so that the students retain the information better. The specific topics that will be reviewed are: Child Labor/Urbanization during the Progressive Era, Japanese Internment Camps during World War II, the Great Depression, and the Civil Rights Movement. These topics were chosen not only because they are major topics of study for the course but also because they all have a plethora of powerful images associated with them, which lends itself to the students making a strong personal connection to the material.

The essential standards that will be covered in this unit are: AH2.H.2 Analyze key political, economic and social turning points in American History using historical thinking.; AH2.H.4 Analyze how conflict and compromise have shaped politics, economics and culture in the United States; AH2.H.7 Understand the impact of war on American politics, economics, society and culture.; and AH2.H.8 Analyze the relationship between progress, crisis and the "American Dream" within the United States. The clarifying objectives of the standards are: AH2.H.2.2 Evaluate key turning points since the end of Reconstruction in terms of their lasting impact (e.g., conflicts, legislation, elections, innovations, leadership, movements, Supreme Court decisions, etc.); AH2.H.4.1 Analyze the political issues and conflicts that impacted the United States since Reconstruction and the compromises that resulted (e.g., Populism, Progressivism, working conditions and labor unrest, New Deal, Wilmington Race Riots, Eugenics, Civil Rights Movement, Anti-War protests, Watergate, etc.); AH2.H.7.3 Explain the impact of wars on American society and culture since Reconstruction (e.g., relocation of Japanese Americans, American propaganda, first and second Red Scare movement, McCarthyism, baby boom, Civil Rights Movement, protest movements, ethnic, patriotism, etc.); and AH2.H.8.4 Analyze multiple

perceptions of the "American Dream" in times of prosperity and crisis since Reconstruction (e.g., Great Depression, Dust Bowl, New Deal, oil crisis, savings and loan crisis, dot.com bubble, mortgage foreclosure crisis, etc.).

In short, the curriculum for American History II is expansive and educators struggle to help our students retain the key information. The primary goal of this review unit will be to use knowledge of whole-brain instruction on the teenage brain to increase retention. Specifically, this will be achieved by stressing a personal connection to the material and by incorporating more movement into the classroom.

Content Research

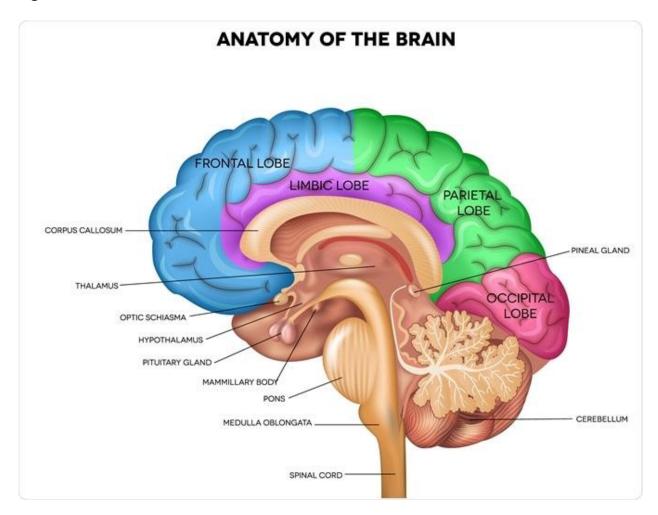
Basic Brain Anatomy

Before understanding precisely what is unique about the teenage brain, it is important to have a general understanding of the human brain itself. The three main sections of the brain are the cerebrum, cerebellum, and brain stem. The cerebrum, the largest part of the brain, is located at the front of the brain and in addition to coordinating movement and regulating temperature, it is the part of the brain that enables speech, judgment, thinking and reasoning, problem-solving, emotions and learning. Additionally, other functions such as vision, hearing, touch, and other senses are located in the cerebrum. If you are familiar with the Disney Pixar movie Inside Out, the cerebrum is the section of the brain that we see glimpses of inside the young protagonist's brain.

The brainstem is the bridge that connects the cerebrum with the spinal cord and it consists of the midbrain, pons, and medulla. This section of the brain does not have a big impact on learning but it is critical for survival. This is because the midbrain facilitates functions from hearing and movement to figuring out responses and environmental changes, the pons controls such functions as tear production, chewing, blinking, focusing vision, balance, hearing, and facial expression, and the medulla is responsible for controlling heart rhythm, breathing, blood flow, oxygen and carbon dioxide levels, as well producing reflexive activities like sneezing, vomiting, coughing, and swallowing.²

Located in the back of the brain and approximately the size of a fist, is the cerebellum. Scientists know that the main function of this area of the brain is to coordinate voluntary muscle movements and to maintain balance, posture, and equilibrium. However, there might be more to the cerebellum as "New studies are exploring the cerebellum's roles in thought, emotions, and social behavior, as well as its possible involvement in addiction, autism and schizophrenia." Refer to Figure 1⁴ for a labeled picture of the brain.

