TEACHER CENTER

HTH TED536
Brain Health & Social Emotional Development

Course Meetings: April 7th - May 12, 2020
Location: Online via Zoom.com Meeting ID 525-183-989, *Password: 278688*
Synchronous: 4:45-6:15pm for whole class discussion of topics, resources, PITP and Final Product
Asynchronous: 90 min Read/Watch and respond via Flipgrid. Participate in feedback and discussion that upholds cohorts norms.
Instructor(s): Nuvia C. Ruland **E-mail:** nruland@hightechhigh.org
Office Hours: Thursday, 3-5pm or by appointment. Don't hesitate to reach out!
Zoom.com Meeting ID 942-8994-9906, *Password: 551151*

COURSE DESCRIPTION
TED 536 is designed to provide participants with a foundational understanding of neuroscience so that they may develop a deeper understanding of child to adolescent brain and social-emotional development. The aim of this class is for teacher candidates to observe and identify typical and atypical social-emotional development, and to apply this understanding into compassion-based and restorative-teaching practices in the classroom. This course is designed to provide candidates with an understanding of the following: 1) **the brain** as the organ that houses memories, emotions, cognitive processes and behaviors; 2) **brain trauma** caused by physical and/or environmental experiences that lead to maladaptive regulation of emotions and behaviors; 3) **pain and reward circuits in the brain** that impact learning and social-emotional development; 4) **compassion-based and restorative teaching practices** to influence interpersonal dynamics and response to student behaviors and achievement; and 5) **student well-being** school structures and teacher responsibilities for supporting students.

ESSENTIAL QUESTIONS

1. **How can an understanding of neuroscience impact teacher's choices in designing age appropriate learning environments?**
2. **How does understanding *brain health* cultivate healthy and empowering environments for students?**
3. **What type of social relationships promote learning?**
4. **How do we design classroom structures and scaffolds for students to grapple and develop *abstract narratives* of themselves?**

PROGRAM STANDARDS

- ❑ *1.1* Apply knowledge of students, including their prior experiences, interests, and social-emotional learning needs, as well as their funds of knowledge and cultural, language, and socioeconomic backgrounds, to engage them in learning. (I)

- ❑ *1.7* Use strategies to support positive psychosocial development and self-determined behavior of students with disabilities. (U1.1) (I,P)

- ❑ *2.1* Promote students' social-emotional growth, development, and individual responsibility using positive interventions and supports, restorative justice, and conflict resolution practices to foster a caring community where each student is treated fairly and respectfully by adults and peers. (I,P)

- ❑ *2.3* Establish, maintain, and monitor inclusive learning environments that are physically, mentally, intellectually, and emotionally healthy and safe to enable all students to learn, and recognize and appropriately address instances of intolerance and harassment among students, such as bullying, racism, and sexism (I, P)

- ❑ *2.7* Understand and access in a collaborative manner with other agency professionals the variety of interventions, related services and additional supports, including site-based and community resources and agencies, to provide integrated support for students with behavior, social, emotional, trauma, and/or mental health needs. (U2.4) (I,P,A)

- ❑ *2.13* Implement systems to assess, plan, and provide academic and social skills instruction to support positive behavior in all students, including students who present complex social communication, behavioral and emotional needs. (U2.6) (I,P,A)

- ❑ *4.2* Understand and apply knowledge of the range and characteristics of typical and atypical child development from birth through adolescence to help inform instructional planning and learning experiences for all students. (I,P,A)

- ❑ *4.5* Demonstrate knowledge of core challenges associated with the neurology of open or closed head injuries resulting in impairments and adjust teaching strategies based upon the unique profile of students who present with physical/medical access issues or who retain a general fund of knowledge but demonstrate difficulty acquiring and retaining new information due to poor memory processing, as well as neurobehavioral issues. (I)

