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CHALLENGING THE PEDAGOGY OF POVERTY WITH FREE-CHOICE LEARNING: A MULTIPLE CASE STUDY

A Dissertation

Presented to the

The Faculty of the School of Education

The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

By

Sharice M. Adkins

March 2024

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By

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Approved March 15, 2024 by

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Dedication

To my students: You've all taught me more than you know. May you stay curious, approach teaching and learning with excitement and wonder, and always fight for what's best for kids.

Acknowledgments

I have to start by acknowledging Carrie's birthday. If it weren't for a 30th birthday trip to Colonial Williamsburg (yes, we're that kind of nerdy), I never would have embarked on this journey to William & Mary.

Next, the magnitude of this journey is unpredictable, and I have to give a sincere thanks to those who were along for the ride:

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To Panera/Bread Co.: I don't know if it's the scent of bagels and broccoli cheddar soup or the endless refills of coffee, but this is the place I am absolutely most productive. Many, many hours were spent working on this dissertation in a booth at a Panera, so I figured they deserved a nod too.

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Abstract

Children in under-resourced schools are often subjected to a *pedagogy of poverty*, in which their school days consist primarily of independently completing worksheets and preparing for assessments. By contrast, children in more affluent schools often experience engaging, hands-on learning opportunities. This discrepancy is identified as an *opportunity gap* in which some students are given chances to develop both academic and non-cognitive skills, such as critical thinking, collaboration, and perseverance, while others are not. This opportunity gap could potentially be narrowed by implementing free-choice/choice-based learning experiences. The focus of this study was to examine the implementation of choice-based learning in selected under-resourced schools. I sought to learn about the decision-making processes of educators and their implementation of choice-based learning.

I conducted a multiple case study in which 20 classroom teachers and school/district leaders from six schools shared their experiences and perceptions with me via interviews, written responses, and artifacts. Grade levels from kindergarten through 12th, in urban, rural, and suburban communities from the U.S. West Coast to the Mid-Atlantic region were included. Participants reported several reasons for implementing student choice, including their own K-12 experiences and the support of school/district leadership. They also cited student outcomes, such as the development of non-cognitive skills, as reasons for continuing to implement student choice in multiple ways. Unbeknownst to the participants, the implementation of choice in these schools aligned with guidelines from a *pedagogy of plenty* and Universal Design for Learning (UDL). A discussion of these results is presented, as well as recommendations for school leaders, teacher educators, and educational researchers, which, if followed, could help to expand implementation of choice-based learning in under-resourced schools.

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CHALLENGING THE PEDAGOGY OF POVERTY WITH FREE-CHOICE LEARNING: A MULTIPLE CASE STUDY

CHAPTER 1: INTRODUCTION

From 2014-2017, I worked as an instructional coach in a low-performing, underresourced urban elementary school. My principal and I started working there in the same year; his first year as a head principal, and my first year as an instructional coach. We had inherited the lowest performing school in our unaccredited school district. We had strong feelings about teaching and learning and worked hard to revamp our unit and lesson planning to make them more useful for teachers and students. We also knew that whatever had been done in the past had not been effective in terms of student achievement, so we encouraged our teachers to try new instructional practices. We talked often about learning from failure and were as supportive as we could be when teachers wanted to do something that was not explicitly in our curriculum, so long as it was done with purpose and was beneficial to students.

In the summer of 2016, I participated in a Science, Technology, Engineering, and Math (STEM) education certification graduate program at a local university. As it was graduate coursework, we had to complete a capstone project in which we described how we were going to take what we learned back to our classrooms and schools. Because I was an instructional coach, I chose to implement one specific STEM project for each grade level, kindergarten through fifth grade, at my school. Some of the projects I shared with the teams of teachers at each grade level were edible architecture, project-based learning (PBL), and Genius Hour.

In Genius Hour, students think of a topic they would like to explore and generate driving questions to guide their projects. They then conduct research, which could take the form of online investigations, interviews, or any other way students may collect and/or generate

information or experience about their topics. Once their research is complete, students present their learning to others. Ideally, they present to an authentic audience, such as someone from an energy company if their research had been about wind power. At a minimum, students present their learning to their teacher and classmates (Juliani, 2014). I had selected Genius Hour for fifth grade because I believed that the fifth-grade students would be most able to do a highly independent project like Genius Hour. I also thought that this project would benefit students by allowing them to practice literacy skills, such as reading, research, writing, and speaking, while studying a topic of their choosing. Further, I thought this was an ideal project for fifth grade because the teachers in that grade level had previously implemented projects with their students and were generally willing to try different instructional practices in their classrooms.

I approached the two fifth-grade teachers with my idea to try Genius Hour and was met with a series of concerns. "I don't have time for that, I have to teach all these standards." "That is far too unstructured for me." "What if Central Office walks in?" One of the teachers had been having difficulty with classroom management, and our district leaders were punitive toward teachers who were not doing what was expected, such as using the district-purchased textbooks and curriculum documents. My heart sank a bit as I considered the opportunities our students might not get to experience because the teachers did not see the value of this self-directed learning opportunity and because they were afraid of being reprimanded for doing something that may not have been directly related to state learning standards. I asked them to implement Genius Hour for just three weeks. If, at the end of those 3 weeks, it really felt like a "waste" of time, I would relent, and they could stop. They agreed to implement Genius Hour for the next three weeks. What happened next will be shared later in this chapter.

When I think about this personal experience with free-choice learning, I am struck by the decision-making in which teachers and school leaders engage that makes trying something like Genius Hour a feasible possibility (or not). When I consider all of the reasons educators do not implement this type of learning, it makes me particularly interested in the reasons why some teachers do engage their students in this type of learning.

The concept of free-choice learning can be enacted differently, based on the contexts in which the learning occurs. For example, when individuals visit a museum, research an actor's filmography on the Internet Movie Database (IMDb), or watch YouTube videos to help them to fix their dishwasher, they are engaging in free-choice learning (Falk, 2002). For this study, I am defining free-choice learning as the opportunities students must choose what they want to learn about, how they are going to learn it, and/or how they are going to share their learning with others. Genius Hour is an example of free-choice learning, but there are other forms of choice-based, self-directed learning, which will be presented in Chapter 2.

Research Focus

The focus of this research was how six distinct under-resourced classrooms implemented free-choice learning within the contexts of their schools. I was interested in the decision-making processes that allowed free-choice learning to take place and what the implementation of free-choice learning looks like in these particular under-resourced schools and classrooms. The results of this study could be helpful to educators in other under-resourced schools as they may provide examples as to how free-choice learning could be implemented in other educators' own school settings.

Background

In recent years, several educational authors have written books highlighting schools and classrooms across the United States that are implementing more flexible, student-focused learning. For example, in *The Curious Classroom* (Daniels, 2017), *Most Likely to Succeed* (Wagner & Dintersmith, 2016), *What School Could Be* (Dintersmith, 2018), and *Leadership for Deeper Learning* (Richardson et al., 2021), authors visited schools across the country, observing and speaking with classroom teachers, students, and school leaders to learn about the implementation of PBL, Genius Hour, Passion Projects, and other forms of student-directed learning. Many see these classrooms and schools as revolutionary, providing an innovative form of learning in which students direct their own learning. However, what we are experiencing in some schools today is actually a re-revolution. This type of learning first appeared in classrooms approximately 150 years ago.

Progressive Education

The progressive movement in education occurred during the late 19th and early 20th centuries. This movement was based on a reconsideration of the purpose of school, teaching methods, and the nature of children. It was recognized that children should be active, not passive, learners and that they should learn from nature, not books alone (Reese, 2001). It was an alternative to the "mind-numbing" and "unnatural" education that was occurring in most classrooms; "a sin against childhood" (p. 2). According to Tom Little (2013), former board president for the Network of Progressive Educators, the principles of progressive education include: curriculum that is tailored to individual learning preferences, developmental needs, and interests; students who are active partners in learning; learning that occurs through direct

experience; arts, sciences, and humanities are equally valued in an interdisciplinary curriculum; and that the school is a model of democracy.

John Dewey, often considered the founder of progressive education, and University of Chicago president William Harper conceptualized the "Dewey School" in 1894 (Knoll, 2014). The school opened to students in 1896, and in 1901 Dewey's wife, Alice Chipman, became the principal. That same year, the school was aptly renamed the Laboratory School, as Dewey envisioned a school that functioned as a laboratory focused on educational research, experimentation, and innovation. He wanted the school to test his theories about education and use the findings to create teaching methods for a curriculum that "did not focus on books and recitations but on children and activities" (para. 5). One of the founding principles of this school was that the children's interests served as the starting points for effective teaching and joyful learning. Dewey viewed curiosity, action, and experience as the basic conditions of learning and believed that children would learn new knowledge and skills naturally by experiencing real-life situations (Knoll, 2014). In the Laboratory School, children learned primarily through exploration of occupations, such as cooking, gardening, and woodwork, in which they learned reading, writing, and mathematical skills as they pertained to these occupations. Teachers and students experienced intellectual freedom and decision-making as it pertained to curriculum planning, rather than being required to follow a standard set of instructional plans (Knoll, 2014).

Several years after opening the Laboratory School, there were financial concerns and a decline in enrollment, which led to it being consolidated with another school. Shortly thereafter, Dewey's wife, who had been serving as principal, was asked to resign because of unprofessionalism and poor management of the school. The new leadership of the school was not adhering to Dewey's ideas that had been the foundation of the school, so he too resigned from

his role and left Chicago in 1904 (Knoll, 2014). Although the Laboratory School had not experienced the success he had hoped, Dewey was not finished making a case for progressive education in the United States. In 1938 he published *Experience and Education*, in which he made an argument for the benefits of experiential learning for students. He contended that all students have experiences while in classrooms each day, but that they are not necessarily the kinds of experiences that benefit students. Dewey (1938) stated that there is an "organic connection between education and personal experience," but that not all experiences are "equally educative" (p. 25). Experiences provide opportunities for learning; however, some experiences are not interesting or relevant to children, and therefore they do not learn from those experiences. He proposed that educators provide students with opportunities to engage in experiences that prepare them for later experiences of deeper meaning. He believed that traditional education had too much adult influence and not enough opportunity for students to participate actively in their learning. Without this active participation, students become bored and disengage from learning altogether.

In 1921, 25 years after Dewey opened the Laboratory School, a first-of-its-kind free democratic school opened in England. A. S. Neill's Summerhill School (n.d.-a) operated under a philosophy of "freedom not licence" (para. 2), in which children were free to do what they wish, so long as they did not infringe on the rights of others. Neill founded the school in opposition to the tight management of the school in which he had been teaching, believing that children had the right to choose what they wanted to do with their time. Children may choose to play all day, and that is an acceptable decision at Summerhill. Play holds high value for the Summerhill School, for children of all ages, and staff members. Teachers provide lessons, but children have the freedom to choose whether they participate. The school is run, in most part, by the school

meeting, in which every person, from 6-years-old to adult, holds an equal vote. More information about Summerhill can be found in Chapter 2.

Following the premise of Summerhill's free, democratic schooling, in 1968 a group of parents in Framingham, Massachusetts, saw a need for a school that was more responsive to the needs of children, and they opened the Sudbury Valley School (2020). Like Dewey's Laboratory School, children's curiosity drives the learning as children in Sudbury schools have complete freedom to choose what they want to do each day. The Sudbury model is now recognized as an educational philosophy and is the foundation of several new schools that have opened in recent years. Adults at the school are identified as "staff" and not "teachers," and only provide lessons if the students ask for them. Like Summerhill, decisions about school operations are made at the weekly school meeting, in which each individual, regardless of age, gets one vote. At Sudbury schools, school meetings are used to determine facility usage, event planning, and the hiring and firing of staff members (Sudbury Valley School, 2020). Although the Sudbury philosophy might sound quite unusual, graduates of Sudbury schools go on to experience great success in college and careers in the arts and as entrepreneurs. More information about Sudbury schools is presented in Chapter 2.

Although the previous two examples are private schools, allowing children full freedom to choose how they spend their days and what they learn, teachers in some public-school classrooms have also implemented progressive education ideals. For example, in his book *Freedom to Learn*, which was published in 1969, Carl Rogers highlighted Miss Shiel's sixthgrade classroom, in which she conducted an experiment of sorts, initiating a program "based on student-centered teaching—and unstructured or non-directive approach" (p. 12). In Miss Shiel's classroom, students wrote daily contracts, choosing their work for the day and planning what

they would do. They used their textbooks as instructional materials, largely teaching themselves and each other. The students in the classroom collaboratively developed standards of behavior and adhered to those standards. Miss Shiel discovered that this experiment in the classroom was greatly beneficial to both gifted students and struggling learners. The gifted children became competitive with one another in a manner that was positive for their learning. They also worked together on projects and were not "restricted by the slow learners" (Rogers, 1969, p. 21). According to Miss Shiel, the struggling learners' self-concept changed, and they were able to move quickly through skills they had not previously mastered.

In *Freedom to Learn*, Rogers (1969) also describes a graduate course he taught for doctoral students in an educational leadership program. He designed the course to focus on professional growth rather than requirements he set for students. Students were provided with some readings, but also selected some of their own, wrote reflections on personal values and changes in those values, conducted self-evaluations of their work, and determined the grades they believed they earned. At the conclusion of this course, Rogers noted that when students perceived that they were free to follow their own goals, they were more invested in the course and gave more effort, worked harder, and retained more of what they had learned.

All of the aforementioned educational approaches illustrate the progressive movement in education. Each of these examples demonstrated student-centered decision-making in schools and classrooms, and personalized educational endeavors for each student. However, in the early 1980s, educational decision-making shifted away from a student-centered approach.

Standards-Driven Education

In 1983 *A Nation at Risk* was published in the United States (U.S. Department of Education, 1983). This report came from the Commission on Excellence in Education, which

was established in 1981 due to concern about the "widespread public perception that something is seriously remiss in our educational system" (U.S. Department of Education, 1983, p. 1). The report highlighted the underachievement of American students on national and international scales and proposed significant changes to the educational system. Recommendations were made in five categories: content, standards and expectations, time, teaching, and leadership and fiscal support (U.S. Department of Education, 1983). Among the recommendations were the "New Basics," which suggested that high school students should have fewer elective courses and should be required to take 4 years of English, 3 years of math, 3 years of science, 3 years of social studies, and half a year of computer science. Students intending to go to college should add 2 years of foreign language to that list. After suggesting more stringent high school requirements, the report also suggested higher college admissions standards, including high levels of performance on the "New Basics," standardized tests of achievement, and more rigorous textbooks and teaching at the college level. The report also recommended that the school day and school year be lengthened for K-12 students, that teachers be required to meet high performance standards while working on an 11-month contract, and that parents and community members should hold educators and elected officials accountable for these reforms and increasing the quality of education for children. This report catalyzed many school reform efforts and was the beginning of the academic-standards movement in American education that led to a focus on school accountability, which has attempted to standardize the education children receive across the United States (Park, 2004). In this attempt to standardize education for all students across the country, the federal government became more involved in educational mandates for schools, rather than leaving all accountability to each state.

Outlining these mandates was the Elementary and Secondary Education Act, passed under former President Lyndon B. Johnson in 1965 (Paul, 2016). This act established a role of the federal government in education, and enacted Title I, in which the federal government provided additional funding for schools with large percentages of students living in poverty to help these schools better educate disadvantaged students. The premise of Title I is to provide funding for professional development for educators, instructional materials, and resources to promote parental involvement, all with the focus of closing the *achievement gap*, or noticeable differences in academic achievement between students in poverty and their more affluent peers (Paul, 2016).

This law has been updated several times since 1965, but one of the most notable changes occurred in 2002 with the passage of the No Child Left Behind (NCLB) Act. NCLB significantly increased schools' accountability for the achievement of all students, placing increased emphasis on the performance of English-language learners, students receiving special education services, and poor and minority children. One of the goals of NCLB was to close the achievement gap between poor and minority students with their more advantaged peers (Klein, 2015). While students in schools were taking standardized state assessments prior to NCLB, this law required that schools not only report students' overall scores, but also scores for each of the subgroups referenced above so that subgroup achievement could be tracked from year to year, and comparisons could be made between demographic groups.

This increased accountability required for schools by the federal government led to increased standardized testing in K-12 schools across the country, and a narrowing of the curriculum to focus primarily on the tested content areas: math and reading. Subject areas like social studies, foreign languages, and the arts are often limited so teachers have more

instructional time for math, reading, and test-taking skills (Klein, 2015). Test scores are used to demonstrate student proficiency, which is the goal of NCLB. Students who do not score in the proficient range on these annual end-of-year exams are typically provided with additional instruction in the tested content areas (Zhao, 2016). In some cases, this means that students do not participate in elective courses, being required to take additional, remedial courses in mathematics, reading, or test-taking.

21st Century Learners

In more recent years, education in the United States has seen a shift back to some of the values of the progressive education movement. Since approximately 2010, there has been an increased focus on students developing the skills of a *21st century learner*, including creativity, critical thinking, collaboration, and communication. Several states have implemented the profile of a graduate (e.g. Virginia Department of Education, n.d.), which includes more non-cognitive, or "soft skills," such as perseverance and risk-taking, indicating that the development of these skills is seen to be nearly as important as the development of academic skills, because these skills traverse content areas, and help students in a variety of settings, whether that be college classrooms or careers (Wagner, 2012). Some schools are expecting students to have more voice and choice in their learning tasks by implementing opportunities for students to engage in student-driven learning. But not all schools are providing these opportunities for students.

Following the increased emphasis upon school accountability, which now explicitly measures academic growth of subgroups in the student body, many schools in the United States are underperforming; particularly those in which student subgroups, including those receiving special education services, students of color, and those living in poverty, account for most of the

student body. These schools still feel the need to continue with strict standards-based, testpreparation instruction in an attempt to increase students' test scores (Gorski, 2017).

Although many affluent schools are implementing learning opportunities such as PBL, Genius Hour, and other types of experiential learning, students in many under-resourced schools are still being subjected to skill and drill worksheets and practice tests (Diamond et al., 2004; Gorski, 2017). Their opportunities to take elective courses that align with their interests are reduced in the name of scoring higher on the high-stakes end-of-year assessment. Students in these schools are not only getting shortchanged in their educational experiences; many of them also suffer with boredom and inauthentic learning opportunities, which lead to greater dropout rates (Alderman, 2008; Tienken & Zhao, 2013). Even if these students do finish high school, their chances of getting accepted to college pale in comparison to students who have had opportunities to build their problem-solving and critical thinking skills, which are the skills colleges and employers are seeking in the 21st century (Wagner, 2012).

Having had several years of experience as a teacher and instructional coach in underresourced schools, I was often frustrated by the heavy emphasis on preparing students for testing. Teachers in these schools were rarely, if ever, implementing free-choice learning for students. I believed that self-directed learning had benefits for students but had not gathered teacher experiences or any other data pertaining to implementing free-choice learning. Because my own experiences indicated that this type of learning was not prevalent in under-resourced schools, I was curious to know if other under-resourced schools were implementing this type of learning, and what the outcomes were if so.

Pilot Study

In the spring of 2021, I conducted a pilot study, examining free-choice learning in several under-resourced elementary schools. While attempting to conduct this study, I contacted nearly 60 educators from across the country. Of these 60 individuals, I managed to secure only 10 participants for my study. From the non-participants I received responses such as "Is this really happening? Where?" and "That would never fly here; it's not directly tied to a standard." Or "That sounds really great, but we couldn't do that here." Or the most disheartening response: the teacher who laughed when I told her what I was looking for.

From the 10 participants I was able to secure, I learned a great deal about free-choice learning in their classrooms. I learned how they prepared students for this learning, and about challenges they faced: both before and after implementation. I learned about the benefits these teachers observed as a result of students engaging in free-choice learning, and I was able to view many samples of student projects. Most participants were implementing some form of Genius Hour in their classrooms, where students had full autonomy in choice of topic and learning approach. In these classrooms, students chose (for example) to learn more about octopi, develop an online cookbook, create soccer tutorial videos, and build a birdhouse. Other participants guided students by providing a broad topic, such as Ancient Greece, but allowed students to choose topics of interest within the broad topic, such as architecture, people, or historical events, and plan their own learning experiences. The results of the pilot study suggested that, while there are challenges with implementing this type of learning, students can develop many non-academic, or soft skills, such as creativity, communication, and perseverance by engaging in free-choice learning. Teachers reported seeing growth in these skills, as well as their students'

independence, collaboration, and risk-taking. A more comprehensive rendering of the pilot study's results can be found in Chapter 3.

After completing the pilot study, I was left wanting to know more about how teachers arrived at the decision to implement free-choice learning in their classrooms and how it is implemented. I also wanted to know if contextual factors, such as school size, grade level, or student demographics seemed to influence the implementation of free-choice learning in particular schools and classrooms.

Rationale for the Study

There seem to be benefits associated with children's participation in free-choice learning. Yet, it appears that many students in under-resourced schools are not getting opportunities to participate in these types of learning experiences. This study examined how six classroom teachers and their respective school leaders made the decision to implement free-choice learning in their schools and what implementation looked like within the classroom.

The Rest of the Story

Returning to the trial implementation of free-choice learning at my school, at the end of the 3-week trial period for Genius Hour in the fifth-grade classrooms, I had a meeting with the two participating teachers. Once we were all seated, I simply asked them what they were experiencing with Genius Hour. "This is amazing!" were the first words spoken. In that short timeframe, students were researching why we remember some dreams and not others, how to build a go-kart, and exploring the life and works of Maya Angelou. Some students had found it challenging to begin their projects, but classroom management had not been a concern for teachers, because students were deeply engaged in the projects they had chosen to pursue and did not create classroom disruptions.

The decision to encourage teachers to implement Genius Hour had been an easy one for my principal and me because we believed this was learning our students were capable of engaging in. We had also had discussions with educators in nearby schools who were finding success with this type of learning for their students. However, the fifth-grade teachers had reservations about the decision to implement Genius Hour for three reasons. They were not sure they would be able to make time for it in their schedules, they were concerned that Genius Hour was not directly aligned to the state standards they were being held accountable for, and they were nervous that a district-level administrator would not approve of them not using districtpurchased instructional materials. But once they saw the increased level of student engagement during Genius Hour, and observed students developing both nonacademic and academic skills, they, too, agreed this was a worthwhile use of instructional time.

Making the decision to stray from the district's written curriculum and to pause on "test prep" is not easy; especially if one is working in a district in which administrators expect to see teachers using purchased textbooks. However, the fifth-grade teachers who previously had reservations about implementing Genius Hour in their classrooms saw the benefits this learning opportunity had provided to their students and agreed that this would be an experience worth continuing.

After that experience with Genius Hour, I later implemented similar projects for secondthrough fifth-grade students in a different school. Organizing these "Genius Days" provided me with a different perspective on the implementation of free-choice learning at the school level. However, my own experiences with free-choice learning provide only a small example of how this type of learning may be implemented in classrooms and schools.

CHAPTER 2: LITERATURE REVIEW

Free-choice learning occurs when individuals have the freedom to choose what they want to learn about and how they are going to learn it. Free-choice learning is enacted each time someone goes to a museum on the weekend, searches the internet for something they are curious about, or watches a YouTube video to learn how to do something. With networked technology becoming increasingly ubiquitous, people are regularly engaging in this type of informal learning (Falk, 2002). For the specific purposes of this study, I am defining free-choice learning as the opportunities students have, during their time in school, to choose what they want to learn about, how they are going to learn it, and/or how they are going to share their learning with others.

Free-choice learning is guided by a person's needs and interests and is done frequently by those wanting to find out more about what is "useful, compelling, or just plain interesting" to them (Dierking, 2005, para. 6). Free-choice learning is typically non-sequential, self-paced, and voluntary. Additionally, it gives the learner the ability to choose what to learn, where, and with whom (Falk, 2005). Most descriptions of free-choice learning in academic literature are specifically related to the learning one does outside of school. However, in many schools, there are opportunities for students to engage in free-choice learning within a school setting.

Overview of School Types

Throughout this chapter many different types of schools will be discussed and referenced. Below are descriptions of these various school types.

Traditional Schools

For this study, a traditional school is the prevalent public or private K-12 school found in the United States. The structure of public schools often involves a top-down leadership model where an elected school board oversees the operation and decision making of the district and the schools within it. In a traditional school district, there is a superintendent, their cabinet, a principal at each school, possibly an assistant principal, classroom teachers, and in some cases, specialists for reading, math, and/or technology (Public School Review, 2022). Private schools often have an advisory board or board of trustees, in which the members may be elected or appointed (Guernsey, 2003). A traditional school, public or private, has a curriculum, or guide for what is to be taught to students (Glatthorn et al., 2018), that is based on the state-approved learning standards, or expectations for what students should learn in each content area in each grade level. These schools are typically in session for 180 days, from roughly August to May. In a traditional school, as defined here, children are grouped into grade levels, which are determined by their age. Children progress through the elementary grade levels, often kindergarten through fifth grade, in a self-contained classroom with one teacher. In middle school (usually Grades 6-8) and high school (Grades 9-12), students have a different teacher for each of the core subjects: math, science, language arts, and social studies, and typically have cocurricular courses (such as physical education) and elective courses (such as band and art; Public School Review, 2022).

Non-Traditional Schools

For this study, a non-traditional school is one that does not conform to the characteristics of a traditional school, as previously mentioned. For example, a school that does not group students by age, or that does not follow a written curriculum may be considered a non-traditional school. Free, democratic, and open schools, as described below, are examples of non-traditional schools. Non-traditional schools may also be referred to as alternative schools, alternative learning, or alternative education (Alternatives to School, 2022b).

Free Schools. A free school is one that has been developed by parents, teachers, or even students, that opposes the tight structure of a traditional public school. Free schools are "usually small and grassroots with alternative curricula" (Walter, 1999, p. 145). In most free schools, children can decide what they want to learn, and spend their days engaged in reading, play, science experiments, and anything else they deem as interesting or worthy of learning. The free schools movement took place in the United States during the 1960s and 1970s, with several free schools opening across the country. Although many of those schools eventually closed, some—like Sudbury Valley School, which will be discussed later—were able to maintain enrollment.

With the 2002 passing of No Child Left Behind, a federal education mandate requiring academic proficiency for all students, came increased accountability measures for traditional schools in the form of test scores (Klein, 2015). The federal government uses standardized test scores to determine levels of student proficiency, which caused an increased focus on end-of-year state assessment performance (Conroy, 2006). Many parents, "tired of standardized testing, excessive homework, and overly rigid curriculums in regular schools" have begun to send their children to free schools, sparking another movement of alternative schooling (Conroy, 2006, para. 4).

Democratic Schools. A democratic school is one in which students take responsibility for themselves, their learning, and the school community. Like free schools, in a democratic school, students choose their own activities and are not segregated by age. Staff members in a democratic school assist students when it is requested, but do not direct their learning. Most

unique to democratic schools is the fact that they are governed democratically via a weekly school meeting in which each student and staff member has one vote. In this school meeting, staff and students may determine the rules and expectations of the school, as well as the procedures for enforcing them. At some democratic schools, the hiring and firing of staff is a process undertaken during a school meeting. The Alternatives to School (2022b) website states that democratic schools are a "democratically governed setting for self-directed learning in which students have the advantage of an age-mixed community of friends and colleagues with whom and from to learn" (para. 4).

Open Schools. Open schools are another form of alternative education that were popular in the 1960s and 1970s in the United States. This form of education, much like free and democratic schools, is predicated on student choice, collaborative learning in mixed-age settings, and flexibility in learning rather than a rigid curriculum (Rathbone & Smith, 2022). Teachers in open schools are seen as observers, guides, and providers of resources and materials rather than the keepers of all knowledge. The day in an open school typically opens and closes with a class meeting, but outside of that time, the students are rarely instructed as a group.

These alternatives to traditional education employ free-choice learning as the primary means for day-to-day learning for students. In these approaches, there is not an imposed curriculum, but rather unlimited options for students to explore what is of interest to them.

Manifestations of Free-Choice Learning in K-12 Schooling

The concept of free-choice learning originated as an outside-of-school practice, based on the notion of informal learning. The practice of free-choice and informal learning emphasizes learning that that occurs in a self-directed manner, such as a visit to a zoo or museum. A defining characteristic of this type of learning includes a perception on the part of the learner that there

are "reasonable and desirable learning choices" available, and that the learner has the freedom to select from among those choices (Falk, 2005, p. 273). This is learning that individuals engage in because they choose to, not because they have to (Falk et al., 2006). In fact, it has been calculated that a mere 5% of what we learn in our lifetime is learned within a school setting (Falk & Dierking, 2010). Thus, free-choice learning is becoming more valued and more important in our learning society (Falk et al., 2006). While the origins of free-choice learning are outside of school, educators have been incorporating free-choice learning within schools for many years.

Free-choice learning within a school setting does not require any special materials, resources, or training, and therefore can provide opportunities for equitable learning experiences for all students in a variety of school and community settings. As with many educational ideas, there is no one correct way to implement free-choice learning within a school. There are wholeschool and classroom-based approaches. Examples of these varied approaches are presented throughout this chapter. Each of the approaches exemplify free-choice learning in that students are given autonomy to choose what they want to learn about and how they will learn it.

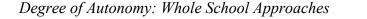
The degree of autonomy, however, is not the same in each approach. The examples of free-choice learning are presented on a continuum, from the approach with the lowest degree of student autonomy to the highest degree of student autonomy. Approaches with a high level of student autonomy allow students to choose their topics, how they want to approach their learning, and the manner in which they will share their learning with others. There is very little teacher influence on this end of the continuum. Approaches with less student autonomy have greater input from the classroom teacher about the topic of study, approaches to research, and presentation formats.

Whole-School Approaches

There are whole schools guided by a philosophy of free-choice learning. These may, in some cases, be identified as free, open, or democratic schools. These schools are truly student-centered, as students have a great deal of agency, autonomy, and even authority in the school regarding decision-making and discipline. In many of these schools, there is no curriculum; adults are not teachers, but guides; and children not only choose what they want to learn about, but also participate in school governance (Alternatives to Education, 2022a).

Three examples of whole-school approaches to free-choice learning will be presented. The first example is Montessori schools, which offer children "freedom within limits" (American Montessori Society, 2022a). Montessori schools are also the oldest of the approaches presented here. The next school, Jefferson County Open School (JCOS), is the only public school included. Although it is a public school and therefore accountable for state-level expectations, educators at JCOS (2022c) have been able to continue a model of free-choice learning for over 50 years. Then, England's Summerhill School, considered the first democratic school, and its American counterpart, Sudbury Schools, will be examined. Both of these are democratic schools, which means that the schools operate via a school meeting, which meet one to two times per week, where every individual, from child to adult, has an equally weighted vote in making school decisions. Figure 1 shows the placement of each of these schools on a continuum of student autonomy. The schools are presented beginning with Montessori, which offers the least amount of student autonomy, and moves to Sudbury schools, which offer students full autonomy of their learning.

Figure 1





Montessori Schools. Maria Montessori became a physician in Italy in 1896. She declared her specialties to be pediatrics and psychiatry. With this combination, she spent her early career working in Rome's asylums for children with intellectual disabilities (American Montessori Society, 2022a). While working with the children, she became interested in the learning differences among them and discovered the research of Jean-Marc Itard and his student Edouard Seguin. The basis of their research was the notion that sensory training could cure the mental deficiencies of children by strengthening their nervous systems (Minnesota Department of Administration, n.d.). Sensory training included allowing the child to experience various tactile interactions such as touching rough, smooth, and soft items, alternating between hot and cold, and experiencing taste, smell, and various noises (Myers, 1930). Using the information she had learned from Itard and Sequin, Montessori developed her own ideas about sensorial education and the impact it could have on children. She began testing her theories while serving as the director of a school for children with a myriad of disabilities and found that all of the children in the school were able to learn (American Montessori Society, 2022a).

In 1906, while serving as the medical officer of hygiene in Rome, Dr. Montessori was approached by construction workers who were building a tenement there (Montessori150, 2022).

Construction had begun on the building several years earlier but had not been completed. Several homeless families were living in the previously abandoned building, and the children were being left alone during the day while their parents went to work. These children were causing disruption and vandalizing new construction. The workers asked Dr. Montessori for suggestions on how to keep the children occupied during the day. She saw this as an opportunity to test her theories on "typical" children, believing that if her methods worked for children with disabilities, they would work for any child (American Montessori Society, 2022a). The workers agreed to give her an empty apartment as a place to house the children, and, in 1907, she established the first *Casa dei Bambini*, or Children's House (American Montessori Society, 2022a).

Dr. Montessori brought in sensory materials such as objects of various shapes, sizes, colors, and textures, and materials for practical life, such as brooms for sweeping, bins for washing dishes, and watering cans for watering plants, but did not directly instruct children as to what to do with the materials. She left the children alone and allowed them to engage with the materials as they wished. Dr. Montessori had hired a classroom assistant to help in the room while she observed the children. She instructed the assistant to not interfere with the children or direct them as they engaged with the materials in the classroom (Montessori150, 2022). While the children had been unruly when left unattended to run about the tenement, once they were confined to a classroom, they became quiet and timid. After some time allowing the children to interact with the materials, she observed that they also began to socialize with one another. The mothers of the children reported an increase in the children's confidence and joy. In addition to the change in their demeanor, the children began to care for their environment, both at the Children's House and in their own homes, cleaning their spaces and encouraging their mothers to put flowers in the windows (Montessori150, 2022).

Many parents of the children at the Children's House were illiterate, so they requested that Dr. Montessori teach the children how to read and write. However, the only thing that was expressly taught to the children was writing. Dr. Montessori believed that reading would develop naturally as a by-product of learning how to write (Montessori150, 2022). Children began learning the letter names and their sounds using letters cut from sandpaper that they could trace with their fingers. Once they mastered the letter sounds, the children were then able to use the letters to build words, and an "explosion into writing occurred" (Montessori150, 2022, para. 33). As she continued to observe, she noted that the children worked without being told to do so. When given the freedom to move about the room and choose what to do with their time, children engaged in practical life activities, worked with the sandpaper letters, and used the other sensorial materials. As she observed the children, she removed anything that was not engaging to them, or things they were not using (Montessori150, 2022).

From these observations, she discovered that when children were in an environment designed to support their natural development, they were able to educate themselves (Association Montessori Internationale, n.d.). She referred to self-teaching as "auto education," a process by which children direct their own education by choosing how to engage with learning stimuli in the environment that has been prepared by the teacher (Montessori Academy, 2022b). The prepared environment is a crucial element of Montessori education and will be described in further detail later in this chapter.

The children in her school displayed immense progress in their academic and social skills. Individuals around Italy, including state ministers and the queen, became interested in the children and the work that Dr. Montessori was doing. She found it hard to explain what was happening in the Children's House and could only discern that the impact on growth had been

made by following the child, rather than forcing the child to do anything. In a speech, Dr. Montessori said, "Anyone who wants to follow my method must understand that he should not honour me but follow the child as his leader" (Montessori150, 2022, para. 41).

Within a year there were five more Children's Houses in Italy with three principles: the freedom to move, the freedom to choose, and the freedom to repeat (Montessori Children's House, 2016). Freedom to move grants children the opportunity to move freely about the classroom, so long as they are not disrupting other students who are working. The freedom to choose allows children to decide which work they want to engage in. Freedom to repeat encourages children to repeat work until they have mastered the skill they are practicing (Montessori Children's House, 2016). In 1909, Dr. Montessori began to provide training courses on her methods to educators throughout the world, and wrote a book, *The Montessori Method*, which appeared in the United States in 1912. Although much of her early research was on early childhood education, Dr. Montessori began to focus her work on the education of elementary-aged students in 1916, and in the 1920s she expanded her focus to adolescence (Association Montessori Internationale, n.d.).

The first Montessori School opened in the United States in New York in 1911. In 1915 Dr. Montessori gave presentations on her methods at two highly attended educational conferences in the United States. As a result, nearly 100 Montessori schools were operating by 1916. Although Montessori schools were originally designed for young children in the years prior to formal schooling, they now serve children from birth through high school. There are currently more than 5,000 Montessori schools in the United States and more than 20,000 schools internationally (Mountain View Montessori, 2019).

Characteristics. One of the most prominent characteristics of a Montessori School are the materials with which students engage. Dr. Montessori believed that an intentionally designed environment would allow children the best opportunity to learn. Thus, Montessori classrooms are filled with simple, moveable furniture, hands-on tools that allow students to concretely practice academic skills, and items relating to practical life skills, such as washing dishes and watering plants.

As mentioned, the materials in a Montessori classroom are there to assist students in mastering a variety of skills, including academic skills. Although there is a high level of choice and independence in a Montessori classroom, children are taught basic skills in reading, writing, math, science, social studies. For example, children first learn to write by engaging with the sandpaper letters and learning that each of these letters has a sound. They then learn how to use the moveable alphabet, a tray of wooden letters that the children can use to build words. Children are also taught the four basic mathematical operations (addition, multiplication, subtraction, and division) early in their school years, and move on to algebra and more complex math skills as they progress through school. Students learn geography, biology, and myriad other academic foundations (Montessori Academy, 2022a). Children learn these academic skills via lessons, which are provided to them individually or in small groups from the teacher.

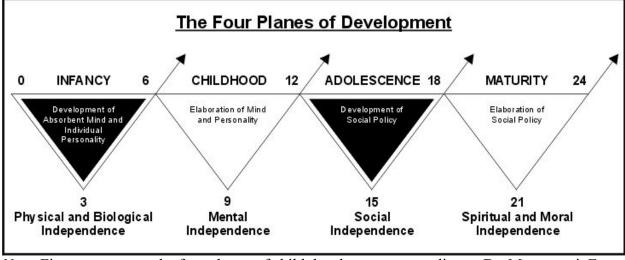
Lessons in a Montessori classroom are meant to be brief and to focus narrowly on one topic without extra, unnecessary information. Lessons follow the *three-period lesson* format designed by Maria Montessori.

First Period: Introduction (naming) – For example, "This is a circle."Second Period: Identification (recognizing) – For example, "Show me the circle."Third Period: Cognition (remembering) – For example, "What is this?" (Irinyi, 2007)

Montessori classrooms are also mixed age, rather than separating children by grade level as students are in more traditional schools. These age groupings are based on what Dr. Montessori identified as "planes of development" (Association Montessori International, n.d.). According to Dr. Montessori, each of these four planes consists of particular human tendencies and characteristics, which teachers can use in order to prepare the environment for optimal learning and independence. Independent children can accomplish personal tasks, such as dressing and feeding themselves, and tend to their environment by cleaning up after themselves and helping others. Additionally, independent children can make decisions based on available choices and solve problems by themselves (S. Jones, 2022b).

Characteristics of each of the four planes are presented in Figure 2. The first plane of development is *infancy*, which is from birth to age six (Association Montessori International, n.d.). Children in this phase have an "absorbent mind" and are developing physical and biological independence: "help me do it myself." The second plane is identified as *childhood*, and ranges from ages 6–12. Children in this phase have a "reasoning mind" and are developing mental independence: "help me think." Plane three, *adolescence*, is from ages 12–18. In this phase children are developing social independence: "help me think with you." Finally, plane four is *maturity*, in which individuals are ages 18–24. In this phase spiritual and moral independence is being developed: "how can I help you?"

Figure 2



Montessori's Four Planes of Development

Note. Figure represents the four phases of child development, according to Dr. Montessori. From "The Child's Development," *Association Montessori International,* (<u>https://amiusa.org/families/childs-development/</u>).

Montessori classrooms follow a 3-year cycle, within the planes of development (Association Montessori International, n.d.). Children are in the toddler room from birth to age three. They then transition to Children's House from ages 3–6. Upon leaving Children's House, students go to *lower elementary*, which is for children aged 6–9. Students then go to *upper elementary* (Ages 9-12), middle school, and high school.

Children in Montessori schools are valued as individuals and encouraged to work on tasks at their own paces, which is possible in these mixed-age classrooms because it is not necessary that all children are doing the same activities at the same time. In a Montessori classroom, while children are working, often independently, the teacher conducts observations. Dr. Montessori believed that the teacher was to "get out of the way" (Association Montessori International, n.d.) and let children do their learning. It is during these observations that the teacher can determine whether a student has mastered a skill, or learning goal, if they need more practice, or if they need to be re-taught. When the teacher sees that a child has mastered a skill and is ready to move to the next skill, lessons are provided to children in small groups or one-onone.

Once children have received a lesson from the teacher, they continue to practice the new skill with a series of "follow up works" which are typically designed so children can self-check, locate their own errors, and complete their work accurately, not having to rely on others (Wheaton Montessori School, 2019). Students may choose their follow up work or may take a suggestion from the teacher or an older student (Kapor-Mater, 2020). Students may make a timeline, write a report, write a song, poem, or letter, make up a game to practice the lesson, do an experiment, build something, or choose another way to practice the skills or content that was learned during the lesson.

When a follow up involves the use of Montessori materials, there is often a self-check built in so students can self-correct as they practice. For example, when younger students are learning about ordering by size, they use knobbed cylinders (Montessori Album, 2022). In this practice, students place pegs of various sizes in their corresponding holes. If the student is left with a peg that will not fit in the remaining hole, they know they have improperly placed an earlier peg. The student is then able to go back and check all of the pegs to discover their own error.

Dr. Montessori observed children while they were working and noted that when given freedom to work independently, children's cycles of work were very predictable, lasting approximately three hours (Association Montessori Internationale, n.d.). Because of this, learning in a Montessori classroom takes place in long, mostly uninterrupted work cycles of

approximately three hours, during which time children choose what they will work on, and in what order they will complete their tasks. Lessons from the teacher are the only exception, as they do occur during the work cycle, and the schedule of them is determined by the teacher. Children are required to participate in the lessons but return to their choice of work when lessons are completed.

Children work primarily independently, which allows them to make choices about which topics they want to study, in what order, and with which materials. Materials in the Montessori classroom progress from concrete to abstract (North American Montessori Center, 2008). Concrete materials have more structure. The child progresses through the practice of skills first using concrete materials, then transitions to more abstract materials. For example, a child may choose to start their day with math. They may be working on addition and have the option to choose how they will practice the skill. A child who is still needing more concrete practice with this skill may use bead chains, where there is a bead to represent each number, and physically count beads as they add them together. Or, if they are ready to move to a more abstract version of addition, they might choose to use the Stamp Game. The game consists of stamps, or tiles, that represent place value categories: ones, tens, hundreds, thousands. The stamps are laid out to represent a given mathematical equation, then counted to arrive at the answer to the equation. Figure 3 shows a student using the Stamp Game to add 6421 and 2679. The student has a written equation and is laying out the stamps as a concrete representation of those numbers. The student will slide the stamps together, determine the value of each column, and be able to answer the equation (Lord, 2020).

Figure 3

Student Engaging With the Stamp Game



Note. From "Numbers on a Page: The Addition Stamp Game!" by H. Lord, 2020, *Villa di Maria Montessori School*, (<u>http://www.villadimaria.org/blog/2020/02/26/numbers-on-a-page-the-addition-stamp-game</u>)

Roles. Roles of teachers, children, and school leaders in a Montessori school are different from those in more traditional schools. One of the benefits of working in a multi-age classroom is that children may seek guidance from other students, who may have already mastered the skill (American Montessori Society, 2022a). Therefore, one of the roles of the student is to also be a teacher, as well as a potential role model for the younger children in the classroom.

Teachers in Montessori classrooms are guides and observers (Franz, 2022). They create the structures in the classroom that allow children to be independent. The environment is part of the academic triad, which also includes the teacher and the child (Montessori in Kentuckiana, 2011) Therefore, part of the responsibility of the teacher is to intentionally prepare the environment, making necessary materials accessible to students (HMS Administrator, 2018), making it a conducive space for children to learn. Montessori teachers follow the children's needs and interests as they prepare learning materials and activities (A Child's Place Elementary, n.d.).

School leaders, sometimes referred to as the Head of School, assume the responsibilities of the day-to-day operations of the school (Stephens, 2020). They also serve as the liaison between the governing board of the school and the school, staff, and families. In a Montessori school, the school leader is responsible for supervising the faculty and staff, ensuring program quality, making sure classrooms have appropriate instructional materials, and building community among staff, parents, and children. One of the most important roles of the school leader is to keep the mission and vision, and Dr. Montessori's philosophies, in the life and culture of the school (Arbor Montessori, 2021).

Benefits. Cooking teacher and author Julia Child, NBA star Stephen Curry, Google founders Larry Page and Sergey Brin, and Amazon CEO Jeff Bezos are all products of a Montessori education (American Montessori Society, 2022b). Children attending Montessori schools have opportunities to develop a love of learning, independence to make discoveries on their own, increased executive functioning, higher creativity, better well-being, and cognitive and socio-emotional advantages over peers who do not attend a Montessori school (Denervaud et al., 2019; Franz, 2022; Lillard et al., 2021). In fact, attending a Montessori school for at least two years was associated with significantly higher adult general well-being, engagement, social trust, and self-confidence (Lillard et al., 2021). By choosing their own work, children in Montessori

schools are in charge of their own education, which can lead to increased self-determination and the sense of agency experienced in a Montessori school often predicts stronger intrinsic motivation, self-efficacy, happiness, and sense of competence (Denervaud et al., 2019; Lillard et al., 2021). The opportunity to guide their own learning and to investigate topics of interest helps Montessori students to become confident, self-directed learners who can think critically (American Montessori Society, 2022a). Those following the Montessori philosophy believe that when children are given opportunities to address their own curiosities and interests, they find joy in learning that will span their lifetimes.

Challenges. Montessori schools afford students many benefits, but the schools do face challenges as well. One challenge is that Montessori schools were originally implemented for poor children, but today many Montessori schools are private schools, requiring tuition for attendance (Meckler, 2018). This means that a Montessori education is not accessible to every. Additionally, many Montessori schools must maintain enrollment in order to fund the operations of the school.

As with many free-choice learning approaches, Montessori schools face criticism for allowing children to have too many choices and too little structure. Those focused on assessment scores are concerned that Montessori schools are not providing rigorous enough academics (S. Jones, 2022a). Because Montessori schools do not follow state standards and do not give formal assessments or grades, critics argue that there is not enough accountability for teachers or students regarding academics.

Students in Montessori schools experience child-led learning. Students do receive lessons but can choose how they want to practice their newly learned skills, how long they work on any particular skill or concept, and in what order. Montessori schools do not implement a pre-

designed curriculum, and do not administer tests or give grades. Students work in mixed-age classrooms, which allows them to learn from and teach peers. Another school that implements some of the same philosophies, but is not a Montessori school, is JCOS in Colorado.

