


5-2018

Exploring Existing Innovative Education Models: A Best Practice Guide for a New School Design in Lewiston, Maine

Katie Bosse
kbosse@clarku.edu

Follow this and additional works at: https://commons.clarku.edu/idce_masters_papers

 Part of the [Bilingual, Multilingual, and Multicultural Education Commons](#), [Curriculum and Instruction Commons](#), [Curriculum and Social Inquiry Commons](#), [International and Area Studies Commons](#), and the [Urban Studies and Planning Commons](#)

Recommended Citation

Bosse, Katie, "Exploring Existing Innovative Education Models: A Best Practice Guide for a New School Design in Lewiston, Maine" (2018). *International Development, Community and Environment (IDCE)*. 219.
https://commons.clarku.edu/idce_masters_papers/219

This Research Paper is brought to you for free and open access by the Master's Papers at Clark Digital Commons. It has been accepted for inclusion in International Development, Community and Environment (IDCE) by an authorized administrator of Clark Digital Commons. For more information, please contact mkrikonis@clarku.edu, jodolan@clarku.edu.



EXPLORING EXISTING INNOVATIVE EDUCATION MODELS

A Best Practice Guide for a New
School design in Lewiston, Maine

Katie Bosse

May 2018

A Master's Paper

Submitted to the faculty of Clark University, Worcester,
Massachusetts, in partial fulfillment of the requirements for the
degree of Master of Arts in the Department of Community
Development and Planning

And accepted on the recommendation of

Kathryn Madden, M.C.P., S.M.Arch.S., Chief Instructor

EXPLORING EXISTING EDUCATION MODELS: A BEST PRACTICE GUIDE FOR A NEW SCHOOL
DESIGN IN LEWISTON, MAINE

KATIE BOSSE

The purpose of this research is to both identify best practices in innovative school design and then identify a guide to assist new school design teams on how to make the transition out of current practices of traditional education. First, I describe the current structure of traditional education, the challenges schools face in regard to school structure, community, and academics. Then I examine six public schools that are working to create strategies to address the challenges stated in traditional schools. Through school site visits and interviews with teacher and faculty, I explore the strategies of existing innovative school models and identify common themes that unite the schools' methods. I then classify a set of drivers that can guide schools on how to transgress the traditional system of education in the United States. This research grew out of response to ACLU reports on the current state of Lewiston - and the entire nation in general - challenges and shortfalls in the education system. Hence the ultimate goal is to present best practice strategies in the areas of curriculum, policy, and school structure that attempt to reimagine the function and outcome of learning in public schools.

Kathryn Madden, Ph. D

Chief Instructor

Ramon Borges-Mendez, Ph.D.

Second Reader

ACADEMIC HISTORY

Name: Katie Bosse

Date: May 2018

Baccalaureate Degree: Geography, Concentration: Urban Development and Social Change

Source: Clark University

Date: May 2017

DEDICATION

This paper is dedicated to my amazing Lewiston community in Maine. It inspires me to see the city come together to advocate for change and justice in our schools.

A special thank you to the Bates research group who allowed me to share my research with their focus groups with Lewiston youth. Moreover, a thank you to the Lewiston youth that gave up their Thursday nights to discuss the changes they would like to see in their school. Your critical lens and enthusiasm for justice give me hope as our future leaders!

TABLE OF CONTENTS

Abstract.....	ii
Academic History.....	iii
Introduction.....	- 1 -
Situating the Research.....	- 2 -
Review of the Literature.....	- 4 -
Analytical Method.....	- 20 -
Findings.....	- 25 -
Discussion.....	- 32 -
Conclusion.....	- 36 -
Appendices.....	- 39 -
Appendix 1. Detail School information.....	- 39 -
Appendix 2. Student Centered Learning Definition.....	- 47 -
Appendix 3. Expeditionary Learning Definition.....	- 48 -
Appendix 4. Social Reconstructionist Education.....	- 49 -
REFERENCES.....	- 51 -

INTRODUCTION

Despite the consistent advancements in technology, the United States education system - the policies, structure, and pedagogical design - has hardly evolved in the last few centuries. The present education model throughout the United States public school system is years behind current evidence-based research on best practices in education - including 21st-century theories on innovative school reform. In Lewiston, Maine the state of an outdated traditional school model is exacerbated by the city's changing demographics in one of the whitest, predominantly Christian states in the country. Since early 2000's, Lewiston has welcomed a new wave of immigrants and refugees to the city that has transformed the culture and community. The new residents were, and continue to be met with prejudice and divisive othering. We know anecdotally that community and culture of an area are usually replicated in the local schools, which was true for Lewiston. Therefore, in addition to the common, nationwide issues that exist in the antiquated U.S education system, Lewiston High School faces new challenges to meet the needs of a newly diverse school community and address the implicit bias with teachers and students alike. The American Civil Liberties Union (ACLU) has documented the set of issues emerging from the local high school based on racism in school culture and policies and an inefficient English Language Learner and special needs program.

In 2017, Tree Street Youth, a well-established youth organization in Lewiston, Maine, was given an opportunity to address some of these issues through a Barr Foundation grant to create a new school. The new school will be public collaborating with the Lewiston School Department. The partnership is now excited to provide another option for public schooling in Lewiston. Together, Tree Street Youth and the Lewiston School Department, want this new

school to be informed by current best practices in innovation education reform¹. This paper will serve to inform the new school design team and the Lewiston School Department on existing models of innovative education curriculum, policies, and structures for the group to reimagine what teachers, students, and classrooms could look like.

I conducted school observations and interviews with education professionals at six schools in the New England region to explore a variety of successful programs and get feedback on the schools' advice, challenges, and impact. I presented my research findings in a dialogue with Lewiston High School students in a focus group lead by a Bates College research team to gain the students' perspectives on the alternative education models. The intention of this paper is that it will be used as a guide for the Lewiston school design team, as well as any school design team, looking to understanding the existing best practices in innovative school models and identify strategies to make the transition in design.

SITUATING THE RESEARCH

Tree Street Youth is an organization that is a cornerstone for change in the Lewiston community. The youth center opened while I was in high school and I volunteered during their grassroots phase as a chance to get to know a part of my community that had been either rejected or ignored by a large part of the Lewiston community. Tree Street Youth has expanded their programming significantly since then and I had the opportunity to contribute to the organization once again in this research on the new school design process.

¹ Innovative education models do not have an official definition therefore in this paper I mean small, autonomous public schools that are considered by practitioners and researchers in U.S education realm as models for education innovation because of the flexibility in hiring, budget, curriculum, and school policy.

Tree Street Youth first developed a design committee consisting of the founder and executive director of Tree Street, the superintendent of Lewiston schools, and a student representative from the local high school, among others. The design team then went through the hiring process for a director to spearhead the new school implementation with community advisory committee. The advisory committee is comprised of parents, educators, and school committee members. The director of the project had formerly worked for Tree Street Youth and understood the complex angles of the community, students, parents, and school. It was decided early on that design team wanted the new school policies, procedures, and curriculum guidelines to be informed by exactly those groups. The director navigated the perspectives of both the advisory and design committee to ensure to reach each concern. From the beginning, and the project's goal was for the New School to be the student, parent, and community informed, not strictly a top-down design approach.

The advisory committee identified the students they wish to focus on in the new school as 1) Students who are off-track to graduate on time due to low academic achievement, which will be measured by number of credits received by age and grade 2) Students with significant obstacles to success 3) Students who desire engagement in a different kind of academic and social environment.

REVIEW OF THE LITERATURE

THE GOALS OF EDUCATION

"It would seem to me that when a child is born, if I'm the child's parent, it is my obligation and my high duty to civilize that child. Man is a social animal. He cannot exist without a society. A society, in turn, depends on certain things which everyone within that society takes for granted. Now the crucial paradox which confronts us here is that the whole process of education occurs within a social framework and is designed to perpetuate the aims of society ... The paradox of education is precisely this - that as one begins to become conscious one begins to examine the society in which he is being educated ..." - James Baldwin, 1963 "A Talk to Teachers"

The quote is the author and social critic, James Baldwin when he gave a powerful, articulate speech on the issues of mainstream public education in the United States. Baldwin called for a change in how the U.S educates its people. In order to locate the best practices in innovative school design for Lewiston School Department and Tree Street Youth's new school, the concepts on the goal of education, critical issues in U.S education, and the history of how the education system got to where it is today must first be defined.

Critics of the education structure in the U.S argue that there is a historical contradiction that exists in our goals of for educating students. Howard Zinn (2005), American historian and social activist, identifies the contradiction in the U.S goals in education to be deception of ideals and realities. In the current education system, students learn about the Declaration of Independence, that the nation is a beacon for democracy and freedom, with liberty, equality, and justice for all (Zinn 2005). These lessons instilled at an early age in U.S schools are based off of ideals and ignore the realities. Schools fail to teach how the ideals we are taught are violated every day. Not only do schools fail to teach but they also fail to teach the ability to question the status quo - so that students can look analytically about their environment and

the environment of their neighbors and identify these gaps in ideals and realities (Zinn 2005).

