

Hamline University

DigitalCommons@Hamline

School of Education and Leadership Student
Capstone Projects

School of Education and Leadership

Spring 2019

How Educators Can Utilize Culturally Responsive Teaching To Enhance Personalized Learning Opportunities In The Secondary Classroom

Christina J. Strey-Wells

Follow this and additional works at: https://digitalcommons.hamline.edu/hse_cp



Part of the [Education Commons](#)

Recommended Citation

Strey-Wells, Christina J., "How Educators Can Utilize Culturally Responsive Teaching To Enhance Personalized Learning Opportunities In The Secondary Classroom" (2019). *School of Education and Leadership Student Capstone Projects*. 305.

https://digitalcommons.hamline.edu/hse_cp/305

This Capstone Project is brought to you for free and open access by the School of Education and Leadership at DigitalCommons@Hamline. It has been accepted for inclusion in School of Education and Leadership Student Capstone Projects by an authorized administrator of DigitalCommons@Hamline. For more information, please contact digitalcommons@hamline.edu.

HOW EDUCATORS CAN UTILIZE CULTURALLY RESPONSIVE TEACHING TO
ENHANCE PERSONALIZED LEARNING OPPORTUNITIES IN THE SECONDARY
CLASSROOM.

by

Christina J. Strey-Wells

A capstone project submitted in partial fulfillment of the requirements for the degree of
Master of Arts in Teaching.

Hamline University

St. Paul, MN

May 2019

Capstone Project Facilitator: Trish Harvey

Content Expert: Kaja Martinson

Peer Reviewer: Laura Smetak

Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world.

-Paulo Friere, *Pedagogy of the Oppressed*

Acknowledgements

First, I would like to thank my Capstone Project Facilitator, Professor Trish Harvey, for her many hours spent reading my work, providing a voice of reason when needed, and editing out the many contractions in my paper. Your enthusiasm and wonder for my research bolstered the confidence I needed to complete this work. To Laura Smetak, my peer editor, thank you for being willing to read and critique my work at the same time that you finished yours!

To the Caribou Coffee baristas on Cedar Avenue and Minnehaha Parkway, thank you for providing me with one of the most important pieces of this capstone: coffee! Thank you, too, for providing your encouragement, occasional free treats, and friendly faces while I toiled away in the back corner of your shop.

To Kaja Martinson, my content expert, thank you for recognizing the spark to do this important work in me so many years ago. Your strength and conviction have been guiding lights along this voyage and have fostered a fierceness in me I didn't know I had.

To my family: Jacquelyn, Lora, Matthew, Bridget, and Charlie, you are immeasurably important to not only this project, but to my whole person. Thank you for listening, reading, and editing. Your unending support and love is life giving.

To my husband Morgan, thank you for helping to create the space to make this possibility a reality for me, for our family, and for our future. To Miles and Margot, you are my sun and my moon. There would be no me without you and so this work, this pursuit of passion and growth, is just as much yours as it is mine. I love you.

TABLE OF CONTENTS

CHAPTER ONE: Introduction.....	6
CHAPTER TWO: Literature Review.....	11
Culturally responsive teaching.....	11
Overview.....	12
CRT and the brain.....	17
Challenges facing CRT implementation.....	19
Personalized Learning.....	22
Overview.....	22
Why personalize learning?.....	25
Four examples to personalize learning.....	28
Student choice.....	28
Self-paced learning.....	30
Passion-based learning.....	32
Student voice.....	33
Challenges facing personalized learning implementation.....	36
CRT and personalized learning.....	38
Reflection.....	41
CHAPTER THREE: Capstone Project.....	43
Overview.....	43
Rationale and Audience.....	44
Project Description.....	46

Summary.....47

CHAPTER FOUR: Reflection.....48

REFERENCES.....56

BIBLIOGRAPHY.....63

CHAPTER ONE

Introduction

As a middle school language arts teacher who aims to be more culturally sensitive and is passionate about authentic student voice and choice, my capstone research question will explore the question: *How educators can utilize Culturally Responsive Teaching to enhance personalized learning opportunities in the secondary classroom.*

In the Rationale section of this chapter, you will see the significant need for Culturally Responsive Teaching (CRT) and personalized learning in classrooms today. Then, in the Context section, you will briefly read about the path that led me to teaching and to this research that I find so important.

Rationale

According to a Minnesota Department of Education survey of 9th grade students across the state, 27% said they disagreed with the statement, “Most teachers at my school are interested in me as a person” (2018a). Six percent of students responded that they strongly disagreed with that statement (2018a). When educators come across as not caring about their students as people with diverse histories, cultures, and backgrounds, they lose student trust and, in turn, they lose the important educational relationship needed for new learning to happen (Hammond, 2015). Hammond (2015) argued that, “The education system has historically underserved culturally and linguistically diverse students of color” (p. 90). She continues that, “Because of institutional inequities, these students have underdeveloped ‘learn-how-to-learn’ skills” (Hammond, 2015, p. 90). In order to help these underserved students open up to new, rigorous learning in the

classroom, it is imperative to position, “student-teacher relationships as the key ingredient in helping culturally and linguistically diverse dependent learners authentically engage [in the classroom]” (Hammond, 2015, p. 73).

This is particularly true for students of color who need educators who understand that inequality is a real part of their students’ daily lives (Hammond, 2015). Gloria Ladson-Billings, the founder of culturally responsive pedagogy, explained that teachers cannot ignore the existence of race and color in the classroom because of the significance they play in American society today; as educators, we cannot be color blind when we enter our classrooms because race and color are essential parts of our students’ lives (2009). She went on to say that, “by claiming not to notice, the teacher is saying that she is dismissing one of the most salient features of the child’s identity” (2009, p. 36). We cannot teach the whole student if we do not acknowledge the many unique facets of their daily lives which is why implementing more culturally responsive teaching into our classrooms is so important today.

Personalized learning is an educational tool that individualizes instruction to meet the unique needs and interests of the diverse learners of today with a beneficial outcome of helping guide students to become independent learners. Cordova and Lepper (1996) found that,

Students for whom the learning contexts had been personalized, through the incorporation of incidental individualized information about their backgrounds and interests, displayed larger gains in motivation, involvement, and learning than their counterparts for whom the contexts had not been personalized. (p. 726)

Along with integrating CRT, I propose that another significant way to create a healthy, culturally responsive learning environment where all students feel seen and appreciated is by implementing more personalized learning techniques in the classroom. Thus can we answer the question: *How educators can utilize Culturally Responsive Teaching to enhance personalized learning opportunities in the secondary classroom?*

Context

Reflecting on my educational journey from my time as a teenage student to becoming a teacher at the secondary school level, I find myself remembering those teachers, professors, and colleagues who made an impact on not only my teaching career, but on my life, too. The list is long and full of numerous reasons why I remember their class or their advice or their determination, but there are two real characteristics that link them all together. First, I remember teachers who used their platform to teach their students beyond the content of the classroom, acknowledging personal backgrounds and cultures as strengths. Second, I remember those caring educators who let me know they saw me as a person, instead of just as a student, with unique goals both personal and academic. These two educator characteristics I valued so much as a student are now those things I am most passionate about as an educator: the importance of acknowledging students as people with rich backgrounds and that of attempting to shape the learning for students to help them feel personally and academically successful. I see the tools of CRT and personalized learning as integrated passions of my pedagogy stemmed from the care and education I received as a student.

As mentioned above, I believe that being a culturally responsive teacher is a necessity in our diverse world today. No longer can we, nor should we, ignore the impact that our students' home lives and lived cultures have in our classrooms. Far from being an expert in this field, I know that there is so much I do not and cannot know from my own experiences as a white, cisgender, straight woman. However, being culturally responsive means continually educating myself so that I can be a better teacher, citizen, woman, and mother. Choosing to integrate culturally responsive pedagogy means opening my eyes up to the needs and experiences of others; it means trusting and believing alternative narratives and experiences different than my own.

With two small kids of my own, not only do I want them to be culturally sensitive and inclusive, I also want them to be passionate about learning. I want them to be self-motivated. I want and need to teach the way I would want my own children taught: with their interests, personal backgrounds, culture, growth, and futures in mind. I want them to move beyond memorizing dates and names. I want them to know how to educate themselves so that they can apply that metacognitive learning to their futures as informed and compassionate citizens.

There is such a natural connection between intentionally including culturally responsive pedagogy into our classrooms and personalizing learning through encouraging more student choice, student self-pacing, passion-driven learning, and amplified student voices: these theories both give students autonomy and ownership over their own learning and within the classroom. With the marriage of these two teaching tools, I hope to teach, as Paulo Friere penned it, the “practice of freedom, the means by which men and

women deal critically and creatively with reality and discover how to participate in the transformation of their world” (Friere, 2018, p. 34). I hope to be a part of a classroom where students are encouraged to see the value of where they come from, where they are encouraged to think metacognitively to become lifelong learners, and where they use these tools to lift up themselves and others in and out of school.

There is little peer-reviewed research and work done to specifically bridge the gap between the two teaching tools of CRT and personalized learning in schools. Therefore, my capstone will explore and expand the current research on how educators can utilize Culturally Responsive Teaching to enhance personalized learning opportunities in the secondary classroom.