JCOS. This public school accepted its first class in 1970. The school board agreed to open a pilot school in response to a request from parents to provide a different, better education for their children, in the form of an education that honored the development of the whole child (Posner, 2009). This group of parents developed a mission statement for their proposed school, which was "to create a safe, stimulating, and supportive environment that fosters the personal, social, and intellectual growth of each student" (p. 9). The school opened serving children from kindergarten through eighth grade but added high school grades in 1975. In the first years of the school, staff and students collaboratively developed the following goals for the school and its students:

- Rediscover the joy of learning.
- Engage in the search for meaning in your life.
- Adapt to the world that is.
- Prepare for the world that might be.
- Help create the world that ought to be. (Posner, 2009, p. 10)

They also outlined five outcomes for every student. It is expected that every student at JCOS becomes an effective communicator, a complex thinker, a responsible citizen, an ethical person, and a quality worker (Posner, 2009). The current mission statement of the school states:

The Open School provides a dynamic environment that fosters the development of the unique potential in each individual by nurturing and challenging the whole person. There is an emphasis on self-direction, learning through experience, shared responsibility, and the development of life-long skills. (JCOS, 2022d, para. 2)

Although the mission statement has changed slightly to reflect individuality and actions for fostering individual development, the goals for students at JCOS remain the same for the students who currently attend. In addition to the goals, JCOS (2022d) has five values that guide the operation of the school and the conduct of the students: curiosity, responsibility, courage, personal best, and respect.

Characteristics. There are several characteristics that make JCOS unique, different from more traditional public schools. One unique characteristic of JCOS as a public school is the fact that students from pre-kindergarten through 12th grade are in mixed-aged groupings (JCOS, 2022a), similar to the groupings found in Montessori schools. There are seven age groups within the school: Preschool, Kindergarten, Early Learning Center (Grades 1-3), Intermediate Area (Grades 4-5), Bridges (Grade 6), Foundations (Grades 7-8), and Walkabout (Grades 9-12).

When children enter the Preschool at JCOS, they are given opportunities and experiences that will help them grow academically and socially (JCOS, 2022a). Student autonomy increases for children at JCOS as they get older. As children move to the Early Learning Center the goal is that they begin to see themselves as learners and members of a learning community (Basile & Goodlad, 2004) and can make more decisions about their learning activities. In the Intermediate Area, children are given further autonomy as they choose independent learning projects and socialize, learning to care for each other and solve conflicts (Basile & Goodlad, 2004). It is at this level that students work to develop the skills and behaviors necessary to engage and be successful in a self-directed learning environment (JCOS, 2022a).

In the middle grades, which include Bridges and Foundations, students are encouraged to become more responsible for themselves and learn to make healthy choices in each of the three domains of the school: personal, social, and intellectual (Basile & Goodlad, 2004). Walkabout students are in their final phase of the Open School program. It is in this phase that students must demonstrate their readiness to function as an adult in society (JCOS, 2022a). Students demonstrate this readiness by completing *six passages*. The six walkabout passages are personally challenging projects designed by each student to meet six different areas, which are designed to allow students the opportunity to apply skills in the real world. The six passages are: adventure, career exploration, creative expression, global awareness, logical inquiry, and practical skills. There are guidelines and expectations for each, but students decide how and when to complete each passage.

The JCOS website has examples from former students on their website. The approaches each of these students took to complete their passages are very different and tailored uniquely to each student's interests and experiences. See Table 1 for examples of how two different students, both of whom graduated in 2010, approached their six passages. Although students in most public schools have access to a guidance counselor, who is available to assist with the planning of coursework and college or career goals for after high school, students at JCOS have an adult advisor and a peer advising group (JCOS, 2022a). Advising is a crucial element of JCOS. Teachers serve as advisors, functioning as student advocates and learning facilitators. They help students create, monitor, and achieve their IEP goals. There are both individual and group advising sessions. Additionally, students participate in a triad, which is a peer support group. Triads are groups of students that support one another through the self-directed learning process.

Table 1

Passage	Student 1 Sample	Student 2 Sample
Adventure	Goal to become more self- confident, completed in part by a 4- week backpacking trip in Europe with one classmate	Focus on self-expression, completed by journaling and focusing on relationships with others
Career Exploration	Working in a zoo – completed in part by accumulating 295 volunteer hours at a local zoo	Engineering – completed an internship with a local water company, attended career day at a local university, completed a class at another high school
Creative Expression	Documented travel experiences by creating a scrapbook	Focused on finding her inner-artist, specifically with visual art – participated in an outdoor watercolor course
Global Awareness	Investigated the journey of cell phones	Conducted research on Huntington's Disease
Logical Inquiry	Recreated an experiment first conducted at Stanford about memory and impulse control	The Factors of Jumping – conducted an experiment to test hypotheses about better jumpers
Practical Skills	Focused on time management	Women in Football – began by wanting to start a women's football league, started a summer flag football camp for girls, but had low attendance, started leading football training for elementary aged girls during their lunch break

Note. From "Example Transcripts from JCOS Graduates," (<u>https://sites.google.com/jeffcoschools.us/jcoswalkabout/transcripts?authuser=0</u>).

Triad members attend presentations of learning, which will be described later, and read and provide feedback on students' six passages work. Additionally, triads meet for an hour each week to share goals and help each other monitor their progress on their goals (JCOS, 2022a). Another element that makes JCOS unique is the fact that each student at JCOS has an Individualized Education Program, or IEP (JCOS, 2022a). In most public schools, an IEP is reserved for students receiving special education services. At JCOS, the IEP is created among the student, their parents, and their advisor, and contains personal, social, and intellectual goals that the student intends to work toward and evaluate. The IEP is used to guide course schedules and self-directed learning experiences.

Working with their advisors, students create a Mutually Agreeable Plan, which details course schedules, self-directed learning projects, trips, and other activities in which students might engage in order to achieve their IEP goals and meet graduation expectations (JCOS, 2022a). Each student at JCOS has a unique schedule of classes, which is constructed to help students address the personal, social, and intellectual goals that they have set in their IEP. According to the school's website, the classes students select should also provide challenge and help the student "rediscover the joy of learning" (2022a, p. 7). In addition to the classes students take, the Mutually Agreeable Plan includes self-directed learning time and the opportunity to lead a class as a student. Students may elect to have self-directed learning time instead of a teacher-led class, or they may choose to lead a class for other students. To lead a class, students must get approval from their parent, advisor, and triad. The student leading the class is supported by their advisor for the duration of the class.

In addition to the Mutually Agreeable Plan, experiential learning through travel is an integral part of the student experience at JCOS (2022e). The travel experiences provide students with real-world learning opportunities. While traveling, students build relationships with one another, experience communities and cultures outside of their familiarity, face challenges outside the safety of the school, and are often a turning point in a student's life. Principal Scott Bain

states that he "believes in the power of experiential learning as a means to inspire students to achieve beyond self-imposed limitations" (JCOS, 2022c, para. 2). The objectives of the travel program at JCOS (2022c) are "re-discovering the joy of learning, establishing trust in self, others, and the school community, creating ownership of school and one's actions, and reaffirming self-esteem" (para. 1). Young students begin experiencing travel with day trips through Kindergarten and Early Learning Center. In third grade, students begin having overnight trips. Once in the Walkabout program, students have the opportunity for several extended travel experiences, which are part of the graduation requirements for students. These travel experiences begin with the Wilderness Trip, which is a 4-day backpacking trip that begins the school year.

Students in JCOS do not receive grades, nor do they have a traditional transcript or grade point average. There are, however, explicit graduation expectations (JCOS, 2022b). The expectations for graduation are aligned with the three broad foci of the school: personal, social, and intellectual growth. Personally, students are to develop a strong sense of self in the categories of self-directedness, risk and challenge, values and moral decision making, wellness, and life skills. Socially, students are expected to create and maintain healthy relationships by demonstrating collaborative community involvement, conflict resolution, flexibility and resourcefulness, healthy relationships, and cultural responsiveness. Intellectually, students must demonstrate the ability to think and apply knowledge in the categories of communication, responsible global citizenship, analytical reasoning and problem solving, creative expression, and science and ecological awareness. (The graduation expectations, as presented by JCOS, can be found in Appendix A). While the expectations are clearly outlined, how students achieve these expectations is decided by each individual, in collaboration with their family and advisor as they design their IEP and Mutually Agreeable Plan. In addition to demonstrating mastery in the

above categories, the graduation expectations at JCOS also include the completion of the six aforementioned walkabout passages, participation in advising, triad, and governance, the wilderness trip, community service, extended travel experience, and successful completion of appropriate classes.

Because students do not receive grades from JCOS teachers, they are responsible for keeping a portfolio demonstrating learning and completion of particular tasks (JCOS, 2022a). Students gather evidence to document their personal, social, and intellectual growth toward the graduation expectations. At any point during the year, students may do a *presentation of learning*. This is an opportunity for them to celebrate their self-directed learning projects, classes, and personal and social goals by presenting their learning their learning to others. The presentations of learning, as documented in the student portfolios are required in order to demonstrate readiness to move from one level to the next, similar to how grades in a traditional school demonstrate readiness to be promoted to the next grade level.

In addition to the presentations of learning, students compile narrative transcripts chronicling their experiences while at JCOS (2022a). These transcripts document the activities, learning, and growth throughout their Walkabout experience. They are often upwards of 40 pages in length and describe each course completed, passage, trip taken, community service experience, and any other activities the student engaged in while a student at JCOS. The transcripts also include a personal statement and an advisor support letter. Because students at JCOS do not have traditional transcripts with grades and grade point averages, these narrative transcripts are not only used to demonstrate readiness to graduate from JCOS but are also used when applying to college.

Another graduation requirement is student participation in the democratic governance of the school (JCOS, 2022a). Intermediate Area and Bridges students participate in Community Circle, while Foundations and Walkabout students are involved in Governance. It is in these meetings that students disseminate information to one another, celebrate successes, discuss school-wide issues, and solve problems collectively.

Roles. Although JCOS is a public school, situated within a public school district, the roles of students, teachers, and administrators differ from similar roles in more traditional public schools (JCOS, 2022a). Students at JCOS have a great deal of responsibility and choice in their academic plans. Not only do students participate in trips and school governance, complete their six passages, and complete courses, they are also expected to teach a class, participate in service projects, and be actively involved in their advising groups. The courses they take, the topics of their self-directed projects, and the service projects they engage in are all decisions students make for themselves. This exemplifies the notion of free-choice learning, as students are at liberty to make choices as to how they meet the requirements set forth by the school. No two students follow the same path, no two sets of transcripts will look identical.

Teachers have multiple roles at JCOS. They prepare for and teach courses as most teachers do. However, teachers at JCOS have a "level of autonomy that is unprecedented in public education" in that they decide what they teach, when they teach, and how they teach (S. Bain, personal communication, June 7, 2022). Teachers are also expected to plan and execute two travel experiences for students each year and to participate in the democratic leadership of the school (JCOS, 2022a). The role of advisor is one of the most important responsibilities for teachers at JCOS. As previously stated, as an advisor, teachers work with students to create their IEP. They also work with students, individually and in groups, to monitor and evaluate their

goals. As advisors, teachers serve on committees that determine student graduation readiness and support students in reaching their post-high school endeavors.

JCOS has a head principal and two assistant principals. Their roles are similar to those of administrators at other public schools. However, the student-centered nature of JCOS means that the responsibilities of administrators are also different. To gain a better understanding of the roles of the school leader at JCOS, I was able to interview the principal, Scott Bain. He explained that, similar to a traditional school leader, the principals at JCOS are responsible for the day-to-day operations of the school, including budgets, hiring and training staff, monitoring student discipline, and communicating with stakeholders, including district-level administrators, parents, and community members. The school principal also shared that one of his responsibilities is to translate the activities and student learning that occurs at JCOS into the "eduspeak" that district and state-level administrators are familiar with (S. Bain, personal communication, June 7, 2022). Finally, the school leaders at JCOS do not advise students, but they do teach courses and lead and/or participate in travel experiences.

Benefits. Former teacher at JCOS, Rick Posner (2009), wrote a book, *Lives of Passion, School of Hope*, in which he surveyed alumni of the school. He featured recent graduates, as well as those who were in the founding class of the school. At the time the book was published, 91% of graduates had engaged in post-secondary education, with 85% of them completing a degree program (Posner, 2009). Additionally, 89% of respondents reported being happy with their jobs, and 84% said that their Open School experience had a positive influence on their work lives.

Graduates of the Open School hold a wide variety of jobs, including baker, pilot, professor, Montessori teacher, business owner, medical researcher, and psychologist (Posner, 2009). When surveyed, Open School alumni indicated that the school prepared them for both

college and careers by helping them develop their self-direction and critical thinking skills. They also referenced the fact that they were not afraid to take risks, academically and in their career endeavors, as a result of their experiences at Open School. Many alumni stated that if there was only one thing that they could have taken from their time at JCOS, it would be the social skills developed as students there, which helped them thrive after high school (Posner, 2009). Specifically, graduates referred to collaboration, public speaking, conflict management, problem solving, and leadership skills.

Another self-reported result of their education at JCOS was the innate joy of learning that they experienced, which 97% of alumni say is important to their lives as adults (Posner, 2009). In addition to maintaining a joy of learning, alumni cite the following as the life skills that JCOS helped them to develop:

doing what needs to be done in order to make things happen, taking responsibility for budgeting and planning, dealing with different types of people, adapting to constant change, setting goals and evaluating progress, dealing with challenging situations, dealing with bureaucracy, compromising, listening, decision making, being responsible for your own behavior, learning from one's mistakes, taking the initiative, and multitasking. (Posner, 2009, p. 163)

Over 80% of alumni indicated that JCOS had a positive influence on their ability to prepare for a future that is uncertain.

Challenges. One of the greatest challenges JCOS faces is existing within a public school district that does not operate with the same philosophies (S. Bain, personal communication, June 7, 2022). For example, as a public entity, the school district must report standardized test scores to the state department of education, to parents, and to community members. Most students at

JCOS, had, for many years, opted out of state testing, which is an available option to all publicschool families. However, large numbers of students opting out of testing had a negative impact on the school's scores, and each school's scores affect the district's scores. According to school principal Scott Bain, the large number of JCOS students opting out of testing was causing the school to be labeled as a failing school. Thus, JCOS began encouraging students to take the state tests. Bain stated that they do not engage in test-preparation activities, and their students' scores are not the highest in the district, but their scores have had a positive impact on the district's overall scores.

Another challenge facing JCOS is what author Carol Basile calls the "eduvirus of doubt" (Basile & Goodlad, 2004, p. viii). This occurs when a school is doing things that are out of alignment with the popular education trends at that given time. This can cause school leaders to doubt what they are doing, even if it seems to be benefiting their students. While teachers and leaders at JCOS believe deeply in the way the school operates, they may begin to doubt their practices when they are doing things so differently than other public schools that surround them.

An additional challenge for JCOS has been the changing family dynamic (Basile & Goodlad, 2004). When JCOS first opened, the families of the students were educated, wealthy, and very involved. They spent time in the school, volunteering to work with students and complete administrative tasks as needed, and wanted their children to have exposure to a variety of experiences. Today, many of the students at JCOS are from lower-income families, their parents are working during the day, and are not as involved in the school. It was reported that the lack of involvement from parents in decision-making processes at the school puts teachers in a "heavy" situation in which they feel like they are making all of the decisions about their education for the students (Basile & Goodlad, 2004).

Finally, a challenge that the staff at JCOS continues to face is the balance between freedom and control (Basile & Goodlad, 2004). There is less freedom for students in their decision making around courses and experiences than there was when the school first opened. Some parents find this to be too little freedom for their children. Other parents enroll their children in JCOS, but later decide that there is too much freedom, and they want a more controlled environment for their child. Both of these types of families un-enroll their children and seek a school that better fits their expectations. This poses a difficult challenge for the staff at JCOS as they value student freedom, but also know that they are accountable to the district and state department of education for student growth.

JCOS was opened in 1970, but nearly 50 years earlier the first free, democratic school opened in England. Although students at JCOS have a significant amount of autonomy about their learning experiences and choice of which classes they take, there are other schools that offer students full autonomy in their learning.

Summerhill School. After serving as a dominie, or schoolmaster, in Scotland in the early 1900s, A. S. Neill (1922) became concerned about the state of schooling and its lack of focus on the needs of children. He decided to create what he thought would be a perfect school; a place where he would "make the school fit the child" (Neill, 1960, p. 3), and not force the child to fit the school.

Neill believed that too much adult control and direction made children less capable of making decisions (Darling, 1992). Thus, his goal was to create a school that was not controlled by adult authority, allowing children the opportunity to learn how to take responsibility for their conduct and their learning. Neill believed that the absence of adult control would also eliminate the pressure for students to conform to adult expectations. Further, he believed that curriculum in

schools implied power and "if curriculum is central to our school system, so too is power" (Darling, 1992, p. 54). Given this belief, Neill's ideal school would not have a set curriculum that all students were expected to follow.

With no adult control and no curriculum, Neill opened Summerhill School, a free, democratic school, in England in 1921 (Summerhill School, n.d.-c). It is the oldest currently operating free, democratic school in the world. As a free school, children are free to explore as they wish, focusing on play and a schedule they design, rather than a schedule set forth by the adults in the school. Like at JCOS, students at Summerhill participate in the governance of the school. As mentioned, Summerhill is a democratic school, meaning that each individual within the school community—both children and adults—have an equal vote by which decisions about school operations are decided.

Neill believed that children were "innately wise and realistic" (Darling, 1992, p. 45) and that participation in school government was an "educationally profitable" experiences and an important way for adults to demonstrate trust and confidence in students (p. 46). At Summerhill, there are twice-weekly school meetings, which are not required, but are highly attended by students and staff. It is at these school meetings where decisions about most school operations are decided, and school rules are set. Additionally, at school meetings, discipline concerns are presented and addressed by everyone in attendance, most consequences being determined by peers rather than adults.

Characteristics. Unlike Montessori schools and JCOS, Summerhill operates primarily as a boarding school, with only a few students attending as day students (Summerhill School, n.d.-d). Approximately 65-75 children from more than 15 different countries attend Summerhill each year, who are supported by approximately 15 full time staff members. The founding principle of

the school is that children have "freedom not licence" (Summerhill School, n.d.-a) This means that children are free to do as they please, so long as it does not infringe on the rights of other students. Additionally, the philosophy of the school is to encourage children to make their own decisions, which is, in part, supported by the boarding aspect of the school. While children are living at the school, they are free to make their own decisions about how to conduct themselves outside of the school day, and not forced to follow the rules that may be put in place by their parents within their homes. Rules are generated for the time outside of school hours as well, and the boarders help each other adhere to the expectations. For example, it is reported that almost every school year the children vote to do away with bedtimes. However, after a few weeks, the children decide to reinstate bedtimes. And the children themselves enforce the bedtime expectations by way of "Beddies Officers."

Similar to both Montessori schools and JCOS, children at Summerhill are not separated by grade level (Summerhill School, n.d.-a). However, unlike the other schools, children at Summerhill are not separated into age groups at all. Children from ages 5–17 are free to intermingle as they wish, so it is not uncommon to see some of the youngest students sitting with some of the oldest students throughout the day.

Play is a crucial part of Summerhill, and students are free to play all day if they choose. At Summerhill, play is more an element of imagination, where there is little skill or competition involved, rather than organized games that involve skill, teamwork, and competition (Neill, 1960). Sometimes this play leads to curiosities which inspire students to take a lesson in woodworking, biology, music, or any other area of interest (Summerhill School, n.d.-b). For example, some children may have been imagining that they were pirates, playing near water, when they discovered an animal in the water. This may have led them to participate in a lesson

on environmental science to learn about other animals that may be living in the water. Or, they may have gone to a woodworking class to learn how to build a boat. The adults at Summerhill believe this inspiration leads to enjoyment in learning which will last a lifetime. This lifelong joy of learning is one of the goals of Summerhill.

Roles. Students at Summerhill are expected to take responsibility for their actions and the community around them (Summerhill School, n.d.-d). According to Summerhill's website, the characteristics they look for in students are: "self-esteem, tolerance, integrity, fairness, understanding, sensitivity, compassion, assertiveness, creativity, individuality, humor, self-motivation, and common sense" (Summerhill School, n.d.-d, para. 14).

The staff members at Summerhill do plan and provide lessons, as staff do in Montessori schools and JCOS. However, unlike the expectations in the other schools, students at Summerhill are at liberty to decide whether or not they attend the lessons (Summerhill School, n.d.-b). Like staff members at JCOS, Summerhill staff members are also expected to be active members of the democratic community, participating in school meetings. Additionally, because play is one of the founding elements of the school, it is crucial that staff members at Summerhill value classroom activities and play equally, never judging or reprimanding students who choose to engage in play rather than attend a lesson.

Neill remained the leader of the school until his passing in 1973, at which point his wife became the leader. Currently, his daughter, Zoë Readhead, serves as principal of Summerhill. She states that as principal, she is ultimately responsible for all school decisions, but that she has a strong management team, many of whom have been at Summerhill for several years, including two of her grown children (Z. Readhead, personal communication, May 31, 2022). The management team assists with managerial tasks of running the school, including building maintenance, monitoring the school budget, hiring staff, and communicating with outside entities. Mrs. Readhead participates in many activities with the managerial team, including attending the bi-weekly school meetings, interviewing potential new staff members, participating in activities with students, and communicating with parents.

Benefits. Some have indicated that Summerhill is "the happiest school in the world" (Khost, 2015, para. 1), and that one of the most positive outcomes for students is the social and emotional learning in which they engage (Elmore, 2020). A Summerhill parent reported that students learn emotional intelligence, to communicate with others, to be collaborative as well as independent, and to be empathetic. According to Summerhill's website, the school allows children to experience "natural emotional, social, and intellectual growth," which "often has an extraordinary effect on self-esteem and positive personal development" (Summerhill School, n.d.-d, para. 12). While there is little published information about the benefits of a Summerhill education, graduates from Summerhill have gone on to work in a variety of careers, including graphic design, dentistry, teaching, authoring and illustrating books, and directing non-profit educational charities (Neustatter, 2011).

Challenges. Since its inception in 1921, the school has faced a number of challenges. One of the largest challenges occurred in 1998 when the United Kingdom's Office for Standards in Education report indicated that Summerhill was not "providing adequate education for its pupils" (Riding, 1999, para. 3). After spending 5 days auditing the school, seeing that children were not regularly participating in lessons, the British government demanded that the school ensure that all children were engaging regularly in learning, or risk being closed. The optional attendance in lessons is one of the defining characteristics of Summerhill, and Zoë Readhead refused to change anything that would alter the philosophy of the school (Riding, 1999). School

officials took the case to court, where the government's recommendation to close the school was dismissed and a new set of criteria were created for the inspection of Summerhill, based on its unique philosophy (Cassidy, 2011). A 2007 Office for Standards in Education report rated the school on the quality of education; spiritual, moral, social, and cultural development of the pupils; welfare, health, and safety of the pupils; suitability of the proprietor and staff; school's premises and accommodation; provision of information for parents, carers, and other; and compliance with regulatory requirements. It was deemed that Summerhill was providing a satisfactory quality of education for its students.

In addition to ongoing public doubt about the philosophies of the school, another challenge faced by the school is fluctuating attendance (Cassidy, 2011). In 2000, for example, there were 90 students, but just a year later, only 64 students were enrolled. Although most of the students are boarding students, the option to be a day student has helped enrollment remain steadier in recent years, with enrollment of approximately 80 students over the past few years.

While Summerhill has now been in operation for 100 years, its American equivalent has been serving students for over 50 years. Modeled after Neill's philosophies on self-directed learning and democratic schooling, the first Sudbury school opened in the United States in 1968 (Alternative Education Resource Organization, n.d.). There are now over 50 schools in the United States that identify themselves as Sudbury schools. These schools have very similar operating procedures as Summerhill, but function only as day schools, not as boarding schools.

Sudbury Schools. Daniel Greenberg, a professor at Columbia University, became a parent in 1961, and immediately began to think about how he and his wife, Hanna, were going to educate their son. They had particular beliefs about education for children and were determined to find a school that would support their philosophy in the education of their child (D.

Greenberg, 1973). While their son was still a toddler, Daniel and Hanna visited several schools, but none of them exactly reflected their views on education. Daniel's father challenged him to create the school he dreamed of, to develop a prospectus to convince others that this was the school that was missing in education.

Using Summerhill as a guide, Greenberg proposed a school that he considered "radical." In his prospectus, which he later shared with members of the community for feedback, he stated that the proposed school would fulfill the educational needs of the community, arouse intellectual curiosity, promote creativity, help individuals achieve their highest potential, and enhance meaningful communication (D. Greenberg, 1973). He further outlined the unique characteristics of this school:

The school would consist of students, aged 5-25, and faculty. The guiding principle of the school was that every member would be free to pursue his own interests entirely. Each member of the school could "call freely upon" any other member for guidance or advice. There would be no required lectures or duties, no age groupings, no grades or exams, no departments, and no ranks. "Free inquiry' is the motto, and it is <u>meant.</u>" (p. 180)

Several friends and community members provided feedback on the prospectus and worked with the Greenbergs to find a building for the school and recruit students (D. Greenberg, 1973). In 1967, a catalogue was sent to approximately 5,000 residents near the Framingham, Massachusetts, area, where, after several failed attempts, a building and grounds had been procured. Sudbury Valley School (2020) opened in the summer of 1968 "based on a clear vision of the individual freedom needed by children to flourish, and of a community governed equally by all its members" (para. 2). In the inaugural summer session, 130 students attended. The fall

session began with 130 students also, but only 50% of those students had attended in the summer (D. Greenberg, 1973).

The initial year proved challenging for the school, as many high-school aged students exhibited extremely disruptive behavior, which caused other parents to want to withdraw their children from the school (D. Greenberg, 1973). There was discussion about expelling these students, but that would have had to be a decision made by the school meeting, not by the adults themselves. It was a tumultuous year, in which many of the founders resigned their positions for a period of time and parents held protests at the school. These events and experiences allowed them to refine their school by-laws and make clear the expectations for students and staff in the building.

Sudbury Valley School has now been serving students for more than 50 years, and while it was the first Sudbury school, there are currently more than 50 schools across the United States that are following the Sudbury philosophy for educating students, and more are opening each year in a variety of communities (Alternative Education Resource Organization, n.d.). For example, Chagrin Valley School (n.d.) opened in 2016 in a suburban town outside of Cleveland, Ohio. St. Louis Sudbury School (n.d.), which opened in 2019, and the Wilmington Sudbury School (n.d.), which opened in 2021, are both located in urban cities.

Characteristics. Like JCOS and Summerhill, Sudbury schools are free, democratic schools, in which decisions about the operation of the school are made during school meetings. Sudbury's school meetings are similar to Summerhill's, with each member of the school community, including students and staff members, having an equal vote on school matters (Sudbury Valley School, 2020). School meetings in most Sudbury schools occur just one time per week, and all school decisions are made in the meeting, including the rules and expectations

of behavior, use of facilities, the hiring and firing of staff, budgeting, and supplies. Discipline concerns are addressed via the Judicial Committee, which is comprised of both students and staff, and operates similarly to a hearing in court where each party presents their argument to a committee, who determines guilt and consequences (Hudson Valley Sudbury School, 2022). Any member of the community can take a concern to the Judicial Committee, which holds regular meetings throughout the week, daily in some schools.

Another unique characteristic of a Sudbury school is the fact that children make all decisions about their learning (Traxler, 2015), similarly to children at Summerhill. However, in a Sudbury school, there are no pre-planned lessons; no set curriculum. Lessons only occur if a student asks for one on a particular topic. These lessons may be provided by a staff member at the school, another student, or an expert in the area if no one at the school has the expertise needed to teach that particular skill or topic (Hudson Valley Sudbury School, 2022). Adults do not make any decisions about the curriculum or what students should learn (Traxler, 2015). The Sudbury model of education proports that students who can engage with what is interesting to them will become passionate people who will share their learning with others. In his original plan for Sudbury Valley School, D. Greenberg (1973) indicated that "each member may call freely upon any other member for guidance, advice, or reaction" (p. 180). This philosophy is still in place, as everyone at a Sudbury school, both children and adults, are seen as members of the community working together and learning from each other (M. A. F. Wilson, 2015). As in all free-choice learning approaches previously explored, children in Sudbury schools are not grouped by age. All students, pre-kindergarten through high school, are free to interact with one another. Age-mixing allows children to learn from one another, and not rely only on the expertise of adults (Sudbury Valley School, 2020).

Finally, in Sudbury schools, there is no grading of schoolwork or testing; there are no official academic records kept (Sudbury Valley School, 2020). Students set their own goals for their learning and monitor their own progress toward their goals. They may also seek feedback from others, including adults and other students. For example, if a student has decided they want to learn how to be a playwright, they may write a script, and ask others to read it for feedback. Not all Sudbury schools issue diplomas. In those that do, students must prepare and present a thesis to a committee. This thesis must explain how the experiences at school have helped the student develop the skills necessary to function as an adult in society. Students do not receive letter grades, a grade point average (GPA), or transcripts from the school. Those students that are interested in pursuing higher education typically prepare themselves to take the SATs, which are often required for college admission (Sappir, 2009).

Roles. Students in a Sudbury School are fully autonomous learners (Sudbury Valley School, 2020). It is the responsibility of the student to seek lessons or other guidance from the staff members in the school. For example, many students begin to explore future careers while at a Sudbury school, and many of these students choose to observe people in this career field or do internships. The Sudbury students may approach a staff member to help them make the appropriate contacts with professionals in the community.

Teachers are intentionally referred to as "staff," not as "teachers," to remove the notion of the adults being the keepers of the knowledge that is to be taught to students (Traxler, 2015). Rather than transmitters of knowledge, adults in a Sudbury school are supporters of childinitiated learning (M. A. F. Wilson, 2015). There are no adult impositions on student learning (Rietmulder, 2019). Students decide what they want to learn about, whether that be playing the guitar, biology, geography, or crafting. Students also decide how they will engage in that

learning. They might ask an adult or fellow student for a lesson, they might watch videos online, or seek guidance from a person outside of the school. Finally, students decide how much time they want to spend on each task they pursue. They might work intensely with a topic of great interest for an extended period of time. Or they might try a new activity with a friend, decide after an hour that they are not interested in that activity, and abandon it altogether.

Staff are hired on a 1-year contract only. At the end of each academic year, the hiring of new staff and rehiring of returning staff is presented at the school meeting, where all members of the school community vote on which teachers to hire, rehire, or fire (P. Gray, 2008). Because student votes often outnumber staff votes, it is important that staff make a positive impact by being kind, ethical, and competent. The staff must also contribute to the school environment by being available to support students with their learning, modeling their own learning, and actively participating in school meetings.

In a sense, everyone is a leader at a Sudbury school. In contrast with most other schools, both public and private, there is no principal, head of school, or other named administrator at a Sudbury school (Hudson Valley Sudbury School, 2022). All adults are simply identified as "staff." However, some staff members have been voted into roles that assume some administrative responsibilities. For example, many Sudbury schools have an admissions director and a financial director. In large part, these staff members take actions based on the input from the school meeting and are not sole decision makers.

With this dramatic shift from what most people expect to find in a school setting, many are left wondering what type of education students are receiving, and what they know and are able to do upon leaving a Sudbury school. Students in Sudbury schools experience many benefits

from learning in a student-directed learning environment and are able to pursue college and career goals that they choose.

Benefits. Because there are no set schedules at a Sudbury school, students have the flexibility to make connections within the community surrounding the school, and thus have opportunities to develop real-world experience (Sudbury Valley School, 2020). For example, one student who wished to pursue a career in veterinary medicine was able to spend school hours volunteering at a local vet clinic, learn the required preparation to pursue veterinary medicine, and consult with the Veterinary Studies department at Cornell University (Sudbury Valley School, 2020). Students at the St. Louis Sudbury School (n.d.) regularly participate in a local farmer's market where they are able to share the Sudbury philosophy on education and sell items they have made in order to raise funds for the school.

Students who graduate from Sudbury schools go on to college or begin careers and have successful lives, as determined by respondent self-assessment (D. Greenberg et al., 2005). Two founders of Sudbury Valley School conducted surveys to track students after they left the school. The information from the surveys was compiled and analyzed, and presented as a book, *The Pursuit of Happiness: The Lives of Sudbury Valley Alumni* (D. Greenberg et al., 2005). In the book, several students are featured, and the students share their experiences, both as a student at Sudbury Valley and after. Many of the students became entrepreneurs, artists, executives, and professors (D. Greenberg et al., 2005). Students in Sudbury schools learn responsibility, resourcefulness, and confidence, which allows them to be successful in a myriad of situations (Tunstall, 2014).

Not only do Sudbury school graduates go on to have established careers, but they also report high rates of success, as measured by individual self-actualization and happiness (P. Gray et al., 2021). One graduate stated, "we are special because being an SVS student means we have faced, risen to, and met many challenges" (Tunstall, 2014, para. 3). Further, students reported that the judicial process in their Sudbury school helped them develop a moral compass, making them better people and that the community experience in a Sudbury school has allowed them to connect with others throughout their lives. Most graduates surveyed stated that attending the school provided them with increased self-knowledge and capacity for self-direction and independence (P. Gray et al., 2021).

Challenges. New Sudbury schools are opening across the United States each year. While awareness and popularity of this unconventional philosophy on teaching and learning is increasing, Sudbury schools do face challenges. Though there are not many challenges published in academic literature, one challenge faced is that Sudbury schools are private schools, requiring tuition for attendance (Holmes, 2022). This means that Sudbury schools are not accessible to all families, although many do offer scholarships. Another challenge is recruiting and maintaining enrollment, which is what keeps the school financial stable in many cases.

With exception of JCOS, the whole-school approaches to free-choice learning presented here are typically private schools, which require tuition for attendance, making them less accessible to all families and students. However, it is possible to integrate free-choice learning into a more traditional, structured school setting. Three approaches to doing this are presented next.

Classroom-Based Approaches

Some educators have been incorporating free-choice learning into their classrooms for many years, in a variety of content areas and grade levels. Following are examples of free-choice learning that can be implemented within a regular school day in more traditional schools and classrooms. They all follow the same general structure, but there are some differences in the level to which students have choice and autonomy within each approach. The general structure of classroom-based free-choice learning includes the selection of a topic, the generation of questions which will guide the research or project, student engagement in investigation or problem solving, and the sharing of learning with others. However, there are some differences in the level to which students have choice and autonomy within each classroom-based approach. In following this structure, each of these approaches exemplifies free-choice learning because there is a level of student choice and autonomy within the project.

A selection of classroom-based approaches is presented below, including PBL, Genius Hour, and makerspaces, with a description of the creation of the approach and its unique characteristics. While there are several ways to incorporate free-choice learning into the classroom, the approaches presented here were selected because they are some of the most common approaches, based on the literature I was able to find. As with the whole-school approaches, the roles of students, teachers, and school leaders are also highlighted. Finally, because these classroom-based approaches are similar, a culminating section on the benefits and challenges of classroom-based free-choice learning is presented.

Figure 4 illustrates the degree to which students have autonomy within each classroombased approach. On the left side of the continuum, learning is more teacher-directed. Moving toward the right side of the continuum, the learning becomes less teacher-directed, and more student-led. On the end of the continuum, students have full autonomy over their learning, with adult support, but not adult direction.

Figure 4

Degree of Autonomy: Classroom-Based Approaches



PBL. With roots in experiential learning in medicine and engineering, project-based learning exemplifies the notion of learning by doing (Boss, 2011). PBL is a teaching method in which students are provided with an authentic, complex real-world problem, question, or challenge, for which there is not one correct solution. Students then engage in extended inquiry to develop a plan to address the problem, question, or challenge (Markham et al., 2003; PBL Works, 2022c; Wurdinger et al., 2007). Students have the autonomy to determine how they will approach and solve the problem or respond to the question. PBL is based on three basic principles: learning is done in context, students are actively involved in the learning process, and social interactions and sharing of understanding helps students achieve their learning goals (Kokotaski et al., 2016). PBL is the classroom-based approach presented here that offers the least amount of student autonomy, as teachers typically select the problem to be investigated. Although PBL is not fully free choice, students have freedom within the parameters of the problem, similar to the "freedom within limits" that students experience in Montessori schools.

For example, a teacher might present students with the following real-world problem, which is a sample project from PBL Works

(https://my.pblworks.org/resource/document/mylar mayhem mystery management; 2022b):

Local issue: In the past 2 years over 1,000 Mylar balloons have been collected, partially or completely deflated, mostly in the backcountry of Joshua Tree National Park (JTNP). One estimation by park officials indicates that there may be over 71,000 littered balloons within the 3,247 square kilometer Park boundaries. Why? Students will work together in "Resource Management Teams" to investigate the causes of this Mylar Mayhem Mystery. Teams will develop an action plan to address this environmental challenge and answer the Driving Question. Individually, students will write memos to the JTNP Superintendent briefing him/her on the scientific and geological causes of the problem, as well as their recommendations for action.

If this example problem were actually presented in the classroom, students would work in small teams to develop a solution. The team would decide how to approach the problem, what information they would need to develop a solution, and the research they would need to do in order to gather that information (PBL Works, 2022c).

Project-based learning is one of the few forms of free-choice learning presented here that encourages working collaboratively rather than independently. Once a group has gathered their information and have determined their solution, they will need to decide how they will present that solution to their audience. One group may choose to do a mock press conference in which they present the facts and urge the public to make a change; another group may choose to develop a biodegradable shiny balloon, for which they might create a prototype for their presentation. Although presented with the same problem, each group will likely have a unique solution to the problem, and uniquely different presentations.

Characteristics. Characteristics of PBL include authentic, complex problems, questions, or challenges. They also include student autonomy, constructive investigations, goal setting,

collaboration, communication, and reflection (Kokotsaki et al., 2016; Markham et al., 2003; PBL Works, 2022c). Not every question or problem a teacher presents to students is conducive to project-based learning. The Buck Institute for Education, a leader in PBL resources and training, identifies seven elements for a "Gold Standard PBL." Each project must include a challenging problem or question, sustained inquiry, authenticity, student voice and choice, reflection, critique and revision, and a public product (PBL Works, 2019).

PBL projects are often multi-disciplinary, allowing students to engage with more than one content area at a time. For example, in the mylar balloon project, students might apply knowledge from environmental science, incorporate all elements of literacy: reading, research, writing, listening, and speaking skills, as well as statistical and math skills which may be used in determining how the number of balloons in Joshua Tree National Park compares to the number of balloons littered in other places and other numerical factors. As an approach to free-choice learning, PBL is typically more teacher-directed, which is why I have placed it on the "less student agency" end of the continuum. However, it is important to note that there is a continuum of student agency within PBL as well. PBL can range from being completely teacher-directed to being completely student-directed (Larmer et al., 2015). The teacher can determine the degree of autonomy they offer students based on their own comfort level with releasing control of the project and the perceived readiness level of the students. For example, when a teacher is first implementing PBL, they might direct all parts of the project, including creating the driving question and guiding the inquiry. However, as students develop more independence, the teacher might initiate the driving question, but students will lead their own inquiry. Eventually, the students can develop the driving questions and conduct their own inquiries.

Roles. The teacher's role during PBL is crucial. It is the teacher who presents the students with a complex question or real-world problem. There are many sample PBL projects that can be found in resource banks on the internet, such as PBL Works (https://www.pblworks.org), High Tech High (https://www.hightechhigh.org/student-work/projects/), and Houghton Mifflin's Project Based Learning Space (https://college.cengage.com/education/pbl/index.html). However, to make the learning relevant to a particular group of students or their community, the teacher often revises existing projects, or creates their own. The classroom teacher is also typically responsible for securing the authentic audience to whom the students will present their problem solutions (PBL Works, 2022c). For example, the teacher may invite a park ranger into the classroom to serve as the audience for the aforementioned Mylar balloon problem.

An additional responsibility for teachers during PBL is to scaffold student learning (Kokotsaki et al., 2016; PBL Works, 2019). To scaffold learning for students, teachers will need to provide instruction on the relevant contextual elements to the project and teach students the process for completing the project. For example, to complete the aforementioned Mylar balloon project, students would need some contextual knowledge about Mylar balloons, and the geography of Joshua Tree National Park.

In addition to the elements for a "Gold Standard PBL," the Buck Institute has also generated seven teaching practices for project-based learning (PBL Works, 2019). These include: design and plan, align to standards, build the culture, manage activities, scaffold student learning, assess student learning, and engage and coach. As previously mentioned, there are many projects available for teachers to use in their classrooms, but to allow for student success, teachers may need to design their own projects or modify ones that already exist. The teacher also needs to plan when work on the project will take place, how long students will have to work on the

project, student groupings, and the authentic audience. Part of the planning process also includes aligning the project to academic standards, or learning goals set by the state or school district. Teachers must also establish the classroom culture that allows for PBL to be successful, a culture in which students collaborate, take risks, and one in which there is not a single correct response to questions and challenges. Once students have been presented with the problem and begin to engage in the work of developing a solution, teachers are responsible for managing the classroom, scaffolding learning, or providing small group lessons if students need them. Throughout this process, teachers also monitor students for understanding and misconceptions, and assess students' progress. Finally, teachers engage and coach students throughout this process, assisting when students are experiencing challenges (David, 2008).

School leaders' primary role for classrooms engaging in PBL is to support the learning. Leaders can do this by assisting the teacher in locating an authentic audience for students' presentations of learning (David, 2008). In some instances, depending on the problem, the principal might serve as an audience member. The principal can also support PBL by providing resources that students might need in order to solve the problem. Resources may include technology, books and other print materials, or building materials for students to use if they choose to create prototypes of products. It is important that school leaders support the teachers in their early attempts to implement PBL by encouraging the teachers, visiting the classroom during PBL, helping to secure resources and audience members. When teachers feel supported by administrators in this endeavor, they will feel empowered to continue implementing these types of learning experiences for students. Although PBL offers students the opportunity to make many choices in their learning, and can connect their problem-solving to personal interests, there is a classroom-based approach that offers students more freedom of choice in their learning.

Genius Hour. Genius Hour is probably the most commonly implemented and most widely known form of free-choice learning in traditional classrooms (Krebs & Zvi, 2020). Genius Hour is an inquiry-based, student-driven learning opportunity modeled after Google's 20% time. Employees at Google are given 20% of their work time to devote to a personal interest project; some projects are business related, but others are not. Educators took this model and adapted it to the classroom, giving students approximately 20% of their in-school time to explore a topic of personal interest, which equates to approximately 1 hour per day. However, because classroom schedules are often very busy, it is more common for students to have 1 hour per week to engage in Genius Hour (Juliani, 2014). Some other names for this type of activity are Passion Projects, Passion Time, 20% Time, Google Time, or Passion Pursuit (Juliani, 2014).

Characteristics. During Genius Hour projects, students generate a driving question about a topic of interest, conduct research and learning, develop a product or presentation, and share their learning with others (Krebs & Zvi, 2020). Students typically conduct Genius Hour projects independently but could also work in small groups. While students are working independently, teachers hold individual conferences with students to help them focus, problem-solve, and reflect on their work. Genius Hour exemplifies free-choice learning because students are at liberty to choose their topic, choose how they will engage in the learning about that topic, and how they will share their learning with others.

Following is an example of what a Genius Hour project could look like, based on my own experiences with Genius Hour in classrooms: After seeing several wind turbines for the first time while driving through Kansas on a family vacation, Beau, a fifth grader from Tennessee (where there are virtually no wind turbines) became very interested in how the wind turbines work to conduct energy. Not only did he want to learn how they work, but Beau was also interested in exploring the possibility of bringing wind energy to his hometown.

After deciding on the topic of wind turbines, Beau generated the following questions to drive his project: (1) How do wind turbines conduct energy? (2) How could we use wind turbines in Hometown? After generating his driving questions, he then decided how he wanted to conduct his learning. In this scenario, Beau decided first to conduct research on the internet to learn how wind turbines work, how much energy they produce, where they are located, and why he has never seen any in Tennessee. Once he gathered all of this information, he decided to investigate whether or not wind turbines would work in his hometown. Is there enough open space to build them, is there enough wind, has the electric company ever previously considered wind energy? After this round of investigation, Beau decided that wind energy would work in his town, and he decided that he wanted to create a model to share with the energy company, which he has decided would be his authentic audience. Beau constructed a working wind turbine using a LEGO robotics kit. He situated his model on a map of Tennessee, which helped to demonstrate where the wind would come from and where the electricity would go as he presented to the representative from the electric company.

Genius Hour offers students more autonomy than a project-based learning activity. Through this project, Beau was given full autonomy to choose his own topic, generate his own driving questions, conduct his own learning, choose his audience, and create a presentation of his learning for his specific audience.

Roles. As can be seen from the preceding example, during Genius Hour, students are in control of the decisions around their project (Juliani, 2014). Students are also responsible for

setting goals, managing their time, and keeping track of their progress. Students might also seek assistance or input from others within the school, or even individuals in the community.

During Genius Hour, the role of the teacher shifts from "sage on the stage" to "guide on the side" (Flood, n.d.). Teachers are not responsible for imparting knowledge on children, but they are responsible for introducing this type of learning to students and preparing them to engage in their project. They function as facilitators, asking the questions that will help students make progress with their projects (Krebs & Zvi, 2020). Many teachers create planning guides that help students brainstorm a topic, develop their questions, document their learning, and plan their project/presentation. It is important that teachers know their students and know the level of support they may need, which is often dependent upon the age of the student, and whether or not this is the first time a student has engaged in such a project.

As in many things that happen within a school, the school leader plays an important role in the success of learning opportunities like Genius Hour. Similar to the role of the school leader during PBL, the school leader first and foremost has to support the implementation of Genius Hour (Krebs & Zvi, 2020). The leader may show support by being a participant, spending time in classrooms during Genius Hour, helping to locate resources and supplies, connecting students with community members, and attending presentations of learning.

Genius Hour offers students a high degree of autonomy in their learning. However, it is confined to a particular time in a teacher-created schedule and may also be confined by the resources available in the classroom or in a student's home. Instead, many schools are implementing makerspaces, which may offer students places to access resources that may not be available in their classrooms. Additionally, makerspaces are often available for students to access throughout the day, and use is not predicated upon a classroom schedule (Davee et al., 2015).