When this tool to identify our true reality is left invisible, society begins to see the multiple injustices based on race, class, gender, and sexuality as a natural state in the world and a phenomenon that cannot or should not be changed. In light of this discrepancy, James Baldwin (1963) in his speech "A Talk to Teachers" states that the purpose of education is

"to create in a person the ability to look at the world for himself, to make his own decisions, to say to himself this is black or this is white, to decide for himself whether there is a God in heaven or not. To ask questions of the universe, and then learn to live with those questions, is the way he achieves his own identity. But no society is really anxious to have that kind of person around, what societies really, ideally, want is a citizenry which will obey the rules of society"

What Baldwin (1963) articulated in his call to action was the immediate danger of an education system that operates to reproduce obedient, law-abiding citizens that are not taught to critically think about their environment. Therefore, the goal of education has been and continues to be a paradox.

Paulo Freire, an educator and philosopher in education, described in *Pedagogy of the Oppressed* (1968), the purpose of education is cultivating "critical consciousness" so to realize "social action". The theory is based on the fact that once students begin to understand the oppressive structures shaping their lives, they can then begin to identify the oppressive structures facing other people's lives and think critically about how the multiple oppressive structures are linked - this is critical consciousness (Freire 1968). Once critical consciousness is achieved, this leads to social action where students imagine alternatives to the way things are

in order to develop an action plan to create change (Freire 1968). This goal of education teaches to liberate society by positioning education as a tool to always question the way things are in society in the hopes of making it a better system for all of society. It seems then, the paradox that is the U.S goal of education, is to teach to imprison citizens in the current system, rather than an education of freedom that liberates us from our current reality (hooks 1994).

CURRENT STATE OF THE U.S EDUCATION SYSTEM - THE EDUCATION DEFICIT

The structure of the United States education system has experienced few changes or reforms since the nineteenth-century framework was first developed. In the 1890's, school reformers advocated for a centralized system of public education with control and decision-making responsibilities on issues of curriculum to be determined by educational professionals rather than local communities and parents. Hence, the decisions on critical issues like curriculum design are made largely by politicians, textbook companies (Pearson, McGraw-Hill), and education lobby groups in Washington D.C (Giroux 2013).

Henry Giroux (2013), a renowned American scholar on critical pedagogy, calls the current situation of American schooling the "education deficit". Giroux believes the deficit to be related to current leadership's decisions to neglect "civic literacy" in education design and through standardization of education - denounce critical thinking. This has led to the American public disinterest in the journey to know (Giroux 2013). Current mainstream education models do not teach students to seek knowledge that deals with challenging the status quo to think critically about alleged facts and truths (Giroux 2013). Students are taught improper histories and stories about the country that are told in the interest and instruction of the government and big business. Because students are not taught to question and think critically about the

systems influencing their lives, there is an American psyche that has developed to perceive racial, gender, and economic inequalities as part of the natural order (Giroux 2013). Keeping in mind Henry Giroux analysis of the "education deficit" in the U.S, I will now look briefly at the overarching issues shaping the national deficit before moving further to conceptualize how these national education issues look on a more local scale in Lewiston's education system.

THE "BANKING SYSTEM" OF EDUCATION - TESTING INDUSTRIAL COMPLEX

No Child Left Behind, Race to the Top, and the Common Core all reflect over a decade of educational reform in the United States in addressing historic inequalities in the education system (Croft et al 2015). No Child Left Behind (NCLB) policy was implemented at the turn of the century during the 2001 Bush Administration. The new public education program, which was signed into law in 2002, influenced the education systems in every state as public schooling moved even closer towards a hyper-standardization of education. Now, public schools' quality, which is connected to the schools' funding, are determined mainly by standardized tests. This form of assessment of student and school achievement is commonly upheld by the left and the right alike to be "objective" but ignores the complexities that exist in public schools including socioeconomic inequalities that exist in different districts. Almost a decade after being implemented with insignificant improvements in students' proficiencies on the tests, the Obama Administration decided to salvage the program by creating Race to the Top (Croft et al 2015). This new program provided states the option to opt out of NCLB but was contingent on the states willingness to adopt federal interest neoliberal policies such as building charter schools and policies that would hold teachers accountable for students' poor test scores (Croft et al 2015). More recently the Common Core State Standards Initiative

(CCSI) continues to build on NCLB and Race to the Top's agenda for a more centralized education system and the institutionalization of standardized testing as a means to determine school, teacher, and student quality and ability (Croft et al 2015). The CCSI sets standards for what members in the Council of Chief State School Officers and the National Governors Association believe students in public education should be learning in mathematics and English language arts/literacy (CCSI 2017). The program development was heavily endowed by corporate donors, particularly the Bill and Melinda Gates Foundation and invited peculiar representatives to the table including the U.S Defense Department (Crofts et al 2015). By early 2014, 45 states had adopted the common core standards (CCSI 2017).

The culmination of these three major policies has led to what many education reform advocates refer to as the Testing Industrial Complex (TIC) (Croft et al 2015). The Testing Industrial Complex is characterized by excessive "high-stakes" testing, policymakers' false narrative of improving education, and the transfer of curriculum and funding decisions being transferred from the local and state level to the national and private corporations (Croft et al 2015). Standardized testing is considered "high-stakes" because major decisions about education policy and procedures are being based on schools' test results. The centralized education system works so that policymakers put pressure on their school boards to improve test scores and then that pressure is put on principals and teachers who put pressure on students (Croft et al 2015). This results in deskilled teachers who are not allowed to be innovative in a classroom because they have to "teach the test" to the students so they can regurgitate it back onto the test.

In *Pedagogy of the Oppressed* (1970) Paulo Freire refers to this traditional pedagogical process as the "banking model of education" where teachers, which because of current policy are actually an extension of the federal government standards, make deposits into the passive students who are instructed to receive, memorize and repeat back. Students are expected to deposit the knowledge placed in them and withdraw their own knowledge. This is how the standardized testing system works - it creates manageable citizenry so that "The more completely they accept the passive role imposed on them, the more they tend simply to adapt to the world as it is and to the fragmented view of reality deposited in them" (Freire 1970).

SOCIAL INEQUITIES, MULTICULTURAL CLASSROOMS

The aforementioned policies affect all students in the country, black, brown, and poor students are the ones most wronged in the education system (Ravitch 2010). Although the current policies and trends in U.S education use neoliberal languages such as achievement gap, multiculturalism, and diversity, these policies refused to acknowledge or address embedded racism which is the root of many of the issues in the education system (Kohli et al 2017). Education research scholars point more specifically to what is referred to as "new racism" in U.S schools which can be characterized through color-blind ideology, anti-racist racism, and everyday racism that is much different from previous blatant Jim Crow racism (Kholi et al 2017).

A major issue in U.S education is that as schools and communities become more diverse, the teacher community remains predominantly white. This is important because educators play an essential role in how the students begin to think about their self-worth and the world around them, and if conversations of race and class are avoided in the classroom

setting due to white teachers lack pedagogical knowledge on issues of race or un-comfortability, then this invalidates people of color and low-income students' experiences (Perez et al 2006). A 2016 report by the U.S Department of Education found that U.S public schools were overwhelmingly white (82%) and diversity decreases in higher administration positions (U.S DOE 2016). What this means is that the demographics of teachers does not match the demographics of the citizenry and that as one progresses in the education profession - that is from principals to superintendents, school boards, education policymakers, and education professors - the whiter the demographics become. The following figures formulated by the U.S Department of Education (2016) display these discrepancies:

Figure 1. Percentage distribution of students enrolled in public elementary and secondary schools, by race/ethnicity: Fall 2002, 2012, and 2024

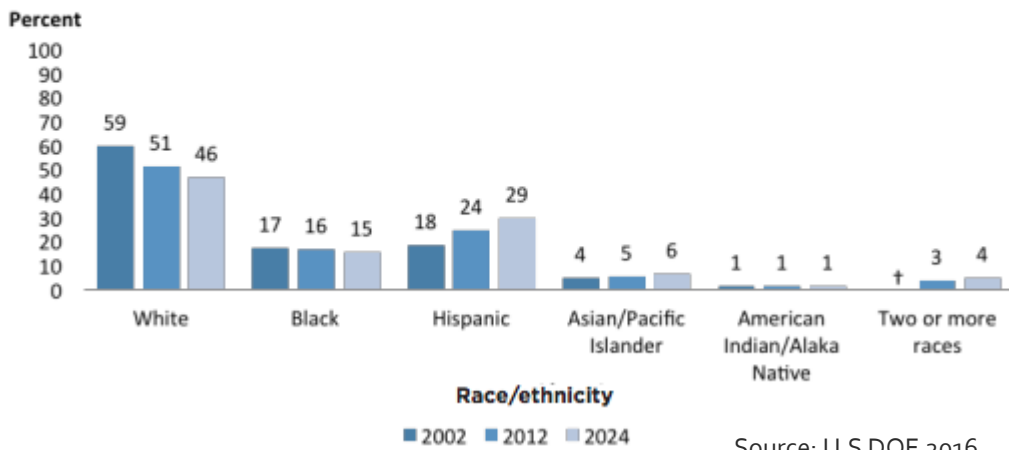


Figure 1 shows data from the State Non-Fiscal Survey of Public Elementary and Secondary Education which was collected in the 2002–2003 and 2012–2013 academic years. The projection for 2024 estimates is from National Elementary and Secondary Enrollment Projection Model collected 1972 through 2024. This illustrates that on a national scale, K-12

schools are becoming less white and that this trend is anticipated to continue. This data is important to keep in mind when contrasted with Figure 2 below:

Figure 2. Percentage distribution of teachers in public elementary and secondary schools, by race/ethnicity: Selected years, 1987-88 through 2011-12

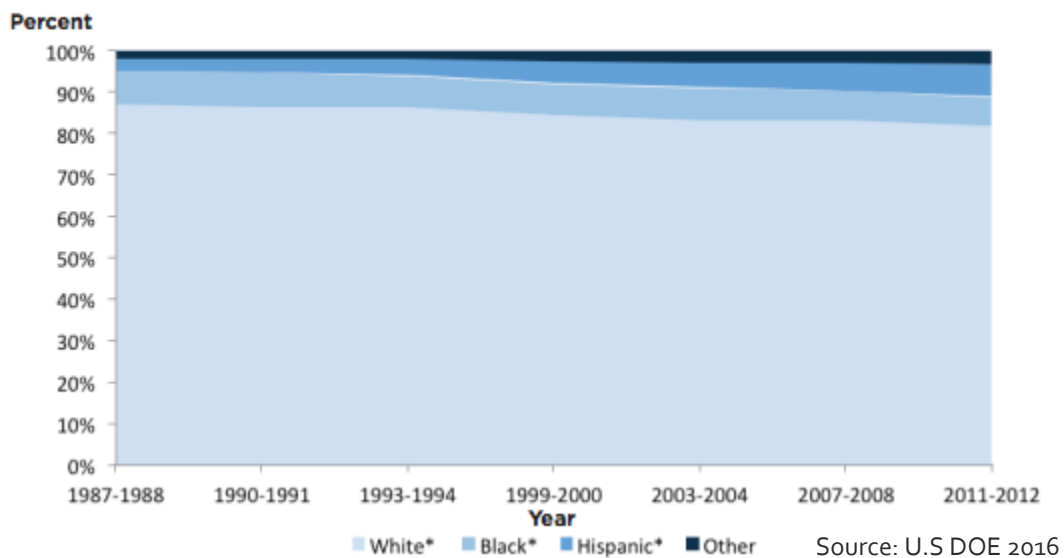


Figure 2 data is collected from the Schools and Staffing Survey (SASS) administered by the National Center for Education Statistics in the “Public School Teacher Data File” which includes data from the 1987–1988 through 2011–2012 academic years. In comparison to Figure 1 which showed student demographics changing significantly, Figure 2 shows little change of the teacher demographic makeup. This is largely the same narrative for principals in the U.S public schools (U.S DOE 2016).

The racial discrepancies displayed in the data matter because racism in the schools and classrooms has led to disengaged students of color and English language learner students (ELL), biased curriculum, and school to prison pipeline ‘dropouts’ (Kholi et al 2017). Consequently, colorblind racism in school’s position students of color and ELL students as

problems in need of fixing, rather than the environment or system in need of change. This issue has led to inequities in the discipline that create dropouts. However, students are not dropouts, but rather pushouts through school policies and practices like zero-tolerance, police presence in schools, and search and seizure in schools (Kholi et al 2017). For example, a video went viral in 2015 of a school police officer at Spring Valley High School (South Carolina) assaulting a black female student for refusing arrest. This police brutality and unwarranted arrest in public schools is caused by a combination of internalized racism in the classroom and hyper-surveillance of schools with many of students of color (Kholi et al 2017).

Two key strategies are currently implemented to address increased diversity and multiculturalism in U.S public schools by predominately white teachers and principals - colorblindness and meritocracy (Kholi et al 2017). Racial colorblindness is when educators avoid the topic of race in the classroom or mention superficial representations in class discussions, readings, and overall curriculum so that any racism that is not blatant remains silenced. Many educators, for instance, teach about individuals or events during slavery or civil rights movement but diminishes the individuals or events by not connecting them to larger structural and institutional factors (Kholi et al 2017). Meritocracy has emerged through NCLB and Race to the Top policies that focus on high-stakes testing as a way to center individual achievement without any structural analysis. These policies reaffirm racial hierarchies because the students with the highest test scores are more than likely white students who have better-resourced schools and with curriculums made for their success.

Moreover, policies and practices around English Language Learners (ELL) oftentimes delegitimizes their bilingualism while congratulating white, wealthier students' ability to learn two languages (Kholi et al 2017). Under NCLB policy, English-only policies spread in U.S schools (Kholi et al 2017). Many education critics added that these policies undermine student's potential and success, by treating their ability of bilingualism as a disability. Parallel to the treatment of ELL students are 'students with disabilities' in special education which research has found to have an overrepresentation of black and Latino students (Kholi et al 2017). A large body of research is now suggesting that this perceived disability that so many students of color have is actually correlated to inequitable resource disbursement, relevant pedagogy that curriculum that is intended for white middle-class students, and inadequate teacher preparation, such as white teachers who lead instruction in to a brown, Spanish speaking classroom.

U.S EDUCATION REFORM – WHAT GOT US HERE?

As expressed at the beginning of this research, the current structure of the U.S education system is largely reflective of 19th-century antiquated education theory (lorio 2011). This education is characterized by the values of 'classical education', which is concerned with the who, what, when, where, but not the why or how. The theory is rooted in teaching logic and rhetoric but has been charged with implementing homogeneity in the classroom structure and curriculum. The core function of classical education is reading, writing, and arithmetic - evidently, the same subjects that the standard college exams like the SATs are evaluating student success (lorio 2011). During this time, Horace Mann also contributed to the education movement to make education the responsibility of the government to provide for all its

citizens and helped standardize education through teacher's education movement. By the middle of the 20th-century, the rapid industrialization and urbanization experienced in the country is thought to have influenced one of the first major education reform movements called progressive education (lorio 2011, Sutinen 2014). Nevertheless, with the advocacy for progressive education reform came to the "scientific management" approach developed by Frederick Winslow Taylor. The philosophy of Taylorism had a lasting effect on the organizational structure and planning of schools (lorio 2011). Informed by the establishment of mass factories and industrial assembly lines, the idea in Taylorism is the factory is a model of a system operating at maximum efficiency. Therefore, Taylor believed if the country designs our schools like factories education can operate at ultimate efficiency (lorio 2011). The U.S public school system became like a business running a factory through its administration policies, design, and curriculum and has changed little since this education movement. For example, in traditional high school education students are taught to learn through memorization, routines, and drills – education is based on the process much like the assembly line production (lorio 2011). lorio states "As a part of the system, the final responsibility was put on the pupil to accept the training and feel the responsibility to perform to expectations. Classrooms were set up identically in rigid rows of immovable desks with the teacher positioned at the front of the room in command position (lorio 2011)". Taylorism has thus informed the school design, standardized curriculum, and financial rewards for high performing school that is still apparent today (lorio 2011).

Progressive education, alternatively, introduces a more holistic response to education reform and was pioneered by education philosopher John Dewey. Dewey advocated for

constructivist learning theory and centered the new strategies for education on experimental curriculum, critical thinking, and collaborative, project-based learning projects (Sutinen 2014). Dewey and many other practitioners in progressive education state that teaching social responsibility is necessary for the advancement of the United States (Iorio 2011). Nevertheless, the full actualization of progressive education has not widely been implemented in American public schools as many still practice Taylorism methods of schooling (Sutinen 2014). There have been many critiques on how progressive education has developed in the way John Dewey intended. Most prominent among the critiques is the education professor George Counts in his speech "Dare Progressive Education be Progressive?" in the mid-20th-century (Sutinen 2014). Counts argued that progressive education should seek to build a new social order in the country based on the current social, economic, and political realities through education (Sutinen 2014). Counts, as well as many other critics of progressive education, developed their theories based on Social Reconstructionist theory which advocated for an intentional focus on the current realities of justice and train youth to create change in the world (Sutinen 2014). This is largely where prominent education theory is situated. Finally, Sutinen (2014) suggests that perhaps this minimal transformation is because of minimal change in the nation's teaching programs and inefficient resources in the schools that inhibit new practices in education from being actualized.

THE CASE FOR LEWISTON HIGH SCHOOL SYSTEM

Basic indicators

Although Lewiston, Maine has a long history of being a homogenous city with very little linguistic, racial, and religious diversity, the city and its schools have been becoming more

diverse as the population continues to grow. At the traditional high school, Lewiston High School, there are approximately 1,294 students and 61.4% identify as white, 33.1% identify as African American or black, 2.7% Hispanic, 1.2% Asian, and 1.3% two or more races (LPS 2017). The high school is also becoming more linguistically diverse and now the two major languages spoken by the students are English and Somali (LPS 2017). There are 335 English Language Learners (ELL) which makes up 25% of the student body (LPS 2017). The high school also has 14.8% in special education and 65% of the student body is classified as economically disadvantaged (LPS 2017). The increasing diversity has been substantially positive for Lewiston as the superintendent noted, Lewiston was a city with a negative growth rate and the immigrant community breathed rejuvenate life back into what was a dying mill town (Besteman 2016). Still, many residents saw their new neighbors as a threat and have created a dialogue of otherness around New Mainers that has made its way to the schools.