- ❑ *2.7* Understand and access in a collaborative manner with other agency professionals the variety of interventions, related services and additional supports, including site-based and community resources and agencies, to provide integrated support for students with behavior, social, emotional, trauma, and/or mental health needs. (U2.4) (I,P,A)

- ❑ *2.9* Demonstrate the skills required to ensure that interventions and/or instructional environments are appropriate to the student's chronological age, developmental levels, and disability-specific needs, including community-based instructional environments. (U2.5) (I,P,A)

- ❑ *2.10* Implement systems to assess, plan, and provide academic and social skills instruction to support positive behavior in all students, including students who present complex social communication, behavioral and emotional needs. (U2.6) (I,P)

- ❑ *2.11* Demonstrate the knowledge, skills and abilities to understand and address the needs of the peers and family members of students who have sustained a traumatic brain injury as they transition to school and present with a change in function. (I)

- ❑ *6.6* Possess the knowledge that the diminishment or loss of previous abilities (learning, social, physical) may have significant, long-term effects on the self-concept and emotional well-being of the student who acquires a traumatic brain injury as well as on their family members, requiring the provision of appropriate supports and services to address these issues. (I,P, A)

REQUIRED COURSE MATERIALS (excerpts from these texts will be read, analyzed and discussed)

Sousa, D. A. (2010). *Mind, brain, and education neuroscience implications for the classroom*. Bloomington (Ind.): Solution Tree Press.

Siegel, D. J., & Bryson, T. P. (2012). *The whole-brain child:* London: Robinson.

Hammond, Z. (2015). *Culturally responsive teaching and the brain: promoting authentic engagement and rigor among culturally and linguistically diverse students*. Thousand Oaks, CA: Corwin.

Immordino-Yang, M. H., Gardner, H., & Damasio, A. R. (2016). *Emotions, learning, and the brain: exploring the educational implications of affective neuroscience*. New York: W. W. Norton & Company.

Izzo, M. V., & Horne, L. D. (2016). *Empowering students with hidden disabilities: a path to pride and success*. Baltimore, MD: Paul H. Brookes Publishing Co.

Resnick, M., & Robinson, K. (2017). *Lifelong kindergarten: cultivating creativity through projects, passion, peers, and play*. Cambridge, MA: The MIT Press.Resnick, M., & Robinson, K. (2017). *Lifelong kindergarten: cultivating creativity through projects, passion, peers, and play*. Cambridge, MA: The MIT Press.

Galván, A. (2017). *The neuroscience of adolescence*. Cambridge: Cambridge University Press.

Blakemore, S.-J. (2018). *Inventing Ourselves: the secret life of the teenage brain*. S.L.: PUBLIC AFFAIRS.

COURSE ASSIGNMENTS and ACTIVITIES

Reflections:

Reflections are an opportunity to personalize and synthesize the content you learned in class as well as from asynchronous readings and videos. All reflection prompts will be posted on FlipGrid along with links to readings and videos. A video reflection will be posted by Sunday before class, for peers and instructors to respond and engage in video dialogue. Your reflection should include a dialogue about the impact course readings, content, and activities have had on your practice. Your responses should reflect your own thinking and a springboard for applying ideas to Put It To Practice and Final Project.

Put it into Practice:

This is an opportunity to actually go and use what you have learned in class. Throughout credentialing classes, you will focus on specific methods for teaching. Each week's session will provide a "Put It Into Practice" that asks you to try out the new skill you learned and then to reflect upon the planning, implementation, success and challenges you faced while implementing it. This is an occasion to analyze and critique the author's ideas, to connect them to other ideas, to reflect on what those ideas mean to you. At the end of each session, reflection prompts will be provided.