Makerspace. The concept of a makerspace began in the 1980s with community spaces for do-it-yourself crafting and computer clubs (Davies, 2017). However, the launch of *Make* magazine in 2005 and the inception of Maker Faires, in which people of all ages, skills, and interests come to display their creations, encouraged many to join what is known as the "maker movement," in which people explore new tools and design and create projects (D. Dougherty, 2013; T. Jones, 2020; Stornaiuolo & Nichols, 2020). Finding value in the maker movement, President Obama implemented the Nation of Makers initiative in 2014, funding makerspaces in under-resourced schools and communities, hosting a White House Maker Faire, and inaugurated a National Week of Making (Stornaiuolo & Nichols, 2020). Makerspaces are places where students can explore their interests, learn to use tools and materials, and develop creative projects (Fleming, 2015) and can now be found in museums, libraries, community centers, and schools across the United States and internationally (Davies, 2017).

Characteristics. Makerspaces are open, accessible, and filled with tools and media resources that can allow students to engage in self-directed learning (T. Jones, 2020). Makerspaces can be dedicated, distributed, or mobile (Davee et al., 2015). A dedicated makerspace is housed in one confined location, such as a specific room in a library. Distributed makerspaces are made up of several areas within a building to be used for this purpose. For example, some schools may have one space for robotics, another space for sewing, and yet another space for film production. Distributed makerspaces are more commonly located in schools and museums which may not have one room to dedicate to the makerspace. Mobile makerspaces feature boxes or carts filled with supplies that can travel to various room, such as different classrooms within a school. They are often smaller, with fewer materials and resources, but still allow students the opportunity to create.

The concept of a makerspace is simple: it is a place where people can design, explore, and create (Davee et al., 2015). A typical makerspace contains a wide array of materials for construction, such as carboard, clay, tools, and wood. It may also have various technological items, such as laptops, tablets, cameras, and recording tools. Makerspaces are not often academically content-related but might function as a place for students to create prototypes or models for school projects (Hlubinka et al., 2013). For example, as Beau, in the previous free-choice learning example, was building his wind turbine model for his Genius Hour project, he might have gone to his school's makerspace, which is where all the LEGO, robotic, and other materials he needed were located, rather than them all being in the classroom.

While the makerspace can be used to work on projects relating to a school task or assignment, in other instances, students may have liberty to explore the makerspace and create as they are inspired (The Institute for Arts Integration and STEAM, n.d.-a). Some students might spend recess or other free time tinkering or creating in the makerspace. In some schools, the makerspace is open after school hours, available to students for the use of materials the students may not have at home, such as sewing machines, audio and video recording tools, or robotics.

Roles. Student responsibilities in a makerspace are to be safe, engage in their own learning and exploration, define their projects and manage their time, provide feedback to others when asked, work with others, and engage as part of the community (Hlubinka et al., 2013). There is typically an array of tools in a makerspace, which could be dangerous if not handled properly. Students determine their own purpose in the makerspace: they might be there to create something for a class project or to engage in a personal creative endeavor, and students set their own goals while in the makerspace, around the use of their time and their creations. Finally, makerspaces form a community of makers. In this space, individuals are responsible for

themselves, but are also supportive of others. As a member of the maker community, students may seek advice from others, but might also be asked for suggestions or assistance.

Teachers, or other adults who may provide makerspace opportunities to students, such as the library media specialist in a school, have unique roles with the makerspace. They function as project managers, principal investigators, and research librarians (Hlubinka et al., 2013). They are there to provide direction or guidance to students when it is requested. Their job is to recruit help to support students in the makerspace, to give advice and feedback, to connect students with resources they may need (We Are Teachers, 2018). Teachers are also responsible for managing schedules for when students go to the makerspace, whether it is within the classroom or outside of it. Finally, teachers may also need to manage budgets for supplies and materials for the makerspace. As mentioned, some makerspaces are classroom-based, and the teacher is therefore responsible for securing the materials for it. They may gather donations of some supplies, like cardboard and yarn, but may need to locate funding for more expensive items, such as a tablet.

School leaders also have an important role in the success of makerspaces. First, they need to have a maker mindset, in which they support the efforts of the makerspace(s) within their school (Hlubinka et al., 2013). They might offer to help mentor students and manage the space. They also can assist in connecting those within the school with those in the community who might be able to offer materials or time to support the makerspace. The school leader might also have a role in creating a budget and allocating funds and resources to the makerspace. Finally, an important role of the school leader is to be an active participant in the makerspace.

The aforementioned classroom-based approaches to free-choice learning can provide many benefits to the students who have the opportunity to engage with them, which are

described next. While there are many benefits associated with this type of learning for students, there are also challenges present for the educators attempting to implement this type of learning.

Benefits of Classroom-Based Free-Choice Learning

There are many benefits associated with classroom-based approaches to free-choice learning. When given the opportunity to choose what they want to learn about, student curiosity increases, which can allow them to develop a passion for learning (Dunst et al., 2011; Hlubinka et al., 2013; Purcell et al., 2020; Renninger, 2000; Segar, 2021). Increased curiosity and passion for learning also increases student engagement in their learning (Blue Brain Teacher, n.d.; PBL Works, 2022a; Reeve, 2006).

As they become more engaged in their learning, students' intrinsic motivation may also increase (Anderman et al., 2024; Barak & Asad, 2012; Lou et al., 2011). When students are intrinsically motivated to learn, they take ownership of their learning and want success for themselves rather than only working for a grade (Hlubinka et al., 2013; Juliani, 2014; Krebs & Zvi, 2020). When taking ownership of their learning, students might be more inclined to engage in goal setting and monitoring and might employ self-management skills in order to hold themselves accountable for achieving their goals (Blue Brain Teacher, n.d.; Purcell et al., 2020; Saavedra & Rapaport, 2024). By guiding their own learning, students also learn how to think (Purcell et al., 2020); can take risks and learn from failure (Blue Brain Teacher, n.d.); and might develop persistence and grit (Reeve, 2006). Grit describes the perseverance needed to reach long-term goals, even when things do not go as planned (Duckworth, 2022).

Free-choice learning opportunities can also allow students to engage in collaborative learning (Kokotsaki et al., 2016; Krebs & Zvi, 2020). Working collaboratively allows students to form social connections with others and build their abilities to work with a team (Davee et al.,

2015; Hlubinka et al., 2013). Additionally, students who learn via a collaborative group, rather than via direct instruction from the teacher, are able to gain greater decision-making ability and may also experience greater transfer of learning (Zhang et al., 2016). Many free-choice learning opportunities, such as creating in a makerspace, allow students to engage in collaborative, creative, hands-on learning (Stewart et al., 2023). These experiences align with instructional strategies that have been found to be effective for many content areas. Additionally, engaging in choice-based learning can emphasize the iterative processes of creating, a concept that can also be applied to other academic experiences, such as engaging in the writing process, in which students are expected to create multiple drafts as they revise their writing. Finally, students who participate in free-choice learning may also be able to develop skills that many of today's employers are seeking. In the 21st century, employers are seeking individuals that have skills in creativity and innovation. These are the skills that many traditional classrooms are failing to help students develop (Wagner, 2012), but that free-choice learning can inspire (Saavedra & Rapaport, 2024).

Alignment With Student Success Goals

The 21st century skills (also known as non-cognitive skills and soft skills), such as creativity, problem solving skills, ability to collaborate with others, strong communication skills, and perseverance are the skills students will need for college and career (Wagner, 2012). These skills, which traverse content areas and career fields, are similar to goals that many state departments of education and school districts have put in place for their graduates. For example, the state of Virginia has developed the Profile of a Virginia Graduate, which states that students will gain content knowledge, workplace skills, community and civic responsibility, and career planning throughout their K-12 experiences (Virginia Department of Education, n.d.).

To meet these goals, schools are expected to help students develop the Five C's: critical thinking, creative thinking, communication, collaboration, and citizenship (Virginia Department of Education, n.d.). These goals have been developed because they are not discipline-specific and will help students be successful regardless of the path they choose after high school: college, trade school, workforce, or the military (Wagner, 2012). Because of our rapidly changing society, it is difficult to predict the exact skills students will need in order to be successful in an unknown future, but many educational researchers and innovators believe that skills such as the Five C's will help students adapt to any situation, thus they are the skills students should be given the opportunity to develop (Wagner, 2012).

As previously indicated, engaging in free-choice learning provides students with an opportunity to develop the 21st century skills that employers are currently seeking, and that can help students to be successful, regardless of which career path they choose (Wagner, 2012). Thus, it seems logical that educators would be inclined to implement free-choice learning in their schools and classrooms and help students develop these skills. However, with increased accountability and pressures on schools to demonstrate high student achievement, as measured by standardized tests, it can be challenging to justify the addition of activities that are not directly tied to state standards, or that veer from the written curriculum (Wagner, 2012). This is particularly the case in under-resourced schools.

Challenges of Implementing Free-Choice Learning in Classrooms

While there are many benefits associated with free-choice learning, there are also challenges with this non-traditional form of learning, although the challenges are not well documented in empirical studies or practitioner reports. Teachers may find it difficult to get permission from their administrators to implement free-choice learning because it takes a

significant amount of instructional time and may appear to not be aligned with state and district learning standards (D. J. Quinn, 2021). Teachers may need to find ways to justify offering this opportunity to their students (Krebs & Zvi, 2020). Another barrier to implementation is required attention to high-stakes testing. With an increased focus on standardized testing, some school districts have implemented scripted curriculums to ensure that all of the necessary learning standards are being addressed. These detailed, scripted programs may leave little time for innovative classroom practices (T. Jones, 2020; D. J. Quinn, 2021).

Lack of time, minimal resources, and the difficulty some students have approaching freechoice learning can also be challenges (D. J. Quinn, 2021). Many states have strict requirements about the amount of instructional time required for each content area. These required minutes typically account for all of the time that children are in school, leaving little time for additional activities (e.g. Missouri Department of Elementary and Secondary Education, 2023). Further, while free-choice learning does not require technological resources, students do typically need a means for conducting research. This may require books or a technology device and access to the internet. Some schools might not have libraries with extensive selections of texts, devices, such as tablets or computers, or reliable internet connections. Finally, many students have not been given the opportunity to make choices about their learning in the past, and therefore may have difficulty choosing a topic to investigate or narrowing their focus enough to make a project manageable (Wettrick, 2014).

Once teachers implement free-choice learning, they might face other challenges, such as feeling incapable of supporting many different student topic inquiries simultaneously (Harlow & Hansen, 2015). Additionally, free-choice learning can feel chaotic, as it is less structured than the teaching and learning that teachers and students may be accustomed to (Krebs & Zvi, 2020).

Finally, if a school does have a selection of technology and other resources available, the management of those resources can present a challenge for some schools and teachers (Hira et al., 2014). Teachers may be responsible for keeping supplies in stock, there may not be technology specialists available to help troubleshoot when difficulties arise with computers, and teachers may have to share resources with others throughout the building, making it necessary to manage a schedule of resource (including technology) use.

Although there are challenges to implementing free-choice learning in the classroom, many educators recognize the benefits of providing this type of learning opportunity for students, and thus, it is happening in many classrooms throughout the United States in a variety of ways. However, it is not happening in all classrooms. Some students, primarily those in underresourced schools, are not being afforded the opportunities to engage in these innovative learning practices (Gorski, 2017; Milner, 2012).

Learning Experiences in Under-Resourced Schools

Decades of research indicate that all learning opportunities are not offered equally. Students attending schools in under-resourced communities often have much different learning experiences than those attending schools in more affluent communities (McKinney et al., 2009; Porter, 2015; Semeuls, 2016). Under-resourced schools in the United States are often identified as Title I—schools in which a high percentage of students qualify for free or reduced-price lunch, which is an indicator of student poverty (U.S. Department of Education, 2018). The formula to determine Title I status is complex, and includes many factors, but most schools qualifying for Title I have more than 60% of students qualifying for free or reduced-price lunch based on household income. There is concern that students in Title I schools in the United States are not being afforded the opportunities to develop the innovative skills previously noted, such as critical thinking, collaboration, creativity, and perseverance (McKinney et al., 2009; Porter, 2015; Semeuls, 2016). Research spanning decades has identified inequitable learning experiences for students living in poverty and their more affluent peers. These issues persist today, and the differences that children experience in classrooms across the country highlight these inequities (Crocco & Costigan, 2007; Darling-Hammond, 2001). Two educational gaps have been identified between students in poverty and their wealthier peers: the achievement gap and the opportunity gap, which are described in the following sections.

Achievement Gap

It is suspected that differences in teaching and schooling have contributed to an achievement gap; notable differences in the achievement of students living in poverty and/or students of color and their more affluent, often White peers (Milner, 2012). Data from the Educational Opportunity Project at Stanford University (Stanford Education Data Archive, 2020a), collected from third- through eighth-grade students from the 2008-2009 school year to the 2017-2018 school year, indicate a correlation between family income and academic achievement, as seen in Figure 5. This model demonstrates that higher household income typically aligns with higher academic achievement, and lower household income aligns with lower achievement.

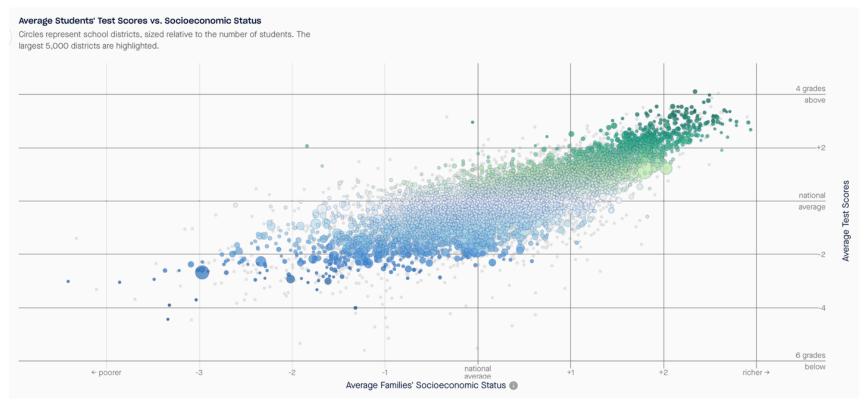
Additionally, Figure 6 shows that in nearly all of the 5000 largest school districts in the United States, there is a gap in achievement scores between lower and higher income students, and the gap favors the higher income students in almost all cases (Stanford Education Data Archive, 2020b). Each circle on the chart below the dotted line represents a school district in

which there is a gap in achievement that favors the higher income students. Further, according to the 2019 National Assessment of Educational Progress (NAEP) assessment, more than 75% of lower income fourth- and eighth-grade students in the United States were not proficient in reading or math, while less than 50% of higher income students were not proficient (Children's Defense Fund, 2022).

These data and statistics present the correlation between household income and students' academic achievement. Additional research has determined "that children's social class is one of the most significant predictors—if not the single most significant predictor—of their educational success" (Economic Policy Institute, 2017, para. 1).

Figure 5

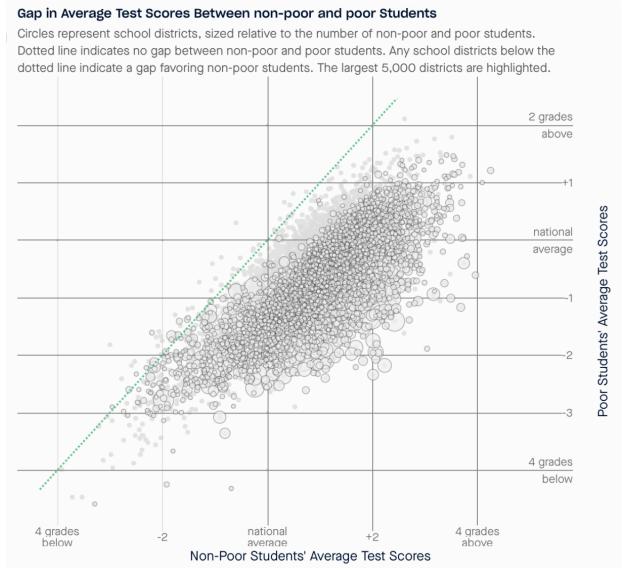
Average Academic Achievement and Household Income



Note. The green circles represent higher than average household income and academic achievement, the blue circles represent lower than average household income and academic achievement. From "Average Students' Test Scores vs. Socioeconomic Status," by Stanford Education Data Archive, 2020a, *The Educational Opportunity Project at Stanford University,* (https://edopportunity.org/explorer/#/chart/none/districts/avg/ses/all/5.98/43.39/-114.32/). Copyright 2020 by Stanford University.

Figure 6

Gap in Academic Achievement Based on Poverty



Note. From "Gap in Average Test Scores Between Non-Poor and Poor Students," by Stanford Education Data Archive, 2020b, *The Educational Opportunity Project at Stanford University*, (<u>https://edopportunity.org/explorer/#/chart/none/districts/avg/seg/pn/12/42.4/-83.22/</u>). Copyright 2020 by Stanford University.

Opportunity Gap

Over time, the achievement gap has been seen for what it really is: an opportunity gap (Gorski, 2017; Milner, 2012). An opportunity gap occurs when educational resources are not equitable, or "the troubling ways youth experiencing poverty are denied the educational opportunities more likely granted to more affluent youth" (Gorski, 2017, p. 101). Students attending affluent schools have access to a myriad of resources, experiences, and opportunities that are not afforded to children in under-resourced schools and communities (Barton, 2003; The Commonwealth Institute, 2021). For example, under-resourced communities may not have museums, summer camps, or other extracurricular activities for children.

These inequities are also present within schools. Under-resourced schools likely have fewer Advanced Placement and dual credit enrollment courses offered, less diverse course offerings, less robust gifted programs, and less-qualified teachers than in more affluent schools (Barton, 2003; Darling-Hammond, 2001). Under-resourced schools also have larger class sizes, more rote pedagogies, and less access to the arts and other extra-curricular programs. Additionally, students attending under-resourced schools are likely being taught with out-of-date textbooks and have access to fewer books and resources in their school libraries (Gorski, 2017). Ultimately, "under-resourced schools are one of the leading factors in the opportunity gap between students who live in communities with money and resources and those that do not" (Reinking & Bouley, 2021, p. 74). Not only are there differences in the courses and programs offered at the district and school levels, but the learning opportunities offered within classrooms are different for students in under-resourced schools as well.

Inequitable Learning Experiences

Researchers have been studying the differences in teaching and learning between underresourced and affluent schools for at least half a century. This research indicates that students in under-resourced schools have fewer resources, such as counselors, technology, and up-to-date instructional materials and textbooks (Darling-Hammond, 2001; Semuels, 2016). Students in these schools also have fewer opportunities to go on field trips, engage in co-curricular courses such as art, and have minimal access to gifted and talented programs. The teachers in underresourced schools often have less training and fewer years of experience than teachers in affluent schools (Crocco & Costigan, 2007; Darling-Hammond, 2001; Porter, 2015). Teachers with less training and less experience are not as adept at recognizing students' needs or revising instruction to meet those needs.

In an attempt to increase scores on yearly standardized assessments, many underresourced schools have narrowed their curricula by reducing classroom time spent on non-tested content (Crocco & Costigan, 2007; Dillon, 2006; McKinney et al., 2009; Sutton & Krueger, 2002). There is a heavy focus on procedural knowledge in the content that is taught, rather than allowing students the opportunity to build conceptual knowledge via engagement in problemsolving experiences. In a classroom in an under-resourced school, it is less likely that an observer would witness cooperative group activities but would more likely see teachers giving lectures and students engaging in individual seatwork (Crocco & Costigan, 2007; McKinney et al., 2009). More on classroom instructional practices and teacher expectations, and their impacts on student achievement will be addressed in the following sections.

Pedagogy of Poverty. In 1991, Martin Haberman coined the phrase "pedagogy of poverty," which describes the types of teaching activities commonly found in under-resourced

urban schools. These activities include giving information and asking questions, monitoring seatwork, giving and reviewing tests, punishing noncompliance, and giving grades. Haberman (1991) stated that this pedagogy of poverty appeals to those who have low expectations of children of children in poverty because it allows for control of the classroom environment and more straightforward tasks which appear to be accessible and not too challenging for students. In some instances, teachers do not believe that their students can manage less structured independent tasks, and in other cases teachers give students in poverty less challenging work because they believe the students are overburdened outside of school that they do not want to put too much pressure on them at school (Gorski, 2017). Thus, children in under-resourced schools can often be seen sitting in desks, which are placed in neat rows in the classroom, working on low-rigor tasks, such as worksheets and what are often referred to as "skill and drill" tasks, which ask students to repeatedly practice low-level skills, such as math facts or grammar correction (E. Dougherty & Barth, 1997).

Currently, many under-resourced schools are labeled as underperforming because student performance on yearly state assessments is below what is expected by state and federal mandates (The Commonwealth Institute, 2021) The educational practices common to under-resourced schools, such as giving information and repetitive skill and drill seatwork, are often seen as the route to higher student achievement because they allow students to practice procedural content as it may appear on the state assessment, allowing students to increase their number of correct responses (Harvard Political Review, 2015; Lazarín, 2014).

Curriculum Narrowing and Test Preparation. Because these schools often have the goal of increasing scores on standardized assessments, the bulk of instructional time is spent on preparing students to take assessments (Crocco & Costigan, 2007). This narrowing of the

curriculum provides students with the low-level information they might need to answer multiple choice questions on a test but might not provide them with transferrable knowledge and skills (Shepard, 2002). Under-resourced schools also often experience high drop-out rates, and most students have stated that they were bored in school and were not able to see how what they were learning would be useful to them in the future (Nichols & Berliner, 2008). Rather than stay in school and have this experience year after year, students may choose to drop out of school and enter into the workforce. Some pursue their GED and then enroll in college coursework where they have more choice, and the courses they take are in alignment with their career aspirations (Nichols & Berliner, 2008). Thus, narrowing the curriculum and focusing on preparation for standardized testing has long-term impacts on students, particularly those attending under-resourced schools (Gorski, 2017). These inequitable learning experiences occur for different reasons, including the focus on test scores. However, another underlying cause of inequitable learning experiences is the deficit mindsets and low expectations that teachers in under-resourced schools may hold of their students.

Deficit Mindsets

Many teachers in under-resourced schools hold a deficit mindset about the children they teach. There is an assumption that children living in poverty are not capable of doing higher level thinking or deeper learning (Darling-Hammond, 2001; Diamond et al., 2004). This mindset is displayed in the types of learning experiences that are provided for students in these classrooms. In an article exploring inequities in schools, for example, deeper learning was identified as the "province of the advantaged," indicating that typically, students in more affluent schools are given problem-solving education while students in under-resourced schools are given rule-following, lower-level tasks (Mehta, 2014, para. 3). Other scholars support Mehta's statements.

For example, Geneva Gay (2018) indicates that teachers with a deficit mindset often provide content that is irrelevant to students' lives, experiences, and needs, and often lacks the opportunity for critical thinking or creativity. Teachers with a deficit mindset do not design learning opportunities that are cognitively challenging, and often teach low-level skills or knowledge, which do not allow students to score well on achievement tests (Ford, 2010; Milner, 2012). These low scores on achievement tests further exacerbate the deficit mindset of the teacher.

This deficit mindset that some teachers have can be projected onto students. This occurs when teachers lower their expectations for certain students, who then begin to believe that they are academically behind their peers and that they are lacking in some skills that other students have (Rist, 2000). Students internalize these beliefs and actually begin to achieve at lower levels than they may have previously because they believe they are not capable of achieving at high levels. Ultimately, this is known as a *self-fulfilling prophecy* and has been identified in classrooms since the 1940s.

Low Expectations. Many years of research indicate that the expectations held by a classroom teacher can affect student achievement, both positively and negatively. Unfortunately, much of this research indicates that teachers hold lower expectations for children living in poverty (Lee & Smith, 1996; Rubie-Davies et al., 2006; Weinstein, 2002). Educators might develop these low expectations based on the previously low academic achievement for students in poverty, assuming that disadvantaged students are unable to learn, or on stereotypes that students in poverty are not as intelligent as their more affluent peers (Friedrich et al., 2015; Rist, 2000). This stereotype could lead teachers to believe that they need to "fix" poor children by working to "catch them up" (Zhao, 2016, p. 725), which also results in lower expectations of

academic achievement. The assumption that poor students are lacking necessary academic skills leads teachers to focus on remedial, basic academic skills, such as math facts and grammar practice, in an attempt to bring students to grade level performance expectations (Diamond et al., 2004).

This is another example of the aforementioned deficit mindset; when teachers believe that the children with whom they are working are not capable of higher levels of thinking and completing complex tasks, they hold low expectations for student achievement (Diamond et al., 2004; Milner, 2012). Therefore, the manners in which schools and teachers attempt to "catch students up" are unsuccessful, and can actually be damaging to students, because it does not allow students to develop the higher-level thinking skills necessary for school and career success (Zhao, 2016). This "deficit fixing" and "catching up" often includes remedial work in reading and math, subjecting students in poverty and students of color to the aforementioned pedagogy of poverty (Ladson-Billings, 2007) while their more affluent peers are being exposed to a more diverse curriculum (Zhao, 2016) that helps them to develop the 21st century skills that are valuable in today's workplace (Levin, 2012). Excessive participation in remedial instruction, at the expense of more active learning opportunities, also leads to a loss of interest in the subject, such as reading, and causes further disengagement (Alderman, 2008; Tienken & Zhao, 2013). This not only does not improve academic achievement, but leads to students dropping out of school, as previously discussed. These assumptions on behalf of the teachers that students are not able to learn causes teachers to alter the content they deliver to students, and the manner in which they deliver it (Poulou, 2014). Additionally, these lowered expectations about academic achievement can lead to a self-fulfilling prophecy, in which students begin to believe that they

are unable to learn and do, in fact, experience lower achievement than other students (Rosenthal & Jacobson, 1968).

Self-Fulfilling Prophecies. A study conducted in elementary school classrooms in 1968 tested the theory of self-fulfilling prophecies based on expectations of the teachers (Rosenthal & Jacobson, 1968). Teachers were given names of students and told that based on the scores of a nonverbal intelligence test, these students were academically "blooming" (p. 66). In reality, the students on their lists had been randomly selected, and had scored low, average, and high on the assessment. At the end of the school year, the children were given a post assessment, and the results indicated that the children the teachers believed would achieve more did actually score higher than the students the teachers thought were not "blooming." The results were specifically notable for children in first and second grade.

More recent studies have confirmed that teacher expectations have an impact on academic achievement, and the impact can begin as early as first grade (Johnston et al., 2019; Rubie-Davies et al., 2006). An ethnographic study conducted in several under-resourced urban elementary schools in the United States in the early 2000s, for example, indicated that many teachers held low expectations for their students in these schools, and that the beliefs the teachers held about their students impacted their instructional practices (Diamond et al., 2004). These teachers were reluctant to try innovative teaching practices, favored seat work and textbook reading over science experiments, and chose not to use manipulatives during math for fear that their students could "not handle" (p. 88) independent work and would use the manipulatives as toys.

Not being exposed to active, rigorous learning experiences can adversely impact student achievement (Diamond et al., 2004). A study from New Zealand, published in 2006, analyzed

teacher expectations of particular groups of ethnically diverse students and the students' reading performance over the course of a school year (Rubie-Davies, 2006). Teachers reported lower expectations for one particular group of students. The reading scores for this group of students were roughly equivalent to the scores of other groups of students at the beginning of the school year. However, by the end of the school year, the scores of the students in this group had fallen significantly below the scores of students in other groups. The researchers attribute this difference in scores partly to the expectations of the teachers.

As a teacher's expectations rise for higher-achieving students, student performance increases (Gay, 2018). Conversely, performance of low achievers becomes even worse as the teacher lowers their expectations. When teachers have higher expectations, they are more likely to offer students with challenging learning opportunities, increased independence and choice, and time to work with peers; practices which may lead to increased student achievement (Rubie-Davies, 2006). Teachers with low expectations of student achievement offer opposite types of experiences. They may slow the pace of the lesson, create a more structured environment where students have little independence, and offer few cognitively demanding tasks, all of which may "restrict student progress" (p. 440). The teachers that hold high expectations are likely to have a greater sense of responsibility for student learning. Teachers can have individual responsibility for the students in their own classrooms, but all of the teachers in a school can have collective responsibility for the learning of all children.

Collective Responsibility. Teacher responsibility refers to the extent to which the teachers in a school take personal responsibility for the success or failure of their instruction (Lee & Smith, 1996). When all of the educators in the school are considered as one entity, accepting responsibility for student success, a school norm of collective responsibility is established (Lee

& Loeb, 2000). In a school where teachers have collective responsibility, the teachers collaborate and support one another in a "collective commitment to caring about students" (Lee & Smith, 1996, p. 110).

Teachers seem to have a greater sense of responsibility for student learning with students who have greater resources available to them, or their more affluent students (Diamond et al., 2004). Teachers often attribute learning success to their teaching, but attribute student failure to students' lack of ability or poor home environments (Gay, 2018). It is often easier to attribute failure to things outside of one's control than to accept responsibility for it. In this regard, teachers do not feel as responsible for the learning of the population of students with fewer resources, and they can justify lower achievement by the children's home circumstances.

Previous research indicated that teachers tended to provide less support for students who did not have academically strong performance in the past (H. M. Cooper & Tom, 1984). Additionally, teachers praised the efforts of the academically high students, even if they got the wrong answer, but they did not do this with their lower-achieving students. Teachers spend less time helping struggling students, and in some instances ignore those students because they believe these students are "unteachable" and their time is better spent with other students (Gay, 2018). Students recognize this behavior from their teachers and begin to internalize the notion that they will not get help from their teachers when they need it and that their efforts are not acknowledged, so they stop attempting to do tasks they are not confident with (H. M. Cooper & Tom, 1984).

Collective responsibility increases individual teacher responsibility by use of positive peer pressure (DuFour & Mattos, 2013). When teachers collectively accept responsibility for student success, it is more likely that finding solutions to problems becomes a shared

responsibility, and teachers' attitudes about student capabilities become more positive (LoGerfo & Goddard, 2008).

Summary of Learning in Under-Resourced Schools

There is a notable achievement gap among groups of students in the United States, namely between children living in poverty and their more affluent peers (Milner, 2012). This gap in achievement may be better identified as an opportunity gap, which occurs when the resources and experiences afforded to different groups of children is not equal (Gorski, 2017; Milner, 2012). This opportunity gap is evident when the learning experiences that are offered to children in different socioeconomic settings are examined. These inequitable learning experiences are demonstrated by the pedagogy of poverty, curriculum narrowing, and a focus on test preparation. The inequitable learning experiences are often caused by the deficit mindsets and low expectations that teachers hold for their students from under-resourced backgrounds. Ultimately, these deficit mindsets and low expectations of students result in lower student achievement. Students are not provided with opportunities to develop critical thinking and problem-solving skills in the manner that their more affluent peers are. Many of the aforementioned issues, such as the belief that students in poverty have deficits that need to be fixed and the narrowing of curriculum to focus on testing skills rather than real-world application of skills, fail to recognize students as people with knowledge, experiences, and personal goals.

Challenging the Status Quo

When teachers neglect to acknowledge students' lives and experiences and assume that they have a deficit of knowledge, they have failed to support students' *funds of knowledge*. Funds of knowledge refer to the knowledge and skills that individuals have gathered from their households and communities that contribute to their success (Moll et al., 1992). This indicates that everyone, including children, has knowledge that they have developed through their experiences. For example, within their homes and communities, children may translate for their families (if they are not native speakers of English), babysit, care for pets, and fix broken appliances or toys. All of these experiences provide children with knowledge, which they bring with them to school (J. Greenberg & Moll, 1990; Moll et al., 1992). It is important that teachers acknowledge and build from this knowledge, rather than assuming that students from lowincome backgrounds have knowledge deficits (Diamond et al., 2004). Teachers who do acknowledge students' funds of knowledge may be seen as having a philosophy of abundance, which is the belief that all children are capable learners, regardless of racial, cultural, economic, or linguistic backgrounds and that children bring with them knowledge that teachers can build upon (Dudley-Marling, 2019). The philosophy of abundance also demands that all children have access to the engaging curriculums commonly found in affluent, high-achieving schools.

The dismissal of students' funds of knowledge and teachers' low expectations of students may lead to the pedagogy of poverty, but teachers who tailor the learning experiences in their classrooms to students and allow all children to experience deeper learning are following what Hodges (2001) referred to as the "pedagogy of plenty." Within a pedagogy of plenty, students are exposed to inquiry-based learning in which they are provided experiential opportunities through authentic tasks. This means that students can apply concepts learned in school to real-world scenarios. Additionally, in a pedagogy of plenty classroom, students are helped to make connections between what they learn in school and their experiences at home and in their community because they are allowed to have their home community and culture, language, and experiences incorporated into the school (Hodges, 2001). Finally, students are provided with a

literacy-rich environment where the importance of reading, writing, and speaking are emphasized with a variety of resources and modeling from the teacher (Hodges, 2001).

Hodges (2001) presented three strategies that may help educators achieve the abovementioned pedagogy of plenty. First, teachers should activate students' prior knowledge. As has been established, all students come to school with experiences and knowledge. It is the teacher's job to determine what that knowledge is, and how they might connect new learning to what the students already know. Next, teachers should use a constructivist approach to facilitate learning. A constructivist approach allows students to engage in an active process of learning through experiences (Black & Ammon, 1992; Hausfather, 2001; Shapira-Lishchinsky, 2015). This approach follows four basic principles: children construct their own meaning rather than accumulate facts, new learning builds on prior knowledge, learning is enhanced by social interactions, and learning develops via authentic tasks (Cooperstein & Kocevar-Weidinger, 2004; Good & Brophy, 1994; Shapira-Lishchinksy, 2015). Rather than being given a list of facts to memorize, students are able to engage with content in a variety of ways, which allows them to create meaning of the material that is relevant and personal to them. Research indicates that connecting new learning to previous knowledge is beneficial because it helps students to create a series of associations in the brain, leading to new learning begin committed to long term memory (Willingham, 2006). Social interactions allow students to get peer support while learning. Additionally, they may engage in the social aspects of learning and strengthen ideas and concepts through discussion with others. Finally, when students see the real-world application of skills and concepts, they are more likely to see the value of this knowledge and are more likely to learn it, rather than just memorize it (Ruddy, 2014). Finally, Hodges (2001) suggests that teachers should create classroom environments that are organized for instructional effectiveness.

By this, she means that classrooms design should be comfortable, both physically and psychologically, where students can take ownership of their learning. The management of the classroom should also be a cooperative one, in which students learn self-discipline and the teacher provides highly engaging learning opportunities.

The processes in which students engage during free-choice learning are in alignment with the classrooms that are exhibiting a pedagogy of plenty. During free-choice learning, students can feel safe enough to take risks and are able to take ownership of their own learning (Juliani, 2014). They can generate questions and engage in self-directed inquiry that allows them to make discoveries of their own.

Conclusion

The learning opportunities afforded to students in under-resourced schools are not the same as the opportunities that students in more affluent schools experience (Gorski, 2017; Milner, 2012). Educators in under-resourced schools can hold a deficit mindset, believing that the students in their classrooms are lacking the basic academic skills necessary for success. Thus, they more often spend instructional time providing students with low-level skill and drill practice, in an attempt to "catch them up" (Zhao, 2016). However, these instructional practices are often not in alignment with student interests, making it difficult for students to be engaged in their learning. Additionally, there is often little room in remedial instruction for critical thinking, collaboration, creativity or other non-cognitive, 21st century skills (Crocco & Costigan, 2007).

However, not all teachers in under-resourced schools hold a deficit mindset. Some teachers believe that their students are capable of high levels of thinking and learning and seek to implement learning experiences for their students that are interesting and engaging. As mentioned before, in the spring of 2021, I conducted a pilot study examining free-choice learning

in under-resourced elementary schools. Through this study, 10 classroom teachers shared with me the processes by which they implemented free-choice learning, the challenges they experienced with implementation, and the benefits they saw for their students. The design and results of the pilot study are presented in Chapter 3, along with the design of this study. This study was designed in a manner that allowed me to co-construct data with teachers from a variety of under-resourced school settings to gain a deeper understanding the nature of free-choice learning in these schools.

CHAPTER 3: STUDY DESIGN

In the spring of 2021, I conducted a phenomenological study seeking to explore the occurrence of free-choice learning in several under-resourced elementary schools. I interviewed 10 educators, all of whom implemented free-choice learning in a Title I elementary school. These participants spanned three states, eight school districts, and nine classrooms. The schools were located in rural, urban, and suburban settings. Information about each participant can be found in Table 2, including their pseudonym, the grade level(s) they were teaching at the time of implementation, and the type of community in which the school was located.

Table 2

Participant	Role	Setting	
Becca	Gifted Teacher	Urban	
Cheryl	4th Grade	Rural	
Jamie	Instructional Coach	Urban	
Josh	2nd Grade	Rural	
Kat	5th Grade	Urban	
Kristin	3rd Grade	Suburban	
Laura	5th Grade	Rural	
Madison	4th Grade	Suburban	
Sierra	Multi-level	Rural	
Wanda	Pre-Kindergarten	Urban	

Pilot Study Participants

Pilot Study Results

After identifying themes across participants from the generated data, I was able to cluster the themes, determine the relationships among themes, and arrive at the results of the pilot study. What follows is a summary of those results.

Decision to Implement

The first theme centered around the teacher's role in free-choice learning, specifically their decision to implement this type of learning in their classrooms. Participating teachers indicated that they chose to implement Genius Hour, or similar projects, because they wanted to do something different in their classrooms. Multiple teachers said they wanted to give students an opportunity to explore their interests, have choice in their learning, and include more creativity in their classrooms. Additionally, some teachers indicated that they wanted to get away from the heavy focus on yearly standardized testing in their schools. Fourth-grade teacher Cheryl said:

Part of the reason I do it...education has, in my opinion gotten very...we are driven towards certain measurable goals. And it takes a lot of creativity and the fun out of it. So just being able to do something with them, that gets them up, gets them moving, gets them thinking is a whole lot of fun. And you will see them learn so much during the research process.

Dewey (1938), in his book, *Experience & Education*, wrote about the types of learning experiences we afford children, and that most of them are experiences that lead children to "associate the learning process with ennui and boredom" (p. 27). The teachers in this study sought to provide a different type of learning experience to their students. Fifth-grade teacher Kat said:

The thing that I want them to get is...a passion for something, a passion for their own learning, critical thinking skills, problem solving skills, working in a team. And I really just want them to...embrace the process of working together, collaborating, coming up with their own ideas, and critical thinking skills, problem solving, those things.

While the participants in this study were all implementing free-choice learning, in many cases they were the only teachers in their buildings doing this type of learning with their students. They held the beliefs that their students not only needed this type of learning experience, but that the students were capable of engaging in this type of learning. However, not all of their colleagues held similar beliefs about students.

Assumptions About Students

Another one of the most prevalent themes was the assumptions my participants held about students and their ability to do free-choice learning, which contributed to their decisions to implement it. Many participants shared that other teachers in their buildings had different assumptions about students, which prevented them from implementing this kind of work. Becca was the gifted teacher in her school, teaching small groups of students and co-teaching in general education classrooms at each grade level. She indicated that some teachers in her building did not believe that low-income students, and students with average or below-average test scores, could handle free-choice learning. Laura referred to these beliefs in student capabilities as teachers' "paradigms" and stated that teachers who do not believe children can do this type of learning do not provide this type of experience for them. Finally, Wanda, a pre-kindergarten teacher and her instructional coach, Jamie, discussed the belief held by many teachers that young students "can't do big learning." Their goal in implementing free-choice learning was, in part, to prove that "little kids can do big projects too."

The beliefs about students' abilities created a culture in the classroom and school. Culture refers to the guiding beliefs and values of those in a school, which are demonstrated in the ways the school operates (Fullan, 2007). Attitudes of both adults and children in the school, as well as

the expected behaviors, can contribute to the overall culture. The building's leadership team often supports this culture.

Culture and Leadership

All of the teachers that I spoke to indicated that the culture of their schools and the leadership of their administrators played a crucial role in being able to successfully do freechoice learning. The school leaders played various roles in the support of free-choice learning. Some helped communicate about these projects with parents, some helped orchestrate an event for students to share their learning with classmates and parents, and others helped secure supplies, resources, and community connections for the classrooms. Teachers felt as though it would not have been as positive of an experience for students had their building principals not been supportive.

Some schools that my participants were working in already had a culture of honoring student voice and choice, which made the transition to free-choice easier than it would have been otherwise. Wanda discussed the fact that she worked to develop a classroom culture that honors her young students' ability to make choices and use their voice; Cheryl created a culture of learning from failure and risk-taking. Kristin also talked about establishing a culture in her classroom that allowed students to be themselves and try new things without fear. Creating this culture where students feel safe to try new things and accept failure as a part of the learning process takes time and intentional effort on the part of the teacher and the students in the classroom. Once this culture was established, teachers felt more prepared to implement freechoice learning. However, even after preparing the environment and the students, there were challenges as teachers approached free-choice learning.

Challenges

Participants acknowledged some challenges around effective implementation of freechoice learning in their classrooms. These challenges were presented in two categories: barriers to implementation and logistical challenges after implementation. Barriers to implementation included finding time to fit free-choice learning into their schedules, justifying these projects to their administrators, and explaining free-choice learning to students and parents. After actually implementing free-choice learning in their classrooms, there were logistical challenges, such as finding resources and being able to support a classroom full of individual projects as just one teacher. For example, fifth-grade teacher Kat described her room as "focused chaos" when students were engaged in Genius Hour, due to so many different projects happening at the same time. She said it was important that all students were able to engage in a project of their choosing, but that it was hard to move from student to student and support everyone with topics she did not have experience with, such as building a drone, which was the topic one group of her students chose to explore.

Benefits

While all participants indicated that there were challenges to doing free-choice learning with their students, they overwhelmingly discussed the benefits of doing this type of learning, and that the benefits far outweighed the challenges. Participants reported that when students were able to choose a topic of interest, they were engaged and excited about the project. Lauren, Kat, and Madison all said that their students seemed to be more motivated to work on this project than other projects during the day.

Participants also stated that their students seemed to have more confidence when engaging in free-choice learning because they were able to call upon individual strengths that

they might not have been able to use in other parts of the day because the structure of the schedule and the curriculum may not have permitted doing so. For example, a student who had an interest in theater was able to create a drama to share her learning about her project in Kristin's third-grade classroom. By being in control and able to make choices about their topics and projects, Lauren noticed that students' confidence increased.

Finally, participants in this study resoundingly acknowledged that students developed a variety of skills as a result of participating in free-choice learning. Every teacher made reference to the development of soft skills, also known as 21st century and non-cognitive skills (Partnership for 21st Century Learning, 2019), as a benefit of having students engage in free-choice learning. Skills specifically mentioned were creativity, critical thinking, and collaboration.

Cheryl told me that she could see a difference in the level of creativity of students in her current class, who was not doing Genius Hour that school year due to the pandemic, and the students she had had in the past. She said her current students did not seem to be as creative, or seem to have the same level of critical thinking skills as her previous classes, who did engage in Genius Hour. Madison, Becca, Kat, and Lauren all also talked about the level of critical thinking they saw students develop as they engaged in Genius Hour. They all spoke about the difference they saw in students before and after doing Genius Hour about how their students approached problems and situations, and the type of thinking they were able to engage in after doing a Genius Hour project.

Also, while most students completed independent Genius Hour projects, many teachers talked about the collaboration skills students developed. Sometimes collaboration skills developed when students were working with a partner or in a small group, but students also had

the opportunity to build collaboration skills when working with outside volunteers, such as the students in Kat's class. Teachers also noted the development of what could be considered life skills. These are skills that students could use throughout their lifetimes, in both learning contexts and outside-of-school contexts. These skills included learning from failure, risk-taking, independence, ownership of learning, reflection, and perseverance.

Cheryl thought it was important to show her students that failure can still produce learning. She showed her students examples of products that were not successful when they were first created and talked about people who failed at what they were doing the first few times they tried. As students in her class shared their learning at the end of the project, they also shared their failures, things that did not go as planned, and things that they would do different on their next Genius Hour project. By doing this, failures became an acceptable part of the learning process, a skill to help future learning.

Several teachers shared that there was an element of risk-taking involved for students in completing their free-choice learning projects. For some, the risk was in reaching out to others for support. For others, getting up in front of the class to share their learning involved some risk. For many students, this was the first time they had engaged in self-directed learning, which posed some risks in goal-setting, time management, and project-completion. Taking risks in the context of free-choice learning allowed students to become risk-takers in other content areas and other activities in the classroom. For example, they were more willing to try something new in other learning contexts, such as art and music, and they were less apprehensive of challenging material, knowing that they may not succeed the first time, and that was acceptable.

Kat mentioned that her students became more independent as they engaged in Genius Hour. They asked for help less and were able to solve problems on their own. Even though her students are only four and five years old, Wanda encouraged students to take ownership of their learning, and do work they were proud of.

Wanda and Cheryl included reflection as a phase of their students' projects. These reflections included what went well, what did not go well, what students learned about themselves in the process, and things they would do the same or different on the next project. Cheryl indicated that most of her students had not previously engaged in self-reflection as a part of their learning experiences, so it was challenging at first to get them to think about the process rather than just the outcome. However, she noted that after engaging in reflection during Genius Hour, her students began reflecting on their learning, preparation, and study habits in other areas of the school day.

Kat shared about two particular groups of students whose projects did not go as they had planned. The students demonstrated perseverance, worked through their frustrations, and were still able to share a project with the class. Fifth-grade teacher Lauren had similar experiences with her students. When asked about the benefits of doing Genius Hour with her students she stated:

I would say just some of like the, I guess we would call them soft skills that they learn, and like time management, and how to talk to people how to ask for help, how to, you know, determine, you know, if they're successful or how to plan and organize. Just those types of things.

Participants also indicated that they saw a transfer of the skills students were developing during free-choice learning into other areas of the school day, and beyond. Teachers specifically mentioned problem solving, proactivity, time management, and connections among content areas as skills that transferred beyond the free-choice learning block. In some cases, the transfer of

these skills went beyond their current classroom and were impacting students in their high school classroom several years later.

After completing the pilot study, I knew that there was more to learn about the implementation of free-choice learning in under-resourced schools. From speaking briefly with each of the participants, I began to wonder if there was a particular set of characteristics common among school leaders and classroom teachers that provided this type of learning for their students. I also wanted to know more about sessions of free-choice learning: what they look like and sound like; what the teachers and students are doing during this time. Therefore, I decided to conduct another, similar study. The design of the pilot study influenced the decisions about the design of this study. I reflected upon each element, what I thought served my study well and those elements that I thought needed to change in order to provide me with a better understanding of free-choice learning in under-resourced schools. Each design element is described below, with what was retained or changed, and the reasoning for those decisions, for this study.

