Summer 2018

How To Create A High School Personalized Learning System To Re-Engage And Extend Deeper Learning Of Opportunity Youth Students

Joseph Cienian
Hamline University

HOW TO CREATE A HIGH SCHOOL PERSONALIZED LEARNING SYSTEM TO RE-ENGAGE AND EXTEND DEEPER LEARNING OF OPPORTUNITY YOUTH STUDENTS

By

Joseph Cienian

A capstone submitted in partial fulfillment of the
requirements for the degree of Master of Arts in Education

Hamline University
Saint Paul, Minnesota
2018

Project Advisor: Susan Manikowski
Content Reviewer: Dan Frey

Specials thanks to my wife Annie, my daughter Willa, my Dzia-Dzia, my supportive parents, the many students I've had to the pleasure to learn from over the years, and my Capstone Committee.

TABLE OF CONTENTS

CHAPTER ONE

Introduction

Overview

This chapter will establish the foundation and context to explain why I've created this project for my Master's in Teaching Capstone around the research question : *How can a high school set up a personalized learning system to re-engage and extend deeper learning opportunities for students?*

It will thoroughly explain the significance, rationale, and need for creating alternative pedagogy, focus, and tools in order to deal with the significant population of disengaged youth in American Society and Minnesota more specifically. It will then explain my personal rationale for choosing this line of work, and line of inquiry for this project. Next, it will explain the set of strategies used locally at a charter school in which I'm personally invested, and what additional tools are needed. Finally, it will summarize and explain how this thesis will transition into the following chapters and eventually the project itself.

Capstone Rationale: Our Drop-Out Crisis

We have a crisis of un-engaged, unplugged, and traumatized youth who have already dropped out of school in our community. It takes a specific mission, structure, and culture of a school to be more than what a traditional school is to re-engage and adequately serve this population of students. This serves the students, the community, and showcases a realistic and innovative system that other institutions can use to deal with this enormous and growing crisis nationwide. To understand this need, one should first analyze the extent of this problem.

We have a crisis of students dropping out and staying dropped out. The numbers are real and alarming. The US Department of Education decribes how, **"***every year, over 1.2 million students* ***drop out*** *of high school in the United States alone. That's a student every 26 seconds – or 7,000 a day. About 25% of high school freshmen fail to graduate from high school on time."* (Miller, 2015)

We have an enormous group of students unengaged, out of school, and out of work in our community and around the country. This is dangerous for our youth and their work / school trajectory into the future, for the fiscal health of our community, and many of these young people are getting involved with the criminal justice system leaving families stranded. In addition, high school drop-outs commit approximately seventy-five percent of the crimes in country further traumatizing the communities where many of these drop-outs come from. (Smiley, 2014) The impact of dropping out of high school can be multi-generational, cyclical, and community wide. There are many places in the community in which we can engage with our civic institutions to address this problem, but the secondary school has a unique role to play.

Locally there is much to be done. Interventions in Minnesota are extremely problematic. While eighty-two percent of students in Minnesota are statistically graduating on time, that figure mostly takes into account white students. (Wastvedt, 2016)(USDofE, 2015) When looking at students of color, particularly Black, Hispanic, Asian-American, and Native American students, Minnesota is almost dead last in the country for on time graduation rates. (NCES, 2015) This describes the true urgency of this problem in our community. To continue, Minnesota schools are not spending money on out of classroom support that many students need. (MPR, 2016) This trend needs to be reversed, and schools do not have to wait for appropriation of

funding to shift at the legislature or school board level. While Charter Schools historically have more space to innovate their programming and structures systemwide, any teacher can employ strategic practices on the classroom level to help begin to address this crisis.

The students this project will focus on are labeled "opportunity youth." They are students who have been kicked or pushed out of traditional public schools (usually also without employment) but are responsive to a personalized, creative and innovative education. Statistics nationwide have shown that the these students are mainly poor, of color (especially black or brown) and English Language Learners. With proper remediations in place, students can re-engage with their school community and work on the skills and credentials they need to secure a healthy future for themselves. (CNCS, 2016)

Personal Context and Story

To better contextualize this sentiment, I'd like to explain my personal story. I grew up in the midwest middle class, male, and white in a very segregated community. I began oblivious to my own privilege and took for granted my place in society. It took me years of reflection through experience, study, and conversation to not only identify my identity as anything but 'normal,' but begin the process of self-examination to check my mannerisms, assumptions, and actions that perpetuate an inequitable society. When I went to college at UW-Madison I began to change my thinking. Through my study in college of US History, sociology, race, and educational philosophy I began the process of intellectually breaking down my biased perspective. While I felt guilty and frustrated with the way I benefited from the broader racism and sexism increasingly becoming apparent to me, I looked for ways to actively work on anti-racism in my own life. I became very involved with activism locally and nationally.

After college I worked as a Social Justice Organizer for Greenpeace in a diverse community in Arizona, listening to community members on how climate change was impacting their lives and helping them to push back against a local government ignoring their needs. I attended the Climate Conferences in Poland and was sincerely impacted by the stories of indigenous people around the world who would be most affected by the consequences of climate change.

As I moved to Minnesota, I aimed to work more locally and got my teacher's license through night school. During the day, I substitute taught in classrooms around St. Paul and Minneapolis, and witnessed a educational structure that was structured as authoritarian and divorced from the individualism and needs of the students it was serving. Students were disengaged and often complained the system didn't serve them. This often white supremacist system which ignored our student's stories, the arts, and creative pedagogy led to disengagement, student behavioral outbursts and punitive structures, and perpetuated a sense of hopelessness. I aimed to do better when I became a teacher and found a home at a local high school.

Alternative Solutions for High Schools

In order to understand the project I've constructed, it is important to unpack the pedagogical strategies and tools I've seen work with opportunity youth in my practice as a teacher. To me, the best way to help any student stay in school is to build a strong relationship with them, have them buy into the pedagogical practices and topics of learning by making them student sourced and centered, have a transparent and relevant competency-based system that students progress through, provide extra help and mentorship in the school building, and set up a variety of wrap-around services to help students who are violating rules as many may be dealing

with other issues of trauma or instability outside of the school day. I think this needs to be done in a school-wide approach as segregated classroom spaces with high-daily turnover seem to work against building these positive supports. I think schools should be working on building restorative justice systems, young development mentorships, and productive not punitive in-school suspension alternatives that aim to help a student re-engage and mend relationships.

Once a student drops out it truly increases their odds of entering the criminal justice system and losing the mobility to enter a productive workforce position they personally value. Due to this, keen attention to this problem is truly essential. This is the motivational force behind this project.

I've worked as a teacher or administrator at a local high school for many years. In this time I've been extremely committed to the principles of deeper learning, particularly in my role in Administration as an Education Director. During the last few years I've been working with a team on remixing an academic model to better serve students by addressing the need for a robustly individualized curriculum rooted in social justice and a student's personal identity and culture. This is paired with a flexible and creative pedagogical structure accounting for a student's prior academic struggles and the need for multiple entry points and accommodations. My aim is to continue to codify this structure in a more coherent student centered system and share the strategies developed with other schools.

This type of innovative programming is extremely important because my work is oriented around serving the opportunity youth described above. High schools, like the one I've worked with closely, actively recruit students who have experienced gaps in their programming, problems of motivation and engagement in prior schools, and trauma associated with life

experience and poverty. Due to this, these students likely come with significant gaps and challenges, so programming must be flexible.