CHAPTER TWO

Literature Review

The purpose of this chapter is to present the literature addressing the ideas in my leading question: *How can educators utilize Culturally Responsive Teaching to enhance personalized learning opportunities in the secondary classroom?* Chapter two begins with an overview of Culturally Responsive Teaching (CRT) and presents theories from leading experts in the field as well as challenges to implementation of CRT in the classroom. It will then present an overview of personalized learning, research of the theory's benefits, and examples of four ways to personalize learning in the classroom: providing student choice, self-pacing the learning, promoting passion-driven learning, and amplifying student voice. The personalized learning section will end with a discussion of the challenges facing educators attempting to utilize this pedagogical tool. The final section will look at the minimal peer-reviewed research available that bridges the gap between CRT and personalized learning.

Culturally Responsive Teaching

Culturally Responsive Teaching (CRT) is a pedagogical theory that encourages teachers to utilize an understanding of student culture and social justice for the academic and social benefit of the culturally and linguistically diverse students in their classroom (Gay, 2013; Hammond, 2015; Ladson-Billings, 1996, 2009). The first section will present a brief overview of CRT including the working definition for this paper. The next section will provide an explanation of how CRT stands apart from other similar, current educational theories surrounding diverse groups of students. The following section will

then summarize innovative research on CRT and the brain including how CRT ultimately encourages independent learning. The final section will outline some challenges teachers face implementing CRT in their own classrooms.

Overview. As Zaretta Hammond (2015), educator, researcher, and author, stated, “The problem of the achievement gap won't be solved by simply trying to motivate students of color to become more engaged learners” (p. 152). She pinpointed a hard truth of education today: there is an achievement gap that negatively affects culturally and linguistically diverse students. Along with many other current theorists, she proposed that in order to see the achievement gap disappear, educators must acknowledge and celebrate diversity and implement more culturally responsive teaching in the classroom. Gloria Ladson-Billings (1995) developed CRT as the solution for helping diverse students succeed academically. She wrote that CRT, “would necessarily propose to do three things-produce students who can achieve academically, produce students who demonstrate cultural competence, and develop students who can both understand and critique the existing social order” (1995, p. 474). Further, Geneva Gay, another leading voice in the CRT movement, pointed out that CRT is, “necessary for both minority and majority students to counteract the negative discriminations and distortions perpetuated in conventional conceptions of knowledge and truth, in schooling generally, and in society at large” (2013, p. 49).

CRT is one of many equity-focused teaching theories to better serve diverse student populations in schools. Two popular theories that are similar to, and often incorrectly interchanged with, CRT are Multicultural Education and Social Justice

Education. They are incorrectly interchanged because they are similar in their goal of directing attention to raising up culturally and linguistically diverse students, but the goal of each theory varies. The definitions are presented here to distinguish between them and, in turn, provide a working definition of CRT for this paper.

Multicultural Education focuses on celebrating diversity and concerns itself with exposing students to a curriculum where multiple diverse voices are represented. Social Justice Education focuses on exposing students to the socio-political context of school and the inequalities that permeate all aspects of their lives (Esposito & Swain, 2009; Gonzalez, 2017). While these theories of teaching are important and much needed, CRT, alternatively, focuses on academic success which sets it apart (Hammond, 2015).

CRT is an “equal education opportunity initiative” that accepts the differences among culturally and linguistically diverse students as normative and valuable to society and, then, to all students’ education (Gay, 2013, p. 50). It focuses on, “improving the learning capacity of diverse students who have been marginalized” by the education system and has the goal of, “building resilience and academic mindset by pushing back on dominant narratives about people of color” (Hammond, 2017). While recognizing the need for Multicultural Education and Social Justice Education, this paper focuses on CRT, with the above description as the working definition for this paper because the end-goal is to help create independent learners. This paper looks most closely at the theoretical work on CRT of Gay, Hammond, and Ladson-Billings.

Beyond the theoretical, there is a need for CRT in schools today. This need is seen in the problematic inequities of low-income students, the culture of poverty in

America, and the school-to-prison pipeline (Hammond, 2015). As Hammond pointed out, “For culturally and linguistically diverse students, their opportunities to develop habits of mind and cognitive capacities are limited, or non-existent, because of educational inequity” (Hammond, 2015, p. 13). Yvette Jackson, educator and author, also wrote on the idea of educational inequity by stating that, “The ignored reality has been that poor, urban students have been school-dependent--that is, they have been dependent on school to provide the enrichment needed to achieve on the standardized test” (2011, p. 21). She explained that diverse students are school-dependent because the school system only puts value on Eurocentric, cultural experiences and that, “the ethnic or personal culture of students classified as ‘minority’ was not only considered irrelevant to learning, it was generally regarded as inferior” (p. 21).

In order to change these systemic inequities in schools, theorists propose that educators embrace CRT to counter the many issues facing culturally and linguistically diverse students to help them better succeed. Gay argued that:

[CRT] is at once a routine and a radical proposal. It is routine because it does for [diverse] and low-income students what traditional instructional ideologies and actions do for middle-class European Americans. That is, they filter curriculum content and teaching strategies through their cultural frames of reference . . .

[making content] more personally meaningful and easier to master. (2013, p. 51)

Hammond, referencing Gay, explained that, “this is the ultimate goal of the culturally responsive teacher: to provide resources and personal assistance so students cultivate positive self-efficacy beliefs and a positive academic mindset” (2015, pp. 88-89).

Many theorist and educators have worked to find ways to help improve the academic performance of diverse students in schools. As mentioned above, Gloria Ladson-Billings was the founder of Culturally Relevant Teaching and advocated for the improvement of teaching and curriculum specifically focused on benefitting African American students.

In her research on culturally relevant pedagogy in one San Francisco Bay area community, Ladson-Billings (1995) studied eight teachers who were nominated and selected for having excellent reputations for their exceptional relationships and academic success with African-American students. She studied their teaching methods, backgrounds, classroom management techniques, and student-teacher relationships. What Ladson-Billings found through her research and data collection was that each of the eight teachers came from different social and educational backgrounds, taught in vastly different ways, and had varying classroom management tools but, again, were all recognized as exceptional teachers of African American students. So, Ladson-Billings (1995) studied their belief systems of their students and of school: all of the teachers held similar beliefs and ideologies of their teaching profession, students, and conceptions of knowledge. She came to the conclusion that culturally relevant teachers:

- See their teaching as an art rather than a technical skill;
- Believe that all of their students can succeed;
- See themselves as part of the community and their teaching as giving back to the community;

- Help students make connections between their local, national, racial, cultural, and global identities;
- Create relationships with students that are fluid, equitable, and extend beyond the classroom;
- Encourage connectedness between the students, a community of learners, and collaboration within the classroom;
- Believe that knowledge is shared by teachers and students.

(Ladson-Billings, 2009, p. 28)

Building on the work done before her, Ladson-Billings addressed the need for a collective educator mindshift to teaching diverse student populations. Gay (2013) also addressed this mindshift when she argued that, “[Educators] must accept the existence of cultural pluralism in this country and respect differences without equating them with inferiorities or tolerating them with an air of condescension” (p. 50). Gay pointed out the importance of teacher attitudes and the effect on students and their learning: “Positive attitudes about ethnic, racial, and gender differences generate positive instructional expectations and actions toward diverse students, which, in turn, have positive effects on students’ learning efforts and outcomes” (2013, p. 56). It is of note that there is new research being done to not only include students who are culturally and linguistically diverse as those benefited by CRT but to also include other marginalized populations in schools including female and LGBTQIA students and students with disabilities who can also benefit from the theoretical implementation (Aronson & Laughter, 2018). This paper recognizes and agrees with this new research.

As addressed above, CRT is about shifting our collective educational mindset to think and be more inclusive of culturally and linguistically diverse students and their great capacity to learn as well as the strengths they bring to the classroom. Notable CRT theorist Zaretta Hammond addresses not only the mindset of educators, but also brings attention to how CRT affects the brain and student learning.

CRT and the brain. Zaretta Hammond (2015) situates CRT in neuroscience and brain-based research to show how specific, rigorous, beneficial educational goals for diverse students can be met (Hammond, 2015). Building off of culturally responsive theorists before her, Hammond argued that educators must move from thinking CRT is a motivational tool to engage students of color or raise the achievement gap to believing that students of color can and should be given equal opportunities to learn complex thinking skills (2015). When “practiced correctly and consistently,” Hammond (2015) explained, CRT can get underperforming culturally and linguistically diverse students, “ready for rigorous learning by building their brainpower [sic]” (p. 3). She argued for educators to understand how the brains of their culturally and linguistically diverse students work in order to promote academic success and independent learners.

Hammond looks at CRT through neuroscience to help teachers not only raise the achievement gap but, more importantly, to promote authentic engagement of culturally and linguistically diverse students to encourage independent learning. Her main argument for embracing CRT in the classroom is that the goal of education, including educating diverse student populations, should, “not simply [be] to fill students with facts and information but to help them learn how to learn” (2015, p. 12). She argued that students

of color are disproportionately taught to be school-dependent learners through less instruction in higher order skills development; less challenging, repetitive work; and consistently teaching marginalized learners skills lower on Bloom's Taxonomy (2015). Dependent learners are not taught the skills necessary to do complex tasks like synthesizing and analyzing information without continuous teacher support (2015). Without critical and creative independent thinking skills, not only do educators continue to maintain the achievement gap, but these dependent, underserved students are ill-equipped for effectively directing their own lives and defining success for themselves in and, then, out of school (2015).