Design of the Study

The focus of this research was how free-choice learning was implemented in six distinct, under-resourced classrooms, within the contexts of their schools. I was interested in the decisionmaking processes by classroom teachers and school/district leaders that allowed free-choice learning to take place in these particular schools, and what the implementation of free-choice learning looked like in these particular classrooms. For this study, I considered under-resourced schools as those that were identified as Title I schools. This classification indicates that the school had a high percentage of students qualifying for free or reduced-price lunches, which is the measure of poverty used in U.S. schools (U.S. Department of Education, 2018).

The concept of free-choice learning can be enacted differently, based upon the context in which learning occurs, the age of the learner, interests and motivations of the learner, and resources available. As previously stated, I am defining free-choice learning as the opportunities students have to choose what they want to learn about, how they are going to learn it, and/or how they are going to share their learning.

As noted in Chapter 2, teaching and learning in under-resourced schools are often geared toward increasing student achievement on standardized tests, leaving little room for free-choice learning (Haberman, 1991; Milner, 2012; Zhao, 2016). Because of this, I was particularly interested in the occurrence of free-choice learning in under-resourced school settings. I approached this research using a multiple case study, in which I sought variety among six participating schools in terms of geographical location, characteristics of the student population, and grade levels. Each school was identified as a case, or object to be studied (Stake, 2006). Each of these cases were unified by the fact that they were under-resourced schools (indicated by populations qualifying for free and reduced-price lunches) that were providing opportunities for free-choice learning in some of their classrooms.

This research was guided by two primary questions:

- How did participating teachers and school leaders arrive at the decision to implement free-choice learning in their classrooms and schools? Why was it important to include this type of learning in their schools and classrooms?
- 2. How did free-choice learning occur in these six specific under-resourced schools?

Quality Criteria

While qualitative research often relies on individual perspectives and the interpretation of those perspectives (Denzin & Lincoln, 1994), there are criteria to follow which ensure the quality

of the results of the research study. Several authors have put forth criteria for determining the quality of qualitative research (e.g., Daniel, 2019; Tracy, 2010; Treharne & Riggs, 2015). For this study, I chose to use Ben Daniel's (2019) trust, auditability, credibility, and transferability (TACT) framework as the criteria for quality. I selected this framework because it is a clearly outlined tool that incorporates elements from several other authors and models for examining the quality of nonpositivistic research. The components of TACT will be discussed throughout the chapter.

Research Paradigm

The pilot study was conducted within an interpretivist paradigm. I originally used this paradigm because I was seeking to understand the perspectives and experiences of those in different contexts who had implemented free-choice learning (Rossman & Rallis, 2003). As I was still aiming to understand free-choice learning from the perspectives of teachers and administrators who were implementing this type of learning, I also conducted the current study from the interpretivist paradigm.

I sought to understand the "lived experience from the point of view of those who live it" (Schwandt, 1994, p.118). Experiences allow individuals to develop knowledge and take actions (V. W. Turner & Bruner, 1986). Perceptions of experiences, and the knowledge derived from them, are unique to each individual (Creswell, 2013). Interpretivists aim to "understand the social world as it is (the status quo) from the perspective of individual experience" (Rossman & Rallis, 2003, p. 46). Interpretivism was an appropriate paradigm for this study, therefore, because I wanted to understand the perspectives and experiences of educators in different contexts who had implemented free-choice learning in their schools and/or classrooms. Although there were participants from different schools and community contexts, they each had an experience of the

phenomenon of free-choice learning in an under-resourced community. It is this interaction with the phenomenon that I aimed to understand, through each individual participant's perceptions (Brundrett & Rhodes, 2014).

Hammersley (2013) noted that we cannot understand why people do what they do without considering how people interpret, or make sense, of their world. Although each of my participants had an indirectly shared experience with free-choice learning in an under-resourced school, their interpretations of that experience varied based on the cultural norms in which they lived and worked (Creswell, 2013). Hammersley (2013) also indicated that to understand each of these unique perspectives, the researcher must adopt an exploratory orientation and observe how patterns develop in different contexts. I employed this exploratory orientation as I interviewed participants, posing questions that allowed them to share their experiences in as much detail as possible. Additionally, meaning is often constructed through interaction with others (Creswell, 2013); therefore, the interviews I engaged in with my participants helped them make meaning of their individual experiences. I then interpreted the information participants shared with me to understand their experiences with free-choice learning in under-resourced schools.

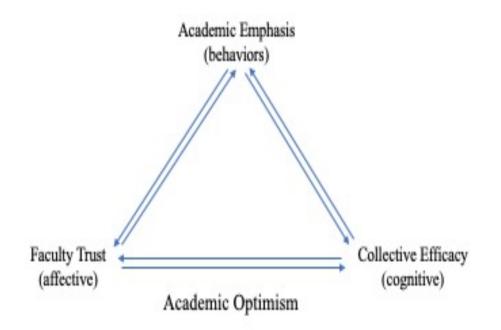
Research Perspective: Academic Optimism

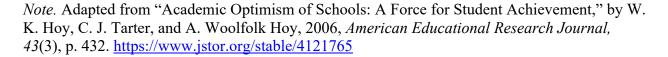
I framed the pilot study using Dewey's (1938) theory of experiential learning. I chose this theoretical framework originally because I was interested in the learning experience free-choice learning provided for students. Although I believe that Dewey's theory still applies to this study, I decided a different theory would help me to discover more information about the beliefs and experiences of educators that provide this type of learning for students and the details of implementation.

Therefore, the theoretical framework framing this study was academic optimism, which is a collective set of beliefs held by a school's faculty that it can teach all children, trust students and parents, and emphasize academics by holding high expectations and celebrating academic successes (Hoy et al., 2006). Academic optimism is a construct consisting of three elements: academic emphasis, teacher collective efficacy, and faculty trust in parents and students (Goddard et al., 2007), each of which are described throughout this section. There is a transactional relationship between each of the elements of academic optimism, making each element dependent upon the other elements (see Figure 7). When the three elements interact, a culture of academic optimism develops in schools (Hoy et al., 2006). I chose this theoretical framework to guide this study because I believe that the culture of academic optimism supports the implementation of free-choice learning. I believe that for school leaders and classroom teachers to implement this type of learning, they must believe in the capabilities of all students, trust the students as they engage in free-choice learning, and emphasize the academic possibilities of this type of self-directed learning.

Figure 7

Elements of Academic Optimism





Academic Emphasis

Academic emphasis is defined as "the extent to which the school is driven by a quest for excellence" (Hoy & Tarter, 1992, p. 76) and is demonstrated by the setting of high expectations for students and a belief in the capabilities of all students to achieve these expectations (Goddard et al., 2007; Hoy, 2012). In schools displaying academic optimism, educators set high, but achievable goals for students. Because of this, the students are motivated to work hard, show a respect for academic achievement, and be cooperative (J. Gray et al., 2016; Hoy et al., 2006). According to several researchers, academic emphasis contributes to academic achievement, even after controlling for socioeconomic status (Alig-Mielcarek & Hoy, 2005; Hoy et al., 1991;

Goddard, Hoy, & Woolfolk Hoy, 2000). Additionally, academic emphasis has been shown to reinforce patterns of collective efficacy, and positively affect the collective beliefs of teachers in a school (Goddard, Sweetland, & Hoy, 2000; J. Gray et al., 2016).

Teacher Collective Efficacy

Teacher collective efficacy is a shared belief in a school that the faculty is capable of educating students (Goddard et al., 2007). The strengths of efficacy beliefs affect the choices and actions teachers and leaders make. Without a positive sense of efficacy, and the belief that they can have positive effects on students, educators are unlikely to initiate action (Hoy et al., 2006). When many educators within one school have this sense of efficacy, they support one another, encourage academic emphasis throughout the school, and persist when there are challenges (Hoy et al., 2006). They believe the responsibility for educating children is a collective responsibility, which enhances the learning for all children in the school (Goddard et al., 2007).

School norms and culture that support academic achievement and collective efficacy are motivating for both students and teachers because the two factors support and depend upon each other. When collective efficacy increases, so does academic achievement. And as academic achievement increases, teachers' sense of collective efficacy continues to increase (Smith & Hoy, 2007).

Faculty Trust in Parents and Students

Faculty trust in parents and students is a collective property, just as academic emphasis and collective efficacy. Trust can be defined as "vulnerability to another in terms of the belief that the other will act in one's best interest" (Hoy et al., 2006, p. 204). Classrooms are social places, and teaching and learning within the classroom often requires taking risks and being vulnerable (Tschannen-Moran, 2014). For teachers to be vulnerable and take risks with their instructional practices (Bryk & Schneider, 2002) and for students to demonstrate vulnerability and risk-taking when approaching learning, mutual trust needs to have been established (Hoy et al., 2006; Tschannen-Moran, 2014). The establishment of this mutual trust provides a safe learning space where both students and teachers are willing to try new things without fear of repercussions if things do not go as planned (Hoy et al., 2006; Tschannen-Moran, 2014). Regarding faculty trust in parents, teachers develop stronger trust with parents that are committed to their child's well-being and to their education (Tschannen-Moran, 2014). Teachers also have more trust in parents that have open communication and are reliable partners in the educating of their child. Reliable parents not only send their child to school ready to learn, but also support learning at home by ensuring general well-being and promoting a positive attitude toward school.

Researchers have also determined that trust supports positive student-teacher relationships, and an overall more positive classroom and school climate (Ransom, 2020). These positive relationships yield higher test scores, better attendance, and increased feelings of connectedness for students (Hoy et al., 2006; Ransom, 2020).

Academic Optimism and Free-Choice Learning

Taken together, these three elements present a construct that is in contrast to the pessimistic view that children from low-socioeconomic backgrounds cannot learn and that there is nothing schools and teachers can do about it, as discussed in Chapter 2 (Hoy et al., 2006). Schools with academic optimism are filled with teachers and educational leaders who believe that all children can learn, and that teachers and school leaders are capable and responsible for facilitating that learning (Smith & Hoy, 2007).

I chose this framework thinking that it was possible that schools and teachers that allow their students to engage in free-choice learning embody academic optimism. Based upon my own experiences working in under-resourced schools where free-choice learning was successfully implemented, I suspected that for school leaders and classroom teachers to prioritize this type of learning, they had to believe in the capabilities of each of their students. They had to believe that together, as a staff, they were capable of educating the students within their classrooms, and they had decided that free-choice learning was one way for students to learn. Further, they had decided that each student was capable of engaging in the freedom to choose what they wanted to learn about and had the self-discipline and motivation to pursue this learning. The teachers and school leaders, as a collective, had likely set high expectations for students around academics and learning.

The elements of academic optimism therefore guided this study. I used the components of this theory as I created my interview guide in preparation for interviews with classroom teachers and school leaders. I documented manifestations of academic optimism as I spoke with participants about how they arrived at the decision to implement free-choice learning, how this learning occurred in their classrooms, and in the artifacts that teachers discussed with me. Additionally, academic optimism offered me *a priori codes* that I used during my data analysis process. A priori codes are codes that are generated prior to conducting the study and analyzing the data (Saldaña, 2015). This theoretical framework provided me with "academic emphasis," "collective efficacy," and "faculty trust" as a priori codes. By using these a priori codes, I could focus on the elements of academic optimism as I analyzed the data that were generated for this study. I not only looked for these elements, but also attempted to determine if the components of

academic optimism were present in schools and classrooms that implemented free-choice learning.

Research Strategy

I approached the pilot study as a phenomenological study, one in which I sought to capture the essence of individual teachers' experiences within the phenomenon of free-choice learning. Although that allowed me to capture the essence of this experience, my goal with this study was to understand more deeply the decision-making that leads to the implementation of free-choice learning. To do this, I investigated free-choice learning in six specific settings, approaching the study as a multiple case study.

Free-choice learning is not a prevalent learning activity in most public schools (Kiepke, 2021). The implementation of this type of learning is complex because it requires dedicated time and is not directly tied to academic standards that many schools follow in determining what skills and knowledge are necessary for students to know (Saavedra & Rapaport, 2024). The implementation of free-choice learning, particularly in under-resourced schools, requires indepth exploration because it is not prevalent. How teachers decided to implement this learning, and how it occurred in the classroom were worthy of in-depth exploration.

Because free-choice learning, particularly in under-resourced schools, is a complex phenomenon requiring in-depth description, conducting a case study was a useful strategy. Additionally, case studies are a useful if one's research aims to respond to "how" and "why" questions (Yin, 2018). These "how" and "why" questions allow a researcher to explore many elements of what is being studied. In this study, I explored why particular educators decided to implement free-choice learning, and how this type of learning occurred in their schools and classrooms.

The "case" is the entity being studied, bound by particular criteria set by the researcher so it is specifically related to the research questions. This study was conducted as a multiple case study, as I considered more than one case. Evidence from multiple case studies is often considered to be more compelling and robust than that from a single case study because they represent more than one instance of the phenomenon being studied (Yin, 2018). For this purpose, I chose to consider six distinct cases to study. The cases in this study were each unique, a sampling of a variety of geographic locations, sizes of schools and communities, grade level, and student diversity.

Multicase study begins with recognizing the concepts that bind the cases together (Stake, 2006). Each of the cases in this study were unified by the fact that each represented an underresourced school implementing free-choice learning. Stake (2006) referred to this unifying factor as a quintain, or the object or phenomenon to be studied. He stated that, "we study what is similar and different about the cases in order to understand the quintain better" (Stake, 2006, p. 6). Except for the unifying factors, my goal was to select cases which were as different from one another as possible. I sought these different contexts so I could see whether type of community, school size, grade level, or student demographics influenced the implementation of free-choice learning.

While results in qualitative research are typically not generalizable to other settings, by intentionally selecting cases from a variety of demographics, readers may see the findings as transferable to their own school settings. When findings are transferable, they can be applied to other settings, or other groups of people which contributes to quality qualitative research (Daniel, 2019). Transferability of findings represents resonance, which is one criterion for quality qualitative research (Tracy, 2010; Treharne & Riggs, 2015). Resonance occurs when the research

influences or moves particular readers (Tracy, 2010). My goal with this study was to include a variety of contextual factors, so that readers may possibly see their own school and classroom contexts within the study and may be able to transfer the findings to their own setting. I was able to locate schools from the West Coast, the Pacific Northwest, the Mid-Atlantic region, the southern United States, and the Midwest. I also had participants who worked in rural, urban, and suburban communities, and grade levels from pre-kindergarten through 12th grade.

Sampling

My goal with the pilot study was to speak with elementary school teachers in Title I schools who had implemented free-choice learning for their students. I did not set a limit on the number of participants but was trying to speak to as many teachers as I could that fit these criteria. After contacting nearly 60 educators in Title I elementary schools, I secured 10 participants for the pilot study. The participants included one gifted education teacher, one instructional coach, and eight general education classroom teachers. These educators were from three different states, eight different school districts, and nine different schools. Although their perspectives aided me in gaining understanding of the phenomenon of free-choice learning in under-resourced schools, my aim for the current study was to gain deeper understanding of free-choice learning within the contexts of the schools and classrooms as I spoke with participants or analyzed the data. After the pilot study, I began to wonder if these contexts influenced the implementations of free-choice learning. Therefore, I was more intentional about the demographics of the schools in the current study.

Qualitative researchers rely on purposeful sampling when selecting participants; a process in which specific cases are intentionally selected that will allow the researcher to gain

deep understanding of issues critical to the purpose of the study. I engaged in a purposeful sampling technique identified as sensitizing concept exemplars sampling to secure participants for this study (Patton, 2015). In this type of sampling, the researcher chooses particular cases that define sensitizing concepts, where meaning is derived by the people using these concepts, such as terms, labels, and phrases, in a particular context.

In this study, the sensitizing concept was free-choice learning and through this sampling technique, I sought to understand what this term meant to each of my participants and how this concept was enacted, situated within the contexts of their classrooms and schools. I located participants who chose to practice free-choice learning and spoke with them to gain an understanding about what led them to the decision to implement this type of learning, and the nature and outcomes of this learning within their schools and classrooms.

For the purposes of this study, I sought several different school contexts for my sample. I connected with my first case and two of my participants while conducting my pilot study in 2021. Ross Elementary School (a pseudonym) is a suburban community on the West Coast, whose student body is primarily Vietnamese and Hispanic. Wanda (also a pseudonym) teaches pre-kindergarten, where the students are 4 or 5 years old, in the year prior to traditional kindergarten. I wanted to further understand the use of free-choice learning in her classroom, within the context of her school. Nearly 50% of students in Wanda's classroom are emergent bilingual students, meaning that they are not native speakers of English. In addition to Wanda, participants from the case of Ross Elementary included Jamie, the instructional coach, Rory, the school's assistant principal, and Katrina, Wanda's classroom assistant.

To locate my other participants, I started by contacting former colleagues and acquaintances in K-12 schools to inquire as to whether they, or teachers in their schools, were

implementing free-choice learning. This did not yield any participants. I then attempted to solicit participants via social media, posting on Facebook, Twitter, and LinkedIn. Several of my connections on those platforms shared my posts on their own social media feeds. This also did not yield any participants. I then contacted the principals of several schools in the communities near the university in which I work. I was not able to obtain participants via this route either.

I then consulted the book *What School Could Be* (Dintersmith, 2018) and located any instances of schools or community organizations included in the book that work with schools. I used internet searches to find contact information for these individuals/organizations. Through this search, I acquired two participants, Jason and Brad. These two educational leaders then connected me with other educators in their school and district, respectively.

Through a variety of internet searches, I stumbled upon the League of Innovative Schools. This organization's website provided information about K-12 schools across the United States that have self-reported the implementation of innovative learning. I looked at each participating district and selected all of those that had 40% or more of their students receiving free/reduced-price lunch. I contacted the superintendent of each of these districts, approximately 25 individuals. From this, the superintendent from Ridgeline Public Schools (a pseudonym) responded, connecting me with Trent and Matt, principals within the district.

I confirmed my sixth and final participating school when Bonnie attended a conference where I was a presenter. She attended my session, asked what I was studying, and informed me that she would be doing Passion Projects with her class.

Although the process of locating participants took much longer, and was much more difficult than I had predicted, I secured six schools from a variety of demographic regions of the United States, which was my goal. My participants were also working in urban, rural, and

suburban schools, which was an additional goal for my study's sample. Finally, participants included early childhood, elementary, middle, and high school educators, which was another one of my goals in participant selection. Participants are identified in Table 3.

Table 3

Participants

Case	Location	Community	Grades	Participants
1	Mid- Atlantic	Urban	Kindergarten-5	Cassie (principal) Kara (classroom teacher) Bonnie (gifted education teacher)
2	West Coast	Suburban	Pre- Kindergarten–5	Wanda (classroom teacher) Jamie (instructional coach) Rory (assistant principal) Katrina (classroom assistant)
3	Midwest	Rural	Kindergarten-5	Jason (principal) Diane (classroom teacher) Kathy (library/media assistant)
4	Pacific Northwest	Urban	6–12	Matt (principal) Maddy (classroom teacher) Claire (classroom teacher)
5	Pacific Northwest	Urban	9–10	Trent (principal) Marina (instructional specialist) Mitchell (classroom teacher)
6	Southern	Rural	7–12	Brad (superintendent) Amy (principal) Kristy (classroom teacher) Willa (classroom teacher)

Note. All participant names are pseudonyms.

In instances where I located a classroom teacher first, I asked them to connect me with leaders of their schools that were directly involved with choice-based learning, as well as other teachers within their schools who were implementing choice in their classrooms. In instances where my first contact was a school or district leader, I asked them to share my information with school principals and/or teachers within their schools that were implementing choice-based learning opportunities for students. After I confirmed teachers and school leaders who were willing to participate, each individual received a consent form (see Appendix B) in which I asked participants to confirm that their participation would occur outside of school hours, off school property, and was permissible by school district policy. Once participants were identified and permission was granted, I was able to begin engaging in data generation, which aided me in developing a deeper understanding around the implementation and enactment of free-choice learning in these selected cases.

Methods for Data Generation

Data for the pilot study were generated and collected by conducting interviews with each of the aforementioned participants, and examining artifacts related to free-choice learning from the participants' classrooms. I conducted two interviews with each participant and asked them to share artifacts with me. These artifacts included samples of student work and final projects, as well as planning materials used in the classroom to guide students through free-choice learning.

Interviews were the main source of data for this study. I also used artifacts, but rather than analyzing the artifacts on my own, I engaged in artifact elicitation (Douglas et al., 2015), in which I asked the participants to bring selected artifacts to an interview. I asked the participants to describe the artifacts they selected and used the artifacts to elicit reflection and explanation about free-choice learning in their classroom. This process is explained in further detail later in this chapter. Employing artifact elicitation provided more information for the artifacts than I could have determined on my own, because the artifacts had meaning within the context of their creation, in a classroom in which I was not present.

To gain a deep understanding of free-choice learning in these six particular classrooms situated within multiple contexts, I generated three types of data. I asked each classroom-level participant to respond to a prompt in writing or via audio recording, and I conducted interviews with each participant, in which we discussed many topics related to the implementation of free-choice learning. Table 4 depicts the phases of data generation for this study. Each of these types of data generation will be described in further detail throughout this chapter.

Table 4

Dentisinent	Phase						
Participant	1	2	3	4	5		
School administrator and other school or district level leader	Complete academic optimism scale	Interview					
Classroom teacher and other school- or district- based educator	Response to prompt & complete academic optimism scale	Initial interview: Decision- making & academic optimism scale	Second interview: Implementation	Select artifacts that illustrate free-choice learning	Final interview: Artifact elicitation		

Phases of Data Generation

Throughout this study, I adhered to ethical practices which is an element for ensuring the quality of this study (Tracy, 2010). Before contacting potential participants, I sought approval

from William & Mary's School of Education Institutional Review Committee (EDIRC). Each participant received the appropriate consent form prior to participation (see Appendix B), which outlined the expectations around participation, and clarified the option to leave the study at any point. The consent form also indicated that interviews would take place outside of school hours and off school grounds. I asked that each participant consult with their supervisors to determine if they needed formal permission in order to participate. If they needed formal permission, I completed and submitted a district-required research proposal, which was the case only for Ridgeline Public Schools. I requested that all identifying factors be eliminated from any artifacts, such as student names or faces, that were shared with me.

Written Response

Prior to the first interview, I asked each of the classroom teachers who participated in this study to respond, in writing or via audio recording, to the following prompt: "Please describe a session of free-choice learning in your classroom. Use as many details as possible. What does it look like, feel like, sound like, etc.?"

By having participants respond to this prompt, I was able to get a glimpse into their classrooms without having to conduct classroom observations. Because my goal was to have participants in various geographic settings across the United States, it would have been challenging for me to travel to each of these schools. Additionally, it might have been difficult to obtain the necessary permissions from school districts and parents to observe children in the schools. It is also probable that the teachers' depictions of free-choice learning in their classrooms were more robust than what I would have been able to observe in one or two sessions in each classroom, because of the knowledge the teacher had of their own classroom and students. I used participants' responses to the prompt to guide a portion of the first interview, asking for clarifications or more details when needed.

Interviews

The primary type of data for this study was interviews. I conducted one interview with each principal and school or district level leader, and a series of three interviews with each classroom teacher and any other personnel directly involved with free-choice learning, such as instructional coaches/specialists. With permission of the participants, each interview was audio recorded and at the conclusion of each interview, a transcription was created to be used during data analysis. Out of respect for participants' time, each interview lasted approximately 1 hour.

I used a semi-structured interview format, in which I pre-planned topics to address with each participant but retained the flexibility to ask follow-up questions and add topics when necessary (D. W. Turner, 2010). I followed this structure so I was sure to address critical elements, but had the freedom to ask other questions as topics were discussed during the interviews. These pre-planned topics were listed in an interview guide, which I used to direct each interview (see Appendix C).

The first interview for teachers was primarily focused on the decision-making processes teachers used when making the choice to implement free-choice learning. For the classroom teachers, I also asked clarifying questions about their responses to the prompt, if needed. I also asked questions related to the academic emphasis, collective efficacy, and trust of the faculty in students and parents, from the perspectives of the participants, based on the responses to the academic optimism scale (Hoy, 2005). The interview guide for the first interview can be found in Appendix C. The second interview focused on the logistics of implementation of free-choice learning in participants' classrooms. The final interview focused on the artifacts that I asked

participants to bring to the interview. For school and district level leaders, there was only one interview, and it focused on their decision-making processes for implementing free-choice learning, how they support free-choice learning in the school, and their responses to the academic optimism scale. Further descriptions of these processes are presented throughout this chapter.

Through these interviews I sought to learn more about the participants' decision-making processes, implementation of free-choice learning, and the potential presence of academic optimism until I reached *thematic saturation*. This occurred when no new themes were being generated, "the point at which there are fewer surprises and there are no more emergent patterns in the data" (O'Reilly & Parker, 2012, p. 192). This was determined through ongoing data analysis, which is described later in this chapter.

Member Checking

Throughout each interview, I engaged the participant in *member checking*, in which I paraphrased responses and asked clarifying questions if necessary to ensure that I was accurately understanding responses (Birt et al., 2016). After the conclusion of each interview, I provided the participants with a written summary of each interview so they could read and make corrections if necessary. I shared the interview summary as a Google Doc, in which I requested that participants insert comments or type in a different colored font directly in the document if corrections were needed. In most instances this summary was sent to participants the day after the interview. Most participants responded in less than a week, three participants never responded to my member checking; one teacher and two principals. In the case of the teacher, I verified accuracy with her during the next interview. However, this was not possible for the two administrators, who only engaged in one interview.

Artifacts

The third type of data I included in this study were artifacts. Artifacts are physical evidence of the topic being studied (Wildemuth, 2017). Artifacts for this study included photographs, extant documents, and, for most participants, student work samples.

The artifacts consulted varied depending on how free-choice learning happened in each of the participants' schools and classrooms. For this study and the examination of artifacts, I engaged participants in an activity known as artifact elicitation (Douglas et al., 2015). This is similar to the process of photo elicitation, in which photographs are used to facilitate discussion (Harper, 2010). During photo elicitation, the participant brings a photograph to the interview, and this photograph serves as the focal point of the discussion, allowing the interviewer to generate questions, while the interviewee is able to call upon memories and reflections about the photograph (Clark-Ibáñez, 2004). In artifact elicitation, a portion of the interview was guided by the artifact brought by the participant, and the information the participant shared about how the artifact illustrated free-choice learning in their classroom (Douglas et al., 2015).

I asked my participants to locate artifacts that they believed illustrated something about free-choice learning, as it was enacted within their schools and classrooms. I asked each participant to bring their selected artifacts to our third, and final interview. To ensure confidentiality, prior to sharing, I asked each participant to eliminate any identifying factors, including names of people or places, from the documents. I shared with participants that these artifacts could include communication from the school to the teachers such as newsletters, emails, and/or professional development documents, communication from the classroom to families, such as notes home, emails, videos, or other documents, and/or student work samples or completed projects. In this study, participants shared photographs of students working during

free-choice learning time in the classroom, examples of planning documents and student journals, and examples of student projects.

I began by simply asking the participant to share with me why they chose the particular artifact, what it illustrated about free-choice learning, and what it could teach me about freechoice learning in their particular classroom/school. From there, I allowed the participant to continue the conversation as they wished. The use of artifact elicitation allowed the participant to reflect on "related but indirect associations" (Clark-Ibáñez, 2004, p. 1513) with the artifact itself. It was through these related associations that I was able to learn more about the manifestations of choice-based learning in each of the cases being studied. Finally, because I was using academic optimism to guide this study, I asked each participant to complete an academic optimism scale. Participants completed the scale relevant to their role: elementary teacher, secondary teacher, or school/district leader.

Academic Optimism Scales

Three scales have been developed to measure the components of academic optimism in schools (Hoy, 2005). One scale, the School Academic Optimism Scale was designed to measure collective efficacy, faculty trust in students and parents, and academic emphasis at the school level. The other two scales, the Teacher Academic Optimism Scales, are designed specifically for teachers and measure teachers' self-efficacy, trust in students and parents, and academic emphasis. There is one scale for elementary teachers and another for secondary teachers (Beard & Hoy, 2009; Hoy et al., 2009).

I asked each of my participants to complete the scale appropriate for their role prior to our first (or only) interview. For school leaders and classroom teachers, I used the participants' responses to guide the interview to better understand whether academic optimism was present in

the schools and classrooms that were implementing free-choice learning. Further, if there was evidence of academic optimism, I sought to determine which elements were present during the coding process, which will be described in detail later in this chapter.

The examination of multiple types of data allowed me to *triangulate* my findings, which helped to ensure the *credibility* of the results of the study (Daniel, 2019; Tracy, 2010; Treharne & Riggs, 2015). The process of considering all of my data types together is identified as triangulation, a process by which the researcher analyzes findings by looking across multiple types of data, sources of data, theoretical frameworks, and literature (Daniel, 2019; Tracy, 2010; Treharne & Riggs, 2015), or "the convergence of data" (Daniel, 2019, p. 104). For this study, I triangulated the findings from the responses to the prompt, the interviews I conducted, the artifact-elicitation, and the responses on the academic optimism scales.

During this process, I considered all of the written responses, initial interviews, the artifact-elicitation interviews, and the interviews related to academic optimism to determine where the findings related to one another, and where they diverged. This triangulation ensures stronger credibility of my findings. Credibility, as an element of the TACT framework for quality research, indicates that my findings can be trusted, are relevant to the topic being studied, and accurately capture the perspectives of the participants (Daniel, 2019). I have achieved this by providing thick descriptions of the data generated in this study, triangulation, and member checking. I have provided in-depth descriptions of participants' experiences with free-choice learning via summaries and direct quotes in Chapters 4 and 5. I have added to the trustworthiness of this study by situating my findings in extant literature, which is also presented throughout Chapters 4 and 5. Throughout the data generation process, and after generation was complete, I engaged in data analysis. Each phase of this process is described in the sections that follow.

Methods for Data Analysis

In the pilot study, I used both thematic coding and holistic coding to analyze the data I had generated and collected. In this study, I also used a variety of coding practices, in which I assigned a word or short phrase that captures the essence of a piece of data (Saldaña, 2015). Further details on the coding process appear throughout this chapter. After coding each prompt response and interview, including the artifact-elicitation and academic optimism scale responses, I engaged in thematic analysis. I have learned more about the process of data analysis since completing the pilot study, so the analysis followed a more specific procedure. For this study, I analyzed the data using Braun and Clarke's (2012) six-phase approach of thematic analysis which includes the following steps: familiarizing yourself with the data, generating initial codes, searching for themes, reviewing potential themes, defining and naming themes, and producing the report.

Phase 1: Familiarizing Yourself With the Data

During this initial phase of analysis, I familiarized myself with the data. I first listened to the audio recording of each interview as I made any necessary revisions to the transcripts and prepared the interview summary to send to the participant. I then read the prompt responses (all were submitted in writing) and interview transcripts with intent of making notes about things I noticed (Braun & Clarke, 2012). According to Braun and Clarke, the purpose of this phase is to become familiar with the content of the data and begin to take note of information that was relevant to my research foci. Therefore, at this stage, I did not yet assign codes to the data; rather, I took notes, beginning to think about what the data meant. I essentially annotated the prompt responses and interview transcripts, highlighting words and phrases that struck me as potentially important, and made notes in the margins about follow-up questions I wanted to ask,

clarifications I needed to make, or commonalities I was starting to notice in responses across participants.

Phase 2: Generating Initial Codes

After familiarizing myself with the data as a whole, I began the process of analyzing prompt responses and interview data by determining my unit of analysis. A unit of analysis is the piece of information that will be considered for the development of codes. The unit may be a line, sentence, paragraph, or a complete response to an interview question (Roller & Lavarkas, 2015). For this study, I looked at discrete ideas in responses to interview questions as a unit of analysis when developing codes. Discrete ideas are sections of responses that are focused on one topic (Strauss & Corbin, 2008). When the participant changed topics within a response, a new discrete idea was introduced, and became a new unit for analysis.

I engaged in deductive coding by applying *a priori*, or preexisting, codes from my theoretical framework, academic optimism. The a priori codes, and their definitions, for this study included:

- Academic emphasis: High expectations and belief in the capabilities of students
- Collective efficacy: Belief in the capability of the staff to educate all students
- Faculty trust: In students and parents; vulnerability to take risks, safe space to try something new

For the data that could not be coded with the predetermined a priori codes, I engaged in inductive coding, in which I generated emergent codes, or codes that arose based on the data, rather than looking for instances of data aligned with pre-determined codes. During the inductive coding process, I used *in vivo* coding when possible, in which I used words and phrases from the participants' own language to assign codes (Saldaña, 2015). I used in vivo coding to honor the

participants' voices and as a means of capturing unique vocabulary that was used by the participants. Additionally, this allowed me to further see commonalities in language, vocabulary, and terminology across cases in this study. During this phase of analysis, I generated 20 codes, acknowledging that these codes could change or be combined as I continued to analyze the data. Each of these 20 codes, with accompanying definitions, can be found in Table 5.

I reviewed all of the data that had been coded according to the codes in Table 5. I noticed that some of the codes only applied to data from one case, so were not indicative of results across cases; therefore, that code was eliminated. I also noted that some of the codes could be combined into larger themes.

Table 5

Initial Codes and Definitions

Code	Definition	
Frequency	How often students had the opportunity for choice in the classroom.	
Level of student choice	Degree of autonomy available to students	
Name of activity	Ex: Genius Hour, passion projects, PBL	
When	When did free-choice learning occur in the classroom?	
How	How did free-choice learning occur in the classroom?	
Benefits/Outcomes	Participant observations of the results of implementing choice.	
Role	The role of the teacher during free-choice learning in the classroom.	
Beliefs	Beliefs the teacher held about free-choice learning.	
Challenges	Difficulties in implementing/managing free-choice learning in the classroom	
Decision-making	How participants arrived at the decision to implement choice in their classrooms	
Preparation	Training that was necessary for both students and teachers.	
Mental health	Acknowledgement that students were still recovering from pandemic trauma, and sometimes too many choices causes anxiety	
Expectations	Aligned with academic emphasis component of academic optimism	
Modeling	Demonstrating for students how to engage in choice-based activities	
Trust	Related to academic optimism	
Interest/Relevance	Aligning classroom tasks/assignments to students' interests	
Culture/Mindset	The climate of the school/classroom and mindsets of educators that allowed for choice	
Differentiation	Using choice to differentiate instruction for students by skill and interest	
Prior Experience	Educators' prior experience with choice-based learning	
Advice for others	Around the implementation of choice in the classroom	

Phase 3: Searching for Themes

In Phase 3, I looked for connected codes across the data and clustered, or grouped, them together. These clusters of codes were representative of individual codes that were related across multiple pieces of data that I was analyzing. In this phase I asked myself if I could identify codes

which could be clustered into broad topics (Braun & Clarke, 2012). These broad topics then became my themes, which considered a range of data that were connected by a shared idea (Braun & Clarke, 2022). After clustering the 20 aforementioned codes, I arrived at eight themes:

- Meaningful learning
- Influence of prior experience
- Expectations of students
- Examples of choice in the classroom
- Preparing students for successful choice-based opportunities
- Teacher planning for choice-based opportunities
- Deeper learning
- Leadership for choice learning

Each of the aforementioned themes and their aligned subthemes are defined and explained in greater detail in Chapter 4. Upon clustering codes into themes, the next necessary step was to review the themes to ensure their quality.

Phase 4: Reviewing Potential Themes

Braun & Clarke (2012) outlined five questions that I asked myself as I determined the quality of my emerging themes:

- 1. Is this a theme or just a code?
- 2. Does the theme tell me something useful about this data in relation to my research question?
- 3. What does the theme include and exclude?
- 4. Are there enough meaningful data to support this theme?
- 5. Are the data to diverse and wide ranging? (p. 65)

By asking myself these questions, I was able to determine if I had quality themes. Quality themes are ones that focus on a singular idea, demonstrate the diversity of the idea within the dataset, are not too simple nor too complex, and are distinctive from one another (Braun & Clarke, 2022). From this assessment of my initial themes, I was able to make any adjustments, including determining if I needed to delete any themes, and whether I needed to combine themes or separate a large theme into smaller ones. I then finalized my list of themes.

Phase 5: Defining and Naming Themes

Each theme needed to be clearly definable. Themes should not be too broad, should not be repetitive, and should directly address the research questions of my study (Braun & Clarke, 2022). One way I determined this was to attempt to write a concise definition that illustrated what the theme was about and how it was presented throughout the dataset. The definition of each theme is presented in Chapter 4. Once each theme's focus was described, I determined which themes related to each other, and how. These relationships among the eight themes were able to be clustered into four broad categories, which then became the overarching, across-case results of the study (Braun & Clarke, 2012). These four overarching results are: *why* choice was implemented, *how* and *where* choice occurs, the *outcomes* of choice learning, and *leadership* for choice learning. These results are detailed in Chapter 4.

Phase 6: Producing the Report

In this final phase, I determined the order in which I wrote about the results that were generated. The way the results were reported needed to tell a coherent story about the findings of my study, with results building upon one another, rather than simply being listed and defined. Braun & Clarke (2022) describe this process as weaving strands into a singular whole. It is in this phase that I shared not only the results that emerged from the data, but also explained the

results in sufficient detail and depth so that they could be understood by readers. In this final phase, I also situated the results within extant literature to not only establish the credibility of the study, but to also establish potential relevance for future research and/or practice.

Upon completion of this six-phase process for thematic analysis, I had coded all of my data, considered clusters of connected codes across participants and types of data, generated themes. I then thoroughly defined and described each of the themes and determined the connections among the themes. I interpreted, or made sense of these themes, and discussed how they were connected to the research foci and extant literature on free-choice learning, all of which is presented in Chapters 4 and 5.

By following, documenting, and describing a specific process for the generation and analysis of data that readers can follow, I adhered to the *auditability* component of the TACT framework to ensure quality research (Daniel, 2019). Auditability is the "provision of record keeping of all decision made during the research process" (Daniel, 2019, p. 103). Further, this auditable process contributed to the *trustworthiness* of the study, another component of TACT, which refers to the confidence readers have in what is being reported (Stahl & King, 2020). The trustworthiness of my study, and the confidence readers have in it, allows the reader to consider *transferability*, or how this study may be applicable to their own contexts.

As an additional tool for auditability, I kept a reflexive journal (Daniel, 2019; Lincoln & Guba, 1985). In this journal, I documented all of the decisions I made throughout this study, the reasons I made those decisions, and actions I took as a result. I also used the reflexive journal throughout the data analysis process to document emerging findings. Additionally, as I continued to read literature on the topics related to my study, I made note of relevant ideas in the reflexive journal. Finally, the reflexive journal was used to document my own role in the research process:

my previous experiences, personal biases (Daniel, 2019) around free-choice learning and classroom practices, and changes I experienced in my insights throughout this study. **Conclusion**

As discussed in Chapter 1, I have personal experiences with the implementation of freechoice learning in under-resourced schools. These personal experiences inspired this study. Considering how my own schools implemented free-choice learning, and joys and challenges associated with that, made me curious about the occurrence of this type of learning in other under-resourced schools in a variety of settings. It was a pleasure to engage with a variety of educators as I generated data, analyzed that data, and learned more about free-choice learning in under-resourced schools and classrooms.

CHAPTER 4: RESULTS

Allowing students to make choices in the classroom is empowering, permitting them to take ownership of their learning and develop critical thinking skills during authentic learning experiences (Kiser, 2020). In a survey of middle and high school students, choice was listed as one of the most engaging strategies teachers can use in the classroom (Wolpert-Sawron, 2018). Unfortunately, upon examination of the pedagogy of poverty (Haberman, 1991), which was explained in Chapter 2, choice-based learning is not a common practice in low-income schools.

While choice-based learning might not be common in low-income schools, there are educators in under-resourced schools providing these opportunities for their students. The purpose of this study was to talk with some of these educators in an attempt to learn about the implementation of student choice in their schools. I wanted to investigate educators' decisionmaking processes as they implemented opportunities for students to make choices into their classrooms. I also wanted to learn more about how student choice is implemented in the classroom. I was interested in what types of choices were being offered to students and how frequently students were being given the opportunity to make choices about what they wanted to learn about, how they were going to do their learning, and/or how they were going to share their learning with others.

In this chapter I will first briefly introduce each of the cases, or entity, featured in this study. I will then present the study's findings from each case that emerged from the analysis of the data generated in the study. I will also provide case-by-case comparisons of these findings.

Finally, I will share the overarching results that emerged after analyzing the findings from each case.

This multiple case study includes data from six schools: Lincoln Elementary School, Ross Elementary School, Central Elementary School, Vision Academy, Oceanic High School, and Eastern Secondary School. All names included, of both schools and individual participants, are pseudonyms. Throughout this chapter, you will be introduced to each educator who participated in this study and will be provided brief demographic information about each school. Table 6 presents the six schools and 20 educators who participated in this study. The table provides a brief description of the school and the role of each participating educator. Demographic data were collected from *U.S. News & World Report* and the *National Institute of Education Statistics*. Specific citations are not included to maintain the participants' confidentiality. Recall from Chapter 3 that each participating school is an under-resourced school, meaning that more than 40% of the students qualify for free or reduced-price lunch. Further descriptions of each school included in this study will be provided throughout the chapter.

I have chosen to arrange the cases according to the frequency of choice-based learning opportunities offered to students. The first case is the school in which choice opportunities for learning were offered the least often to students; the final case is the school in which there were the most opportunities for student choice. I determined the extent of student choice opportunities in each school based on my analysis of data generated from interviews with the school-level educators who participated in the study.

Table 6

Cases and Participants

Case	Participant	Role
1: Lincoln Elementary School (Mid-Atlantic	Cassie	Principal
Region, Urban, Grades K-5)	Bonnie	Gifted Education Teacher
Region, Orban, Orades R-5)	Kara	4th Grade Teacher
	Rory	Assistant Principal
2: Ross Elementary School (West Coast,	Jamie	Instructional Coach
Suburban, Grades TK-5)	Wanda	Pre-Kindergarten Teacher
	Katrina	Wanda's Classroom Assistant
2. Control Elementary School (Midwast	Jason	Principal
3: Central Elementary School (Midwest, Rural, Grades K-5)	Diane	3rd Grade Teacher
Kurai, Orades K-5)	Kathy	Library/Media Assistant
	Matt	Principal
4: Vision Academy – Ridgeline Public	Maddy	7th/9th Grade Humanities
Schools (Pacific Northwest, Urban, Grades 6-		Teacher
12)	Claire	8th/10th Grade Humanities
		Teacher
5: Oceanic High School – Ridgeline Public	Trent	Principal
Schools (Pacific Northwest, Urban, Grades 9-	Marina	Instructional Specialist
10)	Mitchell	9th Grade Humanities Teacher
	Brad	Superintendent
6: Eastern Secondary School (Southern,	Amy	Principal
Rural, Grades 7-12)	Kristy	Middle School Teacher
	Willa	High School Teacher

Note. All school and participant names are pseudonyms.

Recall from Chapter 3 that each school-level educator (superintendent, principal, assistant principal, instructional coach) participated in one interview, while each classroom-level educator participated in two or three interviews each. Roles of participants are indicated in Table 6. The primary focus of these interviews included educator decision-making around the implementation of choice and how choice functioned in the classroom. Additionally, I asked each classroom-level educator to describe, in writing, what a session of free-choice learning looked like in their

classrooms. I also asked each teacher to share artifacts with me that illustrated free-choice learning in their classrooms. Finally, I asked all participants to complete the academic optimism scale appropriate for their role (Hoy, 2005). Recall from Chapter 3 that this scale measures the three components of academic optimism as perceived by each participant: teacher collective efficacy, academic emphasis, and teacher trust in students and parents.

The analysis of data generated from my interviews with each of the participating educators listed in Table 5, artifacts shared by each classroom teacher, and participant responses to the academic optimism scale yielded the findings described throughout the rest of this chapter. The study's findings are first presented by case, with case-by-case comparisons included.

Case-by-Case Results

As previously stated, the study comprises six cases, each case being a school and the selected participants within it. The participants in this study volunteered in response to my invitations that were posted in multiple places or emailed directly to them. Below are the results for each case in this study. As mentioned, the cases are sequenced in order from those offering the least amount of choice to students to those offering the greatest amount of choice to students. This was determined via interviews conducted with school-level participants about the occurrences of choice within their schools. Included with each case is a description of the school and an introduction to each of the participating educators. The results for each case are presented by theme: meaningful learning, influence of prior experience, expectations of students, examples of choice-based learning, preparing students for successful choice-based opportunities, teacher planning for choice-based opportunities, deeper learning, and leadership for choice learning. Comparisons among cases are also included.

Lincoln Elementary School

Lincoln Elementary School is located in an urban community in the mid-Atlantic region of the United States. The school served approximately 900 students in grades Kindergarten through fifth. During the 2022-2023 school year, 51% of students attending Lincoln received free/reduced-price lunch and 23% of students were emergent bilinguals. Emergent bilinguals are those students for whom English is not their native language or the language primarily spoken in the home (García, 2009). Three educators from Lincoln participated in study: two teachers and the school's principal.

Cassie: School Principal. Cassie had been the principal at Lincoln Elementary School for 4 years at the time of this study. She comes from a family of educators; her mother having been a teacher and her father a school and district-level administrator. She did not initially intend to have a career in education and was planning on being a pharmacist. However, after working in a pharmacy for the first time, she realized that she no longer wanted to pursue a career as a pharmacist. She went back to school to complete education courses and get her teaching license. Prior to her appointment as principal, she was a middle school math and science teacher for 11 years.

Bonnie: Gifted Education Teacher. While she had been a teacher for 21 years, the 2022-2023 school year was Bonnie's first year as a gifted education teacher. This was also her first year at Lincoln Elementary School. Prior to beginning as a gifted education teacher at Lincoln Elementary, Bonnie taught several different elementary grade levels as a general education teacher.

Kara: Fourth-Grade Teacher. Kara had been a teacher for 15 years, serving students at Lincoln Elementary for 4 years. Most of her prior teaching experiences were in primary grades,

so she was relatively new to teaching upper elementary school. Kara's classroom was very diverse. Of her 24 students, 12 were emergent bilinguals. She also told me that she had students in her classroom from Central America, Europe, and the Middle East. Kara had also recently completed her master's degree in educational leadership.

Findings: Lincoln Elementary School

Of the six participating schools, choice was implemented with the least amount of frequency at Lincoln Elementary School. Cassie, the school principal, shared that choice was more prevalent in the gifted education classroom and in some of the arts classes, but that it was not occurring often in the general education classroom.