Final Project:

Final project and rubric will be co-designed with teacher candidates to demonstrate an understanding of topics covered in this course and program standards. **Teacher candidates will be encouraged to show their understanding in a medium that works best for them to share with peers and colleagues.** Due to the COVID19 pandemic we are all learning how to create a learning environment online, so sharing your work has never been more important. Final Project examples, but not limited to: illustrated essay, video, zine, graphic poster, etc. Reflections and PITP can be expanded upon in a more formal self-analysis of what new skill was learned, planning, implementation, success and challenges faced while implementing. In this analysis include course readings or resources, cite per APA format, and craft a response that includes quote/excerpt, the questions it raised for you, and any comments or reflections.

COURSE SCHEDULE

Detailed daily agendas will be distributed at course meetings.

Session Overview	Due Today
Session One: Attending to the self - Grieving Change ● *Identifying feelings in response to living in a pandemic* ● *Naming feelings using feeling chart and sharing feelings via Flipgrid or mentimeter* Syllabus Discussion & Finalization ● *Decolonizing the syllabus: Have cohort introduce group norms for facilitator to participate in their class.* ● *Give participants an opportunity to share input for changes and discussion for finalization of syllabus* ● *Listen to suggestions and refine the syllabus for the next meeting* Making the Invisible, Visible: Foundational Neuroscience ● *Introduction to neuroscience concepts that ground* ○ *Brain Development* ○ *Brain Health* ○ *Educational Pedagogy* Unique Brain Development: Child to Adolescent ● *Discuss Age specific brain development characteristics*	**Readings:** ● That Discomfort Your Feeling is Grief **Videos:** ● *The Science of Early Childhood Development* ● *How a Child's Brain Develop through Experiences* ● *The Evolutionary Advantage of the Teen Brain* **Reflection Prompts:** ● *What stage of the grieving process are you at?* ● *What 3 words come to mind when you hear the word brain development?* **Put It Into Practice:** ● Social Emotional wellness centered facilitation during Pandemic-induced distance learning (optional) **Connections and Practices For:** ***Students with exceptionalities*** ● Candidates will learn typical brain development from birth through adolescents to understand structural and physiological differences in students with learning differences. ● In alignment of brain and cognitive development candidates will consider supporting students in processing emotions, including feelings of grief, induced by pandemic restrictions. ● Candidates' awareness of students' emotional and behavioral response to changes in environmental and daily structures will be attuned. ***Emergent Bilingual Learners, Equity and Diversity*** ● Candidates will explore culturally-relevant responses to emotions of grief within their student's community to inform classroom facilitation. ● Candidates will support students in positive identification of feelings for developing self-regulation of emotions. In promotion of positive self-expression candidates will utilize visual, verbal and/or physical representation of feelings.
Session Two: Attending to the self - Compassion & Adaptation ● *5 Steps to Develop Self-Compassion and Overcoming Inner Critique* ● *Rose, Thorn, Bud community reflection* Adjustments to Syllabus & Final Project: Responding to Needs ● *Highlight changes and discuss assignments* Recognizing What We've Been Wired For and its Implications on Designing Learning Environments ● *Discuss Hammond, Z - Ch. 3 This Is Your Brain on Culture*	**Readings:** ● 5 Steps to Develop Self-Compassion and Overcoming Inner Critique ● Ch.3 This is Your Brain on Culture ● S.C.A.R.F. a brain-based model for Collaborating With and Influencing Others ● S.C.A.R.F. Why They Matter At School **Videos:** ● Matthew Lieberman, Ph.D. The Social Brain and Its Superpowers ● SCARF Model Animation **Reflection Prompts:** ● *Which neuroscience concepts inform Culturally Responsive Pedagogy and S.C.A.R.F. model?* ● *How can aligning HTH's PBL model to Culturally Responsive Teaching impact students (and faculty) brain*