Hammond proposes that to begin to help culturally and linguistically diverse students, educators must learn how culture affects the brain in order to understand how culture affects learning (2015). Through her research, Hammond argued that, "Culture...is the way that every brain makes sense of the world...The brain uses cultural information to turn everyday happenings into meaningful events" (2015, p. 22). She explained that our cultural frame of reference makes us see the world and the information in the world uniquely. She explained that, "Our deep cultural values program our brain and how to interpret the world around us" (2015, p. 37). In order to better help teachers understand how the brain uses culture to interpret threats and opportunities for diverse student populations, Hammond (2015) provided these six "Culturally Responsive Brain Rules" for educators:

- The brain seeks to minimize social threats and maximize opportunities to connect with others in the community;

- Positive relationships keep our safety-threat detection system in check;
- Culture guides how we process information;
- Attention drives learning;
- All new information must be coupled with existing funds of knowledge in order to be learned;
- And the brain physically grows through challenge and stretch, expanding its ability to do more complex thinking and learning. (pp. 47-49)

Hammond's brain-based work, as well as Ladson-Billings's and Gay's work with CRT, revolves around the goal of helping to create independent learners of historically underserved populations of students. An ideal culturally responsive classroom would include a teacher who addresses cultural inequities and raises up our diverse differences as strengths; builds positive social relationships within the classroom; and encourages critical and creative thinking skills to promote independent learning. While this may seem like an achievable list, unfortunately, there are many challenges getting in the way of educators embracing culturally responsive pedagogy.

Challenges facing CRT implementation. Unfortunately, there are many challenges facing the implementation of culturally responsive pedagogy in classrooms. Below are some of the barriers facing educators today when enacting CRT within their teaching followed by, when present, advice for overcoming the challenge.

The first challenge facing CRT is the lack of appropriate, in-depth, and comprehensive pre-service teacher training on diversity and multicultural student education (Gay, 2010; Ladson-Billings, 1995, 2009; Villegas & Lucas, 2002). While

progress has been made to include more multicultural and diversity training in teaching programs, students usually just get a superficial, “foods-and-festivals” approach to being culturally aware (Ladson-Billings, 2009, p. 143). The fix? According to Gay (2010), the fix would be for preservice teachers to be asked to critically analyze their attitudes and beliefs of cultural diversity in general as well as within the context of school to begin to understand their potentially bias perspectives (p. 144). Villegas and Lucas also argue that those responsible for preparing teachers for the workforce must also work to articulate a vision of teaching and learning in a diverse society; those responsible must also be culturally responsive teachers in order to help create them (2010).

Another challenge facing CRT implementation is the inevitable awkwardness, confusion, and feeling of chaos that comes with trying something new (Hammond, 2015, p. 153). Hammond explained that our brains, like our students’, fall prey to the amygdala hack of fight, flight, or freeze when we presented with a potential threat and looking incompetent can cause even teachers to give up. The fix? According to Hammond, the fix is to be aware of the awkwardness that comes with trying something new, work through the process, and use this stage of refining teaching practices for inquiry and reflection (2015, p. 153).

A third challenge, according to Esposito and Swain (2009), is that, “The voices of marginalized populations are often absent from the “mainstream” discourse, and the issues that are most important to these populations are frequently ignored” (p. 39). Gay furthered this idea and said that teachers need to be aware of the opposition from the school system and other teachers who cultivate resistance of multicultural teaching,

“...through persistent and pervasive practices that treat ethnic and cultural diversity as contentious, negative insignificant, or nonexistent” (2013, p. 56). Examples of these beliefs can be seen by teachers who are “colorblind,” are advocates of “race-lessness,” and who believe and state, for example, that some cultures don’t “value education.”

The final barrier to implementing CRT, and as a continuation of the previous paragraph’s challenge, is the pessimism regarding the enormity of the task before culturally responsive teachers (Ladson-Billings, 2009). Teachers face the great task of implementing CRT in the classrooms which comes with it the need for hard, personal reflections; potentially a mental shift of beliefs; the knowledge of the inequities facing students today; a change in teaching practices on a daily basis; and the need to speak up and be a voice for their underserved community of students within their community. The fix? As stated by Ladson-Billings (2009): “I remind my audiences that we are teaching the brightest, most creative children the world has ever seen. And we are teaching them in a time of amazing technology and rapid change” (p. 177).

The challenges facing culturally responsive teachers today are numerous and weighty in the face of the real threats to the academic success of culturally and linguistically diverse students. This section presented an overview of CRT and summarized top theorists who have added substantial work to the educational field including Gloria Ladson-Billings, Geneva Gay, and Zaretta Hammond among others. Finally, this section summarized a few challenges that face culturally responsive teachers today and looked to these theorists for solutions. The following section on personalized learning will build off of the information presented above to help answer this paper’s

research questions: *How can educators utilize Culturally Responsive Teaching to enhance personalized learning opportunities in the secondary classroom?*

Personalized Learning

As Ken Robinson wrote: “Education doesn’t happen in the committee rooms of the legislatures or in the rhetoric of politicians. It’s what goes on between learners and teachers in actual school. If you’re a teacher, for your students you are the system” (Robinson, 2015, p. xxiii). For students and educators alike, learning is necessarily personal for what we learn, we carry with us. But learning can also be personalized to meet the needs and interests of students in order to build their independent learning skills and create a more holistic, joyful learning experiences. This portion of the paper discusses the educational tool of personalized learning.

The first section will provide an overview of personalized learning and will take a brief look at technology’s role in making learning personal in schools today. The second section will present rationale to make learning personalized for students, a look into student motivation and personalized learning, and the known benefits of the practice. The next section will provide explanations and examples of four different ways to personalize learning in the classroom: providing student choice, self-pacing the learning, promoting passion-driven learning, and amplifying student voice. The fourth section will discuss the challenges of personalized learning in classrooms today.

Overview of personalized learning. Making learning more personalized for students is not a new trend in education. Personalized learning, “depending on how you define it, dates back to Rousseau. Or it dates back further still – to Alexander the Great’s

tutor, some guy named Aristotle” (Watters, 2017, para. 5). The point Watters made in her speech to the 2017 OEB MidSummit conference is that educators have been personalizing learning as long as education has been around. However, it has recently become popular within education circles and the media to promote technology in the classroom without presenting a broadly recognized definition (Watters, 2017).

Currently, and probably because it has recently become so popular, there is a growing debate surrounding the tool and what exactly is meant when educators use the phrase “personal” when describing classroom learning (Schwartz, 2015). While many think that personalized learning is the use of a technological curriculum that students move through at their own pace, checking off boxes and earning badges, that definition is lacking (Schwartz, 2015). Educators at the 2015 EduCon conferences hosted by Science Leadership Academy argued:

[T]hat a truly personalized learning experience requires student choice, is individualized, meaningful and resource rich. This kind of learning allows students to work at their own pace and level, meets the individual needs of students, and perhaps most importantly, is not a one-size fits all model. (Schwartz, 2015, para. 5)

Their definition, and this paper’s, purposefully lacks the word “technology” to make way for a more holistic view of personalization, “focused on giving agency for learning to the student and valuing each individual in a classroom” (Schwartz, 2015, para. 5).

While educators do not necessarily need technology to achieve the goals of personalized learning (Schwartz, 2015; Watters, 2017), our world and workforce is

technologically driven with a goal of global citizenship, so many schools are utilizing technology in the classroom to better meet the personal needs of their students (Rosenstein, 2017). Robinson and Aronica (2016) agreed that, "...digital technologies are transforming how we all work, play, think, feel, and relate to each other...The old systems of education were not designed with this world in mind" (p. *xxi*). Technology in education today is a such hot-topic issues because of the need for a technologically savvy workforce: "Governments know that a well-educated workforce is crucial to national economic prosperity, and their policies are peppered with rhetoric about innovation, entrepreneurship, and 'twenty-first-century skills'" (Robinson & Aronica, 2016, p. 8).

Similarly, Bulgar (2016) stated that technology in education seemingly presents a promise to level the playing field in the classroom. Advocates hope that technology, "...can provide a new incarnation of the one-teacher-one-student model— tailoring the learning experience to individual progress, interests, and goals... Through personalized learning, these lofty goals seem within reach" (Bulgar, 2016, p. 2). However, she continued, the use of technology in the classroom just for the sake of including a new "hot-button" educational tool should be cautioned (Bulgar, 2016). Instead, educators should focus on the benefits of personalizing learning and implement technology where available, appropriate, and/or necessary. To reiterate that point, Grant and Basye stated that, "When used correctly, these technologies and techniques allow for greater autonomy, engagement, individualization, and differentiation than ever before, while giving students more active, responsible roles in their own learning" (2014, p. 2).

With the history and current situation of personalized learning in mind, this paper defines personalized learning as an educational tool that individualizes instruction to meet the needs and incorporate the interests of the diverse learners of today (Grant & Basye, 2014; Kahn, 2011; Martinez, 2002; Schwartz, 2015; Watters, 2017). With or without technology, when appropriately incorporated into the classroom, personalized learning opportunities provide numerous benefits for students and educators alike.

Why personalize learning? As Salman Kahn (2012), founder of the free, online, self-paced learning platform Kahn Academy, explained in an interview with Michael Noer of Forbes Magazine, our educational system in the United States is founded on an outdated industrial model: students of a certain age are grouped together and move at the same pace through the same, standardized curriculum towards a goal of graduation and higher education. This system, he continued, was created with good intentions in the 1800's but has not really changed since then, even with the invention of new tools, namely the internet (2012). He explained that with the invention of the internet in the mid-90s, the general public, including students, now have unlimited access to information and learning which can be used to personalize learning and humanize classrooms (2012).