Of the participating classroom teachers from Lincoln Elementary, Bonnie was implementing choice with a higher frequency, therefore many of the examples included in this case report represent Bonnie's classroom. Kara shared that she found it more difficult to implement choice now that she was teaching at a grade level in which the students were required to take the yearly standardized state assessment of learning. Because of the amount of content she was required to teach to ensure students were prepared for the aforementioned state assessments, she did not believe she had the time nor the flexibility to implement choice-based activities and projects.

Throughout this study, participants from many cases referred to increased student engagement, ownership of learning, relevant learning experiences, and differentiation as reasons for implementing choice-based learning. When combined, these elements create meaningful learning opportunities for students, based on the data generated in this study from teachers' beliefs. Although all of these elements were not presented during discussions with participants

from Lincoln Elementary School, the participants' discussions of meaningful learning are shared in the following section.

Meaningful Learning. Based on the data generated and analyzed in this study, this theme refers to creating learning experiences for students that are relevant and allow for increased motivation and engagement. Participants in this study also indicated that when learning was meaningful to students, they took greater ownership of the learning.

Student engagement refers to the level of attention, interest, and passion students display when they are learning (The Glossary of Education Reform, 2016). There are multiple ways students can be engaged: cognitively, emotionally, or behaviorally. Cognitive engagement occurs when students are implementing learning strategies, solving complex problems, and asking questions (Center for Innovation in Teaching & Learning, 2020). Emotional engagement is enacted via feelings students have while learning. These can be feelings of joy and excitement or of confusion and frustration. Finally, behavioral engagement describes the observable display of cognitive and emotional engagement. Examples include body language, time on task, and active participation such as note-taking and asking/answering questions. Increased engagement often leads to increased ownership of learning. Regarding student engagement, Bonnie, the school's gifted education teacher, believed that having choice made students more interested and excited about learning. Bonnie also included choice because her students "tend to think outside of the box." She stated, "they've been identified as the creative thinkers in the school, and I don't feel that their learning should be so controlled and narrowed." Implementing choice, according to Bonnie, allowed student work to be more relevant, as they could choose topics or elements of projects that had meaning to them. She also stated that choice allowed her students to show

different ways they had learned material than they would have been able to do on a traditional test, which helped them take ownership of their learning.

Kara also believed that by providing choice to her students, she was increasing their ownership of their learning. Student ownership of learning is the process by which students take responsibility for their progress and can apply learning in multiple contexts (National Institute for Excellence in Teaching, n.d.). According to the National Institute for Excellence in Teaching (n.d.), student ownership is evident when students can discuss what they are learning, why they are learning that particular topic, and their use of learning strategies. Simply stated, ownership occurs when students are actively taking a role and have agency in their learning. Another way to increase ownership of learning is to increase the relevance of topics studied, classroom materials, and instruction. Kara described a project in which her students completed a state studies review. She provided the general topic, but the students in the group could decide how they wanted to teach their peers. She said the students developed ownership of the project, knowing that they would be responsible for planning a review for their peers.

Relevance is an element which increases both engagement and ownership. Priniski et al. (2018) define relevance as "a personally meaningful connection to the individual" (p. 12). When learning is relevant to students, it requires skills or knowledge that students believe will be useful in their futures. This relevance, or notion of what is being studied being meaningful to students, also activates motivation (Crumpton & Gregory, 2011). Essentially, is the topic/context personal and connected to the real world? Studies have shown that perceptions of relevance in class work are instrumental for future success and increased academic engagement. Additional studies determined that when students view school as boring and irrelevant, they become unmotivated, because the education has no connection to their future and therefore, no value.

Participants also cited differentiation of tasks and instruction as a means of creating meaningful learning experiences for students. Differentiation is a method by which teachers can address the needs of the variety of learners in their classrooms (Tomlinson, 2000). Teachers can differentiate the content, process, products, and/or learning environment. Content refers to what the student needs to learn or how they will access the information, process refers to the activities in which students engage, products are the artifacts or projects that students are asked to complete at the end of a duration of learning, and the learning environment focuses on the ways the classroom functions and feels to students. The goal is to create the "best learning experience possible" for students (para. 2). Teachers should focus differentiation on three forms of student variance: readiness, interest, and learning profile (Tomlinson et al., 2003). Student readiness refers to the point at which students cannot yet complete tasks alone but can do with scaffolding and support from the teacher. It is also important that teachers tailor classroom instruction and tasks to student interest, which can increase motivation and achievement. Finally, a student's learning profile comprises their preferences related to learning (environment, interactions, physical needs, etc.); thinking styles (analytical, practical, or creative); and culture. Participants from Lincoln did not specifically address using choice as a means of differentiation. However, other participants' examples of the alignment of choice and differentiation will be shared later in this study's results.

In addition to creating meaningful learning experiences for students, participants from several cases throughout this study referenced their own prior experiences as influential in incorporating choice into their classrooms. There were three main ways that prior experience influenced implementation of choice for participants' students. Some participants had many choice-based opportunities in their own K-12 student experiences, which encouraged them to

infuse choice into their own classrooms. Other participants had very little choice in their academic careers; a situation which made them want to provide a different experience for their students. A final group of participants had experiences outside of their K-12 educational experiences that influenced them to incorporate choice into their classrooms. Examples of each of these influences will be presented throughout the cases.

Influence of Prior Experience. Teachers' professional and personal prior experiences can influence what and how they teach in the classroom. According to Monica Miller Marsh (2003), a teacher's prior experiences in school, at home, or in other professional endeavors influence the ways they teach in their classrooms. Teachers' thinking is also influenced by their personal history, beliefs, values, and social, cultural, and political groups to which they belong. The participants at Lincoln Elementary had varying degrees of prior experience with choice. Bonnie fondly shared an experience in her eighth-grade science class that allowed her to make some choices, but most importantly, she shared about being selected by her junior high school art teachers to create a mural for the school. She said she was given a general topic but was allowed to create whatever she wanted.

Kara, on the other hand, was not able to think of any choice-based opportunities from her own K-12 experience. When asked about other prior experiences that may have influenced her desire to implement choice for students, she shared training she engaged in while in a previous position at another school. That school had just become an International Baccalaureate (IB) school:

We had started the IB program, I think that's what opened my eyes up to, you know, worksheets and sitting kids down in seats wasn't what we were meant to do with

nowadays kids. We're not raising factory workers anymore. We're raising, gosh only knows what they're going to be doing when they grow up.

She shared that this experience helped her learn how to implement project-based learning and create an environment in which students were doing more than completing worksheets at their desks.

Cassie did not share any influential K-12 experiences relating to choice, but—similar to Kara—she shared about some of her previous experiences as a teacher. She shared that she attended a workshop on questioning techniques for the classroom, which she said served as the foundation for her to implementing choice in her own classroom. Another element affecting the implementation of choice is the levels of expectations held for students by the educators in the school. Participants throughout this study referenced both high and low expectations being observed in their classrooms and schools.

Expectations of Students. Expectations refer to the standards of performance expected of students. Educators can hold expectations for students on a continuum from high expectations to low expectations. High expectations are reflected in the belief in the capabilities of students, and the planning of rigorous, challenging tasks for students that encourage high quality work (Williamson, 2012). Alternatively, educators can hold low expectations of students, in which their standards for performance are lower, often providing students with less rigorous tasks (P. V. Wilson, 2019). There is evidence that teachers often hold low expectations of students of color and students living in poverty (Lee & Smith, 1996; Rubie-Davies et al., 2006; Weinstein, 2002). There is also evidence that the expectations that teachers hold of students lead to self-fulfilling prophecies, as discussed in Chapter 2. This occurs when students begin to believe they do not possess the skills or knowledge needed in order to be successful, which leads them to

under-perform (Gay, 2018). In short, "students perform in ways that teachers expect" (Williamson, 2012, p. 1).

Both Bonnie and Kara reported that they held their students to high expectations. When asked how this was evidenced in their classrooms, both teachers gave examples of the encouragement they offered to students. Bonnie said that with her gifted students, she sometimes had to give them a "boost of confidence" before they started a task. She did this by acknowledging that the task was challenging, and that she was asking them to think and process before they started working. Similarly, Kara reported that she constantly told her students, "You can do this, let's figure this out." She also said, "There's not a kid that can't learn in my classroom," and she always let her students know that she believed in them.

Conversely, Cassie, the school principal, reported that some teachers in the building had difficulty with the "productive struggle in the classroom." She shared that teachers are "inclined to rescue [students] right away" and "not allow that productive struggle to produce what they need to be successful." Cassie also shared that she believed that all students should be provided the option and opportunity to prove what they are capable of doing "without us coming in with preconceived notions that they can't do it." She reported that some teachers in her building believed that students were not capable of choice-based learning, academically or socially, so they did not provide those opportunities for students.

Once participating educators made the decision to implement choice into their classrooms, they reported then having to decide what those choices would be and how choice would function. Throughout this study, participants described choice as occurring in four primary ways: small scale choices, choice within parameters, choice in final assessment and/or product, and full-autonomy choices for students. Descriptions of these types of choice are

discussed, with examples of each, as they appeared within participants' classrooms, will be presented throughout this chapter.

Examples of Choice-Based Learning. Chapter 2 presented several classroom-based approaches to free-choice/choice-based learning. These approaches included project-based learning (PBL), Genius Hour, and makerspaces. Choice in the classroom might also consist of small-scale choices, such as the use of task lists, choice boards, or "must do/may do" lists, all of which present a list of options from which students select which tasks they will complete in an order of their choosing (Iasevoli, 2022). Students may also have choice within parameters, such as when the teacher provides the PBL topic or defines the type of project students will complete, giving students choice of topic within the project. Students might also have choice in the way they demonstrate their learning. For example, students could choose to write a traditional essay about the topic of study or elect to complete a more creative project, such as a piece of art.

Choice-based learning at Lincoln did not happen school-wide, however, and the occurrences of choice in classrooms varied widely from teacher to teacher. There were some small-scale choices being offered. For example, Cassie said that some teachers offered students the option to hand write or type assignments. Kara used choice boards in her classroom, in both the math and English language arts blocks:

Everything has to be completed, but how you want to do it is completely up to you. Like, do you do the worksheet first? Do you do your online thing first? Do you work on your word study first? That's every day in math and reading they have that choice of what to do.

Cassie shared that in the general-education, everyday classroom at Lincoln Elementary, "it's definitely free-choice within parameters." One example of this is the project Kara assigned

to her students to review the standards pertaining to the history and features of their state for their state-level assessment. The students were placed in groups and provided with a topic, but within that topic the students were able to choose what they wanted to teach their peers, and how they wanted to present the information.

In the gifted classroom, Bonnie offered her students choice in multiple ways. One way students had choice was in their final products:

I often give them choices. While I insert choice with pretty much every unit that we do at some point, it's usually having to do with the project, or that final product. I guess I should say the product or how they approach the product.

Additionally, Bonnie offered her students full autonomy as they completed a passion project toward the end of the school year. A passion project allows students to engage in "authentic investigation" into a topic that they are passionate about, something they want to learn more about (West & Franklin, 2019, p. 35). In Bonnie's class, students could choose their topic, choose how they wanted to learn about that topic, and choose how they wanted to share their learning with their classmates. Although most students elected to do slide show presentations to share their learning, some students chose other methods. For example, one student chose to study an artist, and used the artist's techniques to complete his own original piece of art as part of his presentation of learning.

Participants throughout this study discussed the fact that most students were unaccustomed to making choices in educational settings, so teachers had to implement supports to ensure students had a successful experience. Some of these supports included scaffolding, modeling, and conferring with students. Examples of each type of support will be provided throughout this chapter. **Preparing Students for Successful Choice-Based Opportunities.** As with every new strategy implemented in the classroom, students need to be taught how to use the strategy in order to be successful (Archer & Hughes, 2011). This preparation can include explicit teaching of the strategy and scaffolding to support students until they are able to use the strategy or engage in the task independently. Other ways to support students include teacher modeling (Lea, 2013) and individual conferring (Serravallo, 2019) with students.

Scaffolding in the classroom is a process in which the teacher adds supports for students to enhance and ensure learning. Teachers implement scaffolding by building on students' prior experiences and knowledge as they teach new skills and concepts (The IRIS Center, 2005). Just like construction scaffolding, instructional scaffolding is intended to be temporary, and adjustable based on student needs. Not only can teachers use this scaffolding concept for academic tasks, but they can also scaffold for students' metacognition, which includes self-monitoring and goal-setting (Menzies et al., 2009). For example, a teacher may frequently monitor a student in a structured manner at the beginning of this scaffolding process, but once the student begins to successfully monitor their own behavior, the teacher can stop the structured monitoring. Another scaffold that can be employed for student self-monitoring is the use of journals, in which students reflect on their focus, engagement, time on task, and other working behaviors (Luca & McMahon, 2002).

Cassie shared with me that some students, even the gifted students, struggled to begin their choice-based projects. "I think it's because they are so used to being told x, y, and z has to happen, in this way, that they're trained just to think that's how things are supposed to be." When Bonnie implemented personal passion projects in her classroom, she said it took some time for students to understand what she wanted them to do, "and I think it's because they never

had that opportunity [to pick their own topic] presented to them. The idea was foreign." Bonnie did not introduce the passion project to her students until the end of the school year. Having worked with students on several projects throughout the school year, she knew that she was going to need to support her them with this open-ended project by building in some structures. These structures included helping students narrow topic choices, setting goals and deadlines, and helping students monitor their own focus during the independent projects. Bonnie also reported that a few of her students struggled with their own self-regulation. The lack of structure and the fact that students had to monitor their own progress and use of time in some of the choice-based projects was difficult for some students to manage. According to Bonnie, some students not only struggled with the open-ended nature of some choice-based projects, but also with the physical behavior needed to monitor themselves in an environment with a lot of leeway.

Another way that teachers can prepare students for successful choice-based learning is to engage in individual conferences with students. Conferring can be an informal check-in with students, not always pre-planned but rather an opportunity for the student to talk with the teacher, to discuss how work on a project or task is progressing, and to seek guidance if necessary (The Institute for Arts Integration and STEAM, n.d.-b). One way that Bonnie supported her students through these projects was by meeting with the students individually to support them as needed. This was relatively easy for Bonnie, since the groups of students in her gifted class were small, often only five or six students. Other participants from Lincoln Elementary did not discuss preparing students to engage in choice-based opportunities.

As was discussed earlier, planning is a crucial part of teaching. Planning for choice-based opportunities is equally important to planning for any other academic learning. Participants throughout this study talked about intentionally planning for choice-based opportunities and

thoughtfully determining how choice would be used in the classroom. Elements of planning that were discussed throughout the study included where to infuse choice, establishing expectations for choice-based projects, developing rubrics, and providing examples for students. Examples of how teachers planned for choice-based activities in their classrooms will be presented throughout this section.

Teacher Planning for Choice-Based Opportunities. One way of planning for classroom instruction is to use a backwards design process, such as that described by Wiggins and McTighe (2005) in Understanding by Design. The process can also be described as planning with the end in mind. Teachers begin by identifying what students should know and be able to do at the end of the learning cycle. Teachers then create the assessment to measure that learning, and finally plan the lessons that will allow students to successfully complete the assessment. As it pertains to choice-based learning opportunities, teachers must first determine the goal of a particular opportunity for choice. Then the teacher must decide what lessons and scaffolding will be necessary for students to complete the task, or assessment of learning. To do this, teachers must know their students' current levels of skills and understanding around not only the content being addressed, but students' abilities to make choices and self-direct their learning. This is also where teachers will need to create the rubric if they are using one. A rubric articulates the expectations of the project by providing descriptive statements in categories indicating how standards are to be achieved (B. S. Cooper & Gargan, 2009). Teachers might also create or locate examples of completed projects, which can also help students see the expectations they are working toward.

Bonnie indicated that when she was planning a unit, she began by deciding what it was that she wants students take away from the unit, and then determined where she could "put the

element of choice into it." Once she determined how and where she wanted to infuse student choice, she then planned for the structures that might be needed to support students as they navigated those choice opportunities. One of those supports was finding or creating examples of the projects she was asking students to complete. Another support was to offer more parameters for the projects at the beginning, and then offering more open-ended projects later in the school year. In planning for choice-based learning for students, Kara stated that it was important to establish expectations for students right at the beginning. "I think it's a lot of structure, putting down rules and showing them how you want it [choice time] run." In her experience, students "thrive off of structure and knowing exactly what to expect." She shared that one of the biggest challenges was establishing the routines, "because they're not used to having that freedom and that choice."

Educators in this study chose to implement choice in their classrooms for a variety of reasons and worked to prepare students to engage in these choice-based opportunities. These teachers continued to implement choice because of the outcomes they observed as a result of implementing choice. Upon inspection of the outcomes described by participants, I discovered that they could be aligned with the elements of deeper learning: mastery of core academic content, critical thinking and problem solving, effective communication, ability to work collaboratively, learning how to learn, and academic mindsets (American Institutes for Research [AIR], 2022). While not all of these elements were present in the data generated from participants at Lincoln Elementary, examples of each element will be presented throughout this chapter.

Deeper Learning. The William and Flora Hewlett Foundation, which funded research on deeper learning, identified the following components of the concept, which are believed to help

students succeed in college, career, and civic life: mastery of core academic content, critical thinking and problem solving, effective communication, ability to work collaboratively, learning how to learn, and academic mindsets (AIR, 2022).

To master core academic content, the first competency of deeper learning, students must be able to develop a baseline understanding in a particular academic discipline. They are also able to transfer that knowledge to other situations (Vander Ark & Schneider, 2014). The second competency is to think critically and solve complex problems. Some of the tools students may employ to achieve this goal are data analysis, statistical reasoning, and scientific inquiry. Creative problem solving and persistence are also parts of this element (Vander Ark & Schneider, 2014). Working collaboratively is the third competency of deeper learning. To achieve this, students must work with others in order to achieve pre-determined goals. In some cases, students are working with other students. Students might also work with adults within the school, or with members of the community (Vander Ark & Schneider, 2014). The ability to communicate effectively is the fourth competency. Similar to collaboration, this communication may occur student-to-student, student-to-teacher, or student-to-audience/community. Students must be able to effectively communicate both orally and in writing (Vander Ark & Schneider, 2014). The fifth competency is "learn how to learn." In this element, students develop the capacity to monitor and direct their own learning. Students can set goals and monitor their progress, manage their time, and work independently, knowing what they need in order to be successful (Vander Ark & Schneider, 2014). The final competency of deeper learning is to develop academic mindsets. In this element, students see themselves as learners, develop a positive attitude about academics and increase their academic perseverance. When students have a positive attitude about learning, they "are committed to seeing work through to completion,

meeting their goals and doing quality work, and thus search for solutions to overcome obstacles" (Vander Ark & Schneider, 2014, p. 4).

Instances of deeper learning were not as prevalent in the data generated from Lincoln Elementary as they were at some of the other participating schools, which will be shared later in this chapter. However, both Bonnie and Kara shared projects in which their students worked collaboratively and communicated effectively when they presented their learning to others, which are two elements of deeper learning. Bonnie believed that offering choice during a final project was a "way for me to get them to synthesize and bring together hopefully everything they had studied and show me how...they got to decide how they wanted to show me what they learned." I believe this notion of synthesis of learning aligns with the deeper learning element of mastering core academic content.

Another element of deeper learning is the notion of learning how to learn (AIR, 2022). Kara discussed this as it pertained to offering choice in her classroom. She believed that by allowing choice, students became more willing to participate in their education and their learning, rather than just completing tasks because they were expected to do so. She shared that as participants in their education, students were able to learn about themselves as learners and make choices that best suited their needs and preferences on any given day.

Many of the details about the implementation of choice in this study are specific to individual teachers and/or classrooms. However, a common thread throughout the data generated regarded the roles school and district leaders play in the implementation of choice in the classroom. While all leaders who participated in this study were supportive of the implementation of choice, their active roles in encouraging and modeling choice varied. Examples of leadership as it relates to choice will be shared throughout this chapter.

Leadership for Choice Learning. Existing literature describes the influence of school leadership on student achievement, climate and culture of the building, and teacher job satisfaction (Branch et al., 2013; Xu, 2018). School leaders can also play an important role in influencing the expectations and behaviors of both teachers and students in their schools. The role of the school leader is to understand the importance of high expectations and to remove barriers to student success (Williamson, 2012). However, as it pertains to choice-based learning, educational leadership has not yet been researched.

While Cassie, the principal at Lincoln Elementary School, supported teachers in their endeavors to incorporate more student choice in the classroom, she had not been emphasizing that teachers do so. She shared with me that some teachers in her building had low expectations for students which prevented them from implementing choice-based opportunities, and she believed it was her job address that.

We've got to find a way...we got to set the expectations higher, basically, for some of these kiddos because they just aren't recognizing and realizing what they're capable of. And, I think...I've allowed, not intentionally, but unintentionally allowing some of the classrooms to set the bar a little lower just due to their circumstances and things that they go through at home.

With an emphasis on holding students to higher expectations, Cassie hoped that more teachers would allow students to demonstrate their capabilities, in part by allowing more student choice at Lincoln Elementary in the future.

The next participating school is another elementary school. This school had similarities in student demographics to Lincoln Elementary, but was a smaller school located on the opposite side of the country.

Ross Elementary School

Ross Elementary School is located in a suburban community on the West Coast. Approximately 42% of students at Ross qualified for free/reduced-price lunch. The school served students from pre-kindergarten through fifth grade. Of the approximately 500 students at Ross, 39% were emergent bilinguals, meaning English was not their native language. Participants from Ross Elementary included assistant principal, Rory; instructional coach, Jamie; classroom teacher, Wanda; and classroom assistant, Katrina.

Rory: Assistant Principal. While 2022-2023 was her first year at Ross Elementary, Rory had 20 years of experience as an educator, serving as a classroom teacher, instructional coach, and assistant principal at other schools.

Jamie: Instructional Coach. Jamie, who also participated in the pilot study, has been an educator for 19 years. She had spent 9 of those years at Ross Elementary. She was the only instructional coach at the school, coaching teachers around instructional practices in all content areas.

Wanda: Pre-Kindergarten Teacher. Wanda, also a participant in the pilot study, was a pre-kindergarten teacher at Ross Elementary School. Children attend pre-kindergarten during the year before entering kindergarten. Wanda had been a teacher for 17 years, spending 12 of them at Ross Elementary.

Katrina: Classroom Assistant. Katrina served as Wanda's classroom assistant. She had been a classroom assistant at Ross Elementary for 5 years, but this was the first year that her time was solely dedicated to Wanda's class.

Findings: Ross Elementary School

Ross Elementary School participated in my pilot study in 2021, so I was interested to see how choice-based learning had transformed after that study, which was conducted 2 years prior. I was also excited to talk to two additional staff members, with whom I did not have an opportunity to speak with during the pilot study. Although Katrina had worked with Wanda before, this was the first year that she was in the classroom during any of Wanda's choice-based experiences. Katrina was reserved during our interviews, as this was the first time she had ever participated in a research study. She did not have many things to share with me, so her perspective is represented less frequently than the other participants from Ross. The findings from Ross are presented in the sections that follow. Additionally, there are comparisons of the findings between Ross Elementary and Lincoln Elementary.

Meaningful Learning. Wanda shared that one of the reasons she implemented choicelearning in her classroom was because it was highly engaging for students. Additionally, Jamie described students as they worked on choice-based projects, "Kids are highly motivated and putting a lot of effort into their projects because they are care about them, because they're interested in it." Wanda shared that implementing free-choice was important because, "that's one of the ways that students, especially at this age, learn" by engaging with their environment and exploring their curiosities.

Jamie viewed free-choice learning as an "under-utilized strategy" in the classroom. Similar to Bonnie's decision to implement choice because it gives students ownership of their learning and how they show their understanding, Jamie pointed out that using free-choice learning at the beginning of the year helped teachers get to know their students, work styles, preferences, and more, and allowed them to infuse relevant learning experiences.

Influence of Prior Experience. Like Bonnie from Lincoln Elementary, Jamie was able to recall only one project she did in high school that allowed her choice. Her teacher called it an "I-Search project," in which students were able to select a career to investigate and learn more about. Jamie chose to investigate circus clowns. She shared that, "It was fun because I wasn't told that I couldn't do that project and do that topic."

While Wanda did not have experiences from her time as a K-12 student to share, she did share that her prior experience with choice-based learning came from her learning experiences at home:

As a child...my parents really encouraged learning about what you wanted to learn about...You had a question about it, let's go research it and find out. So I think that kind of really helped create that foundation for me.

Assistant principal Rory did not have any K-12 or childhood experiences with free-choice learning. When I asked her if she could recall any experiences from her time as a student in K-12 schools, she said, "As a student? No. That was something that, just growing up, we did not do a lot of free-choice learning." Rory was an instructional coach in a project-based learning school prior to coming to Ross Elementary, so, like Kara from Lincoln, she had prior teaching experience to call upon as she worked to support teachers at Ross around the implementation of choice.

Expectations of Students. When asked about the levels of expectations held for students at Ross Elementary, Wanda shared that she held high expectations for her students, which was evidenced by the use of higher order thinking questions and academic vocabulary in her classroom. Additionally:

I try not to baby things down for my students. Anytime someone tells me, "oh, they're too young to do that," then I go, "no, they're not." When we're doing our PBL unit on plants, they're botanists; in math, we're mathematicians. Mathematicians have to prove or show how they got an answer, so that's what we're going to do.

As classroom teachers, Wanda, Bonnie, and Kara all stated that they held high expectations for students. These high expectations were demonstrated, in part, by a confidence in students' abilities to complete challenging tasks.

However, both school-level educators I interviewed from Ross Elementary expressed that not all teachers in the building were holding their students to high expectations. Jamie shared that morale in the building was a little low because the school was facing a lot of behavior challenges, and that teachers were experiencing a lot of stress.

I think, if you ask somebody, "do you have high expectations for your students," they're going to answer yes, because "yes" is the answer you're supposed to say. I think in reality though, we have some folks on staff right now feeling very stressed and very pulled thin, and maybe we aren't as confident in our kiddos as we could be.

Rory echoed this, stating that there were "quite a few [teachers], where they tend to write off some of our students." She shared a story about a teacher who sent a student out of the classroom, and when Rory brought the student back, the teacher said she did not want him in the classroom.

Although all of the participating classroom teachers indicated holding high expectations for students, all three school-level participants reported teachers having low-expectations throughout their schools, demonstrated in different manners. For example, teachers at Lincoln Elementary did not believe that students were capable of engaging in challenging learning, as reported by Cassie, and teachers at Ross Elementary lacked confidence in their students' abilities, as reported by Jamie.

Examples of Choice-Based Learning. Although Wanda was the only classroom teacher I was able to speak with from Ross, I learned about some ways that other teachers in the school were implementing choice. Jamie shared that some teachers at Ross, similar to teachers at Lincoln, were implementing choice-within-parameters. For example, in one classroom the students were learning about biographies. As students wrote their own biographies, they were able to choose the person they wanted to study and write about. Katrina and Wanda both shared about the "exploration block" in Wanda's classroom, in which several stations were set up throughout the room and students got to choose which stations they would like to visit, and how much time they spent there. Students are also able to decide how they wanted to interact with the materials in the station. Wanda emphasized that it was important to have a balance of teacher selected and student selected time in the classroom.

Similar to Bonnie at Lincoln Elementary, Wanda was the only teacher at Ross Elementary implementing a full autonomy project for students. She began implementing Genius Projects during virtual learning in the 2020-2021 school year. While those projects were completed while students were at home with their families, it was Wanda's intent to bring the projects into the classroom when everyone returned to in-person learning. She was not able to implement Genius Projects during the 2021-2022 school year, as the transition back to school was challenging for some of her young students. However, she did implement these projects during the 2022-2023 school year. During the Genius Projects, students were able to choose anything of interest to learn about. They then shared their learning with their classmates in a manner of their choice. While Genius Projects were not executed as Wanda had planned,

students were able to complete the projects, and she said she intends to do them again in the next school year.

Preparing Students for Successful Choice-Based Opportunities. Just as Bonnie and Kara shared from Lincoln Elementary, most students at Ross Elementary needed some support in order to engage in choice-based projects. In preparing her students for free-choice learning, Wanda modeled each step of the process: brainstorming topics, choosing just one topic, conducting research, and designing a presentation. If students were having trouble or if they were not able to draw or write what they wanted to study, she met with them individually and wrote what the students dictated to her. The need to support students through these choice-based activities was in alignment with Bonnie's experience, in which she intentionally planned structures, such as gradually offering more choice and examples to help her students.

Teacher Planning for Choice-Based Opportunities. As with any activity in the classroom, teachers have to intentionally plan choice-based opportunities if they are going to be successful (Panasuk & Todd, 2005). Rory discussed the importance of "planning with the end in mind." She shared some of her work with another teacher at Ross who was attempting to implement some choice-based activities for his students:

There's a lot of conversation with him tying it back to what standards are you teaching? What is the final product going to look like? And while the final product per student is going to look different, what do you want the students to get out of it?

This expresses a similar mindset to Bonnie, who shared that when she planned a unit, she first decided what it was that she wanted students to learn by the end of the unit, then decided where she could infuse student choice. And, depending on the task and amount of student choice, she also determined what structures she needed to put into place.

Participants at Ross Elementary also emphasized the need to establish project expectations prior to students engaging with free-choice learning. Rory said it was important to establish the expectations for the students working on their choice learning, otherwise they would all be asking, "what do I do?" Wanda discussed keeping the expectations realistic. Her students were allowed to choose which stations they went to during the exploration block, and how long they stayed there. This is different from what many teachers do during a stationrotation, in my experience, in which students are assigned to a station, or they have to stay for a pre-determined amount of time. Wanda shared that staying in one place for a pre-determined amount of time is "not what I do as an adult. So, I always try to think about that too. I don't ask the kids to do something I personally wouldn't do."

Deeper Learning. As mentioned previously, deeper learning, as a construct, consists of six elements: master core content, think critically and solve complex problems, work collaboratively, communicate effectively, learn how to learn, and develop an academic mindset (AIR, 2022). Katrina observed deeper learning with the young students she worked with in Wanda's classroom:

They're early, learning how to write numbers and letters, they don't even know how to read fully. It's more of an out of the box type of thinking. Beyond basic learning numbers and letters. It's more critical thinking, expanding their thinking.

Wanda further encouraged this element of deeper learning in other ways as well. When discussing the nomination of students to participate in a PBL camp within the district, many other teachers nominated their "high" students, those with high achievement scores, but Wanda believed "kids who need interventions deserve enrichment too." She believed that just because a

student might have been struggling with reading did not mean that they did not have deep thinking or problem-solving skills.

Rory described some outcomes of the implementation of choice in Wanda's classroom, which reflect critical thinking and effective communication:

The students who have been through [Wanda's] classroom, what I'm finding is that they are more autonomous, they are outside of the box thinkers. I find it interesting when I think about her students in particular, their language capabilities are broader than what I would find from other students. They're using different language, but also more language than other students would.

In her classroom, Wanda used the exploration block to assist her students in mastering core content as they engaged with content-related learning stations. The exploration block also allowed students to collaborate with others in the stations. Finally, the exploration block also allowed students to learn effective communication skills. Katrina, for example, shared that one of her roles as an adult during the exploration block was to help students learn how to communicate with one another when they wanted to use the same materials or needed to share space at the station.

Wanda also described how students developed an academic mindset in her classroom, another component of deeper learning. She shared about a student who studied DNA and chromosomes for her Genius Project. The student was able to describe DNA and answer questions about it, as a 5-year-old. Wanda said, "It was really cool also to see the depth of their learning. It just shows when a student has an interest in something, that the level of understanding, the depth of understanding that they can have is amazing."

Participants from both cases presented thus far indicated that when given choice, students invested more time and effort in their learning. Bonnie believed that students would do more if given a choice. Wanda's experience supported this notion, as she discussed the depth of understanding that students could achieve when interested in the topic.

Leadership for Choice Learning. Both Rory and Jamie discussed examples of teachers at Ross Elementary holding low expectations for students. As leaders in the building, they both stated that this was something they would work on with teachers as they approached the next school year. Cassie shared a similar sentiment, believing that she allowed teachers to hold lower expectations, so it was her intent to begin the next school year emphasizing the need for holding students to higher expectations. According to Cassie, these low-level expectations may have been impeding the implementation of choice, as some teachers in the school lacked the confidence in their students' abilities to complete self-directed learning.

Like at Lincoln Elementary, choice-based learning was not a school-wide endeavor at Ross Elementary at the time of this study. Jamie pointed out that Wanda was really the only teacher fully implementing choice, and talking to other people about it. She did say that there were other teachers that wanted to try implementing choice. Therefore, this will be something that she, as the instructional coach, will work on with teachers in the next school year. She did say that she and Wanda have presented about Genius Projects at conferences, and that they have provided examples of the state standards that are addressed over the course of a Genius Project cycle, "Making it obvious to people that it is possible while still letting kids choose."

Regarding the support for teachers in the implementation of choice, Rory stated: Knowing that you have to put in the work as an administrator, that you have to put in the training and the coaching, you have to be in classrooms, modeling with teachers and

helping them. You have to get in the trenches too, pushing students' thinking, but pushing teachers' thinking too.

Based on the statements made by leaders at both Lincoln and Ross elementary schools, if the implementation of choice is a goal for a school, it seems that the school leaders have to not only support it and encourage teachers to use it, but also show teachers when and how they might implement choice.

The next participating school was another elementary school. Central Elementary was a much smaller school that the previous two schools. Its poverty rate was similar to both Lincoln and Ross elementary schools, but there were fewer emergent bilingual students.

Central Elementary School

Central Elementary School is located in a relatively small rural community in the Midwest. Until 2022 this elementary school served students in grades K-5. In the most recent school year, the school transitioned to serving only upper elementary, grades 3-5. Forty-two percent of the students at Central qualified for free/reduced-price lunch. Participants from Central included the school's principal, a classroom teacher, and the library/media center's assistant.

Jason: Principal. Jason's first career was in law enforcement. He served as a police officer and school resource officer prior to becoming a kindergarten teacher. He was a classroom teacher for 5 years before becoming an elementary school principal. He served as principal of Central Elementary School for 5 years. Jason was no longer the principal at Central Elementary School at the time of this study, having taken a different education-related job. However, he was sitting on the school board for the school district in which Central Elementary is located at the time of this study. **Diane: Third-Grade Teacher.** Diane told me that she explored several other majors while in college, but all of them involved working with children. Diane had taught third and fourth grades for 14 years at the time of this study. She taught at Central Elementary for 6 years prior to relocating out of state in 2023.

Kathy: Library Media Center Assistant. Kathy did not begin working outside of the home until her youngest child went to school. She had been an educator for 15 years, serving as Central Elementary's library media center assistant for all 15 years.

Findings from Central Elementary School, as they are related to the aforementioned themes, are presented in the sections that follow. Also included are comparisons to Lincoln and Ross Elementary Schools.

Findings: Central Elementary School

The principal at Central Elementary School had implemented several opportunities for not only students to engage in choice-based learning, but the staff as well. Jason offered an opportunity for his teachers to select a topic of their choice and investigate it as a professional development opportunity. This was a means of modeling choice-based learning and engaging his staff, with the intent that they would then take such learning into their classrooms. He also implemented a makerspace, which each student was provided the opportunity to explore during their non-core class time each week.

Meaningful Learning. The educators at Central Elementary expressed many ways that choice-based learning allowed students in their school to be engaged in meaningful learning, similar to participants from both Lincoln and Ross Elementary schools. Jason stated, "I really think [choice is] the right thing to do for kids. I think we need to get kids in the states of joy and wonder and curiosity and allow them to chase what they're passionate about." Wanda and

Bonnie provided opportunities for students to chase their passions, and explore topics that they were interested in. Kathy shared:

The reason I really love project or choice-based learning is because so many students have strengths that don't get to shine when we're very limited by what we're trying to get them to do. Basically, I like the choice-based because it meets the students where their interests are.

Kathy also shared that she believed choice engaged a greater number of students that "don't excel in traditional ways."

Previously, Jamie from Ross Elementary shared that choice learning allowed students to take ownership of their learning. Kathy also believed that choice allowed students to take more ownership of their learning and stated that she will always infuse choice into the library because it was so engaging for students:

There are a lot of kids that are willing to please, and they'll jump through hoops. But when you let them choose, they wake up, they get excited, and they get interested. They have ownership of what they're doing. They're not just following orders. I really love it when it becomes their thing.

Diane discussed choice offering relevance and differentiation in her classroom. "I became painfully aware that children were interested in things that had an immediate application to themselves, and most standard curriculum does not feed that interest." Because of this, she thought that offering choice would be a good way to differentiate learning in her classroom. Diane was the first teacher to discuss choice as a means for differentiation.

Influence of Prior Experience. Like the previous two cases, the educators at Central Elementary had a variety of experiences that influenced them to implement choice in the

classroom. Similar to Jamie's experience, Diane had one significant choice-related memory from her K-12 education. Diane shared that she was in the gifted program as a student, and was encouraged to explore topics that interested her. Kathy, like Rory and Kara, did not have choicebased experiences as a student. However, she shared that as a parent she encouraged her children to explore their interests and passions and had "seen the benefit of it."

Jason's prior experiences with choice were unique. He could not really call upon any choice experiences from his K-12 schooling, nor did he have any choice-based opportunities in college. He shared that college, "was just the start of like...no longer were you allowed to learn or teach or explore things. You were just being told how, what, and when to do things." Not really thriving in his college experience, he joined the police academy as a junior. He essentially failed out of college because he stopped going to class. After becoming a police officer, he was a school resource officer, placed in a low-income school. This experience highly influenced him in his decision to become a teacher and to incorporate choice in his classroom. He shared:

As an [school resource officer] you would just see kids that just didn't have any choice in their life because of the circumstances of their upbringing. Where everything they had to do was just about survival. And they come to school and are told to do this, this, and this, and they never get that opportunity to explore or be curious or wonder, like, what could be in life or how to go find the answer on their own, everything has been dictated for them.

He became a kindergarten teacher because kids at that age were able to "get lost in their wonder." This was also an impetus for him implementing his professional development project for his staff when he became a principal. He wanted teachers to be able to get lost in their own curiosity about something, recognize the joy in that, and then provide those opportunities for students.

Like Wanda, Jason had a significant out-of-school experience that influenced his decision to implement choice in the classroom. For Wanda, it was her childhood experiences at home with her parents that influenced her; for Jason it was seeing students in schools as a school resource officer. While Wanda was the only participant to this point that talked about the influence of the experiences provided by her parents at home, Kathy talked about providing the opportunity for her children to pursue their passions at home and believed that that had a lasting impact on them. Kara's discussion of professional development opportunities encouraging her to implement choice in her classroom was in alignment with Jason's desire to provide professional development that allowed his teachers to experience a passion-driven project, in hopes that the teachers would then implement similar experiences for their students.

Expectations of Students. All of the educators at Central Elementary expressed holding high expectations of students, this was the first case in which there were no reports of low expectations for students. Classroom-level educators at all three schools stated that they held high expectations for students. Evidence of these expectations, however, varied among the participants. Jason said this was evidenced by the fact that you could go to any teacher and ask about any student, and that teacher would be able to:

discuss at length what a kid knew and didn't know based upon the standards and evidence and the level of mastery that they had done...what kids truly know and don't know from an academic vs. compliance or what they turned in or didn't turn in was a non-factor in our building.

Diane expressed that she did not expect perfection on student projects, but she did expect for work to be something students were proud of, and something they would be proud to show the public.

Examples of Choice-Based Learning. Choice-based opportunities at Central Elementary spanned a continuum as they have at both Lincoln and Ross Elementary schools. Jason reported that some teachers had extended blocks of time in which they used project-based learning and students generated their own driving questions to guide their work. Participants from Central Elementary were the first to discuss significant use of project-based learning as a means of choice for students. All students in the building, K-5, also visited the makerspace once a week. During this time, student choice was often within some parameters. For example, third-grade students were tasked with designing and building worktables for the space. Choice-within-parameters was a common approach to choice in all three schools. However, participants from neither Lincoln nor Ross made any reference to a makerspace being available to students in their schools. Additionally, Central was the only school thus far in which all students had exposure to a choice-based opportunity.

Jason shared that, "in 20% of classrooms there was some form of free-choice learning going on." He said that several teachers did this as an entry event into the classroom, where "students were allowed to free explore and research and get into STEM labs or things like that." This was similar to Wanda's exploration block in which there was dedicated time each day for students to freely explore a variety of activities. Diane was one of the 20% of teachers offering a fully free-choice opportunity for students, which was achieved with Genius Hour projects. Diane being one of only a few teachers implementing a fully autonomous project is similar to Bonnie and Wanda, who were the only teachers at their schools offering this opportunity to students.

Preparing Students for Successful Choice-Based Opportunities. Kathy was the only educator at Central Elementary that discussed the need to prepare students for a choice-based learning opportunity, which they likely had not experienced before. "I think so many kids, especially in the school setting, are used to being told what to do and when to do and how to do it, that when they're given freedom, they don't know how to self-monitor." She also shared that the makerspace was "such a change of pace" from what they had been doing previously that some students were hesitant to participate. And, while Kathy did not say that she modeled makerspace activities, when the reluctant students were able to see other students embracing it, they were more willing to participate. She also discussed students' willingness to participate as it pertained to having their work graded, saying, "I think they were less afraid of failing because they knew it wasn't something that was going to be strictly graded. It wasn't graded at all actually." While no one else explicitly discussed the notion of grading, Wanda's choice opportunities were not graded, as pre-kindergarten students at Ross Elementary School did not receive traditional grades.

Participants from all three cases emphasized that children did not have much experience with choice in the classroom, which resulted in some challenges helping students get started and self-monitoring their behaviors. Kathy and Bonnie both shared that most students had not previously had the opportunity for choice-based learning. Wanda modeled each phase of the Genius Projects for her students, as it was something they had not done before. However, she told me that with the exploration block, students usually "dive right in" and there were rarely reluctant participants. This willingness to "dive right in" is in contrast to what other participants shared thus far about student participation in choice-based activities. It is possible that this was due to the age of Wanda's students, or the fact this this type of exploration is more common in preschools, therefore familiar when students arrived to Wanda's class. Bonnie noted that some students had trouble with self-regulation in the lack of structure. Kara also shared that students were not used to having the freedom and choice. Kathy echoed these experiences, noting that when given the freedom, students did not know how to self-monitor.

Teacher Planning for Choice-Based Opportunities. As other teachers have stated, Kathy engaged in a process of backwards planning. Because she only saw students for a short period of time each week, she began with determining what students needed to do during their visit to the library, then infused choice into their tasks as she could. Diane established the expectations for student choice-based projects prior to them beginning their work, emphasizing that she did not expect perfection, but that she expected them to do work they were proud of. Both of these examples are in alignment with Rory's suggestion to her teachers, to determine what the expected outcome was before planning the rest of the project/unit.

The bulk of conversations around planning for choice-based learning at Central Elementary came in the form of scheduling. Jason created a calendar for the school that dedicated blocks of time for PBL and free exploration. Diane stated that Genius Hour took place in her classroom every Friday (or every fifth day of school if they were not in school for a whole week for some reason). Students visited the makerspace once a week as part of their specials rotation. While no other participants discussed the scheduling of choice-based learning, Wanda did say that in her classroom, the exploration block was a non-negotiable, meaning that other activities were scheduled around that. So, similar to Jason's calendar, this time was dedicated and not interrupted. Participants at Lincoln Elementary did not discuss the scheduling of choicebased opportunities.

Deeper Learning. The first element of deeper learning is to master core academic content (AIR, 2022). Diane described using choice as an opportunity for students to be able to apply their knowledge in "outside of the box" situations. This ability to apply knowledge in a variety of contexts was similar to Bonnie's discussion of the synthesis of learning that students engaged in when they were doing choice-based projects.

Participants also discussed the depth of learning students could achieve through choicebased learning. Diane mentioned that when given choice, students would "be more willing to dive deeper into what they are learning," which is congruent with an observation made by Wanda about her students, "when a student has an interest in something, the depth of understanding they can have is amazing." Kathy also described students "far exceeding" her knowledge on a topic of interest that they are exploring. Two other elements of deeper learning are working collaboratively and communicating effectively (AIR, 2022). While in the library with Kathy, students often engaged in collaborative tasks. Students in Diane's classroom also had the opportunity to collaborate with others as they engaged in project-based learning. Genius Hour and PBL allowed students in Diane's classroom to practice their communication skills as they presented solutions and learning to authentic audiences. Students in each school thus far have had opportunities to engage in collaborative work and communication building. Another part of deeper learning is learning how to learn (AIR, 2022). Diane shared, "I believe that students given a choice in their learning will be more willing to dive deeper into not only what they are learning, but the process of learning." Kara also talked about choice allowing students to be more involved in the process of learning, and not just doing what they are told. Another element of deeper learning is that students develop an academic mindset (AIR, 2022). Kathy shared that choice allows students to do this, "it's not just the content that they're learning...but

when they get into something, it develops a personal growth in them that cannot be achieved by just following somebody else's guidelines."

When asked about the outcomes of implementing choice for students, Diane emphasized the understanding that students were able to achieve, and offered advice for classroom teachers on the implementation of choice throughout the classroom and how it could positively influence students' academic mindsets and performance on standardized tests. Diane believed that in providing the opportunity for students to choose how their learning would be demonstrated, the state-mandated learning standards were being addressed, but that students approached learning in a more positive way when they were given some control over their learning. She believed that if the students were happy and applying their knowledge "outside of the box" that they would be successful in standardized testing as well.

Leadership for Choice Learning. In the previous cases, school-level educators and administrators supported the implementation of choice, but had not emphasized the use of it school-wide. Jason, on the other hand, was highly active in modeling and encouraging choice at Central Elementary School. On a logistical level, he created a school calendar that set blocks of time for free-choice or PBL in classrooms. He deemed those to be the foci of the school and made the time for it possible, which is often one of the biggest hurdles to implementing choice. Jason also modeled the opportunity for choice by writing a grant and implementing an unconventional professional development opportunity for his teachers, which turned professional development into a passion project. Each teacher could apply for up to \$2000 to explore a topic of their choice. While, to some, this sounded like a wonderful opportunity, some teachers at Central chose not to participate, and were not willing to implement free-choice in their classrooms, in part because they were scared: That was one of the biggest things, like, trying something new even though they knew what they were doing wasn't working as well as we'd hoped it would, but still scared. "What's going to happen to me if this doesn't work?" And I would say all the time, the first person they fire is me. If this doesn't work, none of you are going anywhere, the school board will come for me. And they'll be like, "this guy was an idiot" and they will fire me. And they'll tell you to go back to doing what didn't work before.