Introduce Rock, D S.C.A.R.F. model of Social Needs ● *Implications of SCARF in highly collaborative environments* ● *A tool for naming the threat activating the amygdala*	*health?* ● *Can understanding social needs help initiate and facilitate social emotional conversations?* **Put It Into Practice:** ● Aligning and applying Culturally Responsive Brain rules to your context ● S.C.A.R.F. as a tool for talking about social threats **Connections and Practices For:** ***Students with exceptionalities*** ● Aside from applying Maslow's Hierarchy of Needs when working with students, candidates will expand their understanding of the impact of social needs on student behavior. Such as, if social needs of students are not met, threat response behaviors will be exhibited. ● Candidates will focus on what safety looks like physically, verbally, and environmentally for students with exceptionalities. ***Emergent Bilingual Learners*** ● Candidates will lift diverse languages in the classroom and highlight the assets of multilingualism to provide status and relatedness for students. ● Candidates will integrate of native languages to foster feelings of classroom community for emergent bilingual students. ***Equity and Diversity*** ● Candidates will apply a S.C.A.R.F. (status, certainty, autonomy, relatedness and fairness) lens to assess student's feelings of safety to bring their whole self to the classroom or school environment. ● Candidates can also use this lens for self-assessment of teacher practices and classroom structures that promote a student's sense of status, certainty, autonomy, relatedness and fairness.
Session Three: Attending to the self - Mindfulness Practice ● *Calm App: Monkey Mind Meditation* ● *Schools Are Embracing Mindfulness, But Practice Doesn't Make Perfect* Adjustments to Syllabus & Final Project: ● *Co-creating Final Project Rubric* ● *Student share final project proposal* Emotional Co-regulation & Adaptive Behaviors Developmental Neuroscience research of Adriana Galvan, Ph.D. ● *Rewards System in the Developing Brain* ● *Facial Recognition of children and adolescents* ● *Atypical Social Development: Social Anxiety Disorder & Autism* Traumatic Brain Injury	**Readings:** ● Schools Are Embracing Mindfulness, But Practice Doesn't Make Perfect ● Children & Brain Injury: Impact on Education ● TBI Manual: Manual for Educators ● Galvan, A The Neuroscience of Adolescence Ch.6 Motivation Systems ● Galvan, A The Neuroscience of Adolescence Ch.7 Social Brain **Videos:** ● *Monkey Mind Meditation* ● *Co-regulation: Still Face Experiment* ● *Adriana Galvan, Ph.D. Insight to Teen Brain Motivation and Rewards* ● *NIH: TBI In Children* **Reflection Prompts:** ● *What are you noticing about your students ability to read faces and emotions? What insight does this concept give you about how you show up for students?* ● *How is learning about the differences of the reward*

● *What is it?* ● *Impact on Cognition and Emotional Wellness* ● *What are age-specific learning school accommodations for children with TBI?* Adaptive forces on Brain Development ● *Neuroplasticity after trauma induced by physical and implementation of occupational therapy*	*system in children and adolescents impacting your teaching practice?* ● *How does an understanding TBI help best differentiate instruction for physically, cognitively and emotionally impaired students?* **Put It Into Practice:** ● Work with Ed. Specialist to differentiate instruction for student(s) with IEP due to TBI, or has similar physical, cognitive or emotional impairment ● Critically look at co-regulation between you and the students you serve to gain new understanding of your relationship ● Notice similarities between *Hammond, Z., Rock, D. and Galvan, A.* main concepts and design age appropriate activities to promote creative thinking **Connections and Practices For:** ***Students with exceptionalities*** ● Candidates will support student's ability to recognize and respond to social cues to appropriately navigate social interactions independently. ● Candidates will support student's self-regulation skills to appropriately respond to conflict or disruptive behaviors. ● Candidates will have a strong understanding of the necessary classroom and academic accommodations for students recovering from Traumatic Brain Injury. ***Emergent Bilingual Learners*** ● Candidates are knowledgeable in language to describe symptoms of Traumatic Brain Injury and concussion to share with bilingual learners and their guardians. ***Equity and Diversity*** ● Candidates will have cultural awareness and understanding of purpose before including mindfulness practice as classroom structures. ● Candidates know the symptoms of and educational resources for helping students and guardians after Traumatic Brain Injury
Session Four: Attending to the self - Community Circles ● *Resource: Lil Bits of Magic: Community Circle* Guest Speaker: Rob Riordan ● Compassion in Learning How is neuroscience informing pedagogy? *What are the similarities and differences of:* ● *Culturally Responsive Teaching* ● *Trauma-informed Classroom Practices* ● *Brain-Based learning* ● *Responsive Restorative Justice*	**Readings:** ● Weekly Circles for Students & Faculty ● Edutopia Using Circle Practice In the Classroom ● Immordino-Yang, MH Building Meaning Builds Teen's Brains **Videos:** ● *We Are Built to be Kind* ● *Brene Brown: Compassion vs. Empathy* **Reflection Prompts:** ● *When has an act of compassion in the classroom had a profound effect on you as a learner or educator?* ● *Which of these four neuroscience-based pedagogies do you connect with? Why?* ● *How can you use elements of these approaches in your own teaching practice?*