We live in an extremely segregated system with a variety of elements of institutional racism impacting people of color from different civic institutions. In schools, this is clearly the case as the achievement gap, drop out rate, suspension rate, special education designation, and incarceration rate disproportionately impact people of color, particularly black people in Minnesota. In Minnesota, only 4% of our teaching force is populated by people of color so it should come as no surprise to see a disproportionate gap of black students being suspended by white teachers as the majority of teachers are white.

That being said, it doesn't have to be this way. The majority of the student population I've worked with is African American. In this, I've recognized that developing strong identity awareness and cultural identity is a huge motivator as well, as students often do not see themselves reflected in the curriculum of traditional schools. Thus, schools can use curriculum guiding philosophies such as Hip Hop Pedagogy or other culturally responsive guidance systems to produce a relevant curriculum that can re-engage students who may feel they are not targeted or reflected in what they learn at school.

I've worked to build a system in which students learn both in the classroom and through guided-study curriculum online or in small groups as teachers have set up a creative and diverse pedagogical approach to expose students to different learning and assessment styles. Teachers incorporate experiential learning and creative community engagement through expeditions within our community's learning resources and institutions, as we know the 21st century classroom must extend beyond the walls of the schoolhouse. I believe strongly in incorporating

community experts into our curriculum as their different professions, knowledge, and expertise supplement teacher facilitation and provide exposure and mentorship for our students.

Blended learning helps students re-engage as they can quickly catch up to the class if they've missed time, or entered a learning experience in a non-traditional timeline. In this, teachers can extend their lessons into the digital realm by using a learning management system. For example, if they use a learning management system like Schoology, students can watch filmed missed lessons that teachers upload daily from classroom interactions, explore student exhibitions of learning from the classroom, self-pace through curriculum and lab spaces in the school, and submit work for class from their cellphones or laptops anywhere they have an internet connection. This really helps our students who miss class due to a variety of life circumstances have multiple entry points to re-engage as they can make up a missed class on the bus on the way to school, at home, or in the classroom at a learning station. In this, when students show up they are engaged and can immediately move to make progress.

In order to focus each student on a set of core-value learning competencies, this project has aimed to collect the variety of strategies described in their application to a local high school above, into a validation system that students can access to measure their learning, see their progression, and construct a portfolio to defend when they are ready to graduate. This new system will help high school opportunity youth students understand their pathway more clearly and focus on important skill and knowledge development.

In addition, a school needs a complex system of wrap-around services to help students get what they need to enter the classroom ready to learn. I've seen enormous success when comes in the form of an individualized youth mentoring system called advisory and, a complex

system of wrap-around services in the realm of social work, housing advocacy, mental health services, and transition skill supports. These services allow our students an ability to deal with their pressing needs at school before they have to step into the classroom and help to sustain attendance, better school progress in grades / credits earned, a feeling of belongingness, and a focus on self-efficacy and meaning that alter their personal trajectories.

While essential to our model's success, this paper will only explore the life skills, therapy, and knowledge acquired through their representation in our Validation System. Life skills inclusion in our core competencies needed for graduation helps guide students to focus on a variety of important self-development and advocacy skills needed to successfully re-engage on the path to a diploma and success after they graduate.

When serving opportunity youth, a high school needs to be built with a highly personalized nature. In this, each student's day may look quite different from another student's. As students attend their initial advisory block, they decide how best to use their time in concert with their advisor, who has access to and manages each student's personal learning profile. Student schedules, therefore, represent the general projects and courses they are enrolled in at a given time, rather than any fixed schedule a student might adhere to over the course of a quarter, semester, or trimester. One way a high school can adapt to its students needs for flexibility in their schedules is through the delivery of a competency-based approach to accreditation, which means students get assessed for their mastery of a subject and receive credit on a unit-by-unit basis.

As a High School uses a competency-based model it should recognize that, for students, mastery depends on one's grasp of a subject, not how long they spend on that subject, a very

important adaptation for students facing life circumstances that often make it difficult to get to school. Within the parameters of this project, the competencies have been extended in to a set of core validation areas which guide a student's focus. This set of core competencies was re-established in 2017-18 by this project with the participation of the local community (staff of a local high school, students, community members and families). Through comparison with contemporary research in the field of graduation profiles of learning and portfolio systems using competencies across the country, it was refined and distilled into a core validation portfolio to be re-initiated in 2018-19 as a core lens of learning for all students at a local high school. This has been a key addition to the variety of tools the school already employs on the path to re-engage opportunity youth.

Summary

As this paper moves unto the next chapters it will continue to explore the answer to the question, *How can a high school set up a personalized learning system to re-engage and extend deeper learning opportunities for students?* Chapter two will explore the field of literature about this topic. It will focus on the variety of pedagogical tools and strategies used in a re-engagement system, that need to be reflected in broader validation portfolio that this project will center upon. In this it will explore some of the most important research behind competency-based learning, cultural relevance and hip hop pedagogy, project based learning, and blended learning.

CHAPTER TWO

Review of Literature

Introduction

A key element of re-engaging students who have dropped out previously and are at-risk to dropping out again is to have a diverse and creative set of pedagogical practices and structures in the classroom. In attempt to answer this capstone's research question, *How can a high school set up a personalized learning system to re-engage and extend deeper learning opportunities for students?,* this section will discuss how a secondary high school can create a complex blend of these approaches in a realistic framework that does not overwhelm the student, but instead meets them where they are at when they arrive to the program.

This chapter will focus specifically on how a competency based learning system with deeper learning competencies can integrate with hip hop pedagogy, project based learning, blended learning and interdisciplinary learning in order to effectively provide an educational toolbox to re-engage opportunity youth. Breaking down this holistic system is necessary as this project's core development, a validation system, depends upon and utilizes these complex strategies to engage students, create learning opportunities, and measure proficiency. These are a complicated set of pedagogical frameworks to use effectively in schools, particularly if students do not have experience in these ways of learning before one brings any of them into their classroom.

This is certainly relevant on the secondary level as many students have had years of training of *what learning and being a student* looks like in a very traditional way. For example,

students quite often go to class, watch a teacher give a lecture or show a piece of media, engage in a simple discussion or Question and Answer session, and complete a traditional assessment to showcase learning. This training complicates a student's ability to work in a classroom in a more comprehensive, self-directed or collaborative, and experiential way. This is frequently the case for opportunity youth who have had a fractured school experience, may have low confidence in the classroom and struggled with classroom success, and have spent significant time out of school.

That being said, these frameworks for learning help students develop significant skills useful in the twenty-first century society and help a classroom embolden students to participate in truly deeper learning. Due to this, a school serving opportunity youth needs to develop an innovative system that scaffolds and supports training on using these tools which the next chapter and project of this capstone will further explore.

In this section, I will showcase research that compares and presents the value in the use of these pedagogical tools, the resiliency and learning skills they help embolden, and the reason these skills are important in a twenty-first century context. This is extremely important to my project as the validation system I am developing will be a this scaffolding system or map for students to identify key skills and knowledge to focus upon while using this set of teaching and student-driven learning practices that are essential to helping re-engage as learners.

Re-Engagement Strategies: Alternative Pedagogy and Research

Competency Based Learning and Deeper Learning Competencies. Competency Based Learning centers around structuring learning requirements transparently and with flexibility for students, structuring assessments to be creatively so students can showcase

proficiency as they are reading in a personalized or creative way, and with learning outcomes that also showcase broader skills. (Sturgis, 2016)

Due to its transparency and flexibility, Competency Based Learning has shown to provide greater adaptive equity for students. For example, Chris Sturgis writes in *Reaching the Tipping Point: Insights on Advancing Competency Education in New England*, that students that are low income, have disabilities, are English Language Learners, and are members of racial or ethnic groups who have historically experienced "systemic inconsistency and low achievement levels" benefit from systems designed differently than "top-down" accountability structures. The report describes how transparency of " learning objectives, rubrics to guide demonstration of mastery, and exemplars of what it means to be proficient" are all elements of a Competency Based Learning system which better serve opportunity youth students because they can help provide greater individualized pathways. Competency Based Learning is an important tool for opportunity youth in that it can provide a more relevant and accepted assessment mechanism for showcasing student growth and learning that can result in more student and family participation and more adequate and accurate measurements of a variety of growth areas in a student's classes.