Kathy, who had been at Central Elementary School for 15 years said that she had seen several administrators come through the school in her time there. Regarding the administrator's role in the implementation of choice, she pointed out that "I think a lot of the choice is dependent on how much power they [administrators] give to the teachers." Kathy's statement emphasized the role of school leaders when it comes to choice-based learning in schools. I believe Cassie recognized this as she took responsibility for allowing some teachers to hold lower expectations, which in turn led them to not offering choice-based opportunities for students.

Jason took the implementation of choice very seriously. He not only modeled choice with the implementation of his professional development project, but he also brought professional development (PD) presenters to the school, provided PD himself, and he would go into classrooms to model for teachers what choice could look like in the classroom. While Rory talked about the need for administrators to "put in the work, modeling for teachers," Jason's advice for other school leaders is: "We just start blowing up the systems that don't work. Try new things like that. Largely what we do isn't working in lots of areas. Do something different."

The next school was a secondary school. Like Central, it is a small school. It had similar rates of students receiving free/reduced-price lunch as all of the previous schools.

Vision Academy

Vision Academy is a magnet school within Ridgeline Public Schools, a large urban school district in the Pacific Northwest. Students were admitted to Vision Academy based on a lottery system. The school served students from sixth to 12th grades. It is a small school by design, with only about 200 students and nine full-time teachers. Forty-nine percent of the students at Vision qualified for free/reduced-price lunch. I spoke with the principal, Matt, and two humanities teachers, Maddy and Claire.

Matt: Principal. For Matt, working in education was a third career. He served in the military for 8 years, then in a corporate job for another 8 years before becoming an educator. He had been in education for 22 years, having taught high school literature, composition, and journalism prior to becoming a school administrator. He had been the principal at Vision Academy for 10 years at the time of this study.

Maddy: Sixth- and Seventh-Grade Humanities Teacher. Maddy had been teaching for 10 years and had been at Vision Academy for 6 of those years. She was a humanities teacher and served as the English language arts and social studies chair for the school. She previously taught health and physical education at Vision, and also taught International Baccalaureate and Advanced Placement courses at her previous school.

Claire: Eighth- and 10th-Grade Humanities Teacher. The 2022-2023 school year was Claire's first year as a teacher. During the prior school year, she completed her teaching internship in Maddy's classroom. Prior to entering education, Claire worked in account management and the food service industry.

The findings as they pertain to the aforementioned themes are presented in the following sections of this chapter. In addition to a presentation of the findings, comparisons among Vision Academy, Central Elementary, Ross Elementary, and Lincoln Elementary are presented.

Findings: Vision Academy

As previously mentioned, Vision Academy is a magnet school, meaning that students/families can elect to attend this school, and are admitted by a lottery system. Student enrollment was intentionally kept small, allowing for small class sizes and stronger studentteacher relationships.

Meaningful Learning. Participants from each case thus far discussed ways in which choice allowed for meaningful learning for each student in their classroom. Teachers expressed increased engagement, ownership, creativity, and differentiation. The participants from Vision Academy echoed these experiences. As in other cases, increased student engagement was an important reason for implementing choice in the classroom for the participants from Vision Academy. Maddy shared a reflection she had after watching her sixth graders get excited about the option to include art in their projects:

So, I guess what it tells me is that there's just this ingrained desire for them to really be able to express themselves and have decision making in their academic experience. And I see that light, kind of shine the brightest when they have it.

Maddy, like Bonnie and Wanda, believed that choice allowed students to connect to their interests, making them more excited about learning, and therefore more engaged in the learning.

Ownership of learning was also discussed by teachers at Vision. Maddy described the main driver for her in implementing choice:

Student agency and ownership. The main driver is wanting them to find some interest of investment in what they're doing. And I feel like they're not going to do that unless they have some agency in the classroom, able to control their learning a little bit.

Maddy's drivers were in direct alignment with statements made by Bonnie, who said that students were more invested (ownership) when they had some control (agency) over what they were learning. When asked about her reasons for implementing choice, Claire shared that she "just couldn't have conceived the outcomes" of allowing students choice in the classroom. "They're not empty vessels...that facilitator style learning, you bring out so much from people."

Regarding relevant learning, Maddy said:

I guess choice-based learning is just an extension of what I think humans naturally do. I think humans naturally get good at or learn more about what they feel interested in. And so choice in the classroom just helps create that.

Claire stated that, "the only way to truly be engaging to students is to provide relevancy and autonomy over what's happening in the classroom." Both Maddy and Claire's views of relevance of learning echoed what Kathy said about choice engaging more students when they were able to select a topic of interest. Maddy's belief about choice-based learning being what humans do naturally was also congruent with Wanda's thoughts about her exploration block, in which she stated, "this is how kids, especially at this age, learn."

Finally, the educators at Vision Academy, like Diane, discussed the opportunity for differentiation that choice offers. Matt, the school principal, stated, "I believe that giving students voice and choices in how they demonstrate their learning is the most equitable approach and allows more students to demonstrate what they've learned. It's more equitable overall than traditional, narrow learning." Maddy expressed how choice helped differentiate for both ability and interest:

Some of the choice might be more scaffolding related, or differentiation related. But I guess the two go hand in hand a little bit... we often talk about, as educators, differentiation in the idea around skill level, but I also think differentiation in terms of passion and interest is really important...what I realize is differentiating for skill level, it's just as important to also think about differentiating for passion, interest, etc. Like those two really are congruent.

While Wanda did not explicitly use the word "differentiation," she did discuss the ways her Genius Projects and the exploration block helped to meet the needs of individual students by allowing them to engage in activities that were of interest and at a level appropriate for them.

Influence of Prior Experience. Maddy and Claire were the only educators, to this point, that indicated having a significant amount of choice as a student, which influenced them to implement choice in their own classrooms. Maddy shared that she had teachers that provided choice in the classroom, which led her to feel as though choice was a "fundamental part of education." She said her classes, as a student, were rarely "sit-and-get," and "so I guess when I was deciding to be a teacher, that just always felt like it was going to be part of my practice because that's what I was familiar with." Claire said her own K-12 experience was in alternative schools that presented different ways of thinking about how to learn. School for Claire was focused on building critical thinking skills, and the learning was very choice based. Therefore, very similar to Maddy, Claire stated, "in some ways, it feels like it's really what I know and what really worked for me."

The school principal, Matt, on the other hand, had different experiences that influenced his desire to implement choice in his school. Education was a third career for Matt, having served in the military and worked a corporate job prior to becoming a teacher. Matt said, "I would attribute my mindset [about choice] to having real world experience." This was in close alignment with Jason's real-world, non-educational experiences in a different career that influenced his decision to implement choice in the classroom, and ultimately in the whole school as a leader.

Expectations of Students. Participating educators shared that there were generally high expectations being held for students. While Matt did not speak to the general levels of expectations held for students at Vision Academy, both Maddy and Claire expressed that they held students to high expectations. When asked how this was evidenced in the classroom, Maddy first discussed holding high expectations for students achieving proficiency in reading and writing:

I know it is my duty to make sure that you [students] are a proficient writer and reader, and that you need those skills, those are life skills. And so, I'm not willing to compromise...we know you need to be literate. Period. And so I cannot allow you to find ways out of developing your literacy. But I can allow you to find topics that make you passionate, that make you want to read more, want to write.

Maddy also discussed the use of rubrics and examples that are "high, high, high." Additionally, she modeled work for students. While she was modeling, she encouraged each student to work to the best of *their* ability, acknowledging that that might not look the same for every student. For example, she told her students that she was writing to the best of her ability, as an adult with a master's degree, and wanted them to write to the best of their ability, whatever that was. She

said, "I don't come in with preconceived notions of what the cap is for the grade level." This notion of believing in students' capabilities and having high expectations of them as a result directly aligns with Kara, Wanda, and Diane's view of high expectations in their classrooms. Kara emphasized that every student in her classroom was capable of learning, and she encouraged them through their struggles. Wanda never believed that her students were too young to do challenging work and emphasized higher order thinking and academic vocabulary with them. Diane wanted each student to do their best work, work that they were proud of and would be proud to share. Perfection was not the goal. Claire stated that the work she asked students to do was inherently challenging, "But I think you would find that it's manageable in the sense of everything being chunked into smaller steps." In this way, she held students to a high standard, but ensured that they were able to master steps along the way.

Similar to Central Elementary, no participants at Vision Academy indicated that there were any low expectations of students being displayed. This was in contrast to both Lincoln Elementary and Ross Elementary, where school-level educators indicated that some teachers were demonstrating low expectations of students and lack of confidence in student capabilities.

Examples of Choice-Based Learning. As in all other cases presented thus far, choice was presented to students in a variety of ways at Vision Academy. Most choice options at Vision Academy, for the teachers I spoke with, were choice within parameters as students engaged in project-based learning, or choice in final products or assessments. Maddy shared two specific ways that students had choice in her classroom:

There's topic choice often. I try to, within every unit at least once, give a student-driven selection. So, say we're studying Ancient Rome, I want them to develop what they're

curious about with Ancient Rome. And I'm trying to give them full decision-making

process. What do you want to more of? What topic do you want to focus on? Another way Maddy implemented choice was that she provided a list of topics students needed to learn over the course of the unit, but she allowed the students to decide who studied which items because, "I want it to be more passion driven...who wants to focus on what kind of specialization?"

Similar to Central Elementary, choice at Vision Academy came primarily in the form of project-based learning. No participants at Vision shared examples of fully free-choice opportunities for students. Claire said that she used choice to "frame units and activities." She said, "there's a lot of choice to introduce a topic, because I think that generates interest because it's relevant." She also said, "I use it quite a bit in my summative assessments, so that students have multiple choices to demonstrate their learning." The use of choice in final projects, products, and summative assessments was also an approach Bonnie used in her classroom.

Preparing Students for Successful Choice-Based Opportunities. As shared by other participants in this study, those from Vision Academy acknowledged that many students did not have any prior experience with choice-based learning, so they had to intentionally build in scaffolds and supports to make choice-learning a valuable experience. Maddy shared that in her first unit of the school year, she implemented a gradual release approach, where she started with more guided activities, then, around the halfway point of the first quarter, she wanted to see how students did with minimal choice. Claire echoed the need for some levels of support for students:

Essentially a lot of it is still preserving the choice, but kind of elevating the expectation or the communication pathway. Because...it's really hard to just give students choices when

they haven't had that much autonomy over their learning up until this point. So, you do have to teach them how to make good choices.

This process of beginning with guided choices and then slowly releasing more autonomy to students was shared by Bonnie, who said she gave more parameters at the beginning of the school year in order to ease students into making choices.

Both Maddy and Claire also referenced some challenges in getting students to participate in choice-based opportunities. Maddy discussed those who were strong students but were very regimented and not comfortable in inventive or creative spaces. She shared that for those students, choice-based projects could create a lot of anxiety. In consideration of these students, she tried to emphasize that the projects were not about the grade, but about the experience, asking students "what do you want your learning experience to be?" Claire said that very traditional learners sometimes struggled with seeing the value or merit in the creative or outsideof-the-box learning.

Claire also said that sometimes she had students who used choice as an opportunity to not challenge themselves:

It's that kind of thing where I feel like no one ever wants to talk about it, but some students clearly use it to not challenge themselves. In my opinion, I feel like they are just making an easy assignment. They're not thinking it through, they're not challenging themselves, they're not trying something new. They're just going for the easy A because they see it as, "oh, we don't need to write a 14-page paper? Cool. Then I'm not taking it seriously."

One way she tried to address this particular challenge was to implement project proposals. She began by intentionally teaching the rubric and establishing the expectations for the project. Then

students created a proposal for the project, which allowed her to see specifically how students were thinking through each component. She could then ask questions, give prompts, or otherwise support individual students as needed via individual conferences.

Although the overall experiences of the teachers at Vision Academy were similar to participants from other cases in terms of preparing students, Maddy and Claire were the first participants to discuss the use of rubrics during choice-based learning.

Teacher Planning for Choice-Based Opportunities. As with other cases already presented, the participants from Vision Academy discussed intentional planning on the behalf of the adults to make choice-learning successful for students. Claire and Maddy both shared that they often started with the standards or knowing what the students needed to ultimately learn from each unit and planned individual projects and tasks from there. This alignment to standards was an important note, one only made thus far by Jamie from Ross Elementary. However, other participants, such as Bonnie, did say they determined desired outcomes from a project as the first step to planning. Once she determined the necessary outcomes of a unit, Maddy then determined where she could infuse student choice. "I always try to think about, like, what are the student choices? I try to give as many as I can." This is very similar to Bonnie's planning process, in which she determined the desired outcomes of the unit or project, and then determined where she could infuse the element of choice.

The other elements of planning for Maddy and Claire included establishing the expectations for the project, designing rubrics, and locating examples of student projects that students could use to support them. Claire said, "You [as the teacher] have to provide structures, guidelines, parameters, rubrics. That kind of helps students understand how to be independent learners, how to make good choices with their learning." Maddy talked a little bit more about the

level of supports she planned for students. She said that sometimes the challenge was to not provide so much criterion and structure that students became "grade obsessed" in the project, but to provide enough criterion so that students take it seriously. "So, the challenge is, I don't want to over-scaffold, but I also don't want to...I want to be responsive to different learning [preferences] I have in my classroom." She further explained that she had to "refine rubrics and come up with student examples that help with some of those very loose model assignments, that help spark the ideas without being like, here, I want you to copy paste this and replicate this."

The process of establishing expectations, developing rubrics, and finding quality examples confirmed Rory's suggestion to her teachers that they have their expectations ready before asking students to engage in choice-based learning so students know what they are supposed to be doing during independent working time. Participants from Central Elementary discussed the intentional scheduling of choice-based opportunities for students. Participants from Vision Academy did not discuss the scheduling of choice-based opportunities.

Deeper Learning. Teachers at Vision Academy, like other participants, shared many outcomes of implementing choice in their classrooms. As in the other cases presented thus far, those outcomes were aligned with the components of deeper learning. Regarding the mastery of core content, Maddy discussed wanting students to be able to bring different parts of themselves into the learning experience. She said she wanted them to "feel some synthesis in their skills and in their being." This synthesis of learning across contents and contexts was also shared by Bonnie as an outcome of choice-based learning.

When considering critical thinking and problem solving, Maddy pointed out that "it's not just about skill acquisition. It's about creative thinking. I want them to cultivate that in themselves, because I think that will continue to serve them really well [in academia]." While

Maddy was thinking about her students' futures in college, Katrina pointed out that engaging in choice learning allowed the pre-kindergarten students she worked with to build their out-of-the-box, critical thinking skills.

Because PBL was one of the primary routes to choice-based learning at Vision Academy, students often worked collaboratively, especially when they chose specialization areas which they focused on during their learning. They were able to work with other students with similar interests to explore, research, and learn.

Regarding learning how to learn, Maddy said, "I'm just trying to break that mold of, like, you're not doing it for a grade, you're doing it for the learning experience. What do you want your learning experience to be?" Claire also stated, "I believe that choice learning is actually more fundamentally teaching *people*, not just my content, but actually how to be a learner." Kara agreed, saying that when given choice, students were more willing to participate and be part of their education and the learning process, not just doing things because they had to. Similarly, Diane said that choice allowed her students to dive into the process of learning.

Ultimately, the choice learning that students were engaged in in Maddy and Claire's classrooms allowed them to develop an academic mindset. Maddy pointed out, "I think the outcomes of implementing choice are deeper learning experiences. When the students have ownership over their own learning, they learn more." This aligns with beliefs of several other participants. Bonnie believed that when students had choice they would do more, Wanda shared that when given a choice to explore something of interest, students' depth of understanding was "amazing," and Kathy stated that when given choice, students would far exceed her own knowledge of a topic.

Leadership for Choice Learning. Matt, the principal at Vision Academy, said that he was working on creating a vision, working with partners and other organizations, and supporting mastery-based learning, "which involves moving students more to the center of their learning." He shared that he was the one sharing research and having conversations with staff about choice and student-centered learning. He also said, "I create a vision, and I'm leading my staff fearlessly toward giving more voice and choice." In this way, I believe that Wanda is serving as a teacher leader, modeling how she provided choice, and helping other teachers who had expressed interest in doing so. Jared also served as a model, demonstrating for teacher ways in which they could implement choice in their classrooms. Matt's self-proclaimed role of creating the vision and guiding teachers is the same role Jason held at Central Elementary. He established a vision for choice learning, and created avenues by which to support the implementation of choice.

The next case is another secondary, magnet school within the same district as Vision Academy. Oceanic High School had a slightly lower rate of students receiving free/reduced-price lunch than other schools presented thus far, but at the time of the study only served two grade levels.

Oceanic High School

Oceanic High School is another magnet school within Ridgeline Public Schools, meaning that students enter a lottery for admittance. The school had only been open for 2 years, serving only Grades 9 and 10 at the time of the study; Grade 11 will be added during the 2023-2024 school year. Thirty-two percent of the school's population qualifies for free/reduced-price lunch.

Trent: Principal. Trent was the founding principal of Oceanic High School. He taught high school math for 4 years prior to going to graduate school to obtain a master's degree in educational leadership. After graduating, he joined Ridgeline Public Schools as an assistant

principal. He served in that role at two high schools in the district prior to having the opportunity to be the founding principal at Oceanic High School.

Marina: Instructional Specialist. Marina was part of the founding team of educators at Oceanic High School. In her first year at Oceanic, she taught humanities courses, but transitioned to the instructional specialist role in the second year. She had a variety of teaching experiences, including teaching at a large comprehensive high school on the East Coast before teaching at another choice-based school within Ridgeline Public Schools. She had been an educator for 14 years at the time of the current study.

Mitchell: Ninth-Grade Humanities Teacher. Mitchell had been an educator for 16 years but had only been at Oceanic for one year. He had previously taught science and social studies at a large comprehensive high school, at a performing arts charter school, at Catholic schools, and at international schools. Prior to joining Oceanic High School, he taught in another school within Ridgeline Public Schools for one year. As with the other cases presented thus far, the findings as they relate to the aforementioned themes are presented in the sections that follow. Additionally, comparisons will be made among all cases.

Findings: Oceanic High School

I was able to talk with the founding principal of the school, Trent, the instructional specialist (who was one of the founding teachers in the school's first year), Marina, and a teacher who has only been at Oceanic for 1 year, Mitchell.

Meaningful Learning. Oceanic High School strived to make learning meaningful for students. Students had chosen to attend this school based on their potential future career path, and therefore the learning experiences provided were in alignment with that goal, making learning as relevant and meaningful as possible.

Mitchell, a classroom teacher, said that he believed choice was the "most powerful way to engage the widest variety of students at one time." The principal, Trent, stated that educators need to give students the opportunity to "exemplify their own way of learning in their own ways of thinking, to express that in a way that allows them to be their true, authentic self." These sentiments about engagement echo what other participants shared. Kathy also said that choice engaged the greatest number of students. Marina shared that during work blocks, the classroom "looks like a bunch of people doing a bunch of different things." This is similar to Wanda's exploration block, in which students were scattered all about the classroom as they engaged in various tasks of their choosing.

While Matt discussed moving toward mastery-based learning, Oceanic High School used a mastery transcript, in which students were presented with the competencies of the school, and chose their own evidence of mastery, which were shared with others via presentations of learning. Trent shared, "We really try to value students' agency. We do that by having what we call the mastery transcript. Our students are showing up authentically, by exhibiting whatever evidence they have, form their perspective, as they present their learning." Marina shared that in this mastery-based assessment structure, students did not receive grades at the end of the course. And because they were "not worried about collecting cumulative points and feeling compelled to do every assignment or task that's offered" they were truly allowed to take ownership of their learning. This is similar to Kathy's statement about students being more willing to take risks with their projects because they knew they were not receiving a grade for them.

Marina shared that students at Oceanic were able to exercise choice in "deciding to do something in a certain order, or not at all." Mitchell echoed these sentiments, sharing that, "The tasks, we've decided as a faculty, you don't have to complete. You can skip a task here or there." No other participants to this point had anything similar to the mastery transcript, as the other schools were still using a more traditional grading system. While Kara's students did often have choice in what order they would like to complete tasks, not completing any of them was not an option. Diane and Bonnie's students engaged in presentations of their learning, with flexibility in what those demonstrations looked like, but those presentations were more organized around the end of a unit, in which all students were finishing at the same time, while the students at Oceanic had greater flexibility around when they chose to present their learning to determine mastery of a competency.

Again, Oceanic High School, as an entire school, was relevant, as students chose to attend this school based on their potential future career path. Trent said, "We want to make sure students have options when it comes to their learning, not just at Oceanic, but in the district that I serve, where we truly believe that children have options in creating their education." Mitchell, who had previously taught in a variety of school settings, said:

I've seen the power and transformation that comes with project-based, choice-based opportunities. Because I've taught in so many different spaces, I've seen the difference. And it's clear to me, I've seen the difference in engagement and depth of learning. Excitement, meaningful learning.

This notion of authentic, meaningful learning aligns with several other participants who discussed choice allowing students to explore topics of meaning and interest to them individually.

Like Bonnie and Diane, educators at Oceanic High School viewed choice as an opportunity for differentiation. Trent acknowledged that students had different styles and ways of learning, and that some learners needed different levels of accommodations and support. He said, "choice definitely makes a difference" when working toward that goal. Marina shared that she was not so concerned with every student having the same thing at the same time, noting that she learned to "let go of 'fair' and just embrace a kid's individual learning journey. That's going to make them into a human being who is well adjusted."

Influence of Prior Experience. The prior experiences of the participants at Oceanic High School ranged from having no choice, to having influential choice-based opportunities outside of school, to having positively influential in-school experiences. Similar to Rory, Kathy, and Jason, Trent, the principal at Oceanic, did not have any choice-based opportunities in his K-12 education. When asked whether he had choice-based opportunities as a student, he said, "No, honestly, I can't say I have. But I think I learned a lot from my experience of being in a traditional school and seeing how it has impacted me as well as some of my peers."

Like Wanda, Mitchell's influential choice experiences were not in school, but in out-ofschool opportunities as a child. He shared that he did not have choice-based experiences at school, "I went to Catholic school my whole life, so I can't think of many places where I had choice." However, he shared, "I was a Boy Scout growing up. There's a lot of choice in Boy Scouts...so I think that was really good for me." Mitchell, like Kara, Rory, and Jamie, also shared with me many ways he had experimented with offering choice to students over the duration of his career.

Marina, on the other hand, attended private, inquiry-based schools as a child. About her school experiences, she shared, "We were always given a probe or provocation at the beginning and asked a question, and then given the time to experiment with things. So I think that was nurtured in me early on." Marina also had a variety of experiences in college, which further led to her decision to implement choice in the classroom when she became a teacher. In college, she

was an urban studies major, and said, "that program was very much, like, the city is your classroom. We were always going places in the city, meeting with people, doing case studies." However, like Jason, her other collegiate courses were not offering choice, which impacted her in such a way that she knew what not to do in her own classroom. She shared that she could contrast the experiences in her major courses and the courses she was taking outside of her major that were primarily in a lecture hall. She noted that there was such a stark difference between the two course formats that she knew, "this is the only way to do it. Doesn't matter what you're learning, you have to learn by doing."

Both Mitchell and Marina shared prior teaching experiences that impacted them regarding the implementation of choice. Marina ultimately left a more traditional, comprehensive high school to teach in a choice-based school because:

I felt tired of, I have this way of describing it as like, tap dancing in front of the kids to try...and I would say, I would call it coerce them into learning things that were under the vague promise that it was all going to make sense sometime in the future when I knew it probably wasn't going to. So I just got sick of that. I felt that was disingenuous and that I was coercing the kids into doing stuff that I didn't feel like was in their best interest. So anyways, that was my why. I was like, I have to go to a place where I'm asking kids to do real things that they can see the reason, that they don't have to wait 12 years to figure out why they're doing it. Like, they can see the impact. Then they can take ownership.

Mitchell, on the other hand, had been able to implement choice in a number of ways throughout his career. It was not always supported by school leaders, but he felt strongly about continuing to offer these opportunities. He did Genius Hour in a middle school science class in lieu of a traditional science fair. In an eighth-grade humanities course, students created their own nations. He gave basic, minimal guidelines but did not use the previously designed rubric. He got reprimanded by a school leader for this, but he said, "I don't regret it. For the students...given the wide open...it made a lot of them uncomfortable, but...with enough encouragement, they did things that they wouldn't have otherwise been able to do. So it was pretty cool."

Expectations of Students. Similar to other cases presented thus far, the overall response from educators at Oceanic High School was that students were held to high expectations. One way this was evidenced was by the presentations of learning that students were expected to do throughout the year, to a variety of audiences. Trent said, "I'm a huge fan of public learning...we do a lot of public showcases...Students are presenting their learning, defending their learning, developing capstones, amongst not just their peers and their educators, but also the community."

Marina emphasized pushing students to stretch themselves. For example, a student might create a poster to demonstrate their learning, which is typically an easier task. She said she might respond to the student, "I love that you made a poster, now here are six different ways you could take that to the next level." She also talked about having examples for students to follow, stating that sometimes it was hard to have an exemplar, because she was providing the students with choice, so projects could all look very different:

But that's why I always...bring in mentors and experts from out in the field. When they see what the examples of real work looks like, then they can kind of work backwards from there...I just feel like I want students to do high quality things and use real world examples as their exemplars.

Students at Oceanic worked toward the mastery of the competencies that guided the school. Students were able to choose the artifacts they determined to show their mastery of each competency. The school had structured the competencies to include tasks and milestones that

helped students monitor their progress on the way to mastery. Mitchell shared that one way they demonstrated high expectations for students was by "kicking it back if it's not good enough or if it doesn't show mastery." Mitchell also discussed the independent nature of the work that many students were doing at Oceanic.

A lot of it's like, how they're using their time...They have a lot of time to misuse their time. And that is all part of the learning process. So I think some of those high expectations, I expect them to use their time well, but there's a lot of teaching them how to do that.

Finally, Mitchell acknowledged that "there were definitely times where I think I wasn't challenging some of my capable students as much as they would have liked. And that's just, that's just the challenge of differentiation, even within a lot of choice." Mitchell was the only participant at Oceanic to make any statements about low expectations, and he was the only classroom teacher to have admitted to occasionally having lower expectations of students than maybe he should have. This is reminiscent of Jamie's statement of teachers saying 'yes' if someone asked them if they had high expectations, because that is the answer they are supposed to say. This is also similar to Cassie's observation that some of her teachers had a hard time seeing the value of the productive struggle.

Examples of Choice-Based Learning. There are many opportunities for students to make choices in their learning at Oceanic High School. One way students were able to exercise choice was in whether or not they completed certain practice tasks. Marina shared, "If they are like, 'no, I'm going to skip that practice, I'm gonna go right to the main event.' And so they have choice in terms of how they approach all of the assignments that are offered."

Students also had choice within parameters at Oceanic. Similar to Central Elementary and Vision Academy, Oceanic employed project-based learning, and students had choices around specific topics they would like to learn more about. Marina said, "because we're also project based learning, there's a lot of our projects that are, okay, we're examining this question, this problem, this theme, what sub area of this are you going to tackle?" This mirrored the way choice was implemented in Maddy's classroom at Vision Academy.

Students at Oceanic also participated in Small Learning Communities. These were interest-based, student-led groups that met once per week. Although not exactly the same, these interest groups were similar to the fully autonomous activities centered around student interest and passions in Bonnie, Wanda, and Diane's classrooms.

Preparing Students for Successful Choice-Based Opportunities. Mitchell shared that at Oceanic, choice followed a gradual release structure, similar to Vision Academy:

We're trying to structure it so that there's more and more choice and independence between those eight core quarters [Grades 9 and 10]. Every quarter we have a main impact project, and those projects release agency to the students a little bit more.

He pointed out that one could consider the whole ninth grade year as a long-term scaffold. "It's that fourth quarter where it's really kind of an independent project. So we're working throughout the year to get them to the point where in Quarter 4 they can make choices that will be successful for them."

Mitchell and Marina both shared the need for these scaffolds and supports because sometimes students either were not accustomed to having choice, so did not know how to navigate that, or because students did not want to make choices. Mitchell said that most of the ninth graders were coming out of traditional, comprehensive environments and "they need to relearn, unlearn, and learn new ways of thinking about how to approach school. So we have to hold their hand quite a bit at the beginning." Marina discussed the "slow-to-start kids," the ones that would self-report that they did not have any interests or ideas. She said she wanted to honor students and their choices, but she also recognized some of these instances as a "power trip." She said that if students were refusing to engage in work, she was more comfortable telling students that they had a choice between two provided options, rather than full autonomy.

There was also support for students because the questions and topics may have been teacher directed, but, as Marina shared, the "what are you going to do or make with this is student led." The students did four projects in their ninth-grade year, which were more teacherdirected. Then, in their 10th-grade year, students started by doing similar types of teacher-posed questions, but the products were more open-ended. Marina shared that fourth quarter of 10th grade was completely independent, "independent topic, independent research, you gotta hustle for your connections."

As previously mentioned, there was scaffolding built into the competencies at Oceanic. Mitchell reiterated this:

I wouldn't want to confuse it with like, here's a summative project at the end of the quarter. We start every quarter with the project. We have tasks, and we have milestones, and then we have the impact projects. And the tasks build support...like, you can do the task so that you can complete the milestones, master the milestones, and then you do the milestones because they're essential for the impact project.

This notion of scaffolding to support students as they approached choice-based learning activities was also shared by Bonnie, in which she implemented more parameters for projects at the beginning of the school year, opening projects for more choice as the year progressed.

Another way participating educators supported students was by holding individual conferences with students. Marina, like Wanda, talked about holding individual conferences with students in which they could share their progress and get support where needed.

Teacher Planning for Choice-Based Opportunities. As previously mentioned, the quarterly projects at Oceanic High School were determined at the beginning of the semester, and students worked toward the completion of that project all quarter. Marina said that as teachers, "we know what the topic is, we pre-screen and pre-select, pre-set up some of the outside connections." While most projects were more teacher-selected at Oceanic, choice was present. Trent, the principal, shared:

They [teachers] move away from being that lecturer and becoming more of that facilitator...facilitating the learning, empowering students to be the ones who are really kind of leading and inculcating the academic experiences. And how are we implementing their interests within the classroom as well.

These quarterly projects guided instruction to ensure that students had the content and skills necessary to complete the project. This was another example of backwards planning, or planning the unit after determining what the end goals of the unit were, which was the practice for several other participants.

Like Maddy and Claire from Vision Academy shared, another element of teacher planning for choice-based learning at Oceanic High School was to develop rubrics and examples that could guide students when there were open-ended options. At Oceanic, they had core competencies, which were the learning goals for all students. Each competency included tasks and milestones that students could complete on the way to demonstrating mastery. These tasks and milestones had rubrics, which helped students gauge their own progress as they worked.

The other element of teacher planning that was present at Oceanic was the need to establish expectations prior to beginning the project. Marina shared:

In order for choice-based learning to live up to its potential, you have to provide scaffolds that are both open ended but also demonstrate the high expectations that you have, because choice-based learning is most impactful when students have to produce something real.

This notion of establishing expectations before students began working was echoed by Rory, who supports teachers wanting to implement choice with this goal.

Deeper Learning. The first component of deeper learning is the mastery of core academic content (AIR, 2022). Mitchell shared that choice allowed students to not only master the core content he had planned, but other skills and content that he had not planned as well. "When you release that control, you also release the predictability of the outcomes, and sometimes there will be learning that happens that wasn't predicted, that comes from other places, other connections, and that's really cool." Similarly, Bonnie and Maddy shared that choice allowed students to synthesize and bring together learning from multiple contexts.

Another component of deeper learning is thinking critically and the ability to solve complex problems (AIR, 2022). Oceanic High School provided a unique opportunity for students to do this, as the school was career focused, and allowed students to solve real-world problems in the water industry. Marina and Mitchell further discussed ways that choice allowed students to build critical thinking skills. Marina talked about student agency:

There's this emphasis on the idea that if the kids aren't learning this canon of knowledge that they're missing out, or like, what's society going to come to? And I just don't believe in that at all. I believe, if we don't have kids who have a sense of agency...first of all,

people don't remember the canon of knowledge. It doesn't stick with them. But if students feel, if they cultivate and are nurtured within a safe supportive space...to go out and practice being agents of change, and citizenship in a safe environment, they're gonna go out and become adults who have agency.

Mitchell shared:

Variety...is one of the things that I've come to notice and appreciate. I think what I also mean by variety is, they're not just learning information or concepts, but also life skills in the way that we approach the learning.

He also said, "[Implementing choice] can be scary of course. But it's scarier to think of kids growing up not being able to problem solve and think...deeply and explore and experiment."

In discussing what a typical class might look like on any given day, Marina shared the ways in which students collaborated and learned effective communication skills:

Some kids were just inside sending emails and corresponding with legislators and doing more like on Zoom and stuff like that, and some kids were literally outside waist deep in the dirt. So, it really looks like disorder, but it looks like people doing real things. It doesn't look like people just filling out a sheet and then waiting to be handed the next one.

Students at Oceanic were constantly engaged in real-world application of knowledge and skills. They were also continuously self-assessing and self-monitoring as they worked toward mastery of the competencies. These processes allowed students to self-reflect and learn how to learn. Marina shared:

If you just, if you have the filling-a-pail view of what you're doing to a kid, they're gonna get out and be in a world where they're waiting for someone to tell them what to

do, and no one's going to tell them what to do. So, what I believe about choice-based learning is that it prepares students to be lifelong learners and lifelong change agents.

Students at Oceanic High School developed academic mindsets as they worked through real-world problems that were similar to those they may see in their future careers. Participants at Oceanic also discussed student agency leading to excitement and increased depth of learning, which was in agreement with Wanda's observation about the depth of understanding that students could achieve when they were interested in the topic. Diane and Kathy acknowledged that when given the opportunity to have control over their learning, students would keep working and growing in their knowledge.

Leadership for Choice Learning. All of the participating leaders I spoke with thus far viewed themselves as having a role in the implementation of choice. Trent agreed, stating that it was his responsibility to foster relationships with community, provide resources, and ensure that teachers were moving in the direction of being facilitators, not lecturers. This was in line with Rory's statement about administrators needing to put in the work to support teachers with the implementation of choice. However, Trent was the first administrator to emphasize a connection with the community.

Trent said it was his responsibility, as the principal, to push teachers into the facilitator role and support teachers in incorporating student voice and choice. Jason said his role was in modeling and leading choice implementation at Central Elementary. Matt said that as principal, he was creating a vision and leading the staff toward giving more student voice and choice. Although many of the school leaders I spoke with viewed it as their responsibility to support teachers in the implementation of choice, only Rory and Jared mentioned modeling the practice for their teachers. The final school was another secondary school. This one was a very small school in a rural community with the highest rate of poverty among all participating schools.

Eastern Secondary School

The school in this study offering the greatest opportunity to engage in choice is Eastern Public Schools. Eastern Public Schools is a small rural district located in the Southern United States. The district in its entirety served approximately 900 students from kindergarten through 12th grade. Eastern Secondary School, specifically, comprised Grades 6-12. Approximately 80% of students at Eastern Secondary qualified for free/reduced-price lunch.

Brad: Superintendent. Brad was the superintendent of Eastern Public Schools; he previously was a teacher and a student within the district. Brad brought 25 years of experience with him, having served as a math teacher and a counselor in other districts prior to returning to Eastern.

Amy: Principal. Amy had been the principal of Eastern Secondary School for 8 years at the time of this study. She previously worked in neighboring districts for 18 years, serving as a math teacher, instructional coach, and assistant principal.

Kristy: Engineering Teacher. Kristy had been teaching for 22 years. She had been at Eastern Secondary for 7 years at the time of this study. She taught two courses at Eastern: an engineering class, which was a required course for all students in the district, and an elective course in which students developed a personal passion project. Prior to arriving at Eastern Secondary, Kristy taught middle school science and English language arts and was an instructional coach in a different school district.

Willa: 11th- and 12th-Grade English and Media Arts Teacher. Teaching was a second career for Willa. She was previously a horse trainer and had been at Eastern Secondary

for five years at the time of this study. She taught English for juniors and seniors, which were required courses, and also taught an elective course, Media Arts. The findings from Eastern Secondary, as they pertain to the aforementioned themes, are presented throughout the next sections. Additionally, comparisons to each previous case are included.

Findings: Eastern Secondary School

Eastern Public Schools incorporated choice as a "way of life" in the district. Students from kindergarten through 12th grade were given the opportunity to make a variety of choices throughout the day from the way they accessed a lesson, where they sat, who they worked with, how they demonstrated learning, and even what they ate for lunch.

Meaningful Learning. Meaningful learning is comprised of student engagement, student ownership of learning, relevant learning, and differentiation. Each of these elements were present at Eastern Secondary. Willa from Eastern Secondary echoed a statement made by Jamie from Ross Elementary that choice-based learning could be used as a tool for getting to know students. Knowing your students helps a teacher to tailor class activities to students' interests, which can increase engagement. Kathy and Brad both discussed the fact that choice allowed for greater engagement in learning. In fact, Brad said that choice was the "single easiest engagement strategy." Mitchell agreed that choice was the "greatest engagement strategy." Kristy shared:

When a student gets an opportunity to express themselves in something they're comfortable and confident in, that's going to increase their competence in the classroom overall. It helps you get to understand your students a little bit better.

Participants indicated that when students were confident and competent in the classroom, they were more likely to be engaged in what is happening. Brad also stated that choice was empowering for students.

Another element of meaningful learning is ownership. Oceanic High School used a mastery transcript, in which students completed tasks on the way to completing milestones. However, students had choice in whether they completed each task. This was similar to Willa's classroom, in which students could decide how they received the instruction, or if they received it at all in some cases. Bonnie, as a gifted education teacher, shared that she believed student learning should not be so controlled and narrowed, that students should have out-of-the-box experiences, of which they have control over. At Eastern, students were getting some of those opportunities with the engineering course. In Bonnie's class and in Kristy and Willa's classes, students had some control over their learning and could choose how to demonstrate their learning. Kristy shared, "When I do a project and the choice of how they show me what they do, is developed by them and created by them, the buy in is much higher." Willa also encouraged student ownership by designing self-paced courses.

Eastern Secondary School made learning relevant for students by allowing them to choose and construct a learning path for themselves, which allowed them to gain experiences while in high school that were aligned with their future goals. Because students had choice in this manner, they could select courses that were relevant to them individually. This was similar to the students at Oceanic, who had selected to attend the school based on their future career goals. Participants from Eastern made more of an emphasis on the impact choice can have as an element of differentiation; but noted that you could not use choice to differentiate unless you knew your students. Willa said:

You're teaching to four different groups [levels] of students. So, I mean, you're just kind of running the gamut of what you're teaching. And I do think choice-based learning facilitates that incredibly well. Especially if it's interest-based and not just choices.

Diane, from Central Elementary and Maddy from Vision Academy also discussed choice as way to differentiate for students, particularly differentiating for interests. Trent echoed the use of choice for differentiation by emphasizing that students learn in different ways, that some needed additional accommodations or support, and that not all students were successful in a traditional/comprehensive high school. Kristy noted that, "As you become a better teacher you realize not all your classes are the same, even though they're all learning the same subject." Willa made a poignant statement on the topic of differentiation:

Choice is, for me, it's the most effective form of differentiation and personalization in my classroom...I feel like that's the only way to teach every kid. The only way to not only teach to the middle, or have the highflyers teaching people for you. I feel like that's the only way to teach personalized learning in your classroom...there's no way to know your kids if you're not teaching them choice, what they're choosing is helping you know your students.

According to participants, knowing their students and creating learning opportunities that allowed students to engage in topics of interest allowed students to be more invested in their learning.

Influence of Prior Experience. Choice in Eastern Public Schools began with a trip to the restroom. Brad, the superintendent, was led to the public restroom at a newly opened outlet mall near his home by his 3-year-old son. His son drug him into the restroom exclaiming "surprise and delight" (which is a phrase used in the district for things that spark interest). His son urged him to "take a picture daddy!" Brad was very confused about what his son was so excited about. His son then pointed to a row of small urinals, proclaiming, "they're all tiny potties!" Brad realized that his son had never had a choice about which urinal to use, because in most men's

restrooms there is only one small urinal. He decided then that if his son was that excited over "getting to choose which pot to pee in" then children were not being offered enough choices. Working on his own dissertation at the time, he added choice to his study, and began infusing choice into the Eastern School District. Choice then became "a way of life" and was infused in everything they did at Eastern.

While Brad had this experience which influenced him to focus on choice in the district, like Rory, Trent, Kathy, and Jared, he did not have choice-based opportunities as a student. In fact, Brad attended Eastern Secondary School as a student and shared:

I was the anti, like, my experience was no choice. I went to Eastern, and so in 4 years of high school I got to pick, I think, a class. I mean, like literally not even like what you did during a day. Or like in a lesson. I'm talking about, I picked, I got to pick *a* class that I wanted to take, like senior year, you got to pick *an* elective. And that was Eastern the day I got hired. It had not changed in the 20 years I was gone.

The teachers at Eastern had a mix of experiences in their time as students. Kristy shared that she always thinks about how she was as a learner, she said, "one thing I did know was, I liked it when I could make my own decisions about certain things."

Kristy had very positive K-12 choice experiences, similar to Maddy and Claire. She shared that she had "some of the most incredible educators" that were invested in her. She said they made students work hard but rewarded the work. Those teachers also offered many opportunities for her to make choices within the classroom, which she acknowledged, "I think that's carried with me a great deal."

Willa's experiences were on both ends of the spectrum. She shared that she did not have choice in her content classes. However, like Bonnie, Diane, and Jamie, she did share that choice was offered for her in one elective course:

I did take TV production in high school...we kind of got to pick what we did and how we did it...I'm still super proud of the projects...like that's how you learned stuff. We learn by doing, right? So that was a cool class.

This is directly in alignment with a statement made by Marina, "Doesn't matter what you're learning, you have to learn by doing."

Expectations of Students. Participants from Eastern Public Schools shared primarily instances of holding students to high expectations. Eastern Public Schools had a profile of a graduate, identified as the Eastern Exemplars. These exemplars set the expectations for student performance at every grade level in the district. This was one means of holding students to high expectations. Classroom teacher Willa discussed some of the ways that the Eastern Exemplars affected the expectations of students in her classroom:

So the exemplars are like an outline for what they need to accomplish by the time they're ready to graduate. If they don't accomplish them, they aren't ready to graduate. We spend the year compiling all this evidence. It's pretty great, and it's pretty standard.

Principal of Eastern Secondary School, Amy, also talked about the Eastern Exemplars. "We want our kids to be the bosses. So, we're wanting them to have all those expectations and social skills. So, we have what we call the Eastern Exemplars. In that, they have the Individual Learning Plan." Students were engaged in Connect Meetings with teams of educators, their Epic teacher (advisor), and their parents, in which they discussed academic goals.

While Willa and Amy discussed high expectations that were in place for students at Eastern Secondary at the time of this study, that was not always the case. When Amy became the principal, she said:

there were people that had always been here and grew up in [town]. And so, I hate to say that it was kind of a love 'em dumb, you know, oh, you're great kids, love you, you know, it's okay. You know it was like a loving them dumb situation.

This meant that teachers held lower expectations for students as to not make things too challenging. This was similar to what Cassie shared about teachers at Lincoln Elementary not having high academic expectations of students because of the students' life experiences outside of school. As in all but one case, no teachers at Eastern referenced any low expectations being held for students. Mitchell, from Oceanic High School, was the only classroom-level educator that shared any instances of lower expectations being displayed for students.

Examples of Choice-Based Learning. Brad, the superintendent of the district, and the biggest proponent of choice said, "There is no quantifiable amount of time that choice happens at Eastern. It's all day every day." He shared that students had "choice of partner, choice of pace, choice of presentation strategy, choice of project. Choice of where to learn it. We really try to put it in everything we do."

As in several other cases presented, choice at Eastern Secondary took many different forms. Willa said, "in my classroom...literally everything has a choice." Students in some of her classes received a checklist of what they had to accomplish during the week. She taught minilessons and she recorded lessons. If students missed a day, they could go back and watch the recordings. But it could also function like a "reverse classroom." She said, "It's more about like accessibility for choice stuff too." She also shared that in her Media class, "they literally can

choose the order they do projects and I front-load the gradebook so they can do it however they want." This was similar to the choice boards used in Kara's classroom in which students could decide in which order they wanted to complete tasks. Willa was the only teacher, though, that really discussed students having choice in how they received content.

Students at Eastern also had choice-within-parameters. For example, in Kristy's engineering class, she said, "I'll say something like, I need a windmill...I need the gear ratio to change from three to five...I need the motion to change by 90 degrees...they'll have to figure it all out." Willa said, "I'll show the things we have to get done in the week. They choose how they do it, and they choose when they do it." Amy shared, "There's problem-based learning where...something real world...within that there are choices, which path the kid wants to do, or the groups of kids want to go through and investigate something more, they might take another little avenue." This choice-within-parameters was in alignment with student experiences with PBL at Vision Academy and Oceanic High School, and in Wanda's exploration block.

The students were also able to have choice in how they demonstrated their learning. Kristy said, "Demonstrations of learning, which are generally very hands on and students many times will have choice of how they do that." Willa said, "There's always been an element of choice. It was more and more played out in summative. Like, they could choose how they want to be assessed. Or like, with projects, they could choose interest-based projects." Bonnie also offered her students choice in how they wanted to demonstrate their learning. There were also opportunities for fully student autonomous experiences at Eastern Secondary. Like projects in Bonnie, Diane, and Wanda's classrooms, students could elect to take Kristy's Personal Passion Projects course, in which they got 9 weeks to choose a passion project of their own to explore. Amy, the school principal, shared a bit more about choice at Eastern Secondary.

"Teachers use different things. In middle school, you see a lot of choice boards, you see a lot of things on how to deliver the content...for the kids, for their learning and that path they want to go." Students also had choice of course. Amy told me she had two eighth graders who were really interested in science, so she was allowing them to "double up" on science, taking their eighth-grade science class as well as the freshman integrated science course. Willa talked about how the Exemplars would inform her future practice. In preparation for next school year, she is intending for the senior English course to be more choice-based. Students will essentially plan their own self-paced course based on the Eastern Exemplars.

Finally, while Central Elementary was the only school to discuss the use of a makerspace, student experiences there are similar to some of the tasks students completed in Kristy's engineering class, which also began in kindergarten at Eastern.