Figure 1



The Teenage Brain

In her book, The Primal Teen: What the New Discoveries About the Teenage Brain Tell Us About Our Kids, Barbara Strauch explains that for a long time, it was believed that there wasn't much change going on in the teenage brain and that primary cause behind quintessential teenage behavior was hormones.⁵ John Medina cites teenagers trying to replicate the stunts on the MTV show *Jackass* as a prime example of this stereotypical teenage behavior. As he states, "... teenagers can do really stupid stuff. They make poor, impulsive decisions. They don't understand the consequences of their behaviors." ⁶ As adults, we can reflect on our own adolescence and think to ourselves, "what the heck was I thinking?" Personally, I grew up in a place full of winding hilly roads. I would drive much too fast and would often attempt to "get air" as I accelerated over the crest of a hill. Thoughts of oncoming traffic, destroying my suspension, or hitting the ever-present wildlife were far from my thoughts. Why would I do that? Strauch explains that changes in teenage brain anatomy could be the cause of poor teenage decisions. She describes that during the teenage years, the brain undergoes some massive remodeling. In fact, "The gray matter of an adolescent's frontal lobes grows denser and then abruptly scales back, molding a leaner thinking machine.' This means that not only is the teenage brain undergoing

physiological changes, it's not doing so in a linear or predictable manner. This is what causes teachers and parents to throw their hands up in frustration, as teenagers can seem to morph into completely different individuals overnight. Additionally, "The teenage brain fine-tunes its most human part, the prefrontal cortex, the place that helps us cast a wary eye, link cause to effect, decide 'maybe not'-the part, in fact that acts grown-up." Medina goes into detail about the trinity of response inhibition, cognitive flexibility, and working memory of the brain's executive function. Response inhibition is one's self-control and emotional self-regulation; cognitive flexibility is one's ability to see multiple perspectives, and working memory (formerly known as short-term memory) and is where there are a variety of cognitive buffers that temporarily store information. Siegel and Payne refer to the areas of the brain that control executive function as the upstairs brain and state that it is not fully mature until a person is in their mid twenties and that it undergoes a massive remodel during the teenage years.

Executive function and the remodeling of the prefrontal cortex are both areas that are under construction during the teenage years; it's imperative that educators remember this when working with teenagers. If educators are asking students to complete tasks that they simply are not capable of completing, it will only cause frustration for all parties involved. Teachers will become frustrated that the work is being done poorly or not at all, students will become frustrated that they are not being shown empathy or that their teacher requests are simply too much, and parents will become frustrated at the teacher for the unfair assignment and the student for not getting the assignment done. There have been numerous times during Learning Lab, a class designed for students with IEPs to work on their individual IEP goals, that I would help students complete missing assignments from other class. Often, the student was simply overwhelmed by the assignment and simply did not know where to start. Once the assignment was broken down to simply components with a clear starting point, the student was able to complete the work.

Left Brain vs. Right Brain

In addition to knowing which each part of the brain is responsible for and having a basic understanding of the teenage brain, it's crucial to have an understanding of the primary functions of the different hemispheres of the brain. This will help teachers adapt their teaching to individual learning styles as well as working towards horizontal integration, a key component of whole-brain instruction. 10 Anyone who has ever seen a Jell-O mold of a brain at a Halloween party, knows that there is a clear left and right side of the brain. To put it more scientifically, the brain has nearly symmetrical left and right hemispheres and "Hemispheric lateralization is the idea that both hemispheres are functionally different and that certain mental processes and behaviors are mainly controlled by one hemisphere rather than the other."¹¹ According to Siegel and Payne Bryson, the left brain loves and desires order; it is logical, literal, linguistic, and linear. In contrast, the right brain is holistic, intuitive, nonverbal, experiential and emotional ¹² Gamma summarizes the differences as the left hemisphere is responsible for language, logic, critical thinking, numbers, and reasoning while the right hemisphere is in charge of creativity, emotional intelligence, recognizing faces, using imagination, and being intuitive. ¹³ In other words, left brain people are going to lean towards the hard sciences while right brain people are going to prefer the arts. For teaching purposes, it's important to acknowledge that our students

are going to have predispositions towards a particular hemisphere and we can't completely cater our instruction to one side over the other; integration is key.