A. L. Costa and B. Kallick reported on these elements of Competency Based Learning in their book *Learning and Leading with Habits of Mind.* They suggest using Competency Based assessments such as competency rubrics rooted in a school's educational values replacing grades or traditional report card structures, replacing the singular communication path of teachers reporting to parents to a broader community focus, conducting assessments more frequently than quarterly or semesterly to better assess and celebrate progress, and promoting self and peer evaluation. (Costa & Kallick, 2008p. 258-268) These assessments have shown to better measure

progress as opposed to only completion of learning activities, to identify and develop growth areas, and to create more motivation and authentic value of 'grades' or growth in the student and broader community so that rewards and celebrations are more meaningful. (Costa & Kallick, 2008, p. 268)

Deeper Learning Competencies. As we look at education seventeen years into the twenty-first century, many organizations and businesses are critiquing the traditional school system for not adequately training students with the habits, skills, and knowledge they will need to find work and participate in the broader civic community. This resonates particularly with opportunity youth as those who are successfully re-engaged often are subjected to packet-learning in alternative learning communities, online learning mostly focused on rote memorization and the regurgitation of 'learned' facts into multiple choice interfaces, or fast-paced modules that help them achieve a high school diploma without the skills that help them advance upon it or use it in their lives. There is a need for 'deeper learning' identifiers and strategies to better serve these students so they leave with a more adequate education and skill-set to compete and participate in society.

The Hewlett Foundation has written extensively on alternate pathways and pedagogical structures designed to help students develop what they call 'deeper learning' competencies. In this, they have focused on six competencies they deem to most essential for students to "succeed in twenty-first century jobs and civic life." They write that students need to master core academic content in a way that can "transfer knowledge" to other situations to do "something meaningful with it." In this they challenge schools to give students complex problems or learning opportunities with multiple chances to apply knowledge they've been exposed to in

non-traditional ways so that the learner can practice thinking outside of the box. They next ask students to apply this through critical thinking and complex problem solving using "data analysis, statistical reasoning, and scientific inquiry as well as creativity, nonlinear thinking, and persistence." They want students to be able to work collaboratively and communicate clearly and effectively. They also want students to be self-directed as they learn and develop the ability to self-monitor as they progress. Finally, they think school systems should provide structures that embolden students with "academic mindsets" in which they develop self-confidence and belongingness in an academic community. (TW&FHF, 2012-13)

While Hewlett suggests these skills provide the tools needed to find success after graduation, they clearly are ambitious goals to attain with any student body. For opportunity youth students, a complex set of tools and practices surely must be adapted for these skills to translate effectively. Many of the other sources examined below are aimed to examine different approaches and research aimed to achieve this type of 'deeper learning.'

David Conley and Linda Darling-Hammond have outlined the need to having complex systems that assess a variety of skills that match the needs of the twenty-first century employment field. In their Stanford publication, *Creating Systems of Assessment for Deeper Learning,* they argue that while the common core standards do showcase a variety of the skills and knowledge that students need in the modern world, often schools lack guidance or "incentives" to help teachers and students develop them. (Conley & Darling-Hammond, p.2) In addition, they explore that assessment systems that match traditional classes often fail to measure or even ask students to showcase skills like "written and oral communication, complex problem solving, and investigation that involves evaluation of evidence or application of knowledge."

(Conley & Darling-Hammond, p.3) Due to this, they call for more complex and varied systems of assessment and cite competency-based learning and performance assessments as key tools in this process.

They explore a variety of approaches used in different countries and advocate systems that can "capture the wider range of skills" a student is developing, helps teachers improve their pedagogy and help students "gain insights" that extend beyond the rote and predictable in their classes. They also help better predict whether or not a student is college-ready than currently existing norms such as the SAT or ACT. (Conley & Darling-Hammond, p.12-15) They describe a variety of performance assessments currently in use such as students solving a"multipart problem" and describing their "solution," out of class work such as "accessing information" in public databases to solve problems using interdisciplinary skills, project based learning that may take a number of weeks to finish in the context of a class, or a culminating project that asks a student to focus on one interdisciplinary topic for a long period of time. In each of these teachers will observe a variety of knowledge and skill development in a way that traditional tests may not measure, and help students get support in areas in which they are struggling (Conley & Darling-Hammond, p.21-27)

The Nellie Mae Education Foundation worked with Jobs for the Future to produce a reference guide entitled *Putting Students at the Center.* This guide helps to contextualize a path to get to building the deeper learning advocated by the Hewlett Foundation into a broader school system. Their framework for "student-centered education" advocates four tenets needed for a school to be successfully student-centered that they reference from a variety of research on "brain science, learning theory, and youth development science." (JFTF, 2014, p.3) They state

that a combination of "personalized learning, competency-based learning, student-owned learning, and anytime anywhere learning" leads to acquisition of twenty first century skills outlined by Hewlett.

To be more specific, they write that learning becomes personalized learning when it creates structural space for students to pace themselves according to their individual needs. Also, they should be able to start a learning experience that matches the skills and knowledge they arrive with similar to the zone of proximal development. Finally, they advocate that students focus their learning on "authentic problems and projects" that "takes place anytime, anywhere." (JFTF, 2014, p.3-4)

Here, learning extends outside of the classroom and incorporate community experts, technology, and institutions into the learning experience. They advocate for knowledge to be assessed by students demonstrating proficiency of competencies with a variety of mechanisms to do so. Students should also have ownership and choice in this process. In this, they advocate for schools to provide proper scaffolding and differentiation to support individual progress with a goal of maintaining an equitable student learning community focused on a goal of "reaching college and career and civic outcomes." (JFTF, 2014, p.3-4)

Deeper Learning competencies define a set of goals for students to learn creatively and more holistically in the context of useful skills and knowledge they'll need to be successful and competitive in an ever changing world. To best achieve these skills with opportunity youth they often need to be fused with cultural reference points and pedagogical strategies that stretch beyond the norm. In this, Hip Hop Pedagogy can serve as a useful framework as discussed below.

Cultural Relevance and Hip Hop Pedagogy. Hip Hop Pedagogy is an important part of reaching opportunity youth as it asks teachers to employ a variety of best practices with a 'fresh' approach and in conjunction with emancipatory and entrepreneurial methods and content. It honors and extends upon the Deeper Learning Competencies. It's particularly effective because in the contemporary school, Hip Hop Culture proves to be a extensive frame of reference for youth culture and many symbols and practices of popular culture across global systems.

Marc Lamont Hill and Emery Petchauer collected a variety of contributions to discuss this phenomena, research, and strategies which could be used in a variety of educational settings. They advocate that teachers extend beyond seeing Hip-Hop purely as rapping, whether in content delivery from the teacher or as an assessment mechanism from the student. Instead, they suggest tapping into the "canonical" elements of the medium including rapping, djing, graffiti, dancing, and critical consciousness, knowledge of self, and a social justice critical mindset.