Preparing Students for Successful Choice-Based Opportunities. In preparing students to engage in choice-based learning, Kristy said, "I've learned sometimes you can't give too many choices. Depending on the culture of the class, sometimes it's A or B." Kristy mentioned that she also had to remind herself that students had likely never done anything like what she was asking them to do. So, although choice was commonplace at Eastern, some of the tasks involved choices and/or thinking that was more challenging than what they had done before.

Kathy talked about students being accustomed to "being told what to do and when to do and how to do it" that they did not know how to self-monitor when given the freedom. Bonnie also mentioned a few students who had trouble with self-regulation and not being able to handle the lack of structure. Willa also emphasized that students needed to know the expectations ahead of time. "I think that's important, that helps them learn how to manage their time, manage their...understand what's expected of them. That's such a foreign thing to kids. But for them to become adults, they have to learn how to do all that." Speaking of time management, she also said, "I really tried to stretch them in time management and managing themselves. The work is challenging, like, I'll keep the work challenging."

Willa was honest when she said, "It's been a real exercise in patience trying to figure out how to give them so much choice and then actually get them to do it." She also shared:

Juniors, their lives are still not their own. I mean, we still do state testing, they do ACT stuff, and I don't know, they're just not...it's hard. It's hard to gauge whether or not they're mature enough, because you still have to scaffold it, you still have to structure it. But then it still has to be choice-based. And it's just, I haven't quite gotten the traction on how to support them in their choices.

Cassie mentioned that some students needed some parameters to get started. Kara echoed that students needed to know the routines and expectations before they got started. These things were in alignment with Willa, who provided scaffolds and structures to support her students, and also did weekly student conferences to help students monitor their progress. Claire stated that it was hard to just give students choice when they had not had that much autonomy over their learning up until that point. Marina shared that one challenge was the slow-to-start students, and the ones that reported that they did not have any interests and the supports needed for those students.

To support students, Kristy and Willa engaged in modeling and conferring with students. Kristy said, "when I'm asking in the build [in her engineering class], I do it as well. I think it helps for me to also build community for me to say, look, I've done this." Willa shared that: students' time management [is a challenge]. They have a hard time with choice-base

because there's, even when you have a due date for something, they have no idea how

long it takes them to do something. In the self-pacing, I try to give them structured time gauges, like, this is when you should have this done, like checkpoints.

Mitchell also talked about the way students use their time, and the ability to misuse time, so they had to teach them how to monitor that for themselves. Also, Willa said, "the biggest thing with them is they have to have a teacher conference every single week. Because if not, you have no idea where they are in the process." In a similar fashion, Claire had students complete project proposals and meet with her so she could see how students were thinking through each step and Wanda met with students individually when necessary.

Teacher Planning for Choice-Based Opportunities. Brad, as the superintendent, saw it as his responsibility to support teachers as they developed plans for implementing choice in their classrooms. He made it a point to show teachers a variety of ways they could implement choice, "Even perceived choices. Because the teachers, what we've had to teach them is, like, if there are educational outcomes that you need, then make two choices that get to the same outcome." Rory emphasized first knowing what you want students to learn from the lesson/unit/project.

Participants from each case expressed the need to intentionally plan choice-based learning opportunities for students. Similar to Bonnie's planning process, Willa shared that when she was planning, she asked herself, "what are the choices I can fit in here?" This is almost identical to what Maddy shared about her planning, "what are the student choices?" When they had determined the outcomes they wanted their students to achieve, the teachers indicated that their next step was to determine where they could infuse choice for students. Kristy shared that not every assignment could be a free-choice task, and that "you have to build up…they have to show you that they can handle a free choice." She said that some students could "run with"

choice the first time it was presented to them, but for other students choice could be very overwhelming. Regarding planning, Willa shared:

Every day, when I'm planning something, I was like, okay, so what are the choices I can fit in here? How do they get to choose how they do this, how they receive – my main thing is instruction, it has to be, there has to be a choice in how they receive instruction.
Kristy also reflected on projects, and said, "I'm constantly realizing, I need to fine-tune this. I need to give this opportunity a little more leeway, or I need to add another level. Or, I need to add more structure."

Finally, as other participants have mentioned, it was necessary to establish project expectations prior to students beginning the work. Kristy said she would often include an element requiring students to add a written component that explained their thinking. She wanted students to justify why they made the choices they made. She also typically required an interactive element that showcased student understanding in a physical way, beyond a tri-fold posterboard. She also shared that:

Fifty percent of the kids do something that's pretty cool, but probably could have been quite a bit better if they'd use their time wisely. And then there's about 25% that don't pass because they don't do anything because it's tough, because it's self-instructed. So that's hard.

Kristy discussed reflecting after a project, determining where she needed to give more leeway or more structure the next time. Maddy shared that when planning, she had to be careful to provide enough structure that students took it seriously, but not over-scaffold at the detriment of choice.

Guidelines for project mastery were discussed at several schools. Maddy and Claire discussed the use of rubrics at Vision Academy. At Oceanic High School, the school used competencies as the guide for mastery, and at Eastern, they had their Eastern Exemplars.

Deeper Learning. The first element of deeper learning is to master core academic content (AIR, 2022). On this topic, Kristy shared that:

I think choice also gives an opportunity for synthesis, more than just demonstrating learning. Because they have to themselves figure out how what they're building and bringing together works. Because synthesis isn't just, this is the answer. I'm creating something. Let me show you how this works. It takes it to that exemplary level.

Bonnie talked about choice allowing students to synthesize everything they had learned in multiple contexts. Maddy also talked about choice learning experiences allowing students to synthesize their skills with their being.

The next element of deeper learning is to think critically and solve complex problems (AIR, 2022). Willa shared that she will continue to implement choice in her classroom "because the kids receive it. That's when they like, bloom in their own thinking." She shared an artifact with me, a digital journal that students kept while working with Romeo & Juliet. She said the journals, "illustrate how the process of choice-based learning helps set the kids up for deeper understanding and more thorough levels of critical thinking...they can learn how to carry the load themselves. They learn how to...order their thinking."

Willa discussed students blooming in their thinking when choice is implemented, while Wanda discussed being able to observe student learning and see their growth. Willa also talked about choice preparing kids for deeper learning. Katrina mentioned critical thinking skills being used by the students in Wanda's classroom. Wanda stated that when students had an interest in something, their depth of understanding could be amazing. These sentiments align with Diane's statement about students diving deeper when given a choice.

Working collaboratively is the next element of deeper learning (AIR, 2022). Students in both Kristy and Willa's classrooms had opportunities to work collaboratively on projects. But Amy shared:

trying to set those lifelong lessons, giving them the opportunities to work in groups is huge...And to work through something and not night get the answer they want...Building trust between the students and the students were the ones instead of the teacher pushing the other students. And they're helping each other. It's that empathy too...So it's building all those life skills that we want the kids to have, and to be successful adults.

Kristy indicated that "my ultimate belief is that when students can choose the way they show their understanding, it will be more authentic than any written test" thereby effectively communicating their understanding.

An important piece of deeper learning is learning how to learn. As evidence of this occurring in her classroom, Willa said:

there has to be a choice in how they receive instruction. If they want to receive instruction from me, that's one thing they can do. If they feel like they don't need that and they want to watch this instructional video...or if they just want to hop right into an assignment and see if they can tackle it...it's helped with self-advocacy for sure. Figuring out how to learn stuff. They learn how to learn.

Kara mentioned that choice made students more willing to participate in the process of their education, rather than just doing what they are told. I believe this is in line with a statement made by Kristy, that when students could choose the way they showed their understanding, it was

more authentic. Willa also discussed choice preparing students to carry the load themselves, learning how to order their thinking, choice projects were more about engaging in real learning and learning how to think rather than just completing a task as they have been told. Claire discussed the fact that engaging in choice-based learning allowed students to learn how to be a learner.

The final component of deeper learning is to develop academic mindsets (AIR, 2022). Kristy discussed students' academic mindsets during a task in which her engineering students had to build a windmill, "how they constructed it…was up to them. But they still have to follow the design process. They still have to go through research and rough sketches and a decision matrix. But it's opportunities for them to push themselves." Also relating to the development of academic mindsets, Amy shared:

The teachers putting it back on the kids and asking them questions. And so it's a big learning experience...the kids are learning—yes, you can mess up, you can fail, but you got to learn from those and then see what you can do to change.

Marina shared that choice allowed students to become lifelong learners and change agents. Mitchell talked about the fact that during choice learning, students were not just learning information or concepts, but also life skills in the way they approached learning. Amy talked about choice helping students build "all those life skills we want the kids to have to be successful adults."

Leadership for Choice Learning. One element of leadership shared at Eastern Secondary was the changing of mindsets of the educators. Amy shared:

It took the first 3 years to get some of those who weren't willing out, and who weren't getting on board. And they made that choice. We let them make the choice because we just said, this is what we're doing. And we're here to be a family and have fun. Amy also talked about the mindset that had been established in recent years at Eastern Secondary, "[Teachers] are still willing to learn and try new things, because that's the atmosphere we set."

Brad shared ideas about this too. When asked about building this type of culture within the district, he shared that the district focused on dispositional hiring more than focusing on a candidate's pedagogical background, "We hire awesome people and then let them do awesome stuff. We can teach somebody how to teach." He also shared that he was familiar with working in a punitive environment, "we just spent years and years and years of convincing people that we're the opposite of that. And by the way, it's really hard, because it is so much easier to dictate than it is to inspire."

The other element of leadership for choice-based learning was the teaching of teachers, including providing PD, and modeling. Kristy talked about being a teacher with these types of leaders:

this is the kind of school Eastern is...the kind of admin we have. "Whatever you want"...I think one of the things that has encouraged me to go even farther with it was the encouragement I got behind what I was doing.

She also shared that she was in a district where not only the principal, but the superintendent and board members wanted her to "go out on a limb and try different things." She acknowledged the role these administrators played in her willingness to try new approaches in the classroom, "So

you know, it's a lot with it. It's me recognizing from my own personal what I used to do, and then being encouraged to continue to do it and just go crazy with it."

Willa told me that she was in a deeper learning group that was led by Brad, the superintendent. The group was centered around entry points for innovation. Each teacher was challenged to pick something that they wanted to be better at. Willa chose to focus on increasing student agency and personalized pathways for students. The development of this group was one way that Brad emphasized and encouraged the implementation of choice at Eastern Secondary.

Amy said that she was the cheerleader for choice. She said that she "put myself out there, I make silly mistakes, just to be fun, and I'll own up to them. [Teachers] have to see administration as a person." She also said that she went into classrooms as often as possible, and that she sat with teachers and had conversations with them. "You got to make sure what's important to them, it might not feel important to you at that time, but you got to be there for them." Brad discussed his role as superintendent:

My role is to inform, or to teach the staff the possibilities of how to build in choice...to show them [teachers] what a world could look like where choice reigns. And then, my job is to create an environment where that choice is honored, rewarded, and valued. Like, where I can get out of the way, and make sure that any obstacle to choice is eliminated so that it can grow.

Leaders at Eastern mentioned being a cheerleader, setting the atmosphere where it was safe to try new things, and teaching the staff the possibilities of choice. Trent said it was his responsibility as the principal to push teachers into the facilitator role and support teachers in incorporating student voice and choice. Matt said that as principal, he was creating a vision and leading the staff toward giving more student voice and choice. Amy said she worked to create the

atmosphere where teachers were safe to try new things. I believe Cassie saw these things as necessary if she wanted her teachers to raise their expectations for students. Brad talked about it being his role to inform the staff of ways they could build in choice. Rory talked about the administrators needing to "put in the work" being in classrooms, modeling and coaching teachers. Similarly, Brad talked about it being his role to teach the staff about the possibilities of choice. Jason talked about "blowing up systems" that aren't working. While Brad did not use these exact words, he talked about the need for doing something different, and in his case, it was showing teachers what a world would look like "where choice reigns."

At both Eastern and Ross Elementary, someone in a leadership role encouraged teachers to try something new. In Eastern, it was Brad and Amy both. At Ross Elementary, Wanda first implemented Genius Projects with encouragement from her principal. Now, Wanda is a teacher leader of sorts, sharing her experiences and supporting her colleagues who want to implement choice.

The articulated initial findings and case-to-case comparisons revealed some larger, overarching themes. These themes represent patterns of findings that were present across the sample of participants, which are discussed in the following section.

Across-Case Analysis

When considering all of the cases together, analysis revealed findings that can ultimately be grouped into four primary categories: *why* participating educators chose to implement choice-based learning, *how* and *where* choice-based learning is being implemented in these specific schools/classrooms, perceived *outcomes* of choice-based learning in participating schools/classrooms, and the role of *leadership* in the implementation of choice. Explications of each of these categories of findings, with relevant examples from the study, is presented next.

Why Choice is Implemented

The educators who participated in this study chose to implement choice for a variety of reasons, including their own prior experiences with choice-based learning, a desire to provide meaningful learning experiences for students, and as a means for differentiating learning. When I asked Diane about what advice she would offer other educators who are considering implementing choice-based learning opportunities into their classrooms, she said the following:

What if, as part of that routine [classroom] you put in one hour of free-choice learning per week. What if, instead of a worksheet or essay, you allow students to choose how their learning will be demonstrated. You are covering the standards, and even the most reluctant students feel that because if they have a choice, that they have some bit of control and it will turn their attitude toward school around in a positive way. If the kids are happy and they are learning, and they are applying that knowledge outside of the box, they will be successful in standardized testing.

Diane's statement reflects the goals of many educators in this study. They wanted to provide opportunities for students to be able to assume ownership of their learning, and they wanted learning to be relevant to students (Bonnie and Maddy). They wanted students to experience the power of learning, not just do what they were told to do at school (Kara, Kathy, Trent, Maddy, Claire). They wanted to move students from the compliance discussed by Haberman (1991) into true learning (Jason, Trent). They wanted to move from rote memorization for test-preparation into deeper learning (Kristy, Willa, Diane). The teachers participating in this study are by no means representative of all teachers in the United States. Their classrooms are unique but allowed me to see some patterns about how and where choice was occurring in their schools.

How and Where Choice Occurs

One noteworthy finding was the number of ways teachers in this study were providing choice for students. I went into data generation hoping to find several teachers doing fully freechoice learning experiences such as Genius Hour in their classrooms. I did find those teachers, but I also found teachers implementing exploration blocks (Wanda, Jason), project-based learning (Central Elementary, Vision Academy, and Oceanic High School), choice boards (Kara and Willa), choice in how instruction is received (Willa), and choice in how to demonstrate learning (Bonnie, Kristy, Willa, and Diane). Overall, I discovered that it was difficult to quantify choice in many of these participating schools because students were regularly being given options, even if they were small choices, such as the choice of handwriting or typing assignments.

Regarding where choice took place, there were some important findings from this study, including the isolation of choice, the grade levels in which choice seemed most prevalent, and the content areas in which choice occurred most often in participating schools. In this study, choice was isolated in schools, meaning that it was only happening in one or a few classrooms, rather than being a school-wide endeavor. At both Lincoln and Ross Elementary schools, there was only one teacher implementing a fully autonomous opportunity for students, in which the students were able to choose their own topic for investigation and engage in learning in a manner of their choice (Bonnie and Wanda). I was fortunate that those teachers agreed to participate in this study. At Central Elementary, Jason shared that there was only one teacher per grade level truly implementing choice for students. Choice seemed to be happening in more classrooms in the form of PBL at Vision Academy and Oceanic High School. But only at Eastern Secondary was choice described as "a way of life."

Another noteworthy result was the level of school where choice seemed to occur the most. My participants represented three elementary schools and three secondary schools. Of these six schools, choice occurred more regularly in the secondary schools. This finding was a bit surprising, due to potential assumptions that because students spend the entire day in the same classroom, the daily schedule in an elementary school is more flexible, and therefore more amenable to implementing choice-based learning.

In the participating secondary schools, choice seemed to occur most frequently in humanities classrooms: English language arts and social studies. This might be skewed information, however, since my secondary participants were largely humanities teachers. At both Vision Academy and Oceanic High School, I sent invitations to participate to all teachers on the staff, and only these participants responded, so it is difficult to determine how STEM teachers were implementing choice at these schools. Maddy shared that her colleagues are implementing choice in math and science classes at Vision Academy, but that choice typically occurred during a culminating project at the end of a unit or quarter, rather than being dispersed throughout the quarter. It is not particularly surprising that choice was occurring more frequently in humanities classrooms in participating schools, due to the fact that the curricular expectations of social studies classes include not only geography, economics, and history, but also inquiry, decisionmaking, social-emotional development, and responsible citizenship (National Council for the Social Studies, 2017). Social studies concepts can also be integrated with many other content expectations, making the social studies block an ideal place to infuse choice.

In my experience, this perceived flexibility occurs because social studies is typically not a state-tested content area, making it a lesser-monitored subject. The Every Student Succeeds Act (ESSA, n.d.), a law passed by the federal government to ensure "fair, equitable, and high-quality

education" for all children (para. 2), requires math and English language arts assessments every year in Grades 3-8 and once in high school. A science assessment is required at each of three grade bands: 3-5, 6-9, 10-12. However, there is no federal mandate for social studies or history assessments (Education Commission of the States, 2018).

Outcomes of Choice Learning

All participants in this study discussed the outcomes of implementing choice in their classrooms and schools. As previously mentioned, these outcomes were aligned with the elements of deeper learning. Several participants discussed students becoming more invested in the process of their learning, rather than just doing something because they have been told to do it (Bonnie, Kara, Willa). Additionally, Kristy, Bonnie, and Maddy talked about students being able to synthesize their learning by applying knowledge and skills across content areas. When students develop the skills associated with deeper learning, they are ultimately developing the skills necessary for college and career readiness (Hoffman, 2015). Amy discussed the "life skills" that students developed when given the opportunity to make decisions and have choices about their learning. Participating educators also discussed the development of such "soft" skills, which are an element of college and career readiness (Johnson, 2013). Soft skills are nonacademic skills, such as collaboration and perseverance (Wagner, 2012). These skills have been cited as the skills many employers are seeking in 21st century employees. For example, a representative from the car manufacturer Toyota reported that the most difficult jobs to fill within the company are those that require problem-solving skills (Johnson, 2013). In many of the schools and classrooms associated with this study, students were working collaboratively and communicating with not only their peers and teachers, but with members of the community as

well. For example, students at Oceanic High School collaborated with members of the community to solve real problems facing the watershed areas within the community.

Leadership for Choice Learning

As in the pilot study, school leadership seemed to play an important role in the implementation of choice in participating schools. In each of the participating schools, the administrators were supportive of the implementation of choice. In four of the six schools, the administrators were playing an active role in encouraging and modeling the implementation of choice by working with teachers individually by going into classrooms and supporting teacher needs and by providing professional development to the staff as a whole.

In several instances, the school leaders who participated in this study recognized that what had previously been happening in their school or district was not serving students appropriately regarding preparing them for their futures after school (Brad and Jason). At Lincoln Elementary, for example, Cassie recognized that some teachers in the school assumed students were not capable of engaging in choice-based, less structured learning activities, therefore not allowing students the opportunity to demonstrate what they were capable of doing. Brad, the superintendent of the district in which Eastern Secondary School is located, noted that opportunities for students to make choices about their learning had not increased at all in the 20 years since he had been a student in the district. Students were not able to choose courses, or even what they ate for lunch, and he determined that students deserved the opportunity to choose classes that aligned with their interests and future career goals. Finally, Jason, having served as a school resource officer prior to becoming a teacher, discovered that the students in low-income communities have limited opportunities for choice outside of school and have very little control over their lives. Therefore, he determined that it was necessary for students to be able to make choices and have some control over their learning.

These administrators took on the responsibility of changing practices by modeling for teachers what they wanted students to experience in the classroom. For example, Amy and Jason modeled teaching in classrooms, showing teachers options for implementing choice. Additionally, Jason provided professional development about project-based learning for the teachers at Central Elementary School. He also implemented an additional professional development opportunity for teachers in which they could complete their own passion project, exploring an area of interest. Brad also led professional development for the teachers in Eastern Public Schools, discussing a variety of ways to implement student voice and choice. Finally, Trent worked to help the teachers at Oceanic High School establish community partnerships, in which students would be able to collaborate with professionals to solve real problems impacting their community. As previously mentioned, there does not seem to be literature identifying the roles of school leaders in encouraging and supporting choice-based learning. However, there is a plethora of literature that clearly expresses the crucial roles school leaders play in academic achievement, school culture and climate, and teacher instructional practices.

Regarding academic achievement, Branch et al. (2013) determined that highly effective principals can raise the achievement of students by 2-7 months in 1 school year; but ineffective principals can lower student achievement by the same amount in the same timeframe. It has also been determined that school leadership is the second most influential factor on student achievement, following teacher quality (Clifford et al., 2012). Leadership practices are associated with student learning because the school principal establishes clear goals and fosters shared beliefs about learning, which encourages teachers to establish high expectations for

student performance and implement effective instructional practices (Waters et al., 2003). School principals can also influence a positive culture and climate within the school by promoting cooperation and cohesion among staff and working with the staff to develop a shared vision of what the school could be like. Essentially, as one researcher stated, "There is no high-performing school without an effective principal" (Xu, 2018, p. 5). Xu (2018) states that the influence on student achievement is indirect, because the principal is not directly teaching students, but happens because principals influence "beliefs, attitudes, and conditions about teaching and learning" (p. 5). If principals are this influential, even indirectly, on student achievement, school culture and climate, and teachers' instructional practices, it stands to reason that the school leader would also be instrumental in the implementation of choice in classrooms.

I think this has been demonstrated at Eastern Secondary School. While Brad was not the school principal, but the district superintendent, it seemed that he had displayed that leadership can play a pivotal role in not only implementing choice, but also sustaining these opportunities for students. Brad not only provided professional development for teachers within the district but saw it as a personal responsibility to show teachers how choice could be implemented in their classrooms. Brad also shared that the district did what he called "dispositional hiring," stating that "we hire awesome people and let them do awesome things." He believed that pedagogy and content can be taught, but a belief in honoring student voice and choice is something people have or they do not. Finally, Brad partnered his small rural school district with a local university to provide students with even greater options around courses they might like to take.

Leaders in this study identified themselves as teachers, models, and cheerleaders for choice in their schools. And while choice was still very isolated in four of the six schools, the leaders seemed to have a desire to help their teachers see the value of student choice, and ways to

implement it further. For example, Brad said that it was his role to show teachers what a world would look like where choice reigns. Cassie said that as a leadership team, they had to find ways to allow kids to show what they are capable of. She said this in relation to the fact that many of the teachers in her building did not offer choice because they did not think their students were capable of doing choice-based activities. Jason's statement to "blow up systems that are not working" refers to the systems of testing and scripted curriculums that do not allow for student interest.

Additionally, a statement made by Kathy about the various administrators she has worked for at Central Elementary clearly summarizes this point. "I think a lot of the choice is dependent on how much power they give to the teachers." In fact, Jason left Central Elementary at the conclusion of the 2021-2022 school year, and Kathy reported that some teachers who had been giving choice to students while Jason was the principal were no longer doing that, because the same emphasis on choice and support and encouragement to implement it was not present to the same degree with the current administrator. She shared that the schedule had been changed and students no longer visited the makerspace with the same frequency they did while Jason was principal, and that the blocks of time that were reserved for PBL and other choice-based learning opportunities were no longer in the daily schedule. When considering these four primary categories of overarching results, it became evident that there are relationships among the categories. These relationships are described in the next section.

Relationships Among Themes

The associations among these four primary categories display the elements necessary for successful choice-based learning to occur for students. First is the relationship between *why* choice is implemented and the *outcomes* of that implementation. These two elements seem to be

cyclically related. Teachers wanted to implement choice to offer opportunities for students to have relevant, meaningful learning experiences, which allowed for deeper learning to occur. The observed student outcomes encouraged teachers to continue offering these opportunities.

Next, is the relationship between *leadership* and *why* choice is implemented. In many cases, participating teachers did not say that they started implementing choice because their principals encouraged them to do so. However, the school and district leaders in this study were influential in teachers implementing choice. For example, Wanda began Genius Projects in 2020 after the school principal presented the concept and encouraged teachers to try it during virtual learning. Jason implemented a variety of choice-based opportunities upon his arrival at Central Elementary School. He started a makerspace as part of the library/media center, he brought PBL to the school and intentionally scheduled time to allow teachers to implement PBL and other free-choice activities, and he started his unconventional choice-based professional development opportunity for teachers. Kathy shared that there likely would not have been a makerspace as part of the school's library if Jason had not located the space, purchased the materials, and dedicated time in the schedule for its use. She also shared (as previously explained) that many teachers who had been doing some kind of choice in their classrooms were no longer doing that, after Jason left the school. Finally, Brad implemented choice in a number of ways in Eastern Public Schools, making choice "a way of life." He told me that students had choice of where they did their work, with whom they did their work, the learning path they wanted to take, even what was put on the lunch menu. In contrast to these three leaders, Cassie did not emphasize choice at Lincoln Elementary School, and students there had comparatively fewer opportunities for choice than students in the other study participants' schools.

The relationship between *leadership* and *how/where* choice takes place is notable as well. In some instances, the leaders of the schools not only influenced why teachers implemented choice, but also how and where choice occurred in the school. For example, Jason created a calendar/schedule that built in dedicated time for choice-based learning to occur. He also brought in professional development about PBL and made that a focus for the school. Brad emphasized that part of his role as a leader was to show teachers how and where they could infuse student voice and choice. Trent did not create the vision/structure of Oceanic High School by himself, but in working with the founding educators of the school, he emphasized that student voice, choice, and empowerment would be critical pieces of all they did at the school. Part of that included the real-world work that students did in partnership with the community.

Finally, a relationship existed between *how/where* choice occurred and *outcomes* of choice learning. While many similar outcomes were referenced by participants, the types of choice that students had the opportunity to engage in had an impact on the types of outcomes educators observed. The smaller-scale choices allowed students to practice decision making and further develop those skills. For example, in Kara, Mitchell, and Willa's classrooms, students were presented with choice boards or task lists in which they were able to decide which assignments to complete in which order, considering time management and goals for the end of the day/week/quarter. Larger choices allowed students to exercise their ability to engage with others and be change agents within their communities. For example, in Diane's third-grade classroom, students were tasked with identifying a problem within their community and developing a solution for that problem. Students learned that the bee and butterfly populations were dwindling in their agricultural community and decided to plant a pollinator garden outside of the school to encourage bees and butterflies to remain in the area and reproduce, thereby

increasing the population. Students at Oceanic High School were also tasked with identifying problems within their community and determined that pollution in water sources surrounding the school were an issue they could solve. One solution was to install pet waste disposal areas to encourage dog owners to collect and properly dispose of pet waste, reducing the amount of waste that was polluting the water. Engaging in choice as elementary-aged students allowed students the opportunity to begin developing these skills early, and the opportunity to continue refining these skills as they progress through their educational careers.

Academic Optimism

As you may recall from Chapter 3, I used the theoretical construct of academic optimism to undergird this study. Academic optimism, as a construct, is composed of three main elements: academic emphasis, teacher collective efficacy, and faculty trust in students and families (Hoy et al., 2006). Academic emphasis is the belief among school faculty that all students can achieve. Where academic emphasis is present, there are high achievement standards put in place for students. Collective efficacy refers to the shared belief among teachers that their efforts as a whole will have a positive effect on students. In schools with high collective efficacy, teachers do not view students as being affected only by their classroom teacher, but rather believe that it is everyone's responsibility to ensure student success. Finally, faculty trust in students and parents refers to the vulnerability teachers express, and the confidence teachers have that they can rely on parents and students. The researchers who developed this construct found that when these three elements are present in schools, student achievement will be higher, regardless of the socioeconomic status of the students.

I fully expected the participants from schools implementing choice-based learning opportunities for students to report above-average academic optimism for their schools and

classrooms. However, that was not the case. In using academic optimism to undergird this study, I first asked each participant to complete the academic optimism scale appropriate for their role: school-wide, secondary classroom teacher, or elementary classroom teacher. I scored each scale in accordance with the developers' instructions. The participants' scores are reported in Table 7.

I also used participant responses on the scale items to ask follow-up questions during our interviews. For example, if a participant indicated a high level of trust in students, I asked them to discuss how that trust is evidenced in the classroom: "How do students know they're trusted?" No patterns were revealed in the responses to these types of questions around trust, meaning that there were not common responses among participants about the trust that they hold for parents and/or students.

Although academic optimism as a construct focuses on the perception of school-wide collective efficacy of all of the educators working within it, the academic optimism scale for classroom teachers focuses on *teacher* academic optimism, and therefore measures individual *teacher* self-efficacy. Individual teacher self-efficacy refers to the belief a teacher holds about their ability to successfully complete the tasks related to their profession (Barni et al., 2019) and help students achieve desired outcomes (Tschannen-Moran & Woolfolk Hoy, 2001). Because most of the participants in this study were classroom-level educators, only responding about their own self-efficacy, it was difficult to determine the collective efficacy of teachers in their schools. Donohoo et al. (2018) stated that collective efficacy may be represented by a school-wide focus on "student learning as opposed to instructional compliance" (para. 4). Jason discussed this when asked about evidence of high expectations at Central Elementary School. He said, "you could ask any teacher about any student, and the teacher could discuss what students

actually knew, in terms of real learning and not just compliance." Again, no patterns emerged from the data regarding the collective efficacy element of academic optimism.

Researchers also report an overlap in collective efficacy and high expectations for students. As it pertains to academic optimism, academic emphasis is the belief that every student is capable of high academic achievement, and the implementation of high standards of achievement (Hoy et al., 2006). I equated this element to holding high expectations for students. For example, a teacher that self-reported high scores on the academic emphasis questions on the academic optimism scale was a teacher that held students to high expectations. Again, I asked teachers to discuss how these high expectations were evidenced in their classrooms. Responses to these questions did yield patterns about expectations of students, which were reported in the findings earlier in this chapter.

Table 7

Case	Participant/Role	Score
Lincoln Elementary	Cassie/Principal Kara/4th Grade Teacher	492.99 (slightly < average) 507.80 (average)
	Bonnie/Gifted Education Teacher	547.75 (average)
Ross Elementary	Katrina/Classroom Assistant Jamie/Instructional Coach Rory/Assistant Principal	476.96 (< than 84% of schools) 503.65 (average) 527.54 (average)
	Wanda/Pre-Kindergarten Teacher	608.16 (> than 84% of schools)
Central Elementary	Jason/Principal Kathy/Library Media Assistant	510.10 (average) 524 (average)
	Diane/3rd Grade Teacher	547.75 (average)
Vision Academy	Claire/8th & 10th Grade Teacher Maddy/6th & 7th Grade Teacher	533.52 (average) 591.17 (high average)
	Matt/Principal	949.92 (> than 99% of schools)
Oceanic High	Mitchell/9th Grade Teacher Marina/Instructional Specialist	491.12 (slightly < average) 592.34 (high average)
	Trent/Principal	718.76 (> than 97% of schools)
Eastern Secondary	Willa/High School Teacher Kristy/Middle School Teacher Amy/Principal	511.32 (average) 533.52 (average) 651.16 (> than 84% of schools)
	Brad/Superintendent	792.5 (> than 97% of schools)

Academic Optimism Scale Results

Note. Scores were interpreted via guidelines presented by Hoy (2005; <u>https://www.waynekhoy.com/school-ao/</u>). The guide for interpreting the scores is as follows:

If the score is 200 it is lower than 99% of schools in a typical set. If the score is 300 it is lower than 97% of schools in a typical set. If the score is 400 it is lower than 84% of schools in a typical set. If the score is 500 it is average. If the score is 600 it is higher than 84% of schools in a typical set. If the score is 700 it is higher than 97% of schools in a typical set. If the score is 800 it is higher than 97% of schools in a typical set.

The scores from the academic optimism scale reported in Table 7 revealed some

interesting results. Of the 11 classroom-level educators who participated in this study, eight

reported average academic optimism, one score was slightly below average, one score was lower than 84% of schools (Hoy, 2005), and only one classroom educator reported higher than average academic optimism. The school/district level educator results were slightly different. Four of the nine school-level educators reported average academic optimism. One principal reported below average academic optimism, which happened to be the school offering the least amount of choice to students. One school-level educator reported academic optimism that was higher than 84% of schools, and three reported scores higher than 97% of schools (Hoy, 2005).

So, while some school administrators reported above average academic optimism for their schools, the teachers who are actually implementing choice for their students reported overall average academic optimism. It is possible that participating school leaders reported aspirational examples—what they want to see in their schools, rather than what is actually occurring there. It is also possible that teachers did not want to be seen as inflating their own scores. Since most of the scores on the scale indicated average academic optimism, it is possible that there is not a relationship among collective efficacy, academic emphasis, trust in students/parents, and the provision of choice-based opportunities in the classroom as I had predicted there would be.

After discovering that the participating educators did not have higher-than-average academic optimism, I examined the results from each of the three subscales of the academic optimism scale (Hoy, 2005) independently: collective efficacy, academic emphasis, and faculty trust in students and parents. The educators from the three elementary schools in this study all reported below average scores for academic emphasis, while all of the secondary school educators reported average or higher-than-average scores for this subscale. These scores were interesting, as in this study and according to the participants' reports, the elementary schools

were the schools where choice was occurring the least, while there were more choice opportunities for students at the secondary schools, indicating that there could be a relationship between academic emphasis and the implementation of choice in the classroom.

When looking at the scores for the trust subscale, study participants in all six participating schools indicated higher-than-average scores. This is particularly interesting to me as trust did not emerge as a pattern within or among the participants in this study, yet it appears that the participants in this study do trust their students and families based on the fact that their responses on the academic optimism scale indicated above-average trust.

Finally, when considering the collective efficacy subscale, the participants from Lincoln Elementary School reported a lower-than-average overall score, while participants from the other two elementary schools reported average collective efficacy scores. Participating educators at all three secondary schools had above-average scores for collective efficacy. These scores again aligned with the amount of choice being offered in each of these schools: choice was occurring less frequently in the elementary schools, where there were lower efficacy scores and more frequently in the secondary schools, where educators reported higher efficacy.

However, the academic optimism scale for classroom teachers asks them about their individual efficacy. Therefore, I was curious to know what the scores would be if I only calculated the teacher scores for efficacy, so I removed the administrator scores. When I re-calculated, the efficacy scores for the educators in each school were in the average range. This was a particularly curious finding, as the participating school administrators reported higher-than-average collective efficacy for their schools as a whole, but the individual teachers participating in this study only rated themselves as having average efficacy (with exception of Wanda, who was the only teacher who reported higher-than-average efficacy).

Ultimately, I believe that one of the potential challenges of using academic optimism as the framework for this study is that the construct itself and the scale to measure its components are intended to be used school wide. In this study, I was not able to speak to all of the teachers in any of the six participating schools. In fact, in most cases I was only able to talk with two classroom teachers per school. I believe a clear example of the discrepancy that may have occurred by having minimal participants from each case is the efficacy scores reported above. Administrators reported above-average collective efficacy for their school as a whole, while the few participating teachers only scored themselves as having average efficacy. The scores on each subscale as well as the overall academic optimism scores may have been different if I would have been able to have all teachers at the school complete it.

Conclusion

Overall, the results of this study provided insights about *why* participants chose to implement choice, *how* and *where* choice occurred in participating schools, the *outcomes* teachers observed as a result of implementing student choice, and the role of school/district *leadership* in the implementation of choice. In Chapter 5, I will further discuss the results of this study, and how they align with two existing frameworks: the pedagogy of plenty and Universal Design for Learning. I will also provide suggestions, based on the results of this study, for school leaders, teacher educators, and educational researchers around the implementation of choice in under-resourced schools.

CHAPTER 5: DISCUSSION

The purpose of this study was to gain an understanding about the implementation of freechoice learning in under-resourced schools. I sought to learn about both the decision-making processes of educators, as well as the implementation of these choice-based opportunities for students. To do this, I interviewed participants, which included district-, school-, and classroomlevel educators. I also asked classroom-level educators to submit a written response to a prompt describing a session of free-choice learning in their classrooms and share artifacts that they felt illustrated choice-based learning in their classrooms. I also asked all participants to complete the academic optimism scale (Hoy, 2005) appropriate for their role in the school. I conducted this study as a multiple case study, aiming to locate cases that were as different from one another as possible, so that I could examine choice-based teaching and learning both within each case and across all cases. I engaged in thematic analysis to make meaning of the data that were generated and collected. In Chapter 4 I shared the results of this study and situated those results in extant literature where possible. In this chapter, I aim to further discuss the results of the study, considering further connections to extant literature and recommendations for school leaders, teacher educators, and for future research.

As was demonstrated in Chapter 4, the educators participating in this study implemented choice in their schools and classrooms in a variety of ways, for a variety of reasons. As I was examining these reasons and associated outcomes described by participants, I discovered that they could be aligned with two existing theoretical frameworks. While no participants actually named these frameworks, their reasonings for implementing choice align with the pedagogy of plenty, which was described in Chapter 2, and Universal Design for Learning (UDL). In the next sections of this chapter, I will explain the alignment of participants' responses and results of this study with these frameworks. I will then provide suggestions for action aligning with these frameworks for school leaders, teacher educators, and educational researchers.

Pedagogy of Plenty

In 1995, the first edition of *Educating Everybody's Children*, was published. This was an edited compilation of chapters about teaching the increasingly diverse student body in the United States, which also noted that "often teachers' expectations of students are shaped by inaccurate assumptions about innate ability, low expectations for racial minorities or poor children, and a lack of knowledge about students' different cultural backgrounds" (Hodges, 1995, p. vii). In this book, Lloyd Kline (1995) offered 13 instructional strategies that are effective for teaching all children. These 13 strategies, presented in Table 8, are inclusive; often focus on students working within social situations rather than alone; are interactive and interdisciplinary; and empower students to be actively involved in their own learning, rather than passively receiving instruction.

In 2001, Helené Hodges added three strategies to this list of 13 universal strategies and named the collection of strategies the "pedagogy of plenty" (p. 3) as a counter to Haberman's pedagogy of poverty. Hodges (2001) posited that the pedagogy of plenty—the implementation of the 16 universal strategies—offered all students a greater opportunity to succeed in school, and believed that it is "quite simply, teaching at its best" (p. 3). In short, the 16 strategies listed in Table 8 are ways of teaching that benefit all learners but are particularly beneficial for diverse learners because they capitalize on student strengths, thereby increasing student self-esteem and engagement in learning (Hodges, 2001).

Table 8

16 Universal Strategies for Implementing a Pedagogy of Plenty

16 Universal Strategies 1: Provide opportunities for students to work in a variety of social configurations and settings. 2: Use reality-based learning approaches. 3: Encourage interdisciplinary teaching. 4: Involve students actively. 5: Analyze students' learning and reading styles. 6: Actively model behaviors. 7: Explore the fullest dimensions of thought. 8: Use a multicultural teaching approach. 9: Use alternative assessments. 10: Promote home/school partnerships. 11: Use accelerated learning techniques. 12: Foster strategies in questioning. 13: Emphasize brain-compatible instruction. *14: Activate students' prior knowledge. *15: Use a constructivist approach to teaching. *16: Organize instructionally effective classroom environments. Note. Asterisk indicates strategies added in 2001. Adapted from "Overcoming a Pedagogy of Poverty," by H. Hodges, 2001, in R. W. Cole (Ed.), More Strategies for Educating Everybody's Children, pp. 1-9. Copyright 2001 by Association for Supervision and Curriculum Development. After adding the three additional universal strategies, Hodges then created an

organizational framework that could be used by classroom teachers and school administrators to

implement the 16 universal strategies that comprise a pedagogy of plenty. She believed that

while all 16 strategies are necessary, they are most effective when teachers know how and when

to implement them. In creating this framework, she placed the 16 universal instructional

strategies into five categories, grouping complementary strategies together. She indicated that by

simultaneously using the complementary strategies in each category, teachers "offer their students increased instructional support for learning how to learn" (Hodges, 2001, p. 8). This framework can help teachers to identify practices that permit them to capitalize on student strengths, focus on instructional strategies that best meet the needs of their students, and increase student interest, motivation, and engagement by enabling students to make connections for understanding as they work with other students. The five categories of Hodges's framework are presented in Table 9 indicating the combinations of individual strategies.

Table 9

Organizing Framework for Universal Strategies

Category	Strategies
Capitalize on students' strengths.	5 and 13
Match instructional methods to students' instructional needs.	2, 4, 6, and 11
Increase interest, motivation, and engagement.	12, 14, and 15
Create varied learning configurations.	1 and 16
Make connections for understanding.	3, 7, 8, 9, and 10

Note. Adapted from "Overcoming a Pedagogy of Poverty," by H. Hodges, 2001, in R. W. Cole (Ed.), *More Strategies for Educating Everybody's Children*, p. 8. Copyright 2001 by Association for Supervision and Curriculum Development.

Based on the details participants shared about the implementation of choice-based learning in their classrooms, I believe the teachers in this study were using a pedagogy of plenty, even if they did not identify their practices by name. Throughout the sections that follow, I will provide details of each category of instructional strategies, as displayed in Table 9, as well as connections with the results of this study. Later in this chapter I will provide some implications for the use of this framework by school leaders, teacher educators, and educational researchers.

Capitalize on Students' Strengths

The first category of the pedagogy of plenty framework centers upon individual student strengths and learning preferences (Hodges, 2001). When implementing the strategies within this category, teachers can determine the ways in which students may prefer to learn and can also teach students in the ways that the human brain learns best (Cole, 2008). Learning styles refer to the ways in which it was believed that students learned best, a concept popularized in education in the 1970s-1980s (Husmann & O'Loughlin, 2019). One of the most common approaches to learning styles is the VARK model, which includes visual, auditory, reading, and kinesthetic learning styles (Chick, 2010). The idea behind recognizing student learning styles was for teachers to match their teaching to the ways that students learn best. However, in recent years, the theory of learning styles, the notion that there is a best way that each individual learns, has been disproven, indicating that providing instruction and materials in accordance with a student's learning style does not improve learning outcomes (Husmann & O'Loughlin, 2019). While aligning instructional practices with learning styles may no longer be a proven strategy, students do have learning preferences, and while they may not necessarily learn better with their preferred method of learning (Kirk, 2021; Nancekivell et al., 2020), they will likely be more engaged in the learning if content is presented to them in the manner which they prefer (LeBlanc, 2018).

While beliefs about learning styles may have changed in recent years, Cole's (2008) belief that teachers should focus on capitalizing on individual student strengths and preferences, "while simultaneously removing barriers to learning" (p. 16) is still relevant. It is suggested that teachers provide students with choices in reading materials, ways of receiving or presenting information, and in how they participate in activities: with the whole class, in a small group, or individually (Kline, 1995). In this study, teachers provided students with several options around

receiving instruction and demonstrating learning. These options allowed them to make choices that aligned with their strengths and preferences.

One prime example of this was in Willa's classroom. She said, "there has to be choice in how [students] receive their instruction." In this manner, Willa allowed students to choose the method they preferred for receiving instruction, whether that was reading materials, receiving instruction from the teacher, or watching a video about the new content. When Brad described the choices available to students at Eastern Secondary School, there were choices around how to receive instruction, how to complete tasks, if students wanted to work with others or independently, if they wanted to work in a desk, on the floor, or in the hallway, all of which are elements of learning preferences. To help students identify their own learning preferences, teachers can model the thinking and decision-making processes that students might engage in as they determine how they like to receive instruction and the manner in which they complete assignments and projects (American Psychological Association, 1997).

As educators, it is important to be able to identify individual student strengths, which allow us to create instructional activities that help them to be successful. However, it is also important that we identify student needs so that we may best support students with new learning, which is the focus of category two of the framework (Hodges, 2001).

Match Instructional Methods to Student Needs

The next category of the pedagogy of plenty organizational framework consists of the universal strategies to use reality-based approaches, involve students actively, actively model behaviors, and use accelerated learning techniques (Hodges, 2001). Real-world learning is the phrase often used in educational research and practice when referring to tasks presented to

students that center around authentic problems students may be encountering, as opposed to fabricated classroom scenarios and worksheets (Stanley, 2021).

Students need to be given the opportunity to explore content in a variety of ways, one of which is to explore school-based content in authentic, "real-world" scenarios (Hodges, 2001). They should be able to work through problems, generating solutions by using and applying content, rather than following a formula in which all students ultimately arrive at the same solution in the same way. To do this, teachers should model problem-solving by being actively involved in the tasks that they present to students. Teachers can also scaffold learning to support students when they begin to struggle or display frustration. Recall from Chapter 4 that scaffolding occurs when teachers build on students' prior experiences and knowledge to support and ensure learning (The IRIS Center, 2005). Teachers can also scaffold student learning by using accelerated learning techniques, such as "chunking," or teaching smaller bits of information at a time, which may help students develop associations to things they already know, commit new learning to long-term memory, and be able to call upon that learning when solving other "real-life" problems (Kline, 1995, p. 37).

In this study, educators shared a number of ways in which they used reality-based approaches to learning. First, in the makerspace at Central Elementary School, third-grade students were tasked with designing and building worktables for the makerspace. Students had to identify the needs for the tables, the space within which the tables had to fit, cost, tools necessary for building, and the supports they might need to complete the project. Once the project was completed, the students saw their tables in use in the makerspace. Students at Oceanic High School were regularly involved in reality-based learning as they engaged in real, authentic problem solving within their community. For example, one problem the community was facing

was pollution in the water. Students worked to determine some causes for this pollution and developed solutions. One identified problem was pet waste being washed into the water, so students installed pet-waste collection stations throughout the park bordering the river to encourage pet owners to pick up and properly dispose of pet waste while walking their dogs.

Part of matching instructional methods to student needs is for the students and the teacher to be actively involved in the learning. For teachers, this includes modeling the desired student behaviors by engaging in assigned tasks, often alongside students. To actively involve students, teachers can use the aforementioned reality-based approaches which allow students to explore and develop their own understanding of situations and problems for which a single correct answer does not exist (Kline, 1995). It is recommended that teachers allow students to choose how they will interact with content, which could include the use of games, hands-on lab experiments, the use of manipulatives, or even creative dramatics.

Many teachers in this study encouraged their students to be actively involved in their learning by allowing students opportunities to make choices about their learning. Participants provided several avenues by which students could choose how they wanted to interact with materials and engage in their learning. At Oceanic High School and in Diane's PBLs at Central Elementary, students were involved in solving problems that impacted their school and/or community. They, themselves, identified the problems they believed were most in need of solving and worked to develop solutions for them. Students in Wanda, Kristy, and Willa's classrooms could choose how to engage with materials, how they wanted to receive instruction, and how they demonstrated their learning. This notion of allowing them to have choice in how they received instruction and engaged with classroom materials is in alignment with the next strategy for promoting a pedagogy of plenty.