Robinson continued the argument by explaining that, "...one of the roles of education is to awaken and develop [the] powers of creativity. Instead, what we have is a culture of standardization" (2013). This standardization of the lessons and learning within classrooms are proving to be nonviable for educators to be creative and provide the type of education they would like to (Grant & Basye, 2014). Standardization itself is not a bad thing; there are many reasons to standardize education including fairness, raising

academic success, preparing students for the current workforce, etc. (Robinson & Aronica, 2016). However, research shows that raising the standards has not significantly improved test scores since implementation of No Child Left Behind, which is what was promised (Robinson & Aronica, 2016). Educators are not teaching students what the workforce now, and in the future, actually needs like critical thinking skills, creativity, entrepreneurship, collaboration, and communication skills; “There is an ever widening gap between what schools are teaching and what the economy actually needs” (Robinson & Aronica, 2016, p. 16).

One way to combat the negative outcomes of standardization is by incorporating more personalized learning opportunities within the classroom. Personalized learning methods empower students to take ownership of their education, honors the different ways students learn, promotes critical thinking skills, supports creativity, and encourages intrinsic motivation (Anderson, 2016; Ferlazzo, 2017; Goodwin, 2010; Hammond, 2015; Robinson, 2006; Schwartz 2015).

Not only does individualizing educational opportunities for students foster academic success, it also supports student growth and diversity. Grant and Basye pointed out that, “[Students] are more likely to succeed academically, emotionally, and behaviorally when they are supported as individuals” (2014, p. 3). Personalized learning opportunities also benefit students who have special needs and students labeled as gifted because the learning can be more holistically differentiated (Grant & Basye, 2014).

It is important to note here that, according to Bourke and Loveridge (2016), “Learning as a phenomenon is understood differently by teachers and their students, and

the views of each are shaped by their respective roles and focus on what is important ‘to learn’” (p. 59). Teachers, on one hand, have their own ideas about teaching and learning, but they are necessarily enabled and constrained by their school, the standards, and their profession (Bourke & Loveridge, 2016). Likewise, students have their own perceptions of learning that is influenced by their social lives and aspirations and that perception affects how they approach learning tasks in the classroom (Bourke & Loveridge, 2016). In order for students to see the learning as meaningful and worthwhile, educators must necessarily try to incorporate the interests, learning styles, and present and future lives of their students.

Only when students are engaged in the learning activity and are intrinsically motivated to do that work will they gain the full benefits of the personalized learning opportunities presented them in order to become independent learners (Cordova & Lepper, 1996; Hammond, 2015; Stefanou et al., 2004). Educators know that, “Students learn more when they’re motivated...[but], students aren’t always motivated to do the school work that’s in front of them” (Anderson, 2016, para. 2). It is up to the teachers to provide the space and platform for students to learn things that are of interest to them and students will be more apt to engage. According to The Minnesota Department of Education, 98% of 11th graders stated that they agree or strongly agree with the statement: “If something interests me, I try to learn more about it” (2018b). With this knowledge, it is important for educators to present students with school work that is individualized and personally meaningful for them through student choice, self-pacing, passion-based, and amplification of their voice.

Four practices to personalize learning. According to Grant and Basye (2014), “The customization of education represents an important advance because it recognizes that pupils come from different backgrounds and have varied interests and ability levels” (p. 3). There are numerous ways to customize education for the diverse learners of today. This section will outline and provide examples of four specific ways to personalize learning for students: providing student choice, self-pacing the curriculum, promoting passion-based learning, and amplifying student voice.

Student choice. One key way to make learning more individualized in the classroom is to provide students with more choice. Offering students choice in the classroom increases intrinsic motivation, allows for a more joyful learning experience; promotes student autonomy; increases social and emotional learning; and supports academic achievement (Anderson, 2016; Stefano et. al, 2004). Research shows that students who are offered choice in the classroom, “will show more enjoyment of, better performance on, and greater persistence at a variety of activities” (Cordova & Lepper, 1996, p. 716). There are three specific ways educators can offer choice in the classroom: organizational, procedural, and cognitive (Ferlazzo, 2017; Stefano et. al, 2004).

Offering organizational choice provides students some decision making say in the way the classroom is managed. Organizational choice may offer students a sense of well-being and comfort in the classroom because they’ve had the opportunity to share their thoughts on the ways things work within the space (Stefanou et al., 2004). Below are some examples of how to implement offering operational choice in the classroom. Students can be given opportunities to:

- Choose group members;
- Choose evaluation procedures;
- Take responsibility of due dates for assignments;
- Participate in creating and implementing classroom rules;
- And choose seating arrangements. (Stefanou et. al, 2004, p. 101)

Procedural choice, alternatively, encourages positive student engagement with the learning activities because students are given a say in the way they want to present or showcase their learning (Stefanou et. al, 2004). Stefanou continued by adding that, “Procedural autonomy support encourages student ownership of form and can include teacher behaviors such as offering students choice of media to present ideas—for instance, making a graph or picture to illustrate a science concept” (2004, p. 101). Additional examples within the classroom include giving students opportunities to choose the way competence is demonstrated, have a say in how they want to present their work, to handle learning materials, and to discuss their educational needs (Stefanou et. al, 2004).

Finally, teachers can promote autonomy in the classroom by offering students cognitive choice, that is, “encouraging student ownership of learning by asking them to justify or argue for their point, generate their own solutions, [and] evaluate their own or others' ideas...” (Ferlazzo, 2017, para. 7). Offering students cognitive choice of their learning fosters a more enduring psychological investment in deep-level thinking skills because students are evaluating and being reflective of their own learning (Stefanou et.

al, 2004). Practical classrooms examples of incorporating this cognitive choice are seen when educators give students various opportunities to:

- Find multiple solutions to problems;
- Have ample time for decision making;
- Be independent problems solvers with scaffolding;
- Re-evaluate errors;
- Formulate personal goals or realign task to correspond to interest;
- Debate ideas freely;
- Have less teacher talk time and more teacher listening time;
- And ask questions. (Stefanou et. al, 2004, p. 101)

Self-paced learning. A second way to personal learning for students is to offer self-paced learning opportunities within the classroom. According to Grant and Basye (2014), the appropriate formula for personalized learning opportunities in the classroom necessarily include an “adjustable, individualized pace” combined with differentiated support from the teacher (p. 5). This adjustable pace, tailored to the diverse needs of students is known as self-paced learning where students work through the curriculum at their own speed of mastery with teacher feedback provided along the way (Gonzalez, 2015). Self-paced learning allows students the opportunity to work through the learning with the ability to pause, repeat, and review the lessons for better understanding (Khan, 2011). This section will provide two examples of self-paced learning: self-pacing the curriculum and the flipped classroom.

Self-pacing the curriculum allows students to gauge their own mastery of knowledge, “Rather than forcing students to follow the same path in lockstep with one another, practicing page after page of skills they already have down” (Gonzalez, 2015, para 4). Teachers provide students with pre-assessments, lessons, formative assessments, scaffolding, and summative assessments. They ask students to work through the curriculum on their own, judging how many lessons they need to read or watch and how much practice they need (Gonzalez, 2015). When a student feels they are ready to move beyond the lesson they are on, they take an assessment to judge mastery of the learning. If the student does well, they move on to new learning; if they do not, they continue working through the lessons or receive scaffolded help from the teacher (Gonzalez, 2015). This allows for students to make meaningful decisions about their own learning and education which makes it an effective personalized learning technique.

Adding onto the idea of self-pacing, the flipped classroom is an educational tool that utilizes technology to “flip” the traditional classroom model of lectures at school and homework at home to a model where students view the lecture at home and do the work, or learning, within the classroom. Khan explains that flipped classrooms remove “the one-size-fits-all lecture” in order to humanize the classroom by providing more teacher-student and peer-to-peer interactions during the school day (2011). By utilizing technology, flipped classroom teachers deliver classroom instruction digitally in some way, for example Khan began by posting lessons to YouTube, and then ask the students to view the instruction at home before coming to class. The students are then prepared to

discuss the lesson in class with their peers and build their learning through collaboration instead of isolation (Khan, 2011).

Passion-based learning. Sometimes called strengths-based or inquiry-based education, passion-based learning is a tool where teachers utilize their students' individual passions and curiosity to help improve engagement and learning in the classroom. Passion-based learning, as explained by educator Sheryl Nussbaum-Beach, is "...as diverse as the learners in the room. It's about letting them pick things they're passionate about, finding subjects where their strengths lie, and shaping their own learning systems" (Wolpert-Gawron, 2011, para. 6). Two popular examples of passion-based learning used in classrooms today are the concepts of Genius Hour and Project-Based Learning (PBL).

Former classroom teacher and now Director of Learning and Innovation, A. J. Juliani, explained that Genius Hour is when teachers give their students 20% of their time in class to pursue learning that is passion-driven (2018). He continued to say that it allows students to go into depth on a topic that inspires them, covers multiple standards in all subject areas, and is inherently differentiated and individualized (2018). Many educators use Genius Hour, which is made up of several days or weeks of independent, passion-driven study followed by unique presentations, to engage their students and promote independent learning (Potash, 2018). There are many different ways to enact Genius Hour within the classroom, but all of these ways have the goal of creating experiential, challenged-based, individualized learning that puts the mastery back into the hands of the students (Juliani, 2018).