They suggest using skills of improvisation within rap-battles or cyphers, sampling and remixing different artistic mediums, "kinetic consumption" or learning through feeling and motion, using "affect" juxtaposed with traditional logic or cognition skills, and arts-based "aesthetic" learning. (Hill, 2013, p.31) These activities and modalities encourage other twenty-first century skills and deeper learning such as collaboration, civic engagement, and relevant personalized learning opportunities in students. This in turn, can lead to further student engagement.

E. Adjapong and C. Emdin advocate a few more strategies in their journal article *Rethinking Pedagogy in Urban Spaces.* In this, they explore call-and-response and co-teaching as Hip-Hop elements that can help increase engagement in a Middle School Science classroom

without cutting away from important content learning. The suggest using these should be combined with the previously mentioned canonical elements of Hip-Hop. They suggest that if students are comfortable and highly engaged in the classroom students will take on more "responsibility for their own learning." They cite students often have "cultural capital" outside of the classroom, often rooted in Hip-Hop culture, that defines their perceived value in their personal identity. This can extend into the classroom if a teacher is willing to use tools and practices consistent with Hip-Hop "cultural capital" in the classroom and link it with topics of study.

Personal investment in study increases the "cultural capital" in the classroom that helps inspire further investigation and deeper learning, as well as extend a young student's identity to incorporate this field of learning. They may see themselves as a Scientist more readily utilizing these methods. The co-teaching applied in this approach links in a student, who is trained in the lesson by the teacher, in the content delivery by using modes of delivery that are more authentic for students. The student truly leads the class. The Call and Response method mirrors "music and dance [commonly used] by African Americans" as it has students and the teacher call back and forth spontaneously or with pre-agreed upon cues. This is often seen by students as fun, culturally relevant, highly interactive and it brings energy and broader participation into a classroom. (Adjapong & Emdin, 2015)

D. Banks circles back to the utility of spoken language or rapping in the classroom in the journal article, *Hip Hop as Pedagogy.* In this article, he discusses how spoken word poetry can replace inauthentic traditional texts and further engage students. If a student begins an activity by schema-forming through writing about something "relevant to themselves and their lives," then

they can better dialogue with a "classic" text. In the classroom, he advocates teachers focus more on the "language, history, rituals, and mores of the 40-year-old, global, youth-oriented, social justice movement known as Hip Hop" so they can create learning opportunities that are more relevant and authentic for their students. (Banks, 2015, p.243)

A. Akom extends this conversation in his article, *Critical Hip Hop Pedagogy as a form of Liberatory Praxis.* They state that Hip Hop Pedagogy can incorporate elements of Paulo Freire's research such as "youth participatory action research" and "problem-posing methods" to help students and teachers create a space to discuss and examine "deep-rooted ideologies to social inequities" through the lens of "race, class, gender, and sexual orientation" through the lense of Hip Hop. In this, Hip Hop pedagogy can be engaging, provocative, and deeply personal as students explore oppressive structures that perpetuate racism in schools or broader society, examine and "challenge" broadly accepted traditional "paradigms, texts, and theories" in the classroom particularly as they intersect with the experiences of students of color, and a commitment to civic engagement as it intersects with this social justice approach. (Akom, 2009, p. 312-315)

Hip-Hop pedagogy provides a philosophical framework, strategies, and core skills that can help improve engagement in a school serving opportunity youth. These gains can be extended through the use of project based learning in the classroom, as explored in this next section.

Project Based Learning. Project Based Learning builds upon the foundational structures and philosophies of Competency Based Learning as it can serve as a tool to showcase learning,

assess deeper mastery, and creatively engage students with broader freedom and autonomy on interests they find relevant and interesting.

Dr. Brigid Barron and Dr. Linda Darling-Hammond reviewed a variety of research on Inquiry-Based and Cooperative Learning and found that while these methods are difficult to build into one's teaching there is significant evidence to suggest that this type of learning helps students develop skills in learning not only "content knowledge" but also "twenty-first century skills. Students using these skills develop the "ability to work in teams, solve complex problems, and to apply knowledge gained through one lesson or task to other circumstance."(Barron & Darling-Hammond, 2008)

For this to happen, some key things need to be in place. First, much of their research studying different schools suggests that students are more successful and learn better when they focus the action of their learning on solving a real-world or relevant problem in an authentic context to the student. An interesting sub-point to this research as that the positive impacts of this type of learning transcended "race, gender, or prior achievement." (Barron & Darling-Hammond, 2008)

They cite an interesting longitudinal comparative study in Britain that compared traditional curriculums' and project based learning curriculums' ability to have positive academic gains on students of the same socio-economic status and prior achievement. This study found that students who used the Project Based Learning curriculum had more success on mathematics tests due to its ability to engage students through "exploration and thought" as opposed to rules and repetitive worksheets. (Boaler, 1997, p. 63). This study shows potential the positive impact of authentic problem solving. They cite a few other studies that suggest this type

of education works. For example, a 2000 American study suggested multimedia projects on real-world topics such as problems facing homeless students help students develop skills on empathy and sensitivity to their audience and abstract thinking of design, while still maintaining standardized test performance.

Others suggest an increased understanding of explaining what problems are, development of skills in making clear arguments with good support, and planning and organizational skills that can translate to other projects after the learning experience. More important to opportunity youth students are the many documented studies that measure increases in "motivation, attitude toward learning, and skills including work habits, critical thinking skills, and problem solving abilities" that are often barriers to showcasing a student's true intelligence, abilities, and creative capacity. Their review of studies in the field certainly mimics the first-hand experience I've had as a practitioner as it consistently shows that a Project Based Learning context provides a freedom and style of learning that helps students who have struggled in prior traditional educational settings.

J.D. Bransford, A.L. Brown, and R.R. Cocking's *How People Learn*, cites many of the prior skills as important for learning but suggest there are further structural needs for actual learning to take place. They describe that "knowledge-centered environments" as one might construct in a Project Based Learning / Blended Learning environment are not enough to help students develop the skills they need to be successful after school.

I've encountered similar experiences in my own practice and observations of Project Based Learning schools as often students do hyper-focus on an area of interest, diving deep on an inquiry of choice, but miss many of the formational skills and tools needed to apply their

passion to further projects or future jobs. The Bransford book states that students need more than just "thinking skills or strategies," but also school structures that help students transfer knowledge, achieve goals, and acquire enough breadth of knowledge through a designated set of competencies one can assess. They suggest high-quality classrooms that are inquisitive about voice and sources, metacognitive about what and why they are learning certain skills or knowledge, and take learning beyond simple computations and into the realm of abstract thinking and problem solving. (Bransford, Brown & Cocking, 2000, p. 136)

J.W. Thomas in his paper, *A Review of Project Based Learning,* cites research that advocates students will be more engaged for longer and more motivated to learn at school if they are able to focus on deeper engagement of learning on a subject they are interested versus simply being motivated by grades and classroom achievement. He states that Project Based Learning focuses more on "student autonomy, collaborative learning, and assessments based on authentic performances" as well as "variety, challenge, student choice, and [real-world problem solving]." (Thomas, 2000, p. 6-7) This helps to move away from problematic competitive and ego-focused reward structures that turn many students off.