Educational Implications of Affective Neuroscience: Leveraging Student Context to Promote Deeper Learning ● *Mary Helen Immordino-Yang, Ph.D.*	**Put It Into Practice:** ● Reflect on a moment of compassion in your context that has changed relationships (student-teacher, student-student, teacher-classroom, etc.) ● Share an experience when applying one the neuroscience-based teaching practices, or elements of, have made an impact in your learning environment **Connections and Practices For:** ***Students with exceptionalities*** ● Candidates will support students in self-reflection for identification and accurate expression of emotions towards others to promote empathy building. ● Candidates will provide opportunities for students to practice verbal self-expression to communicate emotions with others. ● Candidates will design activities to promote feelings of inclusion in the classroom community for all students. ***Emergent Bilingual Learners, Equity and Diversity*** ● Candidates will use language stems for communication of neuro-informed practice with students and guardians. ● Candidates can inform guardians of neuro-informed practices to promote consistency between home and school. ● Candidates are culturally aware of differences in communication and conflict resolution between that of their student's culture and white dominant culture. ● Candidates design for meaning making experiences for students to develop a practice of positive personal narrative.
Session Five: Attending to the self - Brain Health Check ● Brain Health Is Important To Me… Guest Speaker: Sarah Archer, *UCSD Adolescent Center* ● Common Mental Health Disorders in Youth, Anxiety & Depression ● Why is it so hard to notice atypical mental health behaviors for adolescents? Advocating for Student Well-being Resources ● California State Policies ○ AB1432 Mandated Reporter ○ AB2246 Suicide Prevention ○ ACE Aware Initiative 2020 CA State Surgeon General: Nadine Burke-Harris, M.D ● Physician ACE Screening and Teacher Awareness	**Readings:** ● Burke-Harris, N The Deepest Well Ch.11 Rising Tide & ACE Test ● Child Mind Institute Educator resources ● BrainFacts.org Childhood Disorders resource ● EachMindMatters.org CA resource to Support Youth Mental Health **Videos:** ● *Nadine Burke Harris California First Surgeon General* ● *CounSEL Teens: How to cope with COVID19?* **Reflection Prompts:** ● *How is your perspective on mental health disorders in youth evolving?* ● *How does an understanding of youth mental health and ACEs, impact the lens you observe student behavior with?* ● *Do schools have a role in connecting students and their families with mental health professionals?* ● *How can your classroom design and instruction promote protective factors against ACEs?* **Put It Into Practice:** ● Connect with school psychologist or administrator to