Integration

Although most people lean towards more to one hemisphere of the brain, nobody is completely one-sided. Even Spock and Sheldon Cooper from the Big Bang Theory have to rely on both sides of their brain. In addition to the different hemispheres of the brain, people also have what is referred to as a "reptile brain' which allows for split second survival decisions and a "mammal brain" that allows us to make connections and build relationships. Siegel and Payne state that it's almost like our brains have multiple personalities, that integration is "linking different elements together to make a well-functioning whole", and that integration "coordinates and balances the separate regions of the brain that it links together." ¹⁴ Specifically, the authors talk about to types of integration; vertical and horizontal.

Horizontal integration is when both hemispheres are being used in tandem, both logic and emotions are being valued. They key is to not get overwhelmed by the emotional flood that can be associated with the left-brain or get isolated in the emotional desert of the right-brain. ¹⁵ Kabel reiterates this point when she states, "The cooperation between the right and left brain is essential for us to learn better, function more intelligently and become proficient in anything. Whatever it is you are engaged in – reading, writing, music, art, sports – each hemisphere has something important to contribute for you to have access to both technique and inspiration." ¹⁶ As educators, our primary goal is for our students to get more proficient in their coursework, whatever the subject might be. This is why it is important for educators to not only be aware of integration but to do whatever is in our power to encourage it.

In addition to horizontal integration, a whole-brain approach involves vertical integration. The "downstairs" portion of the brain contains the brain stem and the limbic region; it is in charge of basic functions like breathing and blinking, innate reactions and impulses like fight and flight or gagging, and strong emotions like anger and fear. The "upstairs" brain is the area where more evolved mental processes like thinking, imagining, and planning take place. ¹⁷ At first, high school educators might think that dealing with the lower brain taking over might be more of an elementary school problem but this is simply not the case. While elementary school teachers do have to work on teaching lessons about sharing and not hitting, teenagers can also get overwhelmed with the strong emotions associated with the downstairs brain. This is why Payne and Siegel speak of the importance of building a staircase to connect the upstairs and downstairs portions of the brain. They summarize the importance of the vertically integrated brain:

That means that the upstairs can monitor the actions of the downstairs and help calm the strong reactions, impulses, and emotions that originate there. But vertical integration works in the other direction, too, with the downstairs brain and the body (the house's foundation) making important contributions. After all, we don't want significant upstairs decisions being made in some sort of vacuum that's devoid of input from our emotions, our instincts, and our bodies. 18

Mental Health

This past year and half, there has been much discussion about the mental health of students and our society. Most people are aware of mental health disorders such as depression and schizophrenia but providing a definition for mental health can be more difficult; it's not all that easy to define. According to MentalHealth.gov, "Mental health includes our emotional, psychological, and social well-being. It affects how we think, feel, and act. It also helps determine how we handle stress, relate to others, and make choices". Factors that contribute to mental health include biological factors such as genes and brain chemistry, life experiences and trauma or abuse, and a family history of mental health problems. Siegel uses the imagery of a "river of well-being" to illustrate mental health. He describes a person peacefully floating in the middle of the river can be flexible and adjust when situations change, is at peace, and has a good understanding of themselves and the people around them. Mental health suffers one a person either drifts to the side of chaos where there is a total lack of control or rigidity where there is too much control and a person becomes inflexible and incapable of change.

Teachers have a long list of daily responsibilities and some might bang their heads against a wall in frustration with adding one more thing to their already too full plates. However, if teachers want to be truly effective at their jobs, it is imperative that we factor in our students' mental health. Let me use myself as an example. In high school, I was an excellent student who was intrinsically motivated to always do my very best and my grades reflected that. In the fall of my sophomore year, my father had a stroke and was hospitalized for a decent amount of time before returning home to begin his long and bumpy road to recovery. My mental health was not in a good place and I know firsthand that I was not able to absorb a single word any of my teachers were saying. This is why it is important for teachers to be aware of our students' mental health, the worse the mental health is, the more likely it is that learning will suffer or note take place at all.

Furthermore, growing up in poverty can have a direct impact on mental health and the development of the brain itself. While not all areas of the brain were affected by poverty, studies showed that there were some areas that showed a marked difference for students who were growing up in poverty, especially the hippocampus. Specifically, "Differences in brain structure were particularly present in areas involved in memory, language processing, and decision-making and self-control." Stallen also states "Plenty of social science research has shown that children growing up in poverty perform worse at school, have poorer cognitive functioning, and are at higher risk for emotional problems. ²¹ There are many contributing factors that can factor into lower cognitive functioning, higher emotional problems, and performing worse in school; things like nutrition, family support, exposure to literacy at a young age to name a few. However, research is now showing that brain physiology is also impacted and educators must be mindful of this.