Diversity and disability

In 2017 the American Civil Liberties Union of Maine (ACLU) issued two reports on the state of Lewiston, Maine's schools on issues related to race, disability, and English Language Learner programs. The reports drew on over two years of investigations that included over 115 interviews with students, parents, community leaders, educators, and administrators that highlight the glaring discrimination students experience in the Lewiston school district. The first report highlighted 5 major shortfalls in the school department including 1) Students of color and students with disabilities are disproportionately suspended and removal measures 2) Students of color are disproportionally and inadequately screened for learning disabilities 3) ELL students high school students are stuck in noncredit classes, inhibiting graduation and

yielding unnecessary segregation 4) Parents with limited English proficiency have issues with access to Lewiston school department activities and programs and 5) It is possible for students to go through the entire Lewiston school system with only white teachers, denying many students the opportunity to learn from teachers with similar racial and cultural backgrounds (Heiden et al 2017). The ACLU of Maine reports that together, these issues amount to a hostile and alienating environment the effects the students experience.

These issues are especially severe for students who experience an intersection of identities including race, gender, religion, disability, and national origin (Heiden et al 2017). For instance, black students in the Lewiston school district are three times more likely to receive an in-school suspension at 15.08% compared to their white students at 5.19% (Heiden et al 2017). Black students receive out of school suspension at 10.52% compared to white students at 5.35% (Heiden et al 2017). Recently in Lewiston's local paper, the Sun Journal, there was a story of a 16-year old student from Kenya who moved to Lewiston 6 years ago that was expelled from Lewiston High School last year and is now getting ready to return upon Superintendent Bill Webster's recommendation (Washuk 2018). He was suspended his freshman year because he skipped classes and had an attitude with the teachers (Washuk 2018). The School Committee decided to expel the student because "it was his lack of interest in being a student" and it was a distraction to others (Washuk 2018). Heiden et al, (2017) suggests seeking ways to adapt the education curriculum, structure, and policies for the many students with this challenge. This situation is what the new school design team hopes to address.

Students with disabilities receive out of school suspension at 17.02% compared to students without disabilities at 5.15% (Heiden et al 2017). When race and disabilities are combined, black students with disabilities are suspended at 26.4% compared to white students with disabilities who are suspended at a 15.85% rate (Heiden et al 2017). The ACLU report indicates that that disrupting students learning process through suspension undermines a safe learning environment. In fact, the ACLU report suggests keeping students in the classroom as the most critical method to combat student involvement in the criminal justice system and promote educational achievement in students. Nevertheless, black students continue to more likely to be removed from the class compared to white students.

The report also found that Lewiston school departments screening process poorly serves students of color, specifically those who are ELL students (Heiden et al 2017). The ACLU found that white students are twice as likely to identify as qualifying for the protection and services from the Individuals with Disabilities Education Act compared to a black student (Heiden et al 2017). Therefore, there is a discrepancy with the implementation of the Disabilities Education Act. During the ACLU investigation, it was expressed by many parties that improvements on disability screening procedures for a student with limited English proficiency is a priority. A common concern is that all employees who conduct screenings for disabilities in the district only speak English (Heiden et al 2017).

Moreover, ELL courses do not allow students to earn credit because they qualify as an elective course. Students in the interviews conducted by the ACLU expressed that the ELL program creates stagnancy in progression and that the program does not provide a clear road

of out so that ELL students can join the core classes (Heiden et al 2017). The report explained that while the program is good at teaching, it needs to become better at evaluation so that students can transition to for credit classes (Heiden et al 2017).

Similarly, there are very few full-time employees in the school faculty and administration who can speak Somali, the second most popular language at the school and in the community. Even so, it was reported that the current staff does not know how to use the interpreter phone service (Heiden et al 2017). This prohibits a large group of parents from participating in their student's education.

Finally, Lewiston High School is nearly 30% black, however, out of the students interviewed by the ACLU, none of the students had a black teacher, neither did they have a Somali teacher or a teacher from a refugee background, which also represents a large portion of the school and community. On the contrary in the second report by the ACLU, it was noted that students at Deering High School in Portland, with a similar community demographic as Lewiston, expressed appreciation for their assistant principal, Dr. Abdullahi Ahmed, who is himself a black, Muslim, and a multilingual immigrant (ACLU 2017). The black, Somali, multilingual students at Deering stated that Dr. Ahmed is a source of comfort and support because he can identify with the issues they struggle with at the school and at home (ACLU 2017). Unfortunately, Dr. Ahmed is the exception and not the norm. Teachers in the state of Maine still remain 97% white with many students never getting the opportunity to be taught by a non-white teacher (ACLU 2017). This, the ACLU explains, is detrimental for students of every race.

Everyday experiences of harassment, inequality, and exclusion

The second report published by the ACLU in 2017 illuminated more on the everyday experiences that minority students encounter in the urban schools, particularly in Portland and Lewiston. The report identified two major issues in Maine schools affecting non-white, multilingual, and/or multicultural students in Maine. First is staff, educators, and fellow students implicit bias ²(ACLU 2017). The second is that there are currently limited processes or resources available to properly address the implicit bias (ACLU 2017). These key issues work to explain the previously mentioned issues of lack of diversity in teachers and staff, inequitable discipline, and inefficient ELL and special education program.

ANALYTICAL METHOD

I will be looking at existing models of innovative schooling and how these education models can inform the design process of Tree Street Youth and Lewiston Public School's new school. The goal of my research is then twofold: (1) To understand what the best practices in innovative school design are that exist currently and (2) to create a guide for new school design teams like the one in Lewiston that outlines the necessary strategies to successfully transition from a traditional school design discussed in the literature review. In order to accomplish these goals for the research, I used interviews, observation field visits, and some additional documents. The first step in designing my research was selecting the schools I wanted to visit

² The Persecution Institute (2018) explained Implicit bias as "thoughts and feelings are "implicit" if we are unaware of them or mistaken about their nature. We have a bias when, rather than being neutral, we have a preference for (or aversion to) a person or group of people. Thus, we use the term "implicit bias" to describe when we have attitudes towards people or associate stereotypes with them without our conscious knowledge."

and interview. I began by doing research on alternative schools in the New England area such as pilot, innovation, or charter schools³. I also drew from conversations with a professor in Clark University's education department who specializes in applied critical pedagogy for their research. I narrowed my schools based on their diversity, locality, and their school performance scores. By diversity I mean I wanted a plethora of schools that represented different school makeups such as suburban, urban, multilingual, multicultural, etc. I wanted to ensure if I was looking for best practices that it did not just come from one kind of school. By locality, I mean schools that are close enough for me to spend the day at as well as share the many similar characteristics of New England. I selected the criteria of school performance scores finally because I wanted to ensure if I was drawing on best practices in innovative school design that these schools I would include were actually performing academically compared to traditional schools. Hence, all the schools I selected for the study were performing above the average for their district based on local test scores and recognition⁴. Finally, all the schools in the study are public schools, free, and open to any student. With these criteria, I narrowed down my school selection to the following six schools:

- Fenway High School, **Boston, MA**
- Francis W. Parker Charter Essential School, **Devens, MA**
- Margarita Muñiz Academy, **Jamaica Plain, MA**
- Casco Bay High School, **Portland, ME**
- The Met School, **Providence, RI**
- Audre Lorde Transformative Arts School, **Worcester, MA** (*ALTAS is currently a work in process. The design stage is done and the founders are now in the implementation phase.*)

³ Pilot, innovation, and charter schools are different forms of public schools that have flexibility in hiring, curriculum, and budget.

⁴ Audre Lorde Transformative Art School (ALTAS) is included in my study, however, has not yet opened its door so this is the only exception to the school performance scores criteria.

choose to look at this school for their radical design and as a model of a school that is in a similar process at the Lewiston school design team)

Once the schools were identified, I briefly researched their school websites to decide what I needed to know to accomplish my goal of understanding best practices in existing innovative school design models as well as strategies to replicate this process in a new school design process. I selected curriculum, policies, and structure to be the overarching angles to look at the schools I included in the study. Therefore, when connecting with the schools and forming my prompt questions for the unstructured interviews during the school visits, I was clear that the three areas I am looking to learn more about for each individual school were how their specific curriculum, policies, and structures inform their innovative school design and contribute to their school successes. In addition to these areas, I also prepared prompt questions to understand the school better. These included (1) "What motivates your school to be different from traditional high schools?" (2) "What is one of your biggest challenges your school faces?" (3) "What impact does this school model have, and why do you think that is?" (4) "What would be a source of advice you would give to a school that would like to implement your school model?" With this design set, I submitted an IRB application to Clark University's Human Subjects/Institutional Review Board to maintain ethical conduct for the interview and field visit observation procedures. I obtained IRB approval because the schools were public institutions, I intended to speak with individuals, and there was no potential harm or misconduct that could emerge from this research design.