Project Based Learning also helps students work on additional important cognitive skills such as self-regulation, self-monitoring, and organizational skills as students have the ability to self-assess metacognitively in sequential stages as they work. He cites research that indicates these opportunities are key if students are to become master problem-solvers as Project Based Learning can mirror similar experiences and skills needed to be successful in adult problem-solving in the professional world. In this, research suggests that teacher-driven classrooms cede more time and space in the modern school to "student-initiated, goal-driven,

independent, "intentional learning" models with an emphasis on knowledge building.” (Thomas, 2000, p.7)

He also discusses the need for the scaffolding and training of students so they can be more successful utilizing project based learning in the classroom. He advocates applying classic teaching best practices to the introduction of project based learning such as modeling and the gradual release of responsibility for the students, consistent coaching through the process, and providing students with different problem solving tools so they can be more metacognitive about their personal development. (Thomas, 2000, p.7)

In this, technology can be used as a “cognitive tool” particularly in helping students organize their project process, enhance collaboration, and train students in tools professionals will use after schooling. (Thomas, 2000, p.8) The report spends a significant amount of space analyzing the effectiveness of Project Based Learning in different environments and cites a variety of examples in which it helped enhance “academic achievement” in the realms of test scores, increased attendance, and engagement. (Thomas, 2000, p.11)

Vanessa Vega describes some essential elements for success in a Project Based Learning Classroom in her article for Edutopia, *Project-Based Learning Research Review: Evidence-Based Components of Success.* She describes that research and evidence highlights four essential components that are “critical” in designing project based learning curriculum. In this, a driving question that “focuses on intended learning objectives, aligns with students' skills, and appeals to students' interests” is key in starting projects. She says project based learning can be most ineffective when it falls outside of a student’s zone of proximal development or deviates from the content the course is focusing on. (Vega, 2012)

She showcases research that advocates small-group project based learning has shown to help students “across grade levels, academic subjects, gender, ethnicity, and achievement levels” as they develop “higher grades, retain information longer, and have reduced dropout rates, improved communication and collaboration skills, and a better understanding of professional environments.” She also describes research that says project based learning assessments increase student learning when they are “clearly defined at the start of the project,” and have sequential and frequent chances for “feedback, reflection” and time for revision. Finally, research showcased in this article says students benefit most from project based learning when they present their knowledge through real-world and highly relevant “public exhibitions, portfolios, and presentations” that highlight growth of various “skills” and knowledge obtained in this project process. (Vega, 2012)

While Competency and Project-Based Learning speak to pathways of learning and showcasing mastery, they don’t fully engage the extent of cross-curricular integration and technological adaptation that can help them be most successful. In a classroom serving opportunity youth, utilizing blended learning and a flipped classroom in an interdisciplinary context can really help them work successfully.

Blended Learning, Flipped Classrooms, & Interdisciplinary Learning. Blended learning has a space in the modern classroom as students are able to utilize technology to supplement and enhance traditional pedagogical practices and personalized projects while showcasing mastery for competency assessments. This often looks like computer programs, online lessons, video lectures, digital assessments, and digital conversations implemented in the daily routines of classroom behavior.

That being said, this method can quickly subvert individualized learning and differentiated needs of students when it is poorly executed. B. Johnson writes about this in his text *What a Blended Learning Classroom Really Looks Like.* (Johnson, 2016) He describes how blended learning can accent "personalization…, freedom and choice" that are often left out of a classroom. In this space "student needs drive the design of learning" as curriculum and teacher / student interactions are "adaptive" and similar to competency based learning, provide a student chosen pathway that helps each student find success at their own pace. Students gain sequential certificates as they showcase learning and skills, are given organizational skills through adaptive checklists, and can use the classroom space more creatively.

C.R. Tucker, in *The Basics of Blended Instruction,* agrees with B. Johnson on many of the essential gains of blended learning but advocates that individual teachers find a balance on how much learning they extend to student driven choice and free-time in each classroom. (Tucker, 2013, p.57-60) They suggest utilizing technology to "replace and improve" upon essential classroom activities such as online discussion boards. They cite the "flipped classroom" model to create a student experience that "weaves together" educational technology, classroom spaces and routines, and a variety of educational media.

A. Sams and J. Bergmann extend this discussion by citing the merits of a "flipped classroom."(Sams & Bergmann, 2013) In this, teacher instruction can be embedded in online lessons or videos, allowing students to watch lessons at home, and allowing teachers to individualize learning and differentiate instruction with the facetime direct instruction would usually use up in the classroom. They suggest making screencasts so students can see their

teacher and lesson simultaneously. This changes the mechanisms needed for classroom management and affords students more choice and agency helping to extend engagement.

They say not all classes will succeed holistically in this format as more "socratic or inquiry-based" classes may need more formal instruction or class-time to be successful. This also supports a Competency Based Learning approach as teachers would assess for mastery sequentially so students can move to the next learning target if they've achieved enough 'knowledge.' It also allows students to retake assessments multiple times and elements some of the "competitive and punitive" elements of a class moving at the same pace. (Sams & Bergmann, 2013) It can help with Project Based Learning as projects can be incorporated as labs, summatives, or as learning experiences before material has been initially covered.

Roy Pea and Stephen Cooper took this philosophy into the classroom in their work, *Designing for Deeper Learning in a Blended Computer Science Course for Middle School Students*. In this study they found that by including a focus on "cognitive, interpersonal, and intrapersonal aspects of 'deeper learning,'" in how they planned their teaching advanced their success with their students.

They had students working on complex computer problem-solving and learning, but by using a blended learning approach students measured in two different classes showed "substantial learning gains in algorithmic thinking skills," as well as an ability to apply their learning into a different context, and had a more "mature" perspective of the field of computing. (Pea & Cooper, 213-230)

School Retool describes the importance of "teaching across subjects" as they suggest real-world problem solving post high school asks adults to incorporate a variety of subjects at

once. This extends the utility of Project Based Learning as it can incorporate competencies from a variety of disciplines as it approaches one complex problem. A school can offer interdisciplinary classes with inter-subject co-teaching or assessment crossovers to help students earn more credit by showcasing mastery in more subjects, find more comfort in a learning activity as they incorporate more interest points in inquiry activities, and work collaboratively with a variety of thinkers and skillsets. Teachers also benefit from this type of learning as they create more flexible pathways and plan together from a different perspective outside of the confines or bias of a particular subject or discipline. (Hattie, 2009)

Summary

This chapter has explored a variety of research that identifies key-strategies, systems, and creative pedagogical approaches to serve opportunity youth in the Twenty-first Century Classroom to add depth to the work answering the question, *How can a high school set up a personalized learning system to re-engage and extend deeper learning opportunities for students?* It has explored the deeper learning competencies that ask student learning in a school to be more holistic, creative, and deeper than we've seen in the past. Hip Hop Pedagogy can help students engage more authentically, have more fun, develop a more complex identity, resist oppression, and showcase genius and learning in authentic ways. It matches well with Competency and Project Based Learning's transparent, flexible, student driven contexts in order to help students have a more meaningful classroom experience in which more learning takes place. Finally, technology and interdisciplinary structures complete the systemic variety by allowing students to take learning outside of the time or space designated for classroom or walls

of a particular discipline. There needs to be a more personalized, student-owned, and competency based structure in place for these to take place.

As this research has shown the effectiveness of these pedagogical tools to engaging youth in the classroom, it also dictates the need for a system to adopt a useful and transparent structure for students to experience this variety of approaches. Chapter Three, will break down the theory and plan to build this system as well as the audience it will serve, the timeline for it's undertaking, and how it will be measured for success.

CHAPTER THREE

Project Description

Introduction

This chapter will first explain the framework used to create this Capstone project and the different resources that it will depend upon to answer the research question *How can a high school set up a personalized learning system to re-engage and extend deeper learning opportunities for students?* Next, it will explore the audience for which this project is directed to help and engage and how this will take place. Then, it will describe the project in more detail explaining competency based learning through the construction of a new validation portfolio system using a set of core competencies as a main interface for navigation of a local high school's re-engagement strategies for students. It will show how the framework for this project will be locally organized. Finally, this chapter will discuss a timeline for the project and how it will be presented.