Project-Based Learning (PBL) is another personalization tool that offers students the ability to drive their education by focusing on their passions and curiosities. PBL is an inquiry-based teaching method meant to help engage students in, “creating, questioning, and revising knowledge, while developing their skills in critical thinking, collaboration, communication, reasoning, synthesis, and resilience” (Vega, 2015, para. 4). In PBL, students work in groups and are challenged to research and find solutions to real-world problems they are passionate about. This process, “increases long-term retention of content, helps students perform as well as or better than traditional learners in high-stakes tests, improves problem-solving and collaboration skills, and improves students' attitudes towards learning” (Vega, 2015, para. 6). Additionally, when done correctly, these projects, “...give students opportunities to build such 21st century skills as collaboration, communication, critical thinking, and the use of technology, which will serve them well in the workplace and life” (Larmer & Mergendoller, 2010, para. 16).

Student voice. The final example of personalized learning discussed in this paper is that of amplifying student voice. By encouraging students to speak their minds, providing relevant feedback, having students present their ideas to broader audiences, and allowing students to have a say in how and what they learn, teachers individualize learning and help amplify authentic student voice (Block, 2014; Larmer & Mergendoller, 2010; Provenzano, 2014; Smyth, 2006). Below are two main reasons to prioritize and encourage the amplification of student voice: to encourage student ownership of their learning and to empower students to be outspoken advocates for their own education.

The first reason to amplify student voice in the classroom is to encourage student ownership and responsibility of their learning. Schoolwork is more meaningful for students when they showcase their learning beyond the teacher and the test; they take more ownership for the quality of their work when it's presented to a broader audience (Larmer & Mergendoller, 2010). For example, educator Joshua Block (2014) created a safe space for his students within the classroom to vocalize their thinking by having students share their work out loud, generate questions, facilitate discussions, evaluate their own work, and integrate presentation into projects (2014). Block asked his students to share their ideas beyond the safety of the teacher-student relationship so that they can begin to understand how to present authentic ideas to a group of people. These learning techniques necessarily individualize the learning space for students because their authentic voices and ideas are encouraged and taken seriously within the classroom.

Another educator, Nicholas Provenzano (2014), found that when his students were allowed to choose their topics for an upcoming classroom TEDx Talk presentations which would be broadcast to the public online, they, "wanted to complete the projects because they meant so much to them, and they wanted to make sure they created the best talk possible" (para. 3). His students, he explained, took ownership of the learning process by putting in a great deal of personal work and had great pride for the creation of their presentations knowing they would be broadcasted to a live, online audience (2014). Both of these educators pushed their students to think about their audience when working on a presentation which is, in many cases, a skill they will need for future education and in the workplace. Asking students to present their work to a larger audience shows

students that teachers value their authentic voice, encourages them to think critically about their ideas, and requires students to take ownership of their learning.

An important second reason to amplify student voice is to ask students to join the conversation about their own learning and schooling to enact beneficial change (Bourke & Loveridge, 2016; Phillips, 2012). Students hold accurate ideas about the school climate and workings of the school administration; they are aware of their environment and should be trusted to give their opinions on it (Phillips, 2012). The dual purpose of obtaining student input on teachers and their teaching, “is (a) helping to empower students and train them to use their voices effectively, and (b) getting the best possible feedback to make adjustments in both curriculum and instruction” (Phillips, 2012, p. ?). When students are given the encouragement, time, and space to use their voice to present ideas, feedback, and their understandings of what is important to learn and why, students and teachers can work together to create a more beneficial, democratic, individualized, and respectful learning community (Bourke & Loveridge, 2016).

By encouraging student choice, a self-paced curriculum, passion-driven learning, and an amplification of student voice, educators tell students that they care about what students think, who they are, and where they want to take their education. “For students,” as Bourke and Loveridge (2016) explained, “the importance of learning [is] about their needs, their interests, and their lives, not around a stipulated curriculum” (p. 65). Educators must chose to individualize learning for their students in order to help create global citizens who are independent, lifelong, passionate learners.

Challenges with implementing personalized learning in the classroom. Even though personalized learning has been proven to raise student engagement, foster intrinsic motivation, and help students succeed academically, there are still challenges with the implementation of the practice in the classroom. This section will discuss three challenges knowing that there are many more unique problems to overcome for each individual teacher, administrator, and school. Those challenges are a lack of an agreed upon definition for personalized learning, using technology in the classroom, and inadequate teacher support and training for implementation.

The first challenge addressed that this researcher also found when beginning this paper, was the lack of an agreed upon definition for personalized learning. As mentioned at the beginning of this section, some argue that personalized learning techniques have been used by educators for as long as students have been educated by teachers (Watters, 2017). Others argue, however, that personalized learning by definition requires the use of technology (Bingham et. al, 2016). Bingham et. al pointed out that, "...a lack of clear definitions or instructions and a dearth of exemplar designs and practices to which trainers and professional development deliverers can point are key challenges to implementing a PL [personalized learning] model" (2016, p. 474). There are many great personalized learning tools to be found, but when educators are not clear what they are discussing, that causes challenging confusion when attempting to implement in the classroom.

A second challenge educators have found when implementing more personalized learning methods in the classroom is that of technology. As previously stated, this author

believes that technology is not necessary when working towards a more individualized learning experience for students in the classroom, however technology has proven to be an integral part of student's present and future and an exciting learning tool to utilize in the classroom. That being said, teachers have found many challenges when including technology in the personalized learning classroom: their comfort levels using new technology, the schools quality of technology, managing student technological use, and student frustration with technology (Bingham, 2016). Another key challenge surrounding technology is the inequity of requiring students to use devices at home or complete online work when the student either does not have internet resources, a device to use, or both.

A final challenge educators face when attempting to implement more personalized learning opportunities in the classroom is a lack of training and support to do so. At first, there is a lot of upfront work for teachers to do when implementing this method for the first time (Bingham, 2016). Teachers not only need to create the material for their classes, they need to learn how to teach in new ways, with new tools, and in potentially new settings depending on the school's policies regarding personalized learning integration (Bingham, 2016). Research indicated that, "... professional development was not sufficient or aligned to teachers' needs, making innovation and personalization difficult" (Bingham, 2016, p. 476). The success of personalized learning methods in the classroom depends on motivating and supporting teachers to facilitate it (Vega, 2012).

The benefits of including personalized learning opportunities in the classroom are not without challenges. However, the benefits for students and their learning outweigh these challenges. This section discussed an overview of personalized learning and

technology's role in making learning personal in schools today. It presented rationale for making learning more personal for students and outline four ways to personalize learning in the classroom: providing student choice, self-pacing the learning, promoting passion-driven learning, and amplifying student voice. This section concluded with a discussion of challenges facing the implementation of personalized learning in classrooms today.

CRT and personalized learning

There is little research done to specifically link the connection between CRT and personalized learning. Using the research in this section, I take the theories of inquiry-based, self-regulated, and co-regulated learning as starting points for discussing the author's definition of personalized learning and the link between culturally responsive pedagogy. As mentioned above, inquiry based learning is a tool where teachers utilize their students' individual passions and natural curiosity to help improve engagement and learning in the classroom. Self-regulated learning (SRL) is an approach to learning where students are given control over their thoughts and actions to achieve personal and educational goals (Perry et. al, 2015). Finally, co-regulated learning is a learning approach that emphasizes the importance of student collaboration and instrumental interaction and activity to support academic success (Perry et. al, 2015). The research below looks at the link between these three theories that are closely tied to the theory of personalized learning and CRT.

First, Brown (2017) looked at the relationship between CRT and inquiry-based science education. Through his research, he found that, "There is evidence that inquiry

experiences improve the academic achievement of students of color and diminish the expansion of achievement gaps typically seen between students of color and white students” (Brown, 2017, p. 1144). While his work focused solely on a set of specific inquiry-based scientific guidelines for questioning, he did find that, “there was evidence of meaningful learning opportunities that drew directly upon students’ experiences, where students were encouraged to pose questions, investigate answers to those questions, and develop scientific literacy through activities” (Brown, 2017, p. 1157). While not a direct link between CRT and personalized learning opportunities, this information supports the positive link between culturally relevant pedagogy and a more holistic, individualized learning approach.

Additionally, Perry et. al effectively researched the connection between Self-Regulated Learning (SRL) and its positive effect on diverse learners. The authors examined the challenges immigrant and First Nations, Inuit, and Métis learners, the largest diverse populations in their British Columbia community, must overcome which include barriers like a lack of familiarity with the new or white culture and school system, learning a new language, and experiences of marginalization, racism, and discrimination (Perry et. al, 2015).

In the same research, Perry et. al (2015) explained the pedagogical theory of co-regulated learning and the benefits it brings to culturally and linguistically diverse learners. Educators co-regulate the learning by asking for student input and questions as well as by creating collaborative learning opportunities. They explain that co-regulated learning, “presumes one or more actors have knowledge or skills that others need or want

to acquire. This feature may be used strategically to value the diverse knowledge of country, culture, and language children bring with them to school” (Perry et. al, 2015, p. 369).

As an approach to pedagogy, Perry et. al stated that SRL and co-regulated learning do not explicitly attend to culture or teaching culture in the classroom, but they do leave the flexibility to do so (2015). They explained that in order to help education be more accessible for those ethnically and linguistically diverse students, teachers must create opportunities for students to use their unique, cultural knowledge and heritage language in the classroom. Students need to analyze how their experiences in their communities outside of the classroom inform those in the classroom and vice versa; they need to see how their decisions and choices reflect a community value, whether that be a school community or cultural one (2015). Again, though this research does not specifically bridge together CRT and personalized learning, it does show a positive link between being an educator who provides more culturally aware, individualized educational opportunities for all students, but specifically for underserved students.