I reached out to the schools either by email or phone. Most of the schools in the study already had a process in place for visitors (primarily educators, city officials) to interview and

observe their schools because of their innovative design and successful outcomes as a school. Hence, when I spoke with the administrators at the school about the nature of my research and how my visit and conversations with their school could help inform a new school design process and my research on best practices in innovative school design, they were not surprised. In fact, after explaining the goals of my research and the three paradigms I would like to learn more about, the schools welcomed me to visit for the entire day and organized the visit with other visitors interested in the school's innovative design to create a more robust learning process for all visitors involved. Although I only asked for an interview and a tour with an administrator or teacher, most of the schools planned a full day visit for me that including info sessions, classroom observations, lunch with teachers, and time for interviews. Hence, my data incorporates a lot of hard facts about the schools however the real substance of the data comes from the stories and incites shared by my conversations with the administrators and teachers. The school that was the exception for this was ALTAS in Worcester. Since ALTAS is in the implementation phase of their design I was only able to speak with a founder on the design team and conversations were bound to their logic and proposal for their curriculum, policies, and structure.

After the interviews and school visits, I had an ample amount of data that I organized into common themes in curriculum strategies, policies, and structure. As far as additional documents to consider, many of the schools provided for me their annual reports and information packets and I also did research with newspapers to support the anecdotes shared during the interview and visits. With the aggregate data, the common themes I identified in

each category I focused on started to suggest best practices that every school in the visit is engaging with and that is contrarian to traditional education design.

The purpose of this study's research methodology is to capture a variety of perspectives through interviews, observation field visits, and some supporting documents, and then identify common themes. The myriad of conversations at the schools attempted to then explain how the existing innovation schools in the study made the change to an alternative strategy of education. Through the anecdotal stories shared during the interviews, my personal observations of the school environment and culture, and supporting evaluation scores of the schools, I triangulated the data to discern common themes on best practices for innovative school design consistent in the six schools in the study. I organized the common themes in the data into the three areas that I structured my data collection in - policies, curriculum, and structure. I will first analyze the data to explain the common practices I found in relation to the policies, curriculum, and structural framework in order to distinguish best practices in the transition to an innovative school design. I will then go to the drivers of how the schools in my study suggest making the transition. In the appendix, there is more detailed information on the data from the schools in this study.

CURRICULUM

PROJECT-BASED WORK

Project-based curriculum emerged as a response to the more traditional standardization of education. This learning strategy is a way for students to show and practice what they are learning outside of homework assignments and tests, which many of the teachers at the schools in the study saw as futile methods of learning. The idea behind this perspective on learning is to accommodate different methods of learning. In an interview, a teacher at Francis W. Parker Essential Charter School stated that for some of their students, tests make it difficult for them to connect with the material and ideas of a subject. Instead, the teacher suggested that project-based work makes learning more accessible to students with different learning styles and inspires more creativity in engaging with the topic at hand. For instance, while observing an Arts and Humanities class at Francis W. Parker Charter Essential School, the students were broken up into group work where they used multimedia tools (YouTube videos, podcasts, and photos) to engage with understanding Jim Crow Era. The two expeditionary schools I visited during the research also thoroughly engaged with project-based work. The principal at Casco Bay High School explained during the interview that there is a guiding question/theme for each grade such as "if we can, should we?", "arts towards justice", or "how do we bridge the divide?" The students in each grade then design a yearlong project on how they would like to address the topic. He explained how some students have worked on a podcast, constructed visual or performing arts, or some have hosted a community night in their neighborhoods to educate the public on a topic of their interest. Many of the

administrators in this study affirmed that main focus in project-based strategy is that the act of doing and creating is a stronger way to learn than to memorize and regurgitate material. The purpose is for students to take the information and show how they understand it in their life.

REAL WORLD EXPERIENCES

Another common strategy in the curriculum were the use of real-world experience, which goes hand-in-hand with project-based learning. This strategy of encouraging students to engage with the community as a way to learn about different subjects was unanimous at all the schools in the study. Real-world learning experiences include using community resources such as local experts, environments, museums to engage with material that is traditionally taught through textbooks. The two expeditionary schools, Casco Bay High School and Margarita Muñiz Academy, frequently used the surrounding community as their textbooks for learning. ALTAS, which is yet to be opened, designed their arts curriculum around sharing the knowledge the students are learning with the surrounding community.

Internships was a common strategy school in the research used to engage with real-world experience. At the Met School, Francis W. Parker Charter Essential School, and Fenway school internships in their community was a large part of the upperclassmen curriculum. In fact, at the Met School, students are at their internships more than they are in the classroom for all years except the first year. At the expeditionary schools as well as in ALTAS curriculum proposal, interaction with the community seemed to be more of an integrated curriculum and was experienced in their project-based work. One of the school design creators from ATLAS said that real-world experience was an important focus in their curriculum because real-world learning makes education more relevant and interesting for the students so that they are more

engaged and understand why the concepts are important to learn. Francis W. Charter Essential School states that the students who were previously in a more traditional school setting had their attendance improve, which they believe is due to a combination of project-based learning and real-world experience curriculum.

INTERDISCIPLINARY CURRICULUM

Consistent with project-based learning and real-world experience, the schools in this study all instituted an interdisciplinary curriculum model that rejected homogenization and standardization of curriculum subjects. From my discussions with teachers and administrators in this study, it is clear that the goal of education for them is for students to learn from the real world where ecologies of art, science, math, and critical thinking are all connected, not exist in vacuums. For instance, most schools combined art and humanities into one class, so students simultaneously engage with poetry, social sciences, and writing together as a way to gain a more holistic understanding of the topic. Moreover, ALTAS and Margarita Muñiz Academy use art as a medium or perspective that is woven into the entirety of their curriculum.

POLICIES

STUDENT ASSESSMENT

A school policy that was widespread in the schools was the implementation of authentic assessment or assessment that looks beyond high stakes testing and the pass-fail dichotomy. The grading system used at the schools in this study were more based on a spectrum rather than a hierarchy. This meant that at the schools with this policy no student fails, they just might take longer to reach a certain expectation. Hence the spectrum for

grading at these schools are based on beginner, approaching, master, and (in some cases) exceeding. Many of the schools in the study also have a mandatory policy for all assignments to have the option for revision of classwork, and many teachers I spoke with encouraged a revision. The administrator at Francis W. Parker Charter Essential School, as well as Casco Bay High School, said that policy is designed to resemble real-world practice where individuals present their work, get peer feedback, and make improvements. Furthermore, the authentic assessment model used at many of the schools in this study correspondingly use narrative progress reports. This means that instead of grades in a class for traditional progress reports, teachers write narratives about each student to explain individually how the student is progressing.

CURRICULUM REGULATION

As discussed in the literature review, the more traditional form of education operates policy in a top-down approach where the government regulates what curriculum is required and pressures the district superintendents who pressure the principals who then pressure the teachers on what they can teach. Another common theme at the schools in the redistribution of power relating to curriculum policy. Since the schools are all autonomous with the curriculum requirements, they have the opportunity to position the power of subject material to the teachers. All the schools in the study said that they allow time for teachers to design and discuss what they want to teach throughout the school year. This was powerful because, as an administrator at Fenway High School explained, teachers can respond to current events and adjust their lesson plans to be relevant to the students' experiences in life. Moreover, at the Met, the teachers shared that this kind of curriculum autonomy allowed them to respond to

subject matters that were important to the students. Therefore, this policy allows teachers to receive necessary feedback from students and adjust their plans according to the uniqueness of the class. This bottom-up policy structure for the curriculum is necessary for the kind of project-based learning and real-world experience mentioned earlier.

STUDENT-PARENT-TEACHER ENGAGEMENT POLICY

The Met School, Francis W. Parker Charter Essential School, and ALTAS all had the policy to incorporate parents' involvement into the students' curriculum so that the education process is a team effort and so students could identify their support networks. Many of these schools implement this policy through the creation of personalized learning plans. In personalized learning plans, the teacher and parent meet with the student every quarter to discuss their learning plan, projects they are working on, and topics that excite them that they want to learn more about. The quarterly meeting is student led and is designed for the student to define what kind of supports the student needs in their learning process. The schools with this policy said that the reason it is implemented is that they believe it improves student's success when a parent or mentor is involved in the students learning process - so that learning is not only confined to the classroom.

STRUCTURE

ADVISORIES

At each school, advisories played a significant role in the structure of the schools, especially in the process of community building. Advisories are small groups of 10-15 students with the purpose to create a sense of community in the school structure. A majority of the

schools structured advisories so that the students stay with the same group of students all four years in order to foster a community that talked about current events, personal matters, and as a way to integrate fun and playfulness in school, which otherwise can be a stressful environment for students. I visited the Francis W. Parker Charter Essential School during an advisory which I was invited to sit in on. The group that day discussed micro-aggressions and shared their experiences with the topic. Through the discussions with the teachers, students, and administrators at the schools I visited, it appears that advisories function as a separate space for students to build community, release from the daily pressure of school, and delve into topics that are better discussed in a safe, trusting group. The advisories at the schools were a common theme and were positioned into the daily schedules as a vital school structure.

STUDENT-CENTERED STRUCTURE

The structure of all six schools was also uniformly student-centered and valued a personalized education experience for the students. The student-centered structure in the schools is manifested in both the policies and curriculum and serves as an overall culture for the school. Through my observations during the full school day visits, I noticed how students were trusted with taking on their own learning and the students every move was not regulated in the way that it is in a more traditional setting. At the school visits, many of the teachers I spoke with that were formerly teachers at a traditional high school said that with a less pressure on performing for standardized tests and teaching the test in the classroom, the learning process was able to be focused on the students so that they could take the learning process, including material and group discussions, in any direction they feel relevant to their interpretation.