Public education has been experiencing a traumatic event since spring of 2019. Never had there been a prolonged shutdown and the term hybrid learning was foreign to the vast majority of the population. Everyone has involved has been stressed and the precise impact that it has had on students will most likely not be known for some time. Our students have been affected though and in turn, teachers have been affected as well. Using some of the strategies below, especially naming it to tame it, to dialogue about the pandemic experiences, may be a way to improve the mental health of both students and staff.

Implications for Teaching

Often, professional development for teachers includes a great deal of abstract discussion with no practical implications. Fortunately, numerous tangible things can be done in the classroom to support our students' mental health. In fact, Siegel and Payne offer 12 specific strategies but for the purpose of this paper, the focus will be on the strategies that focus on horizontal and vertical integration of the brain. The first strategy is "Connect and Redirect: Surfing Emotional Waves". By their nature, teachers are problem solvers and immediately try to provide a list of possible solutions or strategies when a student is facing a problem. However, the Connect and Redirect strategy emphasizes that before offering a solution, you must make a connection to the student's right brain first; this involves acknowledging feelings before the logical solutions of the left-brain can be presented.²²

Another strategy presented to achieve horizontal integration is "Name It to Tame It: Telling Stories to Calm Big Emotions". The authors state that healing from traumatic or difficult experiences can occur when stories are told because the right side of our brain processes our emotions and autobiographical memories but the left side is what makes sense of the feelings and memories.²³ Teachers aren't therapists but teaching our students to be effective writers is a big part of our job. Providing our students with opportunities to write about their experiences and pivotal life moments will provide an opportunity for integration while working on essential educational standards.

Movement is another way to promote horizontal integration: cross-lateral movements, crossing the midline, mismatched movement like patting one's head while rubbing the belly, and "Defying expectations" movement like taking a familiar movement and introducing a different variation are all ways to promote horizontal integration of the brain and these movements do not always require much space. For example, a mismatched movement that can take place while a student is at their desk is circling your right ankle clockwise and then drawing the number six with your right hand. Try this out and you will see that your foot will change direction as you draw the number six.²⁴

The strategies presented for vertical integration of the brain by Siegel and Payne are "Engage, Don't Enrage: Appealing to the Upstairs Brain" and "Use It or Lose It: Exercising the Upstairs Brain. The first strategy involves avoiding ultimatums, commanding, or demanding a certain behavior to either begin or end. Instead, we should implore the student to either convince or come up with another solution. By doing this, we are connecting the downstairs brain which is overwhelmed by emotion to the upstairs brain who is needed to come up with a plausible solution. In the book, the child is upset about having to eat half of their dinner before getting dessert as his opinion was that it was an unreasonable request. The child had to come up with a counter-offer (this ended up being ten bites) and this caused him to integrate both parts of the brain. ²⁵ This is important for young children having temper tantrums but is also very important for teenagers who often complain about not being heard. Instead of ignoring their dissent, ask them for counter-offer, and they are vertically integrating their brain and feeling like they are finally being heard. An example of this would be if a student was upset about being forced to work for a project. Instead of just telling that everybody was doing it as a group project, a teacher could ask the student for the reasons for not wanting to work as a group and then have that student propose how he or she could complete the assignment individually instead.

The other way to promote vertical integration is by encouraging young people to use their upstairs brains. As opposed to the more primitive downstairs brain, the upstairs brain is where thinking, imagining, and planning take place. This is because "a strong upstairs brain balances out the downstairs brain, and is essential for social and emotional intelligence. It's the foundation of solid mental health." ²⁶ As teachers, we have clearly defined lesson plans and units of study designed for our students, we have made most of the decisions for our students. That is why it is important to present opportunities for sound decision-making, self-understanding, empathy, and morality whenever we can because it is making our students use their upstairs brain.²⁴ That being said, it is also important to not overwhelm teenagers with too many choices or directions at one time. Since teenagers do not possess full frontal-lobe function, they are more prone to react with fear and alarm than adults are. So, if they are overwhelmed with too many choices they might shut down. This is why it's important to ask for one thing at a time and to slowly and calmly repeat directions if needed.²⁷ This can be a tough for one for teachers as we are often repeating ourselves numerous times but if the teacher responds to a request for something to be repeated with snark, a teenager will either mirror the snark or shut down and not ask for assistance in the future.