Design Framework

In the main body of chapter three, I will break down the core elements of who this project intends to help, what settings it will be utilized, the frameworks and theories I followed and how they were presented, and a timeline. The research conducted for this project was through qualitative review and analysis of the pedagogical effectiveness of the strategies recommended, through the lens of practitioners of a local high school and other institutions who have attempted to use these strategies and published work around them, or discussed them with this capstone's author. This project did not showcase a formal exercise of academic research in a traditional

sense because these strategies are experimental and cutting edge. However, they have shown success longitudinally in non-traditional venues that do not maintain standards of academic research or data-gathering, but still authentically and critically study the effectiveness for the population of students they serve. For the research process and project development process, I did however utilize Stanford's Design School "Design Thinking" protocol. In this process, I used the format of "empathize, design, ideate, prototype, and test" in order to get a complex understanding and input from the community or 'users' I'm building for, worked with this group to build a working prototype through rapid prototyping. I will be revisiting this process throughout the next year to continue to develop and improve upon the design of our validations toolkit. (Razzouk, Rim & Shute, 2012, p.330)

The project centered around building a Validation Portfolio system of Core Competencies for a local high school. This system is important is it serves as a primary tool for aiding students and staff in navigating the complex pedagogical strategies our re-engagement school should utilize to be successful. Our success is measured by looking at the data surrounding student re-engagement, demonstration of evidence of learning in established key categories of skills and knowledge, and completion of a high school diploma over the course of a year after this project was implemented.

Audience and Setting

The core audience of this project was the primary stakeholders at a local high school such as students, staff, community partners, and families. This system targeted them to serve as a primary navigation tool on the pathway to re-engage in school, recovery credit and show proficiency and learning in key areas, and graduate from high school with a portfolio that has a

high element of transfer into the real world. I decided on this primary audience because it defined our learning community and can be locally trained, conversed with, measured for success and utility, and is the primary group I work with personally.

A secondary group that was targeted by this work, are other schools and learning communities with a similar re-engagement mission. This capstone project aimed to communicate directly with educators, administrators, and educational thinkers in order to give an example of how this philosophy and its strategies can look when implemented at a specific re-engagement site. By demonstrating the tools created and being transparent on the impact they are having on our one school's learning community, other schools locally and around the country can peer into this model and learn or take from it useful elements to their own practice. This secondary audience was important to target, as this work re-engage opportunity youth is still relatively uncharted and undeveloped in programs or philosophies of practice across our country. I hope to continue to share this work to add to the dialog on how we can help serve these youth with deeper learning and highly transferable skills being developed.

This project was built in conjunction with a local high school's staff and community members in Saint Paul, and was be implemented directly in this school's practice. The work was shared in Hamline's public database, but also with networks I work with through dialog and conferences such as nationally with the Big Picture Network and Equity Fellowship, the Internationals Network for Public Schools, the RAPSA network (Reaching At Promise Students Association), the Education ReImagined Community, and other alternative schools I converse with locally. Finally, this framework was produced for use in replication efforts to build other re-engagement schools with a similar mission in different school markets across the country.

Project Description and Timeline

This project examined how competency based learning can be best represented through a Validation Portfolio system of core competencies. This system was built as a vessel to help students experience the re-engagement tools of a local high school and continue to produce deeper learning outcomes. This Capstone Project was represented in the creation of a physical and digital portfolio or guide that can be used by other practitioners or trained upon in a formal setting. It was presented formally in a professional development presentation to the local educational community upon its completion.

This project was carried out and built over the course of the 2017-2018 school year, building upon years of research, practice, codification, and implementation. It took one year to complete by adding to each section each month, checking in with a support team from Hamline, Big Picture's Equity Fellowship, the University of Minnesota's Principal Academy and a local high school's staff, and was presented in August of 2018.

Creating a Validation system of core competencies was comprised of a variety of elements. As mentioned above, I used Stanford's Design Thinking Methodology as a key guiding method to construct this project. I did a workshop at the D-School at Stanford University in Stanford, CA, to get a solid understanding of their system. In this system, I followed their guideposts of "Empathise, Define, Ideate, Prototype, and Test" to structure the development of my project. To begin, while I had abstractly defined my problem to create a personalized learning system of re-engagement for students, I wanted to get beyond my own bias and experience of working in schools for seven years prior. Thus, the empathise element is included

to ask the designer to gain a better understanding of their ‘user’ and beyond their own assumptions with some direct experiences, interviews, and interactions. I found that that first I wanted to view my user through the lens of a variety of institutions and students in my state and across the country.

I did site visits and had conversations with students a variety of schools and institutions including; Minnesota New Country School in Henderson, MN, Avalon Charter School in Saint Paul, MN, High School for Recording Arts in Saint Paul, MN, EPIC High School in New York, NY, Boston Day and Evening Academy in Boston, MA, Mapleton Early College High School in Thornton, CO, and High Tech High in San Diego, CA.

I also looked at systems used to develop similar approaches at a variety of local and national sites including; The Original Saint Paul Open School’s Validation System, Boston Day and Evening’s Competency System, High School for Recording Art’s Original Validation System, EPIC High School in New York’s Attainment Competency System, Profile of Learning for Minnesota Schools, and Envision School Network’s Graduate Profile System.

I gained an enormous amount of knowledge through this process but needed to focus on the site I was then building for. I first, was trained by an Envision Representative on the Envision Schools Graduate Profile development system so I could refine my process. Then, in order for me further understand my local users better, I worked with a series of local Focus Groups to build a system for this local school. In this process, I asked local community members to share the values, skills, and knowledge they deemed important for a high school graduate to have to be successful in their post-secondary path. I conducted twelve focus groups with parents, students, staff, and community members, from a local school and community, to determine a set of

consistent values and ideas for the validation system I was building. I adapted a process used by the Envision school network to conduct these focus groups and evaluated our work according to their tool.

After this, I worked with a series of Design Team comprised of students, school advisors, teachers, and graphic designers to ideate on the data we received and prototype a thorough, user-friendly, and student centered portfolio system. The Validation areas and Competencies were constructed on a foundation of the values and ideas generated in the focus groups.

Then, we cross-checked them with state standards and graduation requirements and constructed a plan to cover all necessary graduation information. We also created a tool box for implementation including an assessment module and breakdown of key learning targets for each competency. We also created a visual representation of the validation system in catalog and poster form and then created a digital interface in order for students and staff of a local high school to keep track of student progressions throughout the school year. I also designed a portfolio system and paired it with our academic calendar.

Finally, with a training team I constructed a training system to bring our new Validation Portfolio to the staff of a local high school. This group workshopped any pitfalls or cultural barriers to integration and implementation. All of these elements were consolidated into a final product and turned in as the project that included a blueprint for how we embarked upon this change of systems, an example of the completed system in its final form, and a set of tools that another school could use or adopt to build their own.

Measuring the success of Validation Program

The effectiveness or success of this project was built to be measured after it's submission in a variety of ways. First, true to the *rapid prototyping* concept inherent in the Design Thinking methodology, I fully expected this project to be remixed and altered in real time to maximize its utility for the staff and students who will be using it at a local high school. To do this, I aimed to hold semesterly review focus groups in which students will discuss what they appreciate and what they hope to adjust with this Validation System. This method also aimed to create a bank of qualitative data in which we can return to, to measure its effectiveness. It also aimed to assess this system's impact on student engagement and hope through a bi-yearly Hope Survey (vs. prior hope survey scores).