STRUCTURE OF INSTRUCTORS ROLE

As described in the literature review, current structure of traditional high school education is based on hierarchical relationships between administrators, teachers, and students. In contrast to student-centered structure, teacher-centered learning positions the teacher as the zenith of knowledge or as Freire referred to as "the banking concept of education (Freire 1968)". As a way to challenge this traditional role of the instructor in education, all of the schools in the study discussed in their interviews a re-imagining of the instructor role to resemble that of a coach in sports. Still, the role of the 'teacher as coach' is distinct depending on the school's structure. For example, at the Met School, because of the school design that allows the students curriculum to be largely self-designed, the teachers at the school work as a resource to direct the student to the internships that are interested, connect the students to academic resources for their self-designed plans, and advise the students through their education process. However, at the other schools in this study, the administrators during the school visits explained that the 'teacher as coach' role was about the overall structure of the classroom that positions the student at the center of learning. Francis W. Parker Charter Essential School administrator stakes that this structure is about teaching students how to learn so that learning can extend beyond the classroom. This structure, the administrator clarified, is made possible by the curriculum's goal is more focused on building skills, compared to the inflexibility that comes with teaching for a standardized test. Therefore, the role of the teacher in many of the schools in the study is to help students develop essential skills that will allow the student to take learning into their own hands.

DISCUSSION

For a new school design team, looking at the comprehensive approach to innovative school design analyzed in the findings of this research can appear daunting. In order to understand how to make these common best practices into actionable strategies, there are specific drivers that the school administrators and teachers in this study helped identify. I found many of the schools I visited in the study to be an exciting, successful break away from the traditional high school model, but I continuously concluded the visits by asking how the schools got to where they are and how do they maintain the design, especially when faced with pushback. Aside from Fenway High School, which is one of the more long-standing high schools in my study, all other schools mentioned some kind of community pushback during the design phase or even in the school's current operation. Moreover, when I asked for advice for a new school design team implementing innovative school design strategies, almost all the schools suggested using the networks that exist including contacting schools like the ones I visited. Finally, on the issue of maintenance, the schools noted that there is a significant amount of work that goes into teacher training to preserve a community and culture that is necessary for an innovative school looking to transgress traditional education. Below are the major drivers I identified shaping the existing innovative schools' transition and maintenance of their model of education:

COMMUNITY BUY-IN

As previously mentioned, the schools in this study identified one of the major challenges and successes of their school models being community buy-in. These models and strategies for education are not mainstreamed into many schools currently and because of

this, there has been a lot of suspicion around the models. First, communities where the schools are located in, even communities thought to be progressive, sometimes see these schools as a waste of resources. This can be consistent with the parents who think of sending their students to the school. An administrator from Francis W. Parker Charter Essential School said that a major obstacle is that most parents have been through the traditional education system and are now doctors, lawyers, even other teachers. They think that if the traditional education system got them to their positions, why is there a need to rethink education models? And they ask – how do I know that my student can be just as successful in this new model? Especially at the parent-student-teacher working meetings and progress reports – the schools in this study said that parents were used to just hearing is my student passing or failing, are they behaving or are they troubled? In addition, there is even skepticism with students when they have been raised in a traditional education system and then arrive at these innovative schools they are unsure what to think of the new grading system and the freedom of curriculum. The schools mentioned there is often the first-year panic where the student is unsure if they are passing their classes and what they *should* be doing.

The schools in the study suggested meeting this pushback with evidence – from current school scores and college rates. They also suggested getting the parents involved from day one and making sure the model and process is very transparent. As far as the student buy-in, many teachers shared that right around the end of the first year for students they see how the new model suddenly clicks for the student. As a student in a presentation at the Met School mentioned – every student has that moment where they finally see the purpose of the school design.

COLLABORATION IN DIFFUSION OF MODEL

Another driver that the schools in the study stated that made their transition into an innovative school model successful was collaborating with other existing innovative school models. Many of the administrators mentioned that there is a supportive network of schools that host workshops, conferences, and even consulting for new schools that are looking to replicate their model. For instance, Francis W. Parker Charter Essential School and Fenway High School are both informed and supported by the Coalition of Essential Schools (CES) who offer a plethora of resources for schools and their administrators and teachers looking to implement their model and stay up to date of innovative learning strategies and programs. Similarly, the Met School was created under the umbrella of Big Picture Learning, which is a school design model that implements a lot of the best practices identified in this study in a variety of schools all over the world. Even new school design teams are not looking to join a network, there are many resources available that new schools can utilize and it will help them with the previously discussed issue of community buy-in.

TRAINING OF FACULTY AND STAFF

Once schools have implemented an innovative school model and succeeded with community buy-in there is a question of how to maintain the culture and community of the school the design team worked so hard to create. Hence, another source of advice that the administrators and teachers proposed in this research was schools should include continuous training of faculty and staff on social justice issues and operate in an innovative school model. This was said to be true especially with faculty and staff who were used to working in a traditional school model – just as students face skepticism and adjustment so do the faculty

and staff. The schools shared that if there is a teacher not on board, their model will not work. This was also reiterated at Fenway High School and Casco Bay High School, the importance of training to make sure all faculty and staff are informed and practice issues related to social justice. At many of the schools, I visited I was pleasantly surprised by how social justice is a strong framework of not only the curriculum but the overall culture and community. When I asked the teachers how this social justice oriented culture and community are maintained the teachers mentioned training. For example, at Francis W. Parker Charter Essential School the teachers are currently being trained with the program Facing History and Ourselves which works to educate instructors to think critically about history especially around race, gender, and class. In addition, many of the schools allow time during the school day for teachers to collaborate and learn from one another by designing mentorships between newer teachers and veterans to this model.

Together, the best practices identified in the area of curriculum, policy, and structure will begin to address the deficiencies discussed in the literature review. The new school design team in Lewiston, like many public schools across the country, observed that the traditional model of public education resulted in many challenges for the local school district. This study has acknowledged key changes in the school system that has resulted in successful outcomes, both in rural and urban school settings. In the literature review, the overarching critique of the traditional school model is that it values standardization of curriculum and evaluation, there is a lack of accommodation to students' unique needs, and there is an established hierarchy between the students and the teachers that can affect the student's ability to grow as a learner. It was also established in the literature review that these issues can be intensified with

students of color, special needs student, and English Language Learners. Therefore, the best-practice findings in this study attempt to address these issues and present a clear road how to implement successful practices. The results of the research show that through the implementation of (1) project-based, real-world experience, and interdisciplinary curriculum, (2) policies that deconstruct the homogenization of student assessment, engage the parents in the learning process, and put curriculum decisions in the hands of the teachers, and (3) student centered structure that allows for a space for students to engage beyond their academics and structures the teacher's role as a coach rather than the expert – the major issues identified in the literature review begin to be addressed. Furthermore, because the practices presented in the findings for this study suggest a school model that individualizes the student, allows for many learnings types, and engages with relevant, real-world, community focused methods for learning, there is space made for conversations on social justice matters within the school.

CONCLUSION

The research suggests that there are a variety of best practice strategies for new school design team to draw from the areas of curriculum, policies, and structures. From the findings of the data collected through interviews, observation site visits, and supporting documents it is clear that the many strategies for curriculum, policies, and structure in the existing innovative school models are interrelated and build off of one another. In short, for an innovation school design process to be successful, design teams must consider holistically how curriculum, policies, and school structure interact to transgress traditional education. The common themes that were identified to suggest best practices in innovative school design are the following:

CURRICULUM

- Project-based work
- Real world experiences
- Interdisciplinary curriculum

POLICIES

- Student assessment and grade divisions
- Curriculum Regulation
- Student-Parent-Teacher Engagement Policy

STRUCTURES

- Advisories
- Student-centered structure
- Structure of Instructors Role

This research also outlines a variety of resources to implement and maintain the innovative school design model. This encompasses using the network of existing innovative school models for evidence and support to address the inevitable need for community buy-in, collaboration in the diffusion of the model, and training of faculty and staff. At many times the design process can get a lot of pushback but there are resources in place to help schools reach away from the traditional school model and soon this model could be mainstreamed.

The goal for this research is that the stories, advice, and themes illuminated in the data can be used as a guide not only for the Lewiston community but also any school design team looking to create a school based on successful best practices outside the traditional education model. As illustrated in the literature review of this paper, there are many challenges in the current mainstream education design. Nevertheless, there is a group of teachers and schools

committed to finding innovative strategies to comprehensively address the traditional strategies of educating and re-imagining a new community of learning.

APPENDICES

APPENDIX 1. DETAIL SCHOOL INFORMATION

Fenway High School

Fenway High School is an autonomous, public school located in Boston, Massachusetts that serves grades 9-12. The school emerged in 1983 and became one of six of the city's original pilot schools. Pilot schools are a creation of the Boston Public School system to allow the development of public schools that have the freedom to determine their own curriculum, budgets, and hiring process (BPS 2017). This type of school was design to be models of educational innovation - to test best practices in education design that challenge traditional methods of urban public education (BPS 2017). I visited and interviewed a representative from the school to learn more about their methods, impact, and challenges as a model of an innovative public school.