What are the steps for supporting a student with compromised brain health in your school context? Adjustments to Syllabus & Final Project: Responding to needs and final project rubric	design a mental health support plan for a student ● Design your plan for listening to a student in distress; how will create physical safety, listen with compassion and prepare steps for professional support **Connections and Practices For:** ***Students with exceptionalities-*** ● Candidates will apply their understanding of typical and atypical behaviors to collaborate with Ed Specialists in designing classroom accommodations for students with compromised brain health. ***Emergent Bilingual Learners, Equity and Diversity*** - ● Candidates participate in school's training for mandated reporting and suicide prevention and know the steps in supporting student wellness. ● Candidates understand the urgency to work with administration and professionals to support students in distress and compromised wellness.
Session Six: Attending to the self - Meaningful Connections ● Rainbow in the Clouds Guest Speaker: Mary Helen Immordino-Yang, Ph.D. ● Meaning-making Makes Who We Are Connecting the Brain to the Heart: A Culture of Student Engagement and Empowerment Final Project Updates: 5 min share-out of draft ● Each teacher candidate has 5 min to share draft of their final project ● Probing questions & Constructive Feedback	**Optional Readings/Videos:** ● Fighting Invisible Tigers by Earl Hipp (Sneak Peak PDF) ● Paper Tigers Documentary (Trauma-informed school) ● Empowering Students With Hidden Disabilities by Margo V. Izzo and LeDerick Horne (Sneak Peak PDF) **Reflection Prompts:** ● *I used to think neuroscience was… I now know neuroscience is… I plan to use neuroscience to understand and apply…* ● *I used to think brain health was… I now know brain health is… I plan to use my understanding of brain health to…* ● *I used to think social relationships were… I now know social relationships are… I plan to use my understanding of social relationships to…* **Put It Into Practice:** ● Final Project Due 5/26/20

THROUGH LINE FOR EQUITY AND INCLUSION

Because equity and inclusion should never live in just one course, the overall connection and practices for all students to experience learning through this course is described below and will be connected to each class session.

Students with exceptionalities- *this course will cover how the propensity to learn throughout brain development of students with exceptionalities is present. The developing brain is plastic due to the generation, pruning and reorganization of neurons into complex brain networks. The collaboration between neurobiology, cognitive science and psychology have, and continue to, collect anatomical and physiological data of the brain of a child with exceptionalities to make correlations to behaviors and cognitive abilities.*

Emergent Bilingual Learners- *this course will introduce candidates to the changes in neuronal connections throughout the brain as language is developed and learned from child to adolescent. Through the course candidates will understand the importance of whole-body activation necessary for language acquisition due to the function of brain networks.*

Equity and Diversity *- this course will explore neurodiversity as a form of human diversity and will discuss and explore issues of equity and access for students. Through the course candidates will understand epigenetic and adaptive forces that*

change how the brain is formed and organized from child to adolescent. To gain an understanding candidates will look into Adverse Childhood Experiences as it relates to environmental factors (physical and physiological) that have led to negative health outcomes of adults.

Course Expectations & Citizenship

Attendance/Punctuality: Attendance each evening is vital. If you have an unavoidable emergency that prevents you from attending class, let your instructor know as early as possible. Additionally, arrive on time and prepared in order to successfully meet course expectations. Enrolled students with more than one (1) absence will **not** receive course credit. Teachers allowed to "audit" will **not** receive credit for course completion. Missing class for an unexcused absence will result in a meeting with program directors.

Make-Up and/or Late Work: Your work should be submitted on time. However, if you miss a class or need additional time due an illness, it is your responsibility to contact/approach the practitioner faculty. Late/missed work up can be submitted two (2) weeks from the original due date. After that, grades will be posted as final. Always communicate with your practitioner faculty.

Participation: In addition to your physical presence, your mental presence is also required. Teachers are expected to be a contributor to this positive learning environment, responsible for their own learning, and a productive citizen within the classroom. Teachers will use their strengths to work and learn cooperatively with others. Please avoid checking your phone or texting during class.

Post graduate-level work and Ethics: Your teaching credential should be regarded as a symbol of professionalism and we expect your work to reflect that. Any form of plagiarism will result in immediate action and penalties which may include repeating the course or departure from the program.