As shown here, there is a lack of peer-reviewed research that links the pedagogical theories of CRT and personalized learning. The ideas of self-regulated and inquiry-based learning are similar to the ideas of personalized learning and, as seen above, shows a beneficial connection with culturally responsive pedagogy. Because of the lack of research and the positive implications of the above studies bridging these pedagogical theories, it is clear there is a need for more research on the positive relationship between CRT and personalized learning.

Reflection

The goal of Culturally Responsive Teaching, as Hammond (2015) explained it, is to create independent learners. Students turned citizens who can take the learning they do, not just the knowledge, into the real world and thrive because, through thoughtful education, they know how to learn and succeed. So, when we look at personalized learning opportunities in the classroom with a culturally relevant lens, the outcomes appear to be the same: create autonomous learners. I would argue that teachers can't effectively use personalized learning opportunities in the classroom without being culturally responsive teachers since the very nature of personalized learning is based on their students' individuality and worldview (shaped by their culture). By no means are these theories the same thing as culturally relevant teachers must also do the work of being multicultural and socially aware, but both concepts require that teachers believe in the classroom, the students, and their own vision for their education with appropriate learning opportunities, encouragement, and feedback along the way.

Going forward, and because of the lack of peer-reviewed work purposefully connecting these two theories, I will work to showcase how educators can utilize CRT to enhance personalized learning opportunities in the secondary classroom by creating a podcast to share this information. I will continue to research these theories and will work to provide effective resources for current educators to answer the question: *How can educators utilize CRT to enhance personalized learning opportunities in the secondary classroom?* The following chapter outlines the rationale for this project, the intended

audience, an overview of how I will determine effectiveness of the project, and the proposed schedule.

CHAPTER THREE

Capstone Project

As a way to share the information in this paper as well as any continued research, I have created a podcast to help educators understand how to utilize Culturally Responsive Teaching to enhance personalized learning opportunities in the secondary classroom. In this chapter, I will give an overview of the project and what will be presented in the podcast. In the next section, I will provide rationale for the creation of a podcast as well as some of the educational benefits they provide. Next, I will outline the intended audience I foresee listening to the show. Finally, I will provide a project description including an overview of the parts of the project, how I will determine effectiveness, and the schedule for the project.

Overview

As someone who looks for current, engaging, and easy to consume information, I know how easy and beneficial podcasts can be. With our current technology of tablets, smart phones, and smart home devices like Alexa, it has never been simpler to listen to podcasts, even while multitasking at home. As an adult student, I understand the busyness of life and the balancing act of school, work, and family, so being able to, say, play cars with my son and learn new information through podcasts at the same time is truly enjoyable.

It is because of these many reasons that I created a podcast entitled iCRT that presents information on CRT and personalized learning to benefit educators who want to

learn more about these topics like I was at the beginning of this research. I present background information on the theories, provided lesson plan ideas, reviewed current books on the topics, and summarized specific CRT and personalized learning classroom tools for educators to use in the classroom immediately. I created a podcast website and Instagram account where people can come and find, for example, blog posts on the episodes, more in-depth lesson plan ideas, or the links to predominant educators working with CRT and personalized learning. I will also be able to better teach podcast consumption and creation with my future students.

Through this podcast creation, the continued research into CRT and personalized learning, conversations with experts in the education field, lesson plan creations, and synthesis of theoretical and practical work surrounding these topics, I am better able to answer the question: *How can educators utilize CRT to enhance personalized learning opportunities in the secondary classroom?*

Rationale and Audience

According to a study done by Edison Research, there are an estimated 124 million people who listened to podcasts in the last year in the United States (2018). Further, 73 million people are monthly listeners with an estimated 48 million Americans listening each week (Edison Research, 2018). People are listening to more podcasts than ever before because of their ease of consumption and availability (Edison Research, 2018).

Podcasts can also be beneficial for educational purposes both for adult learners and secondary students (Hajar Halili, 2018). Adult pedagogy is necessarily built on the

foundation of self-directed, intrinsically motivated, mature learners who should be involved in learner-centered activities (Hajar Halili, 2018). Students respond positively to the inclusion of podcasts to their learning workload because it helps them increase their understanding of the material, provides the opportunity to learn at their own time, and allows them the opportunity to listen to specific podcasts multiple times if needed to gain a better understanding of the material (Foon Hew, 2009). Adult learners in 2018, the proposed audience of this project, already listen to podcasts to gather information and learn new knowledge, as seen by the Edison Research statistics. So, my proposed audience would benefit from information being presented in a podcast form for several reasons: it is already a medium they are comfortable with; they are busy learners and multitask while they listen; and they like the flexibility that podcasts provide.

Secondary education students also benefit from podcast use and creation in the classroom. If podcasts are utilized in the classroom to provide information for students, one benefit is that they can access the learning material when not in the classroom either through their mobile devices or a home computer or tablet (Gray, 2017; Nesi, 2017). Additionally, when creating a podcast, students learn how to properly change their tone and message to fit a specific listening audience (Nesi, 2017). Finally, podcasts can work for students to find not only interesting content, but also to connect students to other people their age discuss a wide variety of topics from around the world (Sprague & Pixley, 2008).

While high school students are not my intended audience, there are several reasons I include this information here. First, putting this podcast out onto the internet

allows for an array of listeners that I do not intend and some may be high school students. Second, as an educator, I am hoping to gain valuable knowledge in the creation of the podcast in order to create them in the future more tailored for my classes. Finally, I hope that by creating a podcast I will be better equipped to teach my future students the process and encourage them to learn through sharing their voices for a broader audience.

With the information above in mind, the intended audience for my podcast will be educators who are interested in learning more about CRT and personalized learning and their implementation in the classroom. I also expect my audience to be future Hamline students who are researching CRT or personalized learning for their own academic work. I hope my podcast will reach many current educators who are looking for more information on how to make their classrooms more culturally relevant and personalized.

Project Description

The project will be a combination of a podcast, website, and Instagram account to reach a wide variety of educators and students. I will have six podcast episodes for this project and will discuss the background of CRT and personalized learning, popular theorists, and current uses in the classroom. The website will house the podcast episodes as well as any beneficial supplemental materials, including pdfs or additional links, mentioned in the episodes. Finally, the Instagram account, that will be accessible through the website, is an additional way to gain listeners of the podcast. My Instagram account will direct followers to my website and will work as a platform to connect social media users to my work.

The effectiveness of this project will be measured in several ways. First, I will monitor the podcast for the amount of downloads, tracking which episodes, and therefore which topics, people are interested in listening to. However, research shows that while a podcast creator can see how many downloads their podcast has, the creator can't actually tell if the downloader has listened to all, if any, of the podcast (Booth, 2018). So, I will also be looking at how many people interact (like, subscribe, follow, comment) with my social media pages. I will have a website and Instagram account to broadcast my podcast as well as push out materials or educational content I create and highlight in the podcast episodes.

I will go live with my podcast in February of 2019 after compiling information to present in the first several episodes. The six podcast episodes for this project, including all background work and supplemental materials, will be completed and published by May 18th, 2019. I will continue my podcast through the foreseeable future to push myself to continue to better my own pedagogy and share relevant information regarding CRT and personalized learning in classrooms today.

Summary

In Chapter Three, the appropriateness of podcasts as an educational tool, either adult or secondary in nature, was rationalized. This chapter also addressed the expected audience of the podcast, outlined the potential measurements of success, and presented the intended timeline of completion.

CHAPTER FOUR

Reflection

Overview

Through a study of the literature on Culturally Responsive Teaching (CRT) and personalized learning and through the creation of an educational podcast and website, I explored the question: *How can educators utilize Culturally Responsive Teaching to enhance personalized learning opportunities in the secondary classroom?* This final chapter serves as a personal analysis and reflection of the work I've done through this process. First, I will reflect on my own personal learning and professional growth throughout the capstone process. Next, I analyze the literature review and the published research available that impacted my own research and project. Then, I look at the potential implications and the known limitations of this project followed by the benefits to the educational community of my work. Finally, I propose my personal next steps for the work in this project.

Personal learning

When I began my research just under a year ago, I did not realize that what I would learn would reshape the foundation of my pedagogy, but it did. I had the idea that I wanted to learn about how to be a more effective educator for diverse student populations, I wanted to work with students' current culture, and I wanted to weave personalized learning into my research somehow. Through my initial research and readings, I stumbled across Gloria Ladson-Billings and Culturally Relevant Teaching and something clicked within me: I had finally found the theory that matched what I was

hoping to become as a teacher. I devoured her works, moved onto read work from Geneva Gay, then Zaretta Hammond, and now Cornelius Minor and have felt a deep shifting of and growing confidence in my belief of the work I choose to do.

After learning about CRT, I knew there was a link to personalized learning, but there is a lack of peer-reviewed work making this distinct connection. That CRT and personalized learning overlap in their theories became very apparent to me when I began my capstone research. They both motivate students, create safe learning environments, generate joy, encourage authenticity of learning, and promote academic success. My literature review research and my work on this project confirmed these ideas I had, but there was still the problem that this information was not easily accessible to educators. Based on this scarcity of readily available information, I decided to create a podcast to broadcast this information freely and easily in order to share this work I find so necessarily and important.