The opportunity to attend Fenway High School is based on an application lottery, not merit. Fenway High School strives to be reflective of the entire Boston area they serve and have every neighborhood represented in their school. In the student body, 52% identify Latino, 36% identify as black, 6% as Asian, Pacific Islander, Native, or other, and 6% identify as white (Fenway High School Annual Report 2018). In addition, 75% of the students live below the poverty line, 50% report coming from homes where English is not the first language, and 21% have learning disabilities (Fenway High School Annual Report 2018). This dynamism is viewed by the school as a success and challenge. A success because it means they are reaching many kinds of students with different narratives, struggles, and values. However, this also means

that there is a continuing concern with having the capacity to be all things to all people.
(Fenway High School 2018).

Francis W. Parker Charter Essential School

Francis W. Parker Charter Essential School, commonly known as Parker, is a grade 7-12 middle and high school located in Devens, Massachusetts. The school was founded by Ted Sizer, a former Dean of the School of Education at Harvard University who is a leading scholar in 21st-century education reform in the United States. As a Charter School in Massachusetts, the Parker school is considered an innovative, semi-autonomous school similar to Fenway High School. Therefore, the admission process is based strictly on a name lottery of students who live in the Devens regional area. Nevertheless, as one of the administrators stated during the school visit, the school tends to attract students that were given up on in the traditional public school system. Although the school is predominantly white due to the regional demographics, Parker has a large community of low income and LGBTQ students. Although all CES schools are based on Ted Sizer's education philosophy that informs the principles, structures, and curriculum at the network schools, the Parker school appears to follow Sizer's philosophy more robustly than other CES schools. The Parker school centers Sizer's pioneering book, *Horace's Compromise: The Dilemma of the American High School* (1992), as the schools guiding piece of literature with how they design their grade divisions, assessments, teachers' role, school values, and concise curriculum.

The Met High School

The Met is a network of six semi-autonomous public schools in Providence, Rhode Island. The school was co-founded by Dennis Littky and Elliot Washnor, nationally recognized for innovative education reform, at the same time they started their non-profit organization started Big Picture Learning. Big Picture Learning is a school design model and tool that is now internationally recognized and implemented throughout the world. This philosophy of education shares many values and principles with Ted Sizer's CES model, with a greater emphasis on taking school outside of the confines of a school building.

Faced with the opportunity to develop a public school completely from scratch, the co-founders sought evidence-based research on what is best for schools. Although seen as educational best practices, most public schools did not have the liberty to implement the alternative pedagogy. The best practices in the 21st-century innovative education reform research said that schools needed to be smaller, have more parent involvement, and a personalized curriculum. The research also stated that there should be a real-world element to learning - based on hands-on experiences and projects instead of tests. The founders also looked to gang research which found that students like to be part of a movement, a culture - something that goes beyond themselves. They also found through research in developmental psychology that students needed or benefited from being coached by a mentor. After thorough research, the Met opened its doors in 1996 with just 50 students. Nevertheless, just three years after being opened, the Bill and Melinda Gates Foundation caught wind of the school and award the co-founder \$4 million to open up more schools, and then another reward to open up even more schools. Leveraged by the financial support, the co-founders then used

the Met School as a model for radical school change to share with school districts all over the country and world. (Big Picture Learning 2018)

The Met School is a public school that reflects the demographics of Rhode Island cities. There are a much larger African American and Latino identifying population compared to the average Rhode Island school. The application process is the same for most schools, anyone can apply and selection is based on a lottery process.

Casco Bay High School

Casco Bay High school is a small, independent public high school located in Portland, Maine that specializes in expeditionary learning. The school is a member of a national school reform network called Expeditionary Learning education that focuses on ten design principles that are informed by the educational values of Outward Bound, a school founded on experimental and outdoor education programs (Casco Bay High School Family Guide 2018). The guiding design principles are:

1. Primacy of Self-Discovery
2. The Having of Wonderful Ideas
3. The Responsibility for Learning
4. Empathy and Caring
5. Success and Failure
6. Diversity and Inclusion
7. The Natural World
8. Solitude and Reflection
9. Solitude and reflection
10. Service and Compassion

Casco Bay High School occupies a building that does not look like a traditional high school and reimagines how traditional schools physically look and flow. The majority of the building is open floor space with some dividers. The structure is informed by expeditionary

learning principles that state that students must work outside the classroom, whether in groups in the common space or an actual community, for authentic learning to transpire. The walls are full of quotes from revolutionaries and social justice activists. There were some classes in session but most of the students were working on group work or presenting to each other in the common space. There are many spaces for collaborative work outside of the classrooms. This is important as peer review is a central component of the schools model. Learning in this model, including writing, is supposed to be public and collaborative. The philosophy is founded on the notion that public and collaborative learning inspires a community of students, provides authentic assessment and encourages students to put their best effort.

Margarita Muñiz Academy

Margarita Muñiz Academy is an Expeditionary high school located in Jamaica Plain neighborhood of Boston, Massachusetts. Margarita Muñiz Academy is particularly interesting case study because in addition to their expeditionary learning structure the school also functions as a full dual language school. Dual language schools, which are particularly prominent at an elementary school level, are designed with the notion that changing demographics in this country means we have increasing numbers of bilingual and bi-illiteracy students, and we should be adjusting the education system to nourish this asset instead of work against it (Ghiso 2013). The learning philosophy is a practical application of inclusive pedagogy that works to engage with and celebrate students' culture and language as a way to bridge the community and more easily include families and communities into the education process. For instance, Jamaica Plain and Boston, in general, has a large community of residents

who Spanish is their more dominant language. The representative said that the practice of dual language learning at a high school level is considered highly controversial and revolutionary. My personal research supported this notion as most of the research on dual language learning pertains to elementary level education.

. Instead of seeing language as a barrier, Margarita Muñiz Academy sees it as an asset. How the school works is it is incorporated into the list of Boston's choice school lottery. So there is no prerequisite for language. A student enters the school with whatever language they are dominant in and over the course of 4 years learn the other language. Therefore the school is an equitable starting point and onward learning journey - the goal for English dominant students is to learn Spanish and the goal for Spanish dominant students is to learn English. The representative at Margarita Muñiz Academy who brought me through my school observation and interview explained that the class structure is divided into English humanities, Spanish humanities, math/technology/science, and an art class. Every student, despite which language they are dominant in, takes all four of these classes every year. Instruction for the humanities class is taught in both languages with emphasis on Spanish and Latin American culture and histories in the Spanish humanities and more traditional United States based history in the English humanities. In the Math/technology/science class, the instructor alternates the language of the instruction for every other learning plan. Nevertheless, the language exchange is very fluid and many times I witnessed a teacher ask a question in one language and the student responds in the other.

The representative I was with said the impact on the students is extremely successful, especially for Spanish dominant students who would otherwise attend an English only school

that would isolate them for their English proficiency. This is especially evident in the science/technology/math class where students can learn these subjects in the language they are more dominant. This also serves to be a successful program for English dominant students to become bilingual and celebrate other cultures and languages. Ultimately, the representative at Margarita Muñiz Academy said the structure de-centers English as the standard for education and challenges fallacies on bilingual student abilities.

In celebration of the passing of new Massachusetts legislation that now allows schools to determine how they want to teach language learners in November of 2017, the Hechinger Report released an article on Margarita Muñiz Academy to highlight the impact the school has in implementing dual language learning. The article states that at the time Margarita Muñiz Academy first opened its doors in Boston in 2012, "Hispanic students were both the most likely to drop out of the city's schools and the least likely to enroll in college when compared to black, white and Asian students (Mathewson 2017)". The school was hence created to address the 39% of ELL students in Boston's schools that were more likely to drop out of school because the existing schools did not support their culture, and thus - their language (Mathewson 2017). Nevertheless, in 2016, five years after the experimental dual language high school opened its doors, "75% of its ELL students graduated, a rate 14 percentage points higher than the district's average for this group and higher even than the overall graduation rate for Boston Public Schools (Mathewson 2017)". Moreover, the dropout rate is 2.5% compared to 10% in the overall district. The article continues to explain that the school's dual language learning program is embedded in decades of research on the effect that cultural affirmation has on student performance and engagement (Mathewson 2017). In the Greater Boston

region, Margarita Muñiz Academy approach to innovative education is beginning to foster widespread interest and support, especially as the impact is becoming more apparent.

Audre Lorde Transformative Arts School

Audre Lorde Transformative Art School (ATLAS) is an innovation school that intends to serve grade 1-12 in Worcester, Massachusetts. The school has yet to open the doors but has the fundamental outline and structure of the school established. The school is being created for students where traditional, progressive education is not working. The vision for the new school is focused on addressing the fact that our youth today are facing and will soon inherit catastrophic global warming, incredible wealth inequality, relentless international conflict, and complications from the greatest global migration caused by the aforementioned issues and will need to be armed with the ethics and creativity to inflict change. In light of this reality, the new ALTAS schools intend "to prepare ALTAS students to embrace these national and global challenges as opportunities for a radical envisioning and re-creation of our world. In order to turn these challenges into opportunities, our educational vision prepares our new century youth to be national and global changemakers by equipping them with the values, perspectives, and disposition of the *artist* (ALTAS Brochure 2018)". The creators of this new school, therefore, would like to be one of the few schools in the country that is now practically implementing the social Reconstructionist philosophy in progressive education (ALTAS 2018).