In addition, I aimed to conduct quarterly polls asking a variety of questions to students and compile this feedback as well. Finally, I created review dates to look at it's impact on our yearly graduation rate with our 1-Year Graduate cohort in comparison our entire Graduation Class, and quantitatively examine how it impacted these year graduation numbers in subsequent years. I determined to quantitatively measure quarterly student progress through competency and credit acquisition (particularly in comparison to prior semesters at our school and other prior schools), qualitatively examine our semesterly complete student body's work and demonstration of learning, and qualitatively examine our graduation portfolios with a review team with a particular focus on the presence of deeper learning evidence. It aimed also to measure engagement through the lens of attendance (vs. prior years) and proficiency growth in math and

reading (vs. prior NWEA / MCA scores). A data team will meet semesterly at the local school to analyze this data and make adjustments as needed.

These measurements aimed to pull together a variety of alternative data in which we can assess our system and new validation tool's effectiveness on re-engagement of opportunity youth within the context of our school system. I planned to make these measurements available to any other schools interested in pursuing a similar system. As mentioned above, I intended to use the results of this analysis to be used to continue to adjust and improve the system and tools created.

Summary

In order to answer the question, *How can a high school set up a personalized learning system to re-engage and extend deeper learning opportunities for students?,* this chapter explained the framework used to create this Capstone project and the different resources that it will depend upon and explore the audience for which this project is directed to help and engage and how this will take place. Then, it described the project in more detail going through each section and discussed how the framework for this project was be implemented in each section. Finally, it discussed a timeline for creation and presentation and a strategy to measure its effectiveness. The next chapter will describe the results of creating this project, share a reflection on its successes and limitations, and finally describe the next steps in pursuing the project's intended aims.

CHAPTER FOUR

Conclusions

Introduction

As I've completed the capstone project, this chapter will focus on reflecting how effective I was at answering, *How can a high school set up a personalized learning system to re-engage and extend deeper learning opportunities for students?* I will also reflect on what I learned in this process as a whole, what I learned through the literature review, what implications or directions my project could take in the future, and some of the shortcomings or limitations of the work that I did. Finally, I will reassert how I will communicate the results of my project within the local and national relevant educational community, and how it benefits the profession at large.

Learning and Reflection

First, this chapter will explore what I learned through this process as a researcher, writer, and learner. To start, research for this project was complicated because this type of topic is relatively novel and innovative in the educational field. Many schools work on strategies or elements that match the focus of re-engaging high school students with a variety of pedagogical tools or strategies. However, there is not a clear best practice, school of thought, or consistent presence of school's focused on this mission in communities all over the country. This made my work more challenging, but also allowed me some freedom to innovate and connect a lot of research and ideas. In light of this, I found that first hand experiential research was particularly

useful. While I was visiting and observing in other schools and talking to other professionals working on a similar mission, I gained enormous insights, new tools, and important questions that helped guide my work in my own community and site where I applied this project. All across the country, people are responding to the needs of their communities and students in interesting ways. I found it very important to have a broader lens on my work for this reason, and it really helped my end product.

Literature Review

As I undertook the process of writing the literature review, I found that while there was an enormous amount of writing on similar topics, there was not any holistic review that combined all the elements I felt needed to be linked in order to adequately serve opportunity youth in high school. Thus, I found enormous utility in reviewing focused elements in my research and thinking about how they combined or juxtaposed against other strategies that served a similar purpose. I found research justifying elements such as project based learning as a re-engagement tool, competency based learning as a way to extend deeper learning, or even hip-hop pedagogy and its ability to bring cultural relevance as qualitatively useful in re-engaging students. To me, having a foundational set of research on a variety of strategies helped me to focus a holistic validation system that would tap into all of this research in a broader system, and thus be potentially much more effective in re-engaging students. I aim moving forward to continue to read and develop my understanding of the variety of voices in this research community, as this process certainly opened my eyes to a vast amount of interesting and relevant scholarship.

Implications

I think that there are a variety of implications of how my project could move forward and suggest innovative approaches for students in a variety of settings. First, though I think my thesis certainly suggests there needs to be innovative re-engagement center schools combining a variety of creative re-engagement strategies with a personalized competency system like the one I built in every city. Not every student needs a system like the one I advocate for to be successful, but many students disengage and drop out due to the lack of supportive options in their community. I think the test-site in which my project has been built for, but also the toolset I created, could stand as an example of a way to re-engage students at new charters or innovative school systems willing to put a focused attention on this issue as a primary goal.

I also think that it's important to recognize that legislators have experimented with similar systems in states like Minnesota in the past, particularly with the now defunct Profile of Learning system. In this context, tools like a validation portfolio system and the results of my project on alternative data sets in re-engagement that I will be collecting can help to showcase a different pathway for legal rulesets and regulatory structures in the educational world. If our aim is to serve all students, including those that have disengaged from the system altogether, then we need to be open to a variety of strategies and systemic approaches to achieve this goal. Thus, legislators could analyze that we need to better measure students who have dropped and build systems to help them. More specifically, we need sanctioned and supported school structures that help students not only re-engage and earn a diploma, but doing so in a meaningful way that helps

them to develop the skills and knowledge they will need to find success and employment after high school.

Limitations and Future Projects

In analyzing the limitations of my project, I found there were a few significant areas worth reflecting on. First, if I write or research future scholarship on this issue, I'd like to expand considerably on the literature review as it goes much deeper than was possible to include in this project. Next, I spent an enormous amount of time working with the local community on my project to make sure it was relevant and reflected the students and families it was built to serve. In this, the structure and content of the project is very thorough but still pre-operational. True to the design thinking framework that I used to build this, I will be re-analyzing and re-prototyping elements in the first year of its use. Thus, the limitation I see here is that this project is an entry to a system that will develop over time considerably, and I regret that I will not be able to include the interesting and important innovations that I assume will take place over the next few years. In this context, I will likely return to this work to write about the changes that took place down the road. Or, I may simply make changes to the system I built and share my learnings with other schools and practitioners on a similar mission.

In the future, I would also like to take on a similar project that extends upon the assessment elements of this type of system. I am very interested in how systems like the one I built can showcase student ownership and authentic buy-in to assessment. More specifically, I would like to further explore research around performance assessment, systems that showcase students developing their own metrics of quality through student-created rubrics, and how these integrate into the different types of schools that use them. I am particularly interested in looking

closer at re-engagement focused schools, and the quality of how their assessment structures not only showcase the quality of student work, but also are meaningful to the students who use them.

Benefit to the Profession

I believe that my project is definitely a small voice, amongst a community of many amazing voices, that will benefit the profession of teaching, school design, and student engagement. I think that at the host-site that will be experimenting and refining this process, many schools and practitioners will benefit from observing, borrowing from, and reflecting on our practices and tools. I aim to be very liberal in sharing this work, and have already invited a variety of practitioners from around the region to come and experience our system. In this, I will continue to communicate not only the results of how this system disrupts the drop-out trajectory of opportunity youth, but also produces alternative data that analyzes how it leads to deeper learning experiences for those students.

References

Adjapong, E.S. & Emdin, C. *Rethinking Pedagogy in Urban Spaces: Implementing Hip-Hop Pedagogy in the Urban Science Classroom.* Journal of Urban Learning Teaching and Research, 2015. Vol. 11. Pp. 66-77.

Akom, A.A. *Critical Hip Hop Pedagogy as a Form of Liberatory Praxis.* Equity & Excellence in Education Vol. 42 , Iss. 1,2009.

Banks, D. *Hip Hop as Pedagogy : Something from Something.* Theatre Topics, Volume 25, Number 3, September 2015, pp. 243-259.