I thoroughly enjoyed working on my capstone project to create a podcast, website, and social media account geared towards bringing information about CRT and personalized learning to educators. When I was thinking of how I wanted to share my newfound knowledge with the world, the idea of a podcast seemed like an affective and easily digestible way to present information to busy adult learners. However, when I actually sat down to record the first episode, I felt like one of my middle school students asked to present for the first time in front of the class: terrified and anxious with just a touch of imposter syndrome. I had not prepared myself for the learning curve of writing scripts, recording, logo creation, social media plugging, and actually uploading your

podcast to a website where people could listen or download. I was naive to the difficulty of these things at the beginning and yet, it all got easier as I went along. Not only am I excited to keep the podcast up and running past graduation, I am now more confident that I will be able to teach podcast creation to my future students as an alternative educational tool.

Beyond the actual creation of the podcast and website, the additional learning I did through the creation of the project has served me just as much, if not more, than the literature review learning. I was able to explore and research more contemporary works including blogs, online articles, podcasts, and graphic novels. While researching the ways other educators implemented these theories within their classrooms, part of my project also focused on practical ways educators could use CRT and personalized learning together within the classroom. Not only do I discuss the ways we can bring these theories into the classroom in the podcast episodes, but I also provide many links and resources through my blog posts. This work directly benefits my pedagogy in positive ways. It has helped me think about the teacher I want to become and the steps I can take to be a more culturally responsive educator with more personalized learning tools to bring into the classroom.

Literature review

The most important part of the process of researching and writing my literature review was finding out about CRT and the theorists Gloria Ladson-Billings (2009) and Zaretta Hammond (2015). As mentioned above, these theorists had a profound effect on

my foundational pedagogical beliefs, and I am a changed teacher because I have read their works.

As stated above, at the beginning of the literature review research, I had an idea of where I wanted to go but no real path. Through the research, the path became clear when I read Gloria Ladson-Billings work. Once I was well on the path of understanding CRT and personalized learning did I start to see the myriad of ways these two theories overlap: heightened student motivation, increased academic success, amplification of authentic student voice, and creating independent learners to name a few. Only after reflecting on the first three chapters and beginning to create practical resources for the project was I more able to see the link between these two theories and ground my pedagogy into that space between the two.

I see this intersection of CRT and personalized learning to be my contribution to the literature surrounding these two theories. Because there is a lack of peer-reviewed work on the benefits of using these two theories in the classroom together, I believe this capstone thesis is a call to encourage others to work with me to bring more awareness about the positive impact this combined educational practice could bring to our students.

Implications and limitations

Based on my research and project work, I believe that every teaching program and school should educate and provide professional development for teachers to be culturally responsive. My work made me firmly believe that CRT is not a way to manage behaviors; it is not something to only be thought about during Black History Month or on Cinco de Mayo; it is not about food. To be a culturally responsive teacher, there must be

a mindset shift in how we think about students and the school as a system that has a history of oppressing specific groups. Only with a deeper understanding of CRT was I able to understand this, and so my work also calls for a look into how we are educating teachers in order to better serve, specifically, our culturally and linguistically diverse students.

One major limitation for my capstone and project and that is the fact that I was not able to begin implementing my new knowledge and pedagogy because I am not in the classroom at the moment. I think my work would have benefitted from having a platform to do just what I was hoping the project would be able to do: bring theory into practice. Another limitation for this project is that I was not able to share my work and get constructive criticism from peers in the field because I am not in the classroom at the moment. It will be beneficial to bring this research and new understanding of CRT and personalized learning into my future PLC meetings to collaborate with other educators and bring theory into practice.

Benefits to educational community

My work benefits the educational community because it draws attention to the link between CRT and personalized learning which the academic community, as of now, lacks publication on. I believe this work is timely and important based on the state of our educational system and America today.

My project is also beneficial to the educational community because I present information in easily accessible and current mediums for adult learners of today. My research is not only presented in my thesis paper but is also available to listen to in easily

digestible chunks with practical advice on my podcast. I wanted to give ideas and classroom tips that other educators could implement immediately after listening to an episode or visiting my website.

Next steps

My next steps for this project are to continue to promote the podcast via the website, Soundcloud, and Instagram. I plan to move forward and continue the work I have started with the iCRT blog, Instagram account, and podcast past graduation. The creation of this podcast has required that I do more research, think more deeply, and plan practical classroom activities with CRT and personalized learning tools in mind. Moving forward in my career, I would like to continue to seek out new information and research to better serve my students my culturally and linguistically diverse students and that our work together will become examples for the necessity of CRT and personalized learning in classrooms. In the classroom, specifically, I will also be using this new knowledge of podcast creation with future students either through assigning episodes to listen to or assisting them in creating their own.

This research and work has changed my thinking about my own pedagogy, so I will also be bringing this new learning with me into the future classrooms and schools I will work in. I will use this information to continue to share the message that these theories are best practice with colleagues, administration, and, most importantly, my students.

Based on my research findings and this creative process, I would recommend a continued look at the specific ways CRT and personalized learning affect one another in

the classroom. Second, I would recommend continuing to create practical unit and lessons plans that incorporate these two theories to better serve culturally and linguistically diverse student populations. Finally, I would recommend sharing this work on platforms that can reach many teachers across the globe to further the idea that these two theories are necessary in schools today.

Summary

In summary, this capstone project began the hard work of answering the question: *How can educators utilize Culturally Responsive Teaching to enhance personalized learning opportunities in the secondary classroom?* But really, after all of the reading, research, and creative processes of this capstone, the answer to this question is, in fact, a rewording of the question itself. It should read: How can educators utilize personalized learning opportunities to enhance CRT in the classroom? Because this work has shown me that CRT is the “what” and personalized learning is the “how”. What I mean by that is that CRT is what is needed in classrooms today to offer all students, but specifically culturally and linguistically diverse students, a safe place to freely pursue academic success and personalized learning is one of the best tools to help educators offer that freedom to students.

Through analysis of the work of Culturally Responsive Teaching (CRT) theorists Gloria Ladson-Billings, Geneva Gay, and Zaretta Hammond, I provided rationale for the ever-present need of Culturally Responsive teachers in today’s world for today’s students. I then provided rationale and practical examples of ways educators can personalize learning for their students by offering students choice, self-pacing the

curriculum, providing passion-based learning opportunities, and by amplifying student voice. Further, my project podcast and website present educators with information about CRT and personalized learning and continuously makes the argument that these theories enhance one another when used together in the classroom.

Through all of this research, work, personal enlightening moments, and ideas for the future of my own pedagogy, I have come to realize that this work I have just begun is not complete and may never be. The hard, arduous task of choosing to look at privilege and systemic oppression and the ways in which they negatively affect all of our students is not something that can be fixed by reading an article or listening to a podcast episode; we fix those things as educators by choosing to think for ourselves, by choosing best practice over “what’s always been done,” by choosing to work for our students and their futures, by choosing to be advocates of change, and by choosing to do this work again and again every morning when we wake up. I want to continue to choose to teach my students, as Paulo Friere (2018) beautifully wrote, the “practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world” (p. 34).

REFERENCES

- Anderson, M. (2016). Chapter 1. The key benefits of choice. In *Learning to Choose, Choosing to Learn*. Retrieved from <http://www.ascd.org/publications/books/116015/chapters/The-Key-Benefits-of-Choice.aspx>
- Aronson, B., & Laughter, J. (2018). The theory and practice of culturally relevant education: expanding the conversation to include gender and sexuality equity, *Gender and Education*, DOI: 10.1080/09540253.2018.1496231
- Bingham, A., Pane, J., Steiner, E., & Hamilton, L. (2016). Ahead of the curve: Implementation challenges in personalized learning school models. *Educational Policy*, 32(3), 454-489. DOI: 10.1177/0895904816637688
- Block, J. (2014). Prioritizing student voice. Retrieved from <https://www.edutopia.org/blog/prioritizing-student-voices-joshua-block>
- Brown, J. (2017). A metasynthesis of the complementarity of culturally responsive and inquiry-based science education in k-12 settings: Implications for advancing equitable science teaching and learning. *Journal of Research in Science Teaching*, 54(9), 1143-1173. DOI10.1002/tea.21401
- Booth, K. (2018, February 23). Podcast metrics: How to measure your performance (with such little data). Retrieved from <https://www.impactbnd.com/blog/how-to-measure-podcast-metrics-performance>
- Bourke, R. & Loveridge, J. (2016). Beyond the official language of learning: Teachers

engaging with student voice research. *Teaching and Teacher Education* 57, 59-66. DOI: 10.1016/j.tate.2016.03.008

Bulgar, M. (2016). Personalized learning: The conversations we're not having.

Data&Society (July 22, 2016), 1-29. Retrieved from

https://www.datasociety.net/pubs/ecl/PersonalizedLearning_primer_2016.pdf

Cordova, D. I., & Lepper, M. R. (1996). Intrinsic motivation and the process of learning:

Beneficial effects of contextualization, personalization, and choice. *Journal of*

Educational Psychology, 88(4), 715-730. doi:10.1037//0022-0663.88.4.715

Edison Research (2018, April 19). the podcast consumer 2018. Retrieved from

<https://www.edisonresearch.com/podcast-consumer-2018/>

Esposito, J & Swain, A.N.. (2009). Pathways to social justice: Urban teachers' uses of

culturally relevant pedagogy as a conduit for teaching for social justice.