After gaining a better understanding of the teenage brain, it can be frustrating for educators to realize that many aspects of the current high school design are setting students up for faiure. In Attack of the Teenage Brain!, Medina offers many solutions on how to make high schools more appropriate for teenagers. These include: designing a school whose centerpiece is the gym, encouraging school-wide participation in a sport, create a school start time, that makes sense for adolescent brain development, implementing non optional SEL program, designating a one room for regular mindfulness practice (and painting it green) and selecting a mindfulness-focused program. ²⁸ Much of what is presented is completely out of the control of an individual educator but that does not mean that smaller components of these big ideas can't be incorporated into our classrooms. For example, Medina proposes having mandatory participation in sports because " aerobic exercise can address depression, the organized sports can address EF issues."29 Instead of playing individual and stationary review games like Kahoot or Quizzizz, teachers can design review games that cause students to get up, work together, and move. Teachers also can't designate a room, or even a space in overcrowded classrooms for mindfulness but we can add more green to our classrooms. Medina explains that research that the color green helps students focus, that the effect is higher when the green comes in the natural form such as plants and trees, and that the effect was so strong that it even helped relieve some symptoms for students with ADHD.30

As teachers, we need as many tools in our toolbox as possible to help connect with and educate our students. For high school teachers, understanding the capabilities and limitations of the teenage brain is critical for effective education. We also can't get frustrated with our students when if we are asking them for things that they simply are not capable of doing. Everything we do has the potential to adversely or advantageously affect the mental health of our students. We need to design our classrooms and instruction in ways that simultaneously promote whole-brain learning and meet the needs of the teenage brain. It can seem daunting but fortunately, our front lobes are fully developed and we know that we can start small and build from there.

The plan is for this to be a review unit that occurs during the last week of the semester. Students would have already been introduced to the material previously in the school year. Since this will be occurring at the end of the school year, students will already have a well-established routine. OCS students benefit from predictable structure and repetition so we will be using the same lesson format of the previous units. Each class will start with a warm-up question that will be a topic that we have already studied and will be a multiple-choice question that will appear on their final exam.

Day 1-

Objective- Students will be able to summarize: Child Labor/Urbanization during the Progressive Era, Japanese Internment Camps during World War II, the Great Depression, and the Civil Rights Movement.

Standards: AH2.H.2.1, AH2.H.4.3, AH2.H.4.4, AH2.H.7.3, AH2.H.8.1, AH2.H.8.4

Activity 1- Daily Warm-Up Activity. Students will given a worksheet that has a brief reading and is followed by several multiple-choice questions. The topic will be about one of the four main subjects for review that day. Students will attempt to read and answer the questions on their own and after 7-10 minutes, there will be a whole class review of the questions.

Activity 2- Students will be provided with four two-sided worksheets. The front of the worksheet will be guided notes that the students will complete through teacher lecture. The information will be about the key facts for each subject area: Who, What, Where, When, and Why. This should take approximately 15 to 20 minutes. On the reverse side of the worksheet, there will be a photograph of each of the four events. The students will have to answer the following questions for each of the photographs: List 3 things that you see in the picture, list two things that the picture makes you feel, list one thing the picture reminds you of. Students will have about 20 minutes to complete the reverse side for each picture. After students are finished, the teacher will ask for students to volunteer their answers to the questions.

Activity 3- The final activity will serve as the assessment. Students will log in to a quzziz and answer multiple choice questions about the topics reviewed that day.

Day 2-

Objective- Students will be able to research and explain images associated with Child Labor of the Progressive Era, the Great Depression, Japanese Internment Camps of WWII, and the Civil Rights Movement.

Activity 1- Daily Warm-Up Activity. Students will be given a worksheet that has a brief reading and is followed by several multiple-choice questions. The topic will be about one of the four main subjects for review that day. Students will attempt to read and answer the questions on their own and after 7-10 minutes, there will be a whole class review of the questions.

Activity 2- This activity will be building upon the four main topics that were reviewed the previous day: Child Labor of the Progressive Era, the Great Depression, Japanese Internment Camps of WWII, and the Civil Rights Movement. Students will be creating a google slide show that contains images from the 4 topics that either make the student angry or sad. Students much include two pictures for each topic and each picture must include a caption that states either "This picture makes me sad because ..." or "This picture makes me angry because". The final slide will be the students explaining which of the four topics made them either the saddest or angriest.

Assessment- Will be based on grading of the student slide shows.

Day 3

Objective- Students will complete their final review for their American History 2 final exam.

Activity 1- Daily Warm-Up Activity. Students will be given a worksheet that has a brief reading and is followed by several multiple-choice questions. The topic will be about one of the four main subjects for review that day. Students will attempt to read and answer the questions on their own and after 7-10 minutes, there will be a whole class review of the questions.

Activity 2- Students will be given a review sheet for their final exam. Students will receive direct instruction on how to answer the questions correctly. The teacher will first ask if any student knows the answer and if not, will provide the answer. This should take about 15-20 minutes.