Barron, B., & Darling-Hammond, L. (2008). Teaching for meaningful learning: A review of research on inquiry-based and cooperative learning. In L. Darling-Hammond, B. Barron, P.D. Pearson, A.H. Schoenfeld, E.K. Stage, T.D. Zimmerman, G.N. Cervetti & J.L. Tilson, *Powerful learning: What we know about teaching for understanding*, (pp. 11-70). San Francisco, CA: John Wiley & Sons.. Retrieved from http://www.edutopia.org/pdfs/edutopia-teaching-for-meaningful-learning.pdf

Berger, R., Rugen, L., Woodfin, L., & Learning, E. (2014). *Leaders of their own learning: Transforming schools through student-engaged assessment*. San Francisco, CA: John Wiley & Sons

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). How people learn: Brain, mind, experience, and school: Expanded Edition. Washington, DC: National Research Council.

Conley, D.T. & Darling Hammond, L. (2013) *Creating Systems of Assessment for Deeper Learning.* Stanford, CA: Stanford Center for Opportunity Policy in Education.

Corporation for National & Community Service. (2016). *The Economic Value of Opportunity Youth.* Corporation for National & Community Service. Retrieved on July 1st, 2017 from: https://www.serve.gov/new-images/council/pdf/econ_value_opportunity_youth.pdf

Costa, A. L., & Kallick, B. (2008). Reporting growth in habits of mind. In A.L. Costa & B. Kallick (Eds.), *Learning and leading with habits of mind: 16 essential characteristics for success*, (pp. 258-268). Alexandria, VA: Association for Supervision and Curriculum Development.

Fancsali, C., Jaffe-Walter, R., & Dessein, L. (2013). *Student agency practices in the middle shift learning networks*. Seattle, WA: Raikes Foundation.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London, UK: Routledge.

Hill, M.L. and Petchauer, E. *Schooling Hip Hop : Expanding Hip-hop Based Education Across the Curriculum. New York: Teachers College Press, 2013.*

Jobs for the Future. *Putting Students at the Center : A Reference Guide.* Nellie Mae Education Foundation. Retrieved on July 7, 2017 from:

https://www.nmefoundation.org/getmedia/7fe89c01-dc9c-496f-80ed-1a53f25d593f/NMEF-sclreframeweb2

Johnson, B. *What a Blended Learning Classroom Really Looks Like : An Urban Teacher's Reboot.* The Hechinger Report. Retrieved on July 9th, 2017 from : http://hechingerreport.org/blended-learning-classroom-really-looks-like-urban-teachers-reboot/

Levine, P. & Kawashima-Ginsberg, K. (2015). Civic education and deeper learning. *Deeper Learning Research Series*. Boston, MA: Jobs for the Future. Retrieved from:http://www.jff.org/publications/civic-education-and-deeper-learning

Lenz, B., Wells, J., & Kingston, S. (2015). Transforming schools: Using performance-based learning, performance assessment, and Common Core Standards. San Francisco, CA: Jossey-Bass.

Miller, Tony. (2015). *Partnering for Educational Reform.* US Department of Education. Retrieved from https://www.ed.gov/news/speeches/partnering-education-reform

MPR News Staff. (March 7th, 2016). *Minnesota's Graduation Gap: Sources.* Minnesota Public Radio. Retrieved on July 7th, 2017 from: http://mprnews.org/story/2016/03/07/graduation-gap-sources#source01

National Center for Education Statistics. (September 4th, 2015) *Table 1. Public high school 4-year adjusted cohort graduation rate (ACGR), by race/ethnicity and selected demographics for the United States, the 50 states, and the District of Columbia: School*

year 2013–14. Common Core DATA America's Public Schools. Retrieved on July 7th, 2017 from: https://nces.ed.gov/ccd/tables/ACGR_RE_and_characteristics_2013-14.asp

New England Secondary School Consortium. (n.d.). I want to know more: Proficiency-based grading. Retrieved on June 25, 2017 from http://newenglandssc.org/wp-content/uploads/2015/12/NESSC_I_Want_to_Know_More_No11.pdf

Rennie Center for Education Research & Policy. (2011). Student learning plans: Supporting every student's transition to college and career. Cambridge, MA: Rennie Center for Education Research & Policy. Retrieved from http://www.renniecenter.org/research/StudentLearningPlans.pdf

Sams, A. & Bergmann, J. (2013). Flip Your Students' Learning. *Technology-Rich Learning,* Vol. 70. No. 6. Pp. 16-20.

Shuchi Grover, Roy Pea & Stephen Cooper (2015) Designing for deeper learning in a blended computer science course for middle school students, Computer Science Education, 25:2, 199-237.

Smiley, Tavis. (February, 2014) *Fact Sheet: Is the Dropout Problem Real?.* Tavis Smiley Reports. Retrieved on July 6th 2017 from: http://www.pbs.org/wnet/tavissmiley/tsr/education-under-arrest/fact-sheet-drop-out-rates-of-african-american-boys/

Sturgis, C. (2016). Reaching the Tipping Point : Insights in Advancing Competency Education in New England. iNACOL. Vienna, VA. Retrieved from

https://www.competencyworks.org/wp-content/uploads/2016/09/CompetencyWorks_Reaching-the-Tipping-Point.pdf

School Retool. (2017). Big Ideas. Stanford, CA : DSchool, Hasso Plattner Institute of Design. Retrieved from http://schoolretool.org/big-ideas

The William and Flora Hewlett Foundation. (December 2012). Deeper Learning Strategic Plan Summary Education Program, December 2012 Update. Retrieved from https://www.hewlett.org/wp-content/uploads/2016/09/Education_Deeper_Learning_Strategy.pdf

The William and Flora Hewlett Foundation. (April 2013). Deeper Learning Competencies. Retrieved from https://www.hewlett.org/wp-content/uploads/2016/08/Deeper_Learning_Defined__April_2013.pdf

Thomas, J. W. (2000). *A review of project based learning*. San Rafael, CA: The Autodesk Foundation. Retrieved from http://www.newtechnetwork.org.590elmp01.blackmesh.com/sites/default/files/dr/pblresearch2.pdf

Toshalis, E., & Nakkula, M. (2013). Prioritizing motivation and engagement. In A. Steinberg, N. Hoffman & R. Wolfe (Eds.), *Anytime, anywhere: Student-centered learning for schools and teachers*, (pp. 171-202). Cambridge, MA: Harvard Education Press.

Tucker, C.R. (2013). The Basics of Blended Instruction. *Technology-Rich Learning,* Vol. 70. No. 6. Pp. 57-60.

Razzouk, Rim & Shute, Valerie. (2012). What Is Design Thinking and Why Is It Important?. Review of Educational Research. 82. 330-348. 10.3102/0034654312457429.

US Department of Education. (December 15, 2015) *US High School Graduation Rate Hits New Record High.* US Department of Education. Retrieved on July 6th, 2017 from: http://www.ed.gov/news/press-releases/us-high-school-graduation-rate-hits-new-record-high-0

Vangrieken, K., Dochy, F., Raes, E., & Kyndt, E. (2015). Teacher collaboration: A systematic review. *Educational Research Review*, 15, 17-40.

Vega, V. (2012). Project-based learning research review: Evidence-based components of success. *Edutopia*. Retrieved June 25, 2017 from http://www.edutopia.org/integrated-studies-research

Wastvedt, Solvejg. (February 22, 2016) *MN Graduation Rates Show Small, Uneven Increase.* Minnesota Public Radio News. Retrieved on July 7, 2017 from: http://www.mprnews.org/story/2016/02/22/minnesota-high-school-graduation-gaps-narrowing-slowly