Perspectives on Urban Education, 6, 38-48. Retrieved from

<https://files.eric.ed.gov/fulltext/EJ838745.pdf>

Foon Hew, K. (2009). Use of audio podcast in K-12 and higher education: A review of

research topics and methodologies. *Educational Technology Research and*

Development, 57(3), 333-357. Retrieved from

<https://www.jstor.org/stable/40388633>

Ferlazzo, L. (2017). Student engagement: Key to personalized learning. *Educational*

Leadership, 74(6), 28-33. Retrieved from

<http://www.ascd.org/publications/educational-leadership/mar17/vol74/num06/Student-Engagement@-Key-to-Personalized-Learning.aspx>

- Freire, P. (2018). *Pedagogy of the oppressed*. New York, NY: Bloomsbury Academic.
- Gay, G. (2010). Acting on beliefs in teacher education for cultural diversity. *Journal of Teacher Education*, *61*(1-2), 143-152. DOI: 10.1177/0022487109347320
- Gay, G. (2013) Teaching to and through cultural diversity. *Curriculum Inquiry*, *43*(1), 48-70. DOI: 10.1111/curi.12002
- Gonzalez, J. (2015, November 12). Self-paced learning: How one teacher does it [blog]. Retrieved from <https://www.cultofpedagogy.com/self-paced-learning/>
- Gonzalez, J. (2017, September 10). Culturally responsive teaching: 4 misconceptions. Retrieved from <https://www.cultofpedagogy.com/culturally-responsive-misconceptions/>
- Goodwin, G. (2010). Research says.../choice is a matter of degree. *Educational Leadership*, *68*(1), 80-81. Retrieved from <http://www.ascd.org/publications/educational-leadership/sept10/vol68/num01/Choice-Is-a-Matter-of-Degree.aspx>
- Grant, P., & Basye, D. (2014). *Personalized learning: A guide for engaging students with technology*. Available from <https://books.google.com/books?id=96apCgAAQBAJ&lpg=PA2&dq=personalized%20learning%20in%20the%20classroom&lr&pg=PR1#v=onepage&q&f=false>
- Gray, C. (2017, January 24). Podcasting in education: What are the benefits? Retrieved from <https://www.thepodcasthost.com/niche-case-study/podcasting-in-education/>
- Hajar Halili, S. (2018). Emerging trends of Web 2.0 tools in adult education. *The Online*

- Journal of Distance Education and e-Learning*, 6(2), 55-60. Retrieved from <http://www.tojdel.net/journals/tojdel/articles/v06i02/v06i02-09.pdf>
- Hammond, Z. (2015). *Culturally responsive teaching and the brain: Promoting authentic engagement and rigor among culturally and linguistically diverse students*. Thousand Oaks, CA: Corwin, a SAGE Company.
- Hammond, Z. (2017). Dimensions of equity chart. [PDF File]. Retrieved from https://s3-us-west-2.amazonaws.com/dimensions-of-equity/Dimensions-of-Equity.pdf?inf_contact_key=21bc72dadb2582cef7c8859791611fa5680f8914173f9191b1c0223e68310bb1
- Jackson, Y. (2011). *The pedagogy of confidence: Inspiring high intellectual performance in urban schools*. New York, NY: Teachers College Press.
- Juliani, A. What to do when genius hour fails? Retrieved from <http://ajjuliani.com/genius-hour-fails/>
- Khan, S. (2011). *Salman Khan: Let's use video to reinvent education*. [Video File]. Retrieved from <https://ed.ted.com/lessons/let-s-use-video-to-reinvent-education-salman-khan>
- Khan, S., & Noer, M. [Forbes]. (2012, November 1). *The history of education* [Video File]. Retrieved from https://www.youtube.com/watch?time_continue=687&v=LqTwDDTjb6g
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465-491. Retrieved from <http://www.jstor.org/stable/1163320>

- Ladson-Billings, G. (2009). *The dream-keepers: Successful teachers of african american children* (2nd ed.). San Francisco, CA: Jossey-Bass, A Wiley Brand.
- Larmer, J., & Mergendoller, J. (2010). Seven essentials for project-based learning. *Educational Leadership*, 68(1), 34-37. Retrieved from http://www.ascd.org/publications/educational_leadership/sept10/vol68/num01/Seven_Essentials_for_Project-Based_Learning.aspx
- Ledesmam, M.C., & Calderón, D. (2015). Critical race theory in education: A review of past literature and a look to the future. *Qualitative Inquiry* 21(3), 206-222. Doi: 10.1177/1077800414557825
- Martinez, M. (2002). What is personalized learning? *The eLearning Developers' Journal*, May 7, 2002. Retrieved from <https://www.elearningguild.com/pdf/2/050702dss-h.pdf>
- Minnesota Department of Education. (2018a). *Engagement and safety: What are students' experiences in school?* [Data file]. Retrieved from http://rc.education.state.mn.us/#engagementAndSafety/orgId--999999000000__groupType--state__year--2016__grade--09__p--1
- Minnesota Department of Education. (2018b). *Engagement and safety: What are students' experiences in school?* [Data file]. Retrieved from http://rc.education.state.mn.us/#engagementAndSafety/orgId--999999000000__groupType--state__year--2016__grade--09__p--1
- Nesi, C. (2017, February 27). 7 benefits of a classroom or school podcast. Retrieved from <https://chrisnesi.com/benefits-classroom-school-podcast>

- Perry, N., Yee, N., Mazabel, S., Lisaingo, S., & Määttä, E. (2017). Using self-regulated learning as a framework for creating inclusive classrooms for ethnically and linguistically diverse learners in Canada. In *Handbook on Positive Development of Minority Children and Youth* (Early childhood and school level influences).
Doi: 10.1007/978-3-319-43645-6_22
- Phillips, M. (2012, June 8). Student voice and the teaching of democracy. Retrieved from <https://www.edutopia.org/blog/student-voice-teaching-democracy-mark-phillips>
- Potash, B. (2018, March 13). Get started with genius hour this year. Retrieved from <http://www.nowsparkcreativity.com/2018/03/get-started-with-genius-hour-this-year.html>
- Provenzano, N. (2014, July 17). Student passion and TEDx talks. Retrieved from <https://www.edutopia.org/blog/student-passion-and-tedx-talks-nick-provenzano>
- Robinson, K. (2006, February). *Do schools kill creativity?* [Video File]. Retrieved from https://www.ted.com/talks/ken_robinson_says_schools_kill_creativity#t-1137075
- Robinson, K. (2013, April). *How to escape education's death valley* [Video File].
Retrieved from https://www.ted.com/talks/ken_robinson_how_to_escape_education_s_death_valley
- Robinson, K., & Aronica, L. (2016). *Creative Schools: The Grassroots Revolution That's Transforming Education*. New York, NY: Penguin Books.
- Rosenstein, A. (2017, November 21). Students transform into global change agents with

technology. Retrieved from

<https://ww2.kqed.org/education/2017/11/21/students-transform-into-global-change-agents-with-technology/>

Schwartz, K. (2015, February 2). What do we really mean when we say ‘personalized learning’? Retrieved from

<https://www.kqed.org/mindshift/39142/what-do-we-really-mean-when-we-say-personalized-learning>

Sprague, D., & Pixley, C. (2008). Podcasts in education: Let their voices be heard.

Computers in the Schools, 25(3-4), 226-234. doi:10.1080/07380560802368132

Stefanou, C. R., Perencench, K. C., DeCinto, M., & Turner, J. C. (2004) Supporting

autonomy in the classroom: Ways teachers can encourage student decision making and ownership. *Educational Psychology*, 39(2), 97–110.

DOI:10.1207/s15326985ep3902_2

Vega, V. (2015, December 1). Project-based learning research review. Retrieved from

<https://www.edutopia.org/pbl-research-learning-outcomes#definition>

Villegas, A., & Lucas, T. (2002). Preparing culturally responsive teachers rethinking the

curriculum. *Journal of Teacher Education*, 53(1), 20-32. Retrieved from

<http://journals.sagepub.com.ezproxy.hamline.edu:2048/doi/abs/10.1177/0022487102053001003>

Watters, A. (2017, June 9). The histories of personalized learning. Retrieved from

<http://hackeducation.com/2017/06/09/personalization>

Wolpert-Gawron, H. (2011, May 12). Passion-based learning: An interview with Sheryl

Nussbaum-Beach. Retrieved from

http://go.galegroup.com.ezproxy.hamline.edu:2048/ps/i.do?&id=GALE|A257082796&v=2.1&u=clic_hamline&it=r&p=EAIM&sw=w

BIBLIOGRAPHY

- Comber, B. (2015). Cultural literacy and social justice. *Journal of Adolescent and Adult Literacy, 58(5)*, 362-367. DOI: 10.1002/jaal.370
- Larmer, J., & Mergendoller, J. (2010, September). Seven essentials for project-based learning. *Educational Leadership, 68(1)*, 34-37. Retrieved from http://www.ascd.org/publications/educational_leadership/sept10/vol68/num01/Seven_Essentials_for_Project-Based_Learning.aspx
- Robinson, K. (2010, February). *Bring on the learning revolution!* [Video File]. Retrieved from https://www.ted.com/talks/sir_ken_robinson_bring_on_the_revolution?language=en#t-346091
- Roschelle, J., Pea, R., Hoadley, C., Gordin, D., & Means, B. (2000). Changing how and what children learn in school with computer-based technologies. *The Future of Children, 10(2)*, 76-101. doi:10.2307/1602690
- Vincent, K. (2011, July 13). Nine tenets of passion-based learning. *Mindshift: A podcast*

about the future of learning. Podcast retrieved from

<https://www.kqed.org/mindshift/13645/nine-tenets-of-passion-based-learning>