Activity 3- Students will be divided into groups. The number of groups and how many members are in each group, will depend on the total number of students in this class. For this particular class, there are six students so there will be two teams of three. Students will be provided all the correct answers on strips of paper. The teacher will then randomly read one of the review questions, the questions will not be read in the same order of the review sheet. Each team will have one minute to make their selection. Team members will take turns coming up to the board to tape their answers up. The boards will be on opposite sides of the room so students can't cheat off of one another. After the final question has been read, the teacher will tell each team which answers are not correct. Teams will then take turns changing their answers. The first team to have all the answers correct, wins a prize.

Activity 4- Time permitting, students will play a kahoot review of the same questions.

Assessment- Based on student grades on the Final.

I'M NOT SURE I SEE THE APPLICATION OF ALL OF THE CONCEPTS DISCUSSED ABOVE. I DON'T SEE THE MOVEMENT, STORY TELLING, OR CONNECT AND REDIRECT. IS THAT INTENTIONAL?

Appendix 1

AH2.H.2.1

Analyze key political, economic, and social turning points since the end of Reconstruction in terms of causes and effects (e.g., conflicts, legislation, elections, innovations, leadership, movements, Supreme Court decisions, etc.).

AH2.H.4.3

Analyze the social and religious conflicts, movements and reforms that impacted the United States since Reconstruction in terms of participants, strategies, opposition, and results (e.g., Prohibition, Social Darwinism, Eugenics, civil rights, anti-war protest, etc.).

AH2.H.4.4

Analyze the cultural conflicts that impacted the United States since Reconstruction and the compromises that resulted (e.g., nativism, Back to Africa movement, modernism, fundamentalism, black power movement, women's movement, counterculture, Wilmington Race Riots, etc.).

AH2.H.7.3

Explain the impact of wars on American society and culture since Reconstruction (e.g., relocation of Japanese Americans, American propaganda, first and second Red Scare movement, McCarthyism, baby boom, Civil Rights Movement, protest movements, ethnic, patriotism, etc.).

AH2.H.8.1

Analyze the relationship between innovation, economic development, progress and various perceptions of the "American Dream" since Reconstruction (e.g., Gilded Age, assembly line, transcontinental railroad, highway system, credit, etc.).

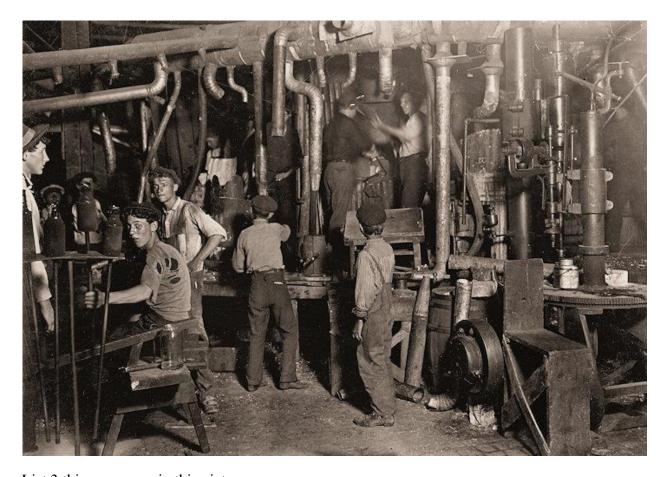
AH2.H.8.4

Analyze multiple perceptions of the "American Dream" in times of prosperity and crisis since Reconstruction (e.g., Great Depression, Dust Bowl, New Deal, oil crisis, savings and loan crisis, dot.com bubble, mortgage foreclosure crisis, etc.).

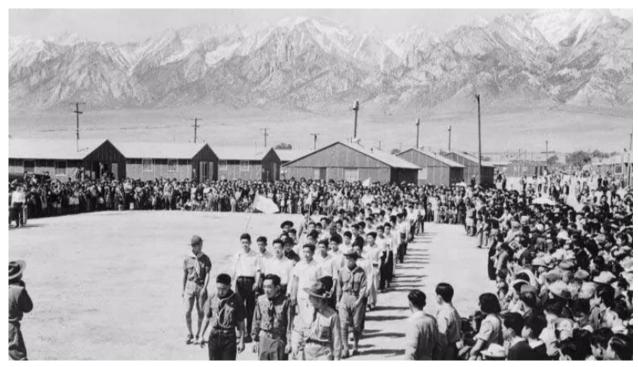
Appendix 2

Day 1 Worksheets- Front Sig	de		
What:			
When:			
Who:			
Why:			

Day 1 Worksheets- Reverse Side



List 3 things you see in this picture:
List 2 things this picture makes you feel:
List 1 thing this picture reminds you of:



List 3 things you see in this picture:	-
List 2 things this picture makes you feel:	
List 1 thing this picture reminds you of:	



List 3 things you see in this picture:
List 2 things this picture makes you feel:
List 1 thing this picture reminds you of:



List 2 things this picture makes you feel:	List 3 things you see in this picture:		
List 2 things this picture makes you feel:			
List 2 things this picture makes you feel:			
	List 2 things this picture makes you feel:		
List 1 thing this picture reminds you of:	List 1 thing this picture reminds you of: _		

Day 1- Sample Quizziz Assessment-

 $\underline{https://quizizz.com/admin/quiz/617575ccff8a44001dce571b/cti-day-assessment}$

Day 2-

Google Slideshow and Rubric

For this assignment, you will create a Google Slide show that contains 10 total slides. The slides will be pictures from the topics we studies yesterday: Child Labor of the Progressive Era, the Great Depression, Japanese Internment Camps of WWII, and the Civil Rights Movement. For each picture, you must include a caption that either states "This picture makes me sad because" Or "This Picture makes me angry because". The last slide does not have a picture and will instead be 2-3 sentences about which of the 4 topics made you the saddest or angriest. Here is a breakdown of what the slideshow should look like:

- Slide 1- Your name along with the 4 topics.
- Slide 2- Child Labor picture and caption
- Slide 3- Another child labor picture and caption
- Slide 4- Great Depression picture and caption
- Slide 5- Another Great Depression picture and caption
- Slide 6- Japanese Internment Camp picture and caption
- Slide 7- Another Japanese Internment camp picture and caption
- Slide 8- Civil Rights picture and caption
- Slide 9- Another Civil Rights picture and caption
- Slide 10-2-3 sentences about the topic that made you the angriest or saddest.

Grading- Each slide will be worth 10 points. For each slide with a picture and caption, you will receive 5 points for the picture and 5 points for the caption. Pictures should be clear and appropriate for the topic. Captions, and the summary in the last slide, must be in complete sentences and have proper grammar.

Day 3-

Review Sheet

- 1. During the 1960s and 1970s. American Indians formed this for equality.
- 2. What did Rosa Parks start when she refused to give up her seat on the bus?
- 3. Who wrote the Feminine Mystique and helped organize NOW?
- 4. Which court cased overturned the idea of "separate but equal"?
- 5. _____ this means to protest without violence.

6. This made poll taxes illegal.
7. Cesar Chavez started the and the National Farmer Worker's Association?
8. An example of was the Greensboro, NC sit-in at the Woolworth's store lunch.
9. Whose domestic policy was known as The New Frontier and helped people in rural areas.
10. Whose domestic policy was New Federalism which gave more power to the states?
11 refers to things that happened here in the U.S. and do not involve other countries.
12. Which of the following is an example of a natural resource?
13. Which of the following was the East Coast point of entry for European immigrants?
14. Which Amendment gave women the right to vote?
15. Which progressive President is known as "The Trustbuster"?
16. The idea that one country can control another through diplomacy to gain power.
17. Which of the following caused the U.S. to declare war on Spain and start Spanish-American War?
18. Compared to the Revolutionary War and Civil War, the Spanish-American War was much
19. What was the goal of Dollar Diplomacy?
20. Causes of World War I include
21. World War I started with the assassination of

22. Which countries made up the Triple Entente?
23. What was one of the main ideas of Wilson's 14 Points?
24. What was Wilson (America's) reaction at the start of WWI?
25. Which 2 events caused the United States to join WWI on the side of the Triple Entente?
26. During the 1920's there were many social and economic changes and the time period is known as
27. The day the stock market crashed is known as
28. What is appeasement?
29. Which countries made up the Axis Powers during WWII?
30. Which group of people did Hitler target in his Final Solution and put into concentration camps?
31. What was D-Day?
32. Who were the first black pilots during WWII?
33. Which international peace keeping organization was created at the end of World War II?
34. What was the name of the war between the United States and the USSR where there was no military action?
35. What type of government did the Soviet Union have that the United States wanted to stop?