The school design team, derived of community activist, educators, and scholars, decided to name the new school after poet and social justice activist Audre Lorde in hopes that her legacy will inspire the students to understand that visual, performing, spoken, written, art can be used as a tool to cultivate community and fight towards social justice. Hence, the new

school designers want to use art as a platform to operationalize the social Reconstructionist theory. The representative I spoke with from the school design team said that they use art as the foundation for the school because they believe students should be treated as creators and visionaries. They stated that Audre Lorde showed us that art is intrinsically involved with intersectional social justice work (ALTAS 2018). The representative stated that the reason for developing this kind of school is because they as a design team are very concerned with the shift to STEM and away from creativity - and that the only way for the next generation to solve the catastrophic obstacles in current society is to teach creativity (ALTAS 2018). Furthermore, the team also believes that in education today, diversity has become a buzzword that all schools want to include, however they believe diversity is antithetical to current standardization trends (ALTAS 2018). However, arts can lead a student to discover their own brilliance and respect the brilliance of others (ALTAS 2018).

APPENDIX 2. STUDENT CENTERED LEARNING DEFINITION

Student-centered learning, often synonymous with project-based learning, is an applied twenty-first-century education theory that challenges traditional methods of schooling that were developed centuries ago (Overby 2011). This education approach is aimed at cultivating student autonomy and personal, lifelong learning by entrusting the student to be in charge of their own learning journey (Overby 2011). Student center learning is informed and influenced by critical pedagogy, a philosophy of education and a social movement traced to Paulo Freire that affirms anti-authoritarian, interactive, experiential, and reflective approach to learning that engages with critiques and analysis of everyday life. Ira Shor who worked closely with Freire explained critical pedagogy as

“Habits of thought, reading, writing, and speaking which go beneath surface meaning, first impressions, dominant myths, official pronouncements, traditional clichés, received wisdom, and mere opinions, to understand the deep meaning, root causes, social context, ideology, and personal consequences of any action, event, object, process, organization, experience, text, subject matter, policy, mass media, or discourse.. (Shor 1992)”. The ultimate goal of critical pedagogies then in social transformation. Likewise, the six schools in this study all possessed a purpose of not only making their school a better learning environment but also about changing the processes and methods of traditional public education.

The first set of schools, Fenway High School and Francis W. Parker Charter Essential School specifically use student center learning strategies derived from a national network of schools, called Coalition of Essential Schools (CES), looking to expand best practices in the student-centered learning in public schools across the country. The CES schools are informed by Ted Sizer, a leading 20th-century school reformer, philosophy on student-centered education practice.

APPENDIX 3. EXPEDITIONARY LEARNING DEFINITION

Expeditionary Learning is an education model, informed by constructivist discovery learning philosophy and pioneered by education reformers John Dewey and Jean Piaget that is based on "learning by doing" (Klein et al 2011). In fact, this theory and practice of learning are in direct response to Freire's concern of the banking system of mainstream education discussed previously. The Expeditionary Learning model has captured overwhelming support by the Obamas as well as the Bill and Melinda Gates Foundation for being an example of how schools ought to operate. According to the Expeditionary Learning Education Network, there

are 125 expeditionary schools across the country and the system has proven to be successful in many diverse locations, demographics, school leadership structures (ie. charter, district, and private). The style of learning was made popular in elementary schools such as the Montessori model but has been becoming increasingly more popular in high schools (EL Education 2011).

APPENDIX 4. SOCIAL RECONSTRUCTIONIST EDUCATION

As stated previously, the social Reconstructionist education movement manifested in the mid-20th century due to concerns over the social goals of progressive education (Sutinen 2014). Spearhead by George Counts, education philosopher, and professor, the social reconstructionist education philosophy has two main goals (1) education should be an activity that socializes the students - between the teacher and student there is an effort made to produce socially conscious students who are taught to think and act justly (Sutinen 2014). This theory is methodized by practicing activities that engage with collaborative and social interaction for learning (2) Educators should aim at producing a thinking of social realities in the students (Sutinen 2014). Ultimately the main objective of this educational philosophy is for the student to be able to identify social realities and change social practices based on their critical evaluation. The idea is to instill in the student that the justest action as an individual in a democratic society is one of solidarity (Sutinen 2014). There are two main strategies for achieving this goal, experimentalism, as discussed previously, and indoctrination. Many social Reconstructionist education theorist criticizes experimentalism however because it cannot be confirmed that it will yield a new world order and lacks a "social mission" (Sutinen 2014). Essentially, this theory aims at intentionally equipping students with consciousness and critique of the current state of social, political, and economic realities and instructing them on

social change and action. The philosophy aims at pushing progressive education a little further on developing education in a way that its ultimate goal is to create informed activists for social change.

REFERENCES

ACLU Maine. (2017, September). We Belong Here. Retrieved January 20, 2018, from https://www.aclumaine.org/sites/default/files/webelonghere_report.pdf

Advisory Committee (2018, January) Advisory Committee Report, Lewiston Maine accessed through school design team.

Audre Lorde Transformative Arts School (2018) Personal communication with school design team representative.

ALTAS Brochure (2018) Accessed at interview.

Besteman, C. (2016). *Making refuge: Somali Bantu refugees and Lewiston, Maine*. North Carolina: Duke University Press.

Boston Public Schools (2018) School Types. <https://www.bostonpublicschools.org/Page/941>

Casco Bay High School (2018) Personal communication and observation with a confidential school professional

Croft S., Roberts, M. A., & Stenhouse, V. (2015). The Perfect Storm of Education Reform: High-Stakes Testing and Teacher Evaluation. *Social Justice/Global Options*, 42. Retrieved January 26, 2018, from <http://www.jstor.org/stable/pdf/24871313.pdf?refreqid=excelsior%3A3dc75a8561bfebeobbad2f91be5a8d72>

Counts, G. (1932) *Dare Progressive Education be Progressive Education?*
<http://courses.wccnet.edu/~palay/cls2002/counts.htm>

Family Guide (2018) Casco Bay High School.

Fenway High School (2018). Personal communication and observation with a confidential school professional.

Focus Group (2018) Observations as Bates College focus group with Lewiston High School Students at Tree Street Youth in March.

Ghiso, M. (2013) *Every Language is Special: Promoting Dual Language in Multicultural Primary Schools*. ERIC Journal.

Giroux, H. (2013) *America's Education Deficit and the War on Youth*. New York: Monthly Review Press.

Heiden, Z., Beer, C., Northrop, C., & Riley, A. (2017, February). Race and Disability Accommodation by Lewiston School District. *ACLU of Maine*. Retrieved January 20, 2018.

hooks, b. (2001). *Teaching to transgress: education as the practice of freedom*. New York: Routledge.

Iorio, S. (2001) *School Reform: Past Present Future*

Kholi, R., Pizarro, M., & Nevarez, A. (2017) The "New Racism" of K-12 Schools: Centering Critical Research on Racism. *Review of Research in Education*, 41. Retrieved January 20, 2018.

Klein, E., Riordan, M. (2011) *Wearing the "Student Hat": Experiential Professional Development in Expeditionary Learning Schools*. Journal of Experiential Education.

Margarita Muniz Academy (2018) Personal communication and observation with a confidential school professional.

Mathewson, T. (2017) *A Spanish-English High School Proves that Learning in Two Languages Can Boost Graduation Rates*. Hechinger Report.

Mathewson, T. (2017) *With No Silver Bullet, Innovation Abounds at this Bilingual School*. Hechinger Report.

Met School (2018) Personal communication and observation with a confidential school professional.

Murphy, E. (2014) "Lewiston students try to raise their voices, but protest interrupted" Portland Press Herald.

Overby, K. (2011) "Student-Centered Learning" ESSAI: Vol 9, Article 33.

Parker School (2018) Personal communication and observation with a confidential school professional.

Perez, H., Johnson, R., & Kholi, R. (2006, January 1). Naming Racism: A Conceptual Look at internalized Racism in U.S Schools. Retrieved December 12, 2017.

Ravitch, D. (2010). *The death and life of the great American school system: how testing and choice are undermining education*. New York: Basic Books.

Sizer, T. (1992) *Horace's Compromise: The Dilemma of the American High School*. New York, NY. Mariner Books.

Sutinen, A. (2014) *Social Reconstructionist Philosophy of Education and George S. Counts - observations on the ideology of indoctrination in socio-critical educational thinking*. International Journal of Progressive Education

U.S Department of Education. (2016). The State of Racial Diversity in the Educator Workforce. Retrieved January 20, 2018, from <https://www2.ed.gov/rschstat/eval/highered/racial-diversity/state-racial-diversity-workforce.pdf>

Washuk, B. (2018, January 18). Turning it around, going back to school. *The Sun Journal*. Retrieved January 20, 2018, from <http://www.sunjournal.com/turning-it-around-going-back-to-school/>

Zinn, H. (2005). *Howard Zinn on Democratic Education*. Paradigm Publisher.