36. In which country did the Bay of Pigs Invasion and a missile crisis occur?
37. What is the domino theory?
38. Which invention became a huge part of American society during the 1950's?
Correct Answers
1. American Indian Movement
2. Montgomery Bus Boycott
3. Betty Friedan
4. Brown v. The School Board of Education
5. Civil Disobedience
6. 24 th Amendment
7. Latin American Labor Movement
8. Civil Disobedience
9. President Johnson
10. President Nixon
11. Domestic Policy
12. Oil

13. Ellis Island
14. 19 th Amendment
15. Teddy Roosevelt
16. Imperialism
17.USS Maine exploded
18. Much quicker
19. To use foreign investment to promote American interests
20. All of the above
21. Archduke Ferdinand
22. Russia, France, Great Britain
23. Establishment of a League of Nations
24. To be neutral
25. Lusitania sank and the Zimmerman Telegram
26. Roaring 20's
27. Black Tuesday
28. giving in to avoid a conflict

29. Germany, Italy, Japan
30. Jews
31. 1 st day of the Battle of Normandy
32. Tuskegee Airmen
33. United Nations
34. Cold War
35. Communism
36. Cuba
37. if one county turned to communism, all the countries near it would too
38. Television
Final Review Kahoot- https://play.kahoot.it/v2/?quizId=ae23eee2-0359-482e-8f1c-99caa9b5a381

Notes

- 1. "Brain Anatomy and How the Brain Works," Johns Hopkins Medicine, accessed September 18, 2021. https://www.hopkinsmedicine.org/health/conditions-and-diseases/anatomy-of-the-brain.
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- 3. Brain Anatomy.
- 4. Tefi/Shutterstock.com in (2020, December 20) *The Anatomy of the Human Brain*. https://www.news-medical.net/health/The-Anatomy-of-the-Human-Brain.aspx. Accessed on October 24, 2021.
- 5. Strauch, Barbara. The Primal Teen: What the New Discoveries About The Teenage Brain Tell Us About Our Kid. New York: Anchor Books, 2003. 13.
- 6. Medina, John. Attack of the Teenage Brain! Alexandria: ASCD, 2018. 33.
- 7. Primal Teen. 203-204.
- 8. Primal Teen. 204.
- 9. Attack of the Teenage Brain. 19.
- 10. Payne Bryson, Tina and Siegel, Daniel J. The Whole-Brain Child: 12 Revolutionary Strategies to Nurture Your Child's Developing Mind. New York: Bantam Books Trade Paperbacks, 2011. 18-29
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- 12. Whole-Brain Child. 15-16
- 13. Left brain vs. right brain.
- 14. Whole-Brain Child. 6.
- 15. Whole-Brain. 6-13.
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https://sequencewiz.org/2014/08/13/integrating-right-and-left-brain/. Accessed on September 25, 2021.

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- 18. Whole-Brain. 41.
- 19. "What is Mental Health?" U.S. Department of Health and Human Services. https://www.mentalhealth.gov/basics/what-is-mental-health Accessed on September 25, 2021.
- 20. Whole-Brain. 11-13.
- 21. Stallen, Mirre. (2017, September 25). "Poverty and the Developing Brain". https://behavioralscientist.org/can-neuroscientists-help-us-understand-fight-effects-childhood-poverty/. Accessed on October 24, 2021.
- 22. Whole-Brain. 22-27
- 23. Whole-Brain. 27-33.
- 24. How to Integrate
- 25. Whole-Brain. 48-52.
- 26. Whole-Brain. 53
- 27. Primal Teen. 206.
- 28. Attack of the Teenage Brain. 194-197.
- 29. Attack of the Teenage Brain. 152.
- 30. Attack of the Teenage Brain. 195.

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"What is Mental Health?" U.S. Department of Health and Human Services. https://www.mentalhealth.gov/basics/what-is-mental-health Accessed on September 25, 2021

Teacher Resources:

https://www.historyplace.com/unitedstates/childlabor/hine-indiana.htm

This web site is from a reliable source and has numerous pictures of child labor during the Progressive Era. This can be shared with students to help them with their google slide show.

https://www.crisisprevention.com/Blog/Trauma-Informed-Schools

This web site provides an overview of what trauma-informed care is and provides evidence and explanations as to its importance in public education today.

https://lifeclub.org/books/the-whole-brain-child-daniel-j-siegel-tina-payne-bryson-review-summary

This review provides a summary of the key points of <u>The Whole-Brain Child</u>: 12 <u>Revolutionary Strategies to Nurture Your Child's Developing Mind</u> which is referenced frequently in the content research section of this paper. This summary is perfect for educators who would like to learn more about the topic but simply don't have time to read the entire book.

https://www.archives.gov/research/alic/reference/photography

This is another web site to share with student to help them with their google slide show. This is not limited to one topic but has a vast collection of historical photos across all topic areas.

Medina, John. Attack of the Teenage Brain! Alexandria: ASCD, 2018.

The entire book is a great resource for high school educators but time doesn't always allow for deep dives into whole books. Towards the end of the book, Medina offers a wide-array of changes that would help improve the education of high school educators. Some of the suggestions are as simple as adding more green, either by plants or colors, because it helps students focus better.