Recall from Chapter 4 that modeling and scaffolding were two ways in which teachers in this study prepared students for successful choice-based experiences. Kristy did each of the projects she asked her students to complete. While she typically did them by herself and not in front of students, she did say that this process helped her to know if the directions and expectations were clear before she presented the project to students. Maddy discussed at length her modeling of tasks assigned to students. She emphasized that everyone should work to the best of their ability, which looked different for each student. Finally, many teachers who participated in this study discussed scaffolding, not only with academic skills and content, but with self-regulation, time management, and decision-making. In scaffolding choice-based, independent projects for students, Mitchell, Marina, Bonnie, Kristy, and Willa all shared the need to put more supports in place at the beginning of the school year, allowing students more opportunities for independence and decision-making as the year progressed. After determining student needs and learning preferences, it is important for teachers to consider student interest, motivation, and engagement. By doing this, teachers may also increase the personal relevance of learning for students.

Increase Interest, Motivation, and Engagement

The next category of strategies encourages teachers to increase interest, motivation, and engagement by fostering strategies in questioning, activating student prior knowledge, and using a constructivist approach to teaching (Hodges, 2001). In implementing these strategies, students are able to take part in learning that has personal relevance, allowing them to explore curiosities and questions. When teachers engage in a constructivist approach to teaching, the teacher allows students to construct meaning in a personal manner, thereby not only learning content, but also learning how to learn. Increased interest, motivation, and engagement were among the top reasons teachers participating in this study cited for the continued implementation of choice-based learning in their classrooms. Students have increased interest, motivation, and engagement when they have the opportunity to participate in learning that is meaningful and relevant to them (Crumpton & Gregory, 2011), which also arose as a theme in the results of this study. Additionally, the constructivist goal of learning how to learn is also a goal of deeper learning (AIR, 2022), which was also a result of this study. Teachers in this study provided ample opportunities for students to generate questions and explore their individual curiosities, becoming active in the learning process and learning about themselves as learners. For example, when engaging their students in fully autonomous learning experiences, Wanda, Kristy, Bonnie, and Diane all encouraged their students to choose topics of interest that they wanted to learn more about. Once students had selected topics, these teachers then guided students through a process of generating questions that would help them gain the knowledge and understanding they were seeking.

Once teachers have considered ways they might increase interest, motivation, and engagement, they should also consider the various social configurations in which students might complete learning tasks. This is the next category of instructional strategies in the pedagogy of plenty.

Create Varied Learning Configurations

The fourth category of instructional strategies encourages teachers to organize instructionally effective classroom environments in which students have opportunities to work in a variety of social configurations and settings (Hodges, 2001). This can include partnerships or small groups, with students working with different groups of peers from time to time. Being able to work cooperatively with other students can not only improve social skills, but may also

improve academic performance (Kline, 1995). For cooperation to be successful in the classroom, students must trust each other, communicate effectively, support one another, and be able to resolve conflicts.

These skills are in alignment with "soft" or non-cognitive skills, also known as 21st century skills, that will help students to be successful in college and career (Wagner, 2012). As discussed in Chapter 2, these skills include, but are not limited to, communication, collaboration, creativity, and perseverance. Throughout this study, participants discussed increased skills for students in collaboration and communication as being outcomes of implementing choice in the classroom. In some cases, the increase in communication and collaboration skills encouraged participants to continue to offer choice-based opportunities as methods for allowing students to collaborate and communicate with one another. For example, Katrina, who worked with prekindergarteners, said that during the exploration block in Wanda's classroom, in which students select from a variety of activities with which to engage, adults helped students resolve their conflicts by helping them to develop communication skills. Diane's students worked collaboratively with one another as they engaged in PBLs, and students at Oceanic high school collaborated with community partners as they worked to solve real problems facing their community. Students at Eastern Secondary School were also provided opportunities to work in partnerships, small groups, or alone, at their own preference.

After teachers have offered students the opportunity to engage in learning in a variety of collaborative learning configurations, they must also determine how they will help students make associations between learning in the classroom and outside of school, as well as among content areas, in order to develop understanding. This is the focus of the next category of instructional strategies.

Make Connections for Understanding

The final category of instructional strategies in the pedagogy of plenty framework is focused on helping students make connections among their learning and tasks completed at school and outside-of-school experiences (Hodges, 2001). Educators can help students make these connections by using interdisciplinary teaching, helping students develop critical thinking skills, using a multicultural approach to teaching, using alternative assessments in the classroom, and developing partnerships with families.

Teachers can implement the strategies above, thereby helping students make connections within their learning, which will help them to develop an understanding of concepts and skills in a way they can apply learning to new settings and situations. (Wiggins, 2010). The strategies in this category of the framework bring interdisciplinary concepts and cognitive skills together to replicate the ways adults approach and solve problems outside of the classroom context, problems which typically do not only involve one academic discipline (Kline, 1995). Kline shares an example of going to the grocery store, in which individuals use math concepts as they look at prices and sales, literacy skills as they write shopping lists and read packaging, and social skills as they interact with other customers and store employees.

With the implementation of PBL in most participating schools, students in those classrooms were encouraged to think critically in an interdisciplinary manner as they approached problems to solve. For example, in Diane's classroom, students combined research and literacy skills with science concepts as they worked to solve problems affecting their agricultural community. Similarly, students in Maddy's classroom used research and literacy skills to explore historical concepts in her humanities class. The teachers participating in this study also made use of multiple alternative assessments. For example, at both Oceanic High School and Eastern

Secondary School, students worked toward mastery of competencies, for which they determined their evidence of mastery, as described in Chapter 4. In this approach, students engaged in presentations of learning. In these presentations, students shared their evidence of learning to a group of individuals, which included educators from the school as well as their parents. In this way, parents were actively involved in their children's schooling.

The pedagogy of plenty is a philosophy of seeing what is not serving students in underresourced schools and committing to teaching them differently, in part by implementing a collection of universally effective instructional strategies that can be used to ensure successful learning for all learners, particularly students in under-resourced schools. Another educational philosophy that is focused on the successful learning of all students is Universal Design for Learning. A set of guidelines for instruction were compiled, based on research, that can help teachers in the implementation of this framework.

Universal Design for Learning

The term "universal design" originated in the field of architecture, when it was determined that designs in physical environments that were originally for those with disabilities were also beneficial for those without disabilities (Kelly, 2018; McGuire et al., 2006). For example, ramps are beneficial for those who use wheelchairs, but are also beneficial for individuals using other forms of wheeled transportation, such as scooters and strollers. Within universal design, inclusive features are put in place proactively, rather than as "retrofitted accommodations," meaning that designers consider accommodations that individuals might need prior to construction, rather than installing accommodations after it is discovered that someone might need one (McGuire et al., 2006, p. 167). Essentially, what is "essential for some" is almost

always "good for all" (Meyer et al., 2014, p. 85); designs that are necessary for some individuals are likely positive additions for everyone.

In the 1990s, this concept of universal design was applied to educational contexts, forming Universal Design for Learning, or UDL (McGuire et al., 2006). The Center for Applied Special Technology (CAST), an organization which works to make learning more inclusive, grounded its work of expanding learning opportunities for all people, particularly those with disabilities, in UDL. Researchers at CAST designed a UDL framework and guidelines to help educators plan learning experiences that promote access and participation for all students in the general education classroom (McGuire et al., 2006). Currently, CAST (2024) defines UDL as "a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn" (para. 1).

UDL is grounded in the neuroscience of how the brain learns, focusing on three specific learning networks: affective networks, recognition networks, and strategic networks (Meyer et al., 2014). The affective networks help us determine the emotional and motivational significance of what we learn. The recognition networks help us to form patterns and make sense in the environment around us and turn it into useable knowledge. Finally, the strategic networks help us plan, organize, and monitor purposeful actions in our environment.

In alignment with these three networks of learning, CAST developed the three principles of UDL (Meyer et al., 2014). These three principals indicate that students should be provided with multiple means of engagement (multiple ways to engage with learning), multiple means of representation (opportunity to access instruction in multiple ways through different modalities), and multiple means of action and expression (multiple ways to demonstrate understanding; Kelly, 2018). Within each principle are guidelines that can be applied in any discipline to

"ensure that all learners can access and participate in meaningful, challenging learning experiences" (para. 1). Each of the three UDL principles, with their corresponding guidelines, are presented in the following sections, with connections to the current study.

Multiple Means of Engagement

Multiple means of engagement refer to the processes by which teachers offer multiple options for students to engage in classroom instruction and with peers (CAST, 2018b). CAST aligns this principle with "affective networks," or the *why* of learning—the motivation students have for the learning (Meyer et al., 2014). In this principle, teachers should consider how the students will become engaged with the learning, how they will stay motivated, how they will be challenged, and how they will stimulate interest in the learning. The experts at CAST (2018b) have suggested several ways in which teachers might provide students with opportunities for multiple means of engagement, including recruiting interest, sustaining effort and persistence, and self-regulation.

Recruiting Interest. This guideline from CAST (2018b) suggests that teachers consider what will attract student attention and engage student interest in learning. One way teachers can do this is to offer students choice and autonomy in how they will achieve the learning objectives for a particular lesson. It is noted that it is important for teachers to know how much choice to offer individual students, and what types of choices will be appropriate, as all students respond differently to having choices. Another way teachers can recruit student interest is to highlight the relevance of the current learning to students, which can be accomplished by presenting authentic activities in which students learn though real-life situations that they find meaningful (Stanley, 2021).

Given that the focus of this study was the implementation of choice in the classroom, every participant in this study provided choice, in some manner, for students. Many of these choices centered around student interest. For example, in Maddy's class, she often provided the general topic to be studied, but students had the opportunity to choose subtopics to study based on areas of individual interest. For example, the general topic was Ancient Rome, and students chose to study gladiators, family systems, and the economy of Ancient Rome. Several participating teachers also indicated the need to alter the amount of choice offered to some students. Kristy shared that for some students she only provides two options, because for those students, having too many options creates anxiety. Teachers in this study also recruited student interest by providing learning opportunities that were relevant to students. For example, students at Oceanic High School identified problems within their community and worked to develop solutions to those problems. Diane presented her students with a school-beautification challenge in which students determined projects that were needed in order to improve physical spaces around or within the school.

Sustaining Effort and Persistence. CAST's (2018b) next guideline emphasizes the fact that the learning of new skills and strategies requires students to maintain attention and concentration, especially when the learning is challenging. In order to do this, teachers might vary the complexity and types of learning demands presented to students. Teachers should also ensure that students have appropriate resources to be successful in those demands and can also provide opportunities for student collaboration in which peers can support one another with sustaining effort and persistence. Finally, teachers can provide relevant, constructive, timely feedback to students, which can help them sustain engagement as they are able to see progress and receive clear direction as they move forward with the projects they are working on.

Participants in this study incorporated varied tasks, which presented opportunities for students to develop sustained effort and persistence. In some instances, students were provided with specific guidelines and parameters for projects, while in other instances, they were provided with open-ended tasks with little teacher input. This allowed for a balance of highly demanding tasks, and tasks that were less demanding on students. In this study, several teachers also indicated that they held individual conferences with students to provide feedback to the student and to help students monitor their own progress on projects. For example, Wanda met individually with her pre-kindergarten students to give them feedback at each phase of their Genius Projects. Willa also shared that she met with each student individually several times throughout larger, independent projects which allowed students to discuss their progress on the project, for Willa to provide specific feedback, and help students set short-term, manageable goals for the next steps in their work.

Self-Regulation. The next guideline provided by CAST (2018b) suggests that teachers help students develop self-regulation skills. Self-regulation is a person's ability to monitor their own emotional responses to situations. Additionally, self-regulation, according to CAST, includes the ability to set goals that can be realistically achieved, and the ability to handle frustration when progress does not occur as planned. It is important that teachers teach students how to recognize their progress, which can help them when they experience challenges. One way that teachers can help students develop self-regulation skills, according to CAST, is to model these behaviors for students. Prior to asking students to set their own goals, teachers can model how to set and monitor goals. Additionally, teachers can model for students ways to respond to highly emotional situations, such as frustration, before students begin work on independent tasks, or when they begin to experience frustration. According to Meyer et al. (2014):

Expert learners are able to set goals for themselves and sustain effort to achieve those goals even when conditions frustrate engagement and achievement. Self-regulation is the hallmark of expert learners, not learners who do well only in highly structured learning environments. (p. 113)

Many teachers in this study engaged students in independent, self-directed projects. Success in these projects required students to have self-regulation skills in which they could manage their responses to situations in the classroom and in their projects. For example, in Willa's Media Arts class, students were provided with the entire semester's projects at the beginning of the semester, and students directed themselves as they determined the order in which they completed projects and set their own schedule and deadlines for completing projects. In this class, Willa worked with students to help them set manageable goals, and she supported students when they experienced frustration, whether that was with the content, the progress of a project, or the challenge of not meeting their own deadlines. She did this primarily via one-onone meetings with students but also included some whole-class instruction around these selfregulation skills. Kristy followed a similar structure of student supports in her passion projects course. Students were also self-directed as they developed their own timeline and worked at their own pace to complete their projects, but Kristy met with them individually to help them create their schedules, help them monitor their progress, and make any necessary adjustments if students were not meeting their deadlines. After ensuring multiple ways in which students might engage with learning, teachers must consider the materials and instructional methods they will use in the classroom. These considerations are elements of the next UDL principle.

Multiple Means of Representation

This second principle of UDL aligns with the recognition networks, or the *what* of learning: the facts and information students are gathering (Coyne et al., 2012), materials students are using, and the methods by which instruction is presented to students (Meyer et al., 2014). According to this principle, teachers should present content and information in different ways that allow students to gather facts and categorize what they see, hear, and read. According to Meyer et al. (2014), "To promote understanding of information, concepts, relationships, and ideas, it is critical to provide multiple ways for learners to approach them" (p. 119). Teachers are encouraged to present content to students using multiple styles, including text, images, videos, and audio and to provide appropriate scaffolds for background knowledge.

Perception. This guideline, provided by CAST (2018c), suggests that teachers present information to students in multiple modalities, considering visuals, sounds, and/or physical touch, which can be selected or adjusted by the learner. One example is to allow ways for students to customize the display of information. This could include the sizes of text and graphics, the color or contrast of text and background, volume and rate of recorded speech, and/or the layout of visual elements. Many of these options are readily available on technological devices, but the teacher needs to be cognizant of the format of what they share with students, to ensure students can manipulate it in ways that are suitable to the learner. Additionally, teachers might offer alternatives for auditory and/or visual information that is presented to students. This could include the use of translations, sign language, and descriptions of images or graphics.

Language and Symbols. CAST's (2018c) next guideline recommends that teachers ensure alternative representations are provided to increase accessibility to content. Teachers might do this by providing alternative representations of key vocabulary, labels, icons, and symbols. This can occur by embedding a glossary, providing graphic equivalents, charts, and maps when appropriate. The inclusion of these alternative representations helps students gain clarity of content, which allows for greater understanding. Teachers can further support students by allowing them to use text-to-speech software and audio recordings of readings.

Comprehension. In this guideline, CAST (2018c) suggests that educators teach students how to construct useable knowledge, or knowledge that is available for future decision-making. Teachers should focus on helping students to constructing meaning, which varies from individual to individual based on prior knowledge and experiences. Teachers can also support students in developing knowledge by making explicit cross-curricular connections and highlighting previous learning that can be helpful to students in the new learning. Further, teachers can emphasize key elements in text, graphics, and diagrams to help students focus on the most important elements.

Participants shared examples of the instructional strategies presented in this guideline. For example, Kristy shared that in her engineering class, she regularly connected new learning to learning students have done previously in her class. She also connected engineering concepts to literacy, creating a cross-curricular experience in which students designed and built models that represented changes in characters throughout a selected novel.

Overall, however, the provision of multiple means of representation was the least represented component of UDL in this study. Teachers in this study did share that they present information in multiple ways, for example in writing and in a recorded lecture. They also shared that students have multiple options in how they respond to assigned projects. For example, students in Bonnie's class could choose the way they presented their passion project learning. Some students created slide shows, while others created pieces of art, and others wrote a more traditional essay. Once considerations have been made for how teachers will engage students in

learning and the different ways information will be presented, teachers must provide opportunities for students to demonstrate their learning in a variety of ways. This is the third UDL principle.

Multiple Means of Action and Expression

The final principle of UDL aligns with the strategic neural networks of learning and focuses on the *how* of learning (Meyer et al., 2014). This refers to the process of how students engage in their learning and how they demonstrate what they know (Coyne et al., 2012). Teachers are encouraged to differentiate the ways that students can express what they know. Providing more than one pathway for demonstrating competence has been shown to increase students' confidence and self-efficacy for completing tasks and demonstrating learning (Meyer et al., 2014). This principle of multiple means of action and expression also focuses on how students plan for the completion of learning tasks. Meyer et al. (2014) emphasize that there is no single tool or path to success that is appropriate for every student in a classroom. Therefore, providing options for students is the only way to create a learning environment that is conducive for everyone. The experts at CAST have suggested several guidelines for offering multiple means of action and expression and communication, and executive functions.

Physical Action. The first guideline relating to action and expression is identified as physical action (CAST, 2018a). This guideline suggests that teachers provide materials with which all learners can interact physically. For example, the teacher might provide alternate means for responding to questions and prompts, such as the ability to type rather than hand-write. Teachers can also ensure that students have opportunities to use tools that might help them to fully participate in the classroom, which may include the use of assistive technologies.

Many teachers in this study indicated that students could respond to prompts in a manner that they prefer. For example, Cassie, the principal at Lincoln Elementary School indicated that the choice to hand-write or type is a commonly offered to students in the school. Kristy shared that she provided general guidelines for projects, but students could respond to those in any manner they chose. In one project she asked students to analyze and present the changes in a character from a novel they read as a class. Students could share this information in any way they chose; some wrote an essay while others created sculptures. In Wanda's classroom, students were able to choose how they wanted to share their Genius Project learning with others. Some drew pictures, while others created slideshow presentations.

Expression and Communication. CAST (2018a) also suggests that teachers provide alternate modalities for expression, which allows all students to express their knowledge, ideas, and concepts in the classroom. Teachers might allow students to use multiple media to compose responses such as text, speech, drawing, comics, music, dance, sculpture, or video. They should also teach students how to use a variety of tools that will help them with the construction of responses, including spell checkers, concept mapping tools, and text-to-speech/speech-to-text software. The goal is to provide tools that allow students to develop independence in the classroom.

A prime example of providing opportunities for students to fully participate in projects occurred in Wanda's classroom. Because Wanda taught pre-kindergarten, many of her students were not yet able to read or write independently. Wanda taught her students how to use speechto-text software on technological devices so they could search the internet for items related to their Genius Projects. She also taught students how to use the text-to-speech features, which

allowed the content on websites to be read aloud to students were not able to read it by themselves.

Executive Functions. The final guideline presented by CAST (2018a) suggests that teachers help students develop their executive functioning skills. Executive functioning, according to CAST, is the ability to set long-term goals, plan effective strategies for reaching those goals, the ability to monitor progress, and change strategies as needed. Teachers can do this by guiding students through appropriate goal-setting and strategy planning. Teachers can also help students self-monitor and reflect on their progress.

Because many educators who participated in this study were engaging students in independent learning projects, they provided instruction in goal setting and monitoring prior to students starting their projects. For example, Mitchell indicated that he taught students about planning timelines for project completion, and ample opportunities to reflect on their progress on projects, including reflection on time-management skills. Similarly, Kristy shared that she assisted students in project planning by helping students set both long-term goals for the completion of projects, but also short-term daily or weekly goals for which students could monitor progress. As has been discussed, examples of each UDL principle were evident in the data generated in this study. What follows is a summary of how this study's results reflected Universal Design for Learning.

UDL Principles Reflected in Study Results

Meyer et al. (2014) suggested that the implementation of UDL is "really not that difficult" (p. 102) if teachers ask themselves the following: "How am I going to present this lesson in a variety of modalities?" "How am I going to keep my students engaged in a variety of modalities?" and "How am I going to assess in a variety of modalities?" (p. 102). Although no

participant in this study used the phrase "universal design for learning" or "UDL" during their interviews, upon examination, the reasons they stated for implementing choice within the classroom align with many of the elements of UDL and the questions posed by Meyer et al. above. Bray and McClaskey (2015) state that the UDL principles can help teachers to "determine learners' needs and how they learn best" (p. 12). Further, they posit that using the UDL framework allows teachers and students to become partners in learning, stating:

Learners have a voice in how they prefer or need to acquire information, a choice in how they express what they know and how they prefer to engage with the content. When learners have ownership and take responsibility for their learning, they are more motivated to learn and more engaged in the learning process. (p. 13)

Each of the elements discussed in this quote appeared as themes or subthemes when analyzing the data that were generated in this study. Not only did most participants discuss motivation, engagement, and ownership, but many also shared that they offer choice in the ways that students demonstrate their learning. Further, several participants indicated that implementing choice-based learning opportunities allowed students to set and monitor individual goals and become more active in the process of learning.

UDL Principles and the Pedagogy of Plenty

The concepts associated with UDL parallel many of the universal strategies associated with the pedagogy of plenty in which teachers are encouraged to develop instructional practices that align with identified student strengths and needs, which allows all students to be successful. Also, by following the pedagogy of plenty, teachers provide avenues by which students can choose how they receive instruction, how they engage with materials, and how they demonstrate

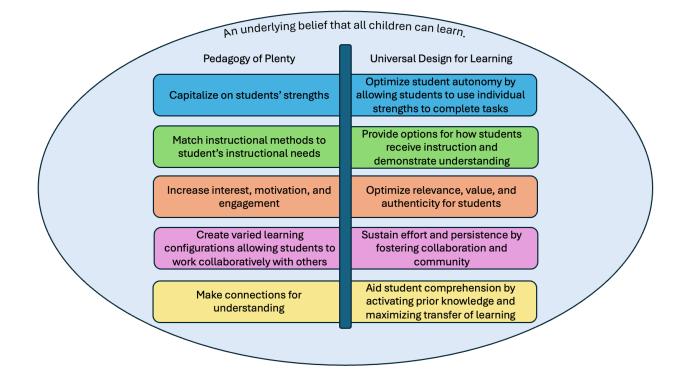
their learning. As was presented, the three broad categories of UDL encourage teachers to offer similar options to students.

A focus of both UDL and pedagogy of plenty is to remove barriers that prevent students from learning at their full potentials (Cole, 2008; Meyer et al., 2014). In fact, in 2010, the U.S. Department of Education recognized UDL as a framework that can benefit all learners, "particularly those who have been underserved" (Meyer et al., 2014, p. 15). This occurs, in part, by establishing high expectations for all students and providing appropriately challenging learning experiences. Within these learning experiences, based on the strategies presented in both frameworks, teachers are encouraged to incorporate opportunities for students to engage in collaborative learning with their peers.

An additional parallel between the two frameworks is the goal of students learning how to learn. Hodges (2001) suggests that teachers use a constructivist approach to teaching, in which the goal of schooling is not just to acquire knowledge, but to develop understanding, a situation in which "learning how to learn becomes the goal," according to Hodges (2001, p. 6). Similarly, according to Meyer et al. (2014), a goal of UDL is help children develop into expert learners, or those who know how to learn. In developing their own knowledge and understanding, students apply previously learned skills and strategies, set and monitor goals, and become motivated to engage in learning (Hewlett Foundation, 2013; Hodges, 2001; Meyer et al., 2014), which are all goals with the pedagogy of plenty and UDL.

There are many parallels between the strategies presented in the pedagogy of poverty framework and the guidelines presented in UDL. Several of these aligned strategies that can be implemented by teachers are presented in Figure 8.

Figure 8



Parallels Between Pedagogy of Plenty and Universal Design for Learning

The results of this small-scale study indicate that there was alignment between the implementation of choice in participants' classrooms, students' opportunities to choose what, how, and with whom they learned, with both the pedagogy of plenty and UDL, the parallels of which were presented in Figure 8. The instructional strategies reflected in these two frameworks are intended to ensure the success of all students. This left me wondering whether the implementation of these two frameworks may provide students with greater opportunities for choice-based learning, increased engagement, and ultimately increased achievement. With this in mind, I present recommendations based on the results of this study for three primary groups of individuals: school leaders, teacher educators, and educational researchers.

Recommendations for School Leaders

In the pilot study, which was conducted in 2021, 9 of the 10 participants indicated that their school leaders largely influenced their implementation of choice in the classroom. Several of those participants stated that simply having permission from their principals to try something like free-choice learning was what they needed in order to implement choice in their classrooms. Others indicated that the principal's encouragement, provision of professional development, and active participation during projects such as Genius Hour were what made it possible for them to implement free-choice learning in their classrooms. Similarly, participants in this study also indicated that school leadership played a large role in the decision to implement choice in these schools. In some instances, like at Central Elementary School, Eastern Secondary School, and Ross Elementary School, the idea to implement choice came from school and district leaders directly. In other instances, school leaders led professional learning related to choice-based learning (Brad and Jason). School leaders were also responsible for dedicating time in the school day for choice-based learning in some schools (Jason and Trent).

Choice-based learning, particularly in under-resourced schools, could serve as an avenue for narrowing the opportunity gap between students in these schools and their peers attending more affluent schools. Based on the results of this small-scale study, choice-based learning is one way in which students can have opportunities to engage in their education that helps them develop both academic and non-cognitive skills such as perseverance, collaboration, and communication. For students to develop these skills, educational leaders could encourage teachers to implement choice in their classrooms.

However, before making changes to instructional practices, it is important for school leaders to have an accurate understanding the current realities of teaching and learning in their

schools. One way school leaders could do this is to familiarize themselves with the pedagogy of poverty that many children in under-resourced schools are experiencing, which is discussed in Chapter 2, and also presented in Table 9. Although it is possible that the pedagogy of poverty is occurring in their schools, it is important that school leaders recognize that there are alternative approaches, which include the pedagogy of plenty and UDL, which they should familiarize themselves with. Once school leaders make the necessary mindset shift to the types of learning experiences they would like to see implemented for children in their schools, they can begin to work with classroom teachers to make the necessary adjustments to instructional practices.

Table 10 highlights the elements of both the pedagogy of poverty and the pedagogy of plenty. Knowledge of these two frameworks and their associated teaching and learning strategies can help school leaders identify current practices occurring in their schools and help guide teachers to shifting classroom practices to reflect a pedagogy of plenty.

Table 10

14 Practices in a Pedagogy of Poverty	16 Strategies for a Pedagogy of Plenty
- Giving information	- Provide opportunities for students to
- Asking questions	work in a variety of social
- Giving directions	configurations and settings.
- Making assignments	- Use reality-based learning approaches.
- Monitoring seatwork	- Encourage interdisciplinary teaching.
- Reviewing assignments	- Involve students actively.
- Giving tests	- Analyze students' learning and
- Reviewing tests	reading styles.
- Assigning homework	- Actively model behaviors.
- Reviewing homework	- Explore the fullest dimensions of
- Settling disputes	thought.
- Punishing noncompliance	- Use a multicultural teaching approach.
- Marking papers	- Use alternative assessments.
- Giving grades	- Promote home/school partnerships.
	- Use accelerated learning techniques.
	- Foster strategies in questioning.
	- Emphasize brain-compatible
	instruction.
	- Activate students' prior knowledge.
	- Use a constructivist approach to
	teaching.
	- Organize instructionally effective
	classroom environment.

Pedagogy of Poverty vs. Pedagogy of Plenty

Leaders can do this by first exposing teachers to the instructional strategies associated with the pedagogy of plenty and UDL, which could help them make any necessary shifts to their practices in the classroom. Leaders can also share with teachers a variety of ways that choice could be implemented in the classroom, as Jason and Brad from this study did. As was detailed in Chapter 4, there are many ways choice can be implemented in the classroom, from small-scale opportunities such as the use of choice boards, to fully autonomous opportunities, such as Genius Hour. School leaders can help teachers determine their readiness for implementing choice and then work with them to create action plans for the specific choice opportunities they would like to implement.

Because of the impact school leaders have in many facets of school operations, including the culture and climate of the building (Xu, 2018), it stands to reason that they would play a role in the successful implementation of choice and the pedagogy of plenty, as outlined in Table 10, in schools. While there is no empirical research to prove this, the school and district leaders who participated in this study are examples of the influence of leadership.

At Central Elementary School, Jason did several things to emphasize to the teachers that choice and inquiry were important parts of learning. He started by scheduling time in the day that was specifically intended for choice-based learning, whether that be free exploration, autonomous research projects such as Genius Hour, or PBL. He also installed a makerspace in the school and created a schedule that allowed each student, from kindergarten through fifth grade to attend the makerspace each week. He also made choice-based learning the focus of PD for his staff. He did this in multiple ways. First was a focus on exemplary PBL. He provided some of this PD himself, but he also brought in other experts to lead training for the teachers. Next, Jason created a type of Genius Hour PD for the teachers, in which they could apply for funding to explore a topic of their choosing. The intent behind this project was that teachers would be able to spark their own curiosity, study something they have always wanted to learn, and take those concepts back into their classrooms. Jason modeled all of these avenues for choice by doing his own passion project, attending and providing PD on PBL, and going into classrooms to support teachers and model ways in which they might infuse choice into their classroom.

Similarly, Brad, from Eastern Public Schools, emphasized choice in all capacities of learning for students from kindergarten through 12th grade. He, too, provided PD opportunities for teachers, he leads book studies/discussion groups for teachers, he models choice-based learning opportunities for teachers, and works to provide opportunities for students at Eastern Secondary that most small, rural school districts would not be able to provide for their students. This includes allowing students to create a learning pathway, which might involve taking courses at a local college to supplement courses that may not be offered at the secondary school. He wants to show his teachers "a world where choice reigns." And the teachers that I spoke with from Eastern Secondary shared that that is exactly what Brad is doing. Kristy shared that the administrators in the district and the school board are very encouraging when it comes to teachers trying something different. It is okay if things fail the first time, they use that as a learning opportunity for themselves and for their students. There is an emphasis in the district that students have a choice in pace, space, content, and even the lunch menu.

The leaders participating in this study clearly had an influence on the implementation of choice, which makes sense given the influence principals have on teachers' instructional practices in general (D. M. Quinn, 2002). One of a principal's primary roles is as an instructional leader, to motivate and inspire teachers, thereby affecting instructional practices. As mentioned previously, I recommend that school leaders take an active role in assisting teachers make a shift from the pedagogy of poverty to a pedagogy of plenty. However, the classroom teacher also has a crucial role in developing student learning experiences. Thus, I began to consider responses from this study's participants about what influenced them to implement choice in their classrooms and determined some recommendations for teacher educators.

Recommendations for Teacher Educators

No educators who participated in this study indicated that they learned about choicebased learning in their pre-service teacher preparation programs. They primarily referenced their own educational experiences as influential in the decision to implement choice in their classrooms. However, Kara, Cassie, and Willa described professional development experiences that were influential for them. Those PD sessions were not specifically about choice, but tangentially related: Kara learned about project-based learning, Cassie participated in a session on questioning techniques, and Willa participated in a deeper learning group with her superintendent, Brad. Jason provided professional development to the teachers in his school, both about PBL and offered an experience for teachers to engage in choice-based learning themselves.

Teachers play a large role in the delivery of instruction, but in order to develop their craft teachers also receive instruction. This typically occurs in two primary places: their pre-service teacher preparation programs and their in-service professional development (Jordan et al., 2018; Yoon et al., 2007). In pre-service programs, teacher candidates learn a series of instructional practices, classroom management techniques, and related content-specific knowledge (Silva et al., 2014). All of this new learning can be overwhelming, and pre-service teachers may not transfer everything from their preparation program into their own classroom (Ji et al., 2022).

Once hired to teach in a school, teachers are often engaged in PD opportunities in which they receive information on new instructional and assessment practices, among other topics (Yoon et al., 2007). Quality PD has been shown to have a positive, indirect effect on students' achievement, but to do so, it needs to be sustained and advance teachers' understanding of effective instructional strategies. However, there is also research that indicates that most of what

teachers learn during in-service PD is never applied in the classroom (Liu & Phelps, 2020). Further research indicates that it is a combination of quality teacher-preparation programs and quality in-service PD that has a true impact on a teacher's effectiveness in the classroom (Jordan et al., 2018).

In discussing the pedagogy of plenty, Hodges (2001) states that for students to excel academically, teachers must be equipped with an array of teaching practices and approaches. She reiterates that teachers play a role in helping children realize and achieve their goals, and that "teachers are powerful change agents who can either escalate or limit the development of every child they touch" (Hodges, 2001, p. 9). Thus, it is my recommendation that teachers be exposed to the pedagogy of plenty, UDL, and using choice as an approach for student learning in both pre-service preparation programs and via in-service teacher PD. During pre-service preparation programs, instructors can provide examples of ways to incorporate student choice in various content-specific instructional methods courses. Instructors could also encourage pre-service teachers to consider ways they might infuse choice as they practice writing lesson plans.

For in-service teachers, PD should be tailored to the specific needs of the teachers and students within the school. Professional development can be used to guide teachers through the planning and implementation of a variety of choice-based opportunities for students. Teachers who are just beginning might explore the use of choice boards in their classrooms. Teachers who are ready to offer students more choice could receive PD on project-based learning, in which the teacher still has some involvement by presenting the problem, but students are provided with opportunities to engage in choice as they develop their solutions. Finally, teachers who are ready to allow their students full autonomy might engage in PD about Genius Hour or makerspaces. It

is important that this PD be teacher-specific, as teachers within a school are at varying stages of their career and readiness to implement student choice.

In addition to PD workshops, there is evidence that suggests that a well-designed instructional coaching program can improve teacher practice and student outcomes (Neergard Booker & Russell, 2022). Instructional coaching typically centers on a relationship between a classroom teacher and a non-evaluative coach, in which teachers set goals for instruction and classroom practices, and the coach provides feedback and suggestions around those goals. Thus, in an ideal situation, teachers would receive coaching from other school faculty, such as instructional coaches, that would allow them to receive individualized training with specific feedback on the implementation of choice-based strategies. Beyond school leaders and teacher educators, the results of this study led me to believe that there are additional implications for future research about choice-based learning, specifically in under-resourced schools. The alignment of the results of this study with two existing frameworks, pedagogy of plenty and UDL, suggest that situating future studies of choice-based learning in one or both of these frameworks may be valuable.

Recommendations for Educational Researchers

After generating and analyzing the data from this study, I was left with some questions that may lend themselves to future research on the topic of choice-based learning. In the sections that follow, I have included my recommendations for future research.

First, it seems as though academic optimism (Hoy et al., 2006) might not have been the best theoretical construct with which to frame this research. Recall from Chapter 4 that I had anticipated that the educators participating in this study would indicate higher than average academic optimism, and for the elements of academic emphasis, collective efficacy, and faculty

trust in students and parents to be prominent in the results. However, that was not the case. This outcome leads me to suggest two potential avenues for further educational research.

I believe further exploration of academic optimism, as it pertains to student choice, would be informative. Why were the academic optimism scores for my participants not higher than average? I had selected academic optimism as the theoretical framework to undergird this study because I believed that schools offering choice to students would have high teacher collective efficacy, high rates of trust in students and parents, and high academic emphasis which are the three components of this framework (Hoy et al., 2006). While the framework does not specifically address choice, I believed that educators with academic optimism would provide opportunities for students to engage in independent, autonomous learning. Is providing students with agency not indicative of academic optimism? Perhaps an analysis of schools in which reports of academic optimism are higher than average would allow researchers to determine which instructional strategies are most prevalent in these schools. Further, rather than only a selfreport of academic optimism, as was the case in this study, educational researchers could conduct observations in schools offering choice-based learning to determine if the elements of academic optimism are displayed to a higher degree than in schools that are not offering students agency.

Finally, I believe there are better frameworks to undergird the study of choice-based learning in under-resourced schools. Based on the results of this study and the fact that results seem to align with two other frameworks, I am suggesting that educational researchers consider exploring choice-based learning in under-resourced schools using the pedagogy of plenty and/or UDL as frameworks. Although UDL has a robust research history, to my knowledge, it has not been used specifically to frame studies on the implementation of choice in under-resourced schools. Further, I was unable to locate any studies using the pedagogy of plenty as a guiding

framework. In an attempt to promote the implementation of the pedagogy of plenty, empirical research would be helpful, as most schools seek to specifically implement evidence-based and scientifically researched instructional practices (Nuland & Ewaida, 2023). One way researchers could investigate the pedagogy of plenty in under-resourced schools is to examine it in contrast to the pedagogy of poverty. Analysis of strategies being implemented, and their effectiveness, in under-resourced schools could provide information for educational leaders as they work to support classroom teachers in implementing successful research-based instructional practices for students.

An additional recommendation for future research centers around student academic achievement. In this study, I asked participants to share outcomes related to the implementation of choice in their classrooms. They shared a variety of outcomes they have seen as a result of implementing choice, including increased risk-taking, perseverance through challenging work, development of communication and collaboration skills, and increased motivation and engagement with tasks. However, they did not discuss academic achievement data. Educators are encouraged to engage in data-driven decision-making (Belton, 2023), so an investigation into whether students engaging in choice-based learning have higher academic achievement may be worthwhile. If, for example, students in under-resourced schools who have the opportunity to engage in choice-based learning have higher academic achievement scores than those students who do not have those same opportunities, this may serve as research to encourage more teachers, particularly those in under-resourced schools to implement choice in their classrooms.

Finally, in this study I was not able to go into classrooms and observe choice-based learning in action. Nor was I able to interact with students around their experiences related to choice-based learning. I believe that valuable follow-up studies to the current one would include

classroom observations and student perspectives on engaging in choice-based learning. These observations could offer more detailed examples of how choice can be implemented in classrooms in under-resourced schools. Observations could also offer anecdotal evidence of behaviors and attitudes of students as they engage in these learning opportunities. All of these details may be useful for other teachers who may be considering the implementation of choice in their classrooms.

The implementation of choice-based learning in under-resourced schools could help to inspire a shift from the pedagogy of poverty to the pedagogy of plenty in instructional practices that are implemented. This shift could also help to increase the opportunities students have to make choices during the school day. Providing student choice and allowing students to have ownership of their learning in school is becoming increasingly important as students' access to technology becomes more prevalent, allowing them to gather information from a variety of sources on topics that are personally relevant and important when they are outside the classroom. I believe it is necessary that we provide opportunities for students to engage in this type of learning at school so they are able to do self-directed learning outside of school as well. However, further research is needed in order to provide more information about the implementation of student choice and its outcomes to help school leaders and classroom teachers make necessary changes in their schools and classrooms.

Conclusion

If you recall from Chapter 1, some of my personal experiences as an instructional coach in under-resourced schools sparked my interest in researching this topic. One particular experience, in which I encouraged the fifth-grade teachers to implement Genius Hour, was met

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with much resistance, and was truly an impetus for this study. Now that this study has been completed, I realize some things about the school I was working in.

First, the school where that experience took place was unintentionally contributing to the pedagogy of poverty. In 2015, I had never heard the phrase *pedagogy of poverty*, and I do not think any of the teachers in our school were consciously perpetuating this type of teaching and learning. I do believe that this was the common form of instruction in the school, and the processes involved in the pedagogy were largely what was expected of teachers in our district. Teachers were expected to assign and grade a particular number of assignments each week, administering assessments was a large part of our practices as we were expected to collect copious amounts of data measuring student progress, and students were expected to do what they were told and not ask questions, which led to a culture of compliance.

I also realize that there were two main groups of teachers who were resistant to implementing choice-based learning in my school. Both veteran teachers and new teachers had concerns about implementing alternative practices for teaching and learning, for similar and different reasons. In my professional experience, veteran teachers can be resistant to change in general. Many of them have been teaching for several years, and have, in their minds, perfected some of their instructional strategies and assignments. Even when provided with professional development on how to implement different practices, these teachers often declare that what they have been doing for the duration of their careers has been effective, so changing is not necessary. On the other hand, new teachers are just beginning their careers and are still trying several instructional methods to determine what their teaching style is, and how their classrooms will function. It can be challenging for these teachers to attempt to implement "one more thing" that they may not yet be comfortable with.

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Both groups of teachers feel the need to comply with expectations put forth by administrators. In my case, our school principal was very encouraging around the implementation of new strategies and learning experiences for students. However, our districtlevel administrators were not, and many of our teachers were afraid of the reprimands they might face if they were doing something that was not specifically stated on our curricular documents, and this was true for both new and veteran teachers at our school. I did provide PD to our team around implementing choice and activities that would require more critical thinking practices than simple worksheets. However, I did not have examples of this type of learning in schools that were similar to ours to share. Most of the literature, videos, websites, and blogs I used in preparing my PD sessions were from highly affluent schools/districts. Teachers in my school had a mindset that these types of learning experiences were successful in schools with small class sizes, a plethora of resources, and highly involved parents, but would not be successful in our school. Had I had exemplars from under-resourced schools to share, I believe the teachers I was working with would have been more inclined to try to implement choice-based strategies. Also, in hindsight, I realize that there were probably some other topics that we should have discussed prior to attempting to get teachers to drastically alter their instructional practices. I think it probably would have benefited teachers to discuss the pedagogy of poverty and the pedagogy of plenty, as I am recommending for school leaders, which may have helped teachers to see how some of their practices could have been altered gradually before asking them to immediately implement fully free-choice opportunities.

After reflecting on the results of this study and my own experiences working with students and teachers in under-resourced schools, I am optimistic. It is my hope that with more research about the benefits, challenges, and logistics of implementing choice-based learning

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opportunities in under-resourced schools in the United States that student learning in these schools can shift from the pedagogy of poverty and will instead be characterized with a pedagogy of plenty.

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Appendix A

Jefferson County Open School Graduation Expectations

Jefferson County Open School





Personal	To develop a strong sense of self	 Self-Directedness - Students will set and meet goals that demonstrate passion, personal responsibility, organized priorities, perseverance, self-assessment, and accountability through the completion of the six Walkabout Passages. Risk and Challenge - Students will take calculated risks, embrace challenges, and face their fears in order to expand their comfort zones and learn from new experiences. Values and Moral Decision Making - Students will identify, articulate, and apply personal values and principles through complex and authentic moral decision-making. Wellness - Students will set goals for, and continuously reevaluate, their physical and emotional wellness to maintain balance in all parts of their lives.
		Life Skills - Students will acquire practical skills that will allow them to direct and sustain themselves as emerging adults.
	c .	Collaborative Community Involvement -Students will work collaboratively to problem-solve, positively influence others, and foster community in school and the world beyond.
F	naintai inships	Conflict Resolution - Students will acquire the skills and courage necessary to respectfully confront and resolve intrapersonal, interpersonal, and group conflicts.
ocia	Social To create and maintain healthy relationships	Flexibility and Resourcefulness - Students will successfully navigate obstacles and recover from setbacks with increased adaptability and grace.
S		Healthy Relationships - Students will learn to appreciate and connect with others, set healthy boundaries, maintain realistic expectations, and relate to friends and family with vulnerability and respect.
	Ĕ-	Cultural Responsiveness - Students will develop cross-cultural skills and cultural self-awareness through study and travel in order to advocate for diversity, inclusion, and equitability.
	Ð	Communication - Students will read, write, research, and present for a variety of purposes, which include the pursuit of curiosity, the representation of oneself, the persuasion of others, and the transmission of ideas, through a minimum of four extensive and interdisciplinary Language Arts experiences.
tual	knowledg	Responsible Global Citizenship - Students will develop critical thinking skills and expand their perspectives on U.S. and world history, geography, civics, and economics through multiple lens, including social justice and intersectionality, in order to become responsible global citizens.
llect	d apply	Analytical Reasoning and Problem-Solving - Students will use algebra, geometry and other mathematical concepts to analyze, make evidence-based decisions, and solve challenging problems.
Intellectual To think and apply knowledge		Creative Expression - Students will use imagination, ingenuity and critical thinking as they develop their own creative process, expressive voice, and understanding of the powerful influence of art in their lives and on culture.
		Science and Ecological Awareness - Students will demonstrate an understanding of ecological principles and the scientific method by acting as curious observers of natural phenomena through three lab-based experiences.
Jeffco Op	en Require	d Learning Strategies

A mutually agreed upon schedule of learning experiences that includes

- Completion of Six Walkabout Passages: Practical Skills, Creativity, Career Exploration, Logical Inquiry, Global Awareness, and Adventure
 Advising, Triad and Governance Participation
- ☑ Wilderness Trip
- Community Service
- ☑ Extended Travel Experience
 ☑ Successful Completion of Appropriate Classes

Appendix **B**

Consent Forms

School Administrator and Other School or District Level Leader Consent Form:

Challenging the Pedagogy of Poverty with Free-Choice Learning: A Multiple Case Study

WHAT DO I HOPE TO LEARN FROM YOU?

This investigation, entitled "Challenging the Pedagogy of Poverty with Free-Choice Learning: A Multiple Case Study," is designed to examine teachers' and administrators' perceptions and experiences in implementing free-choice learning is opportunities (such as Genius Hour) in their schools.

WHY IS YOUR PARTICIPATION IMPORTANT TO US?

Much of the documented free-choice learning takes place outside of schools, in more affluent public schools, or in private school settings. I want to gather information about these learning experiences taking place specifically in under-resourced school settings.

WHAT WILL I REQUEST FROM YOU?

As one of four school principals or other school or district level leader participating in this study, I request that you:

- Confirm with your school district that you and the other educators from your school who are participating in this study are permitted to do so, off school property and outside of school hours.
- Respond to a brief survey, the School Academic Optimism Scale.
- Participate in one one-hour recorded interview with the researcher. This interview will take place via Zoom at a time most convenient for you, outside of school hours and off of school property. During this interview, you will be asked to share your experiences around the decision to implement free-choice learning in your school, the logistics of implementation and challenges and outcomes experienced.
- After the conclusion of the interview, you will be asked to review a summary of the interview to check for accuracy and suggest corrections. The summary will be shared with you via email.

ADDITIONAL INFORMATION:

Please know that:

- The confidentiality of your personally identifying information will be protected to the maximum extent allowable by law.
- Your name and other identifying information will be known only to the researcher through the information that you provide. Neither your name nor any other personally identifying information will be used in any research presentation or publication.

- You may refuse to answer any questions during the interview if you so choose. You may also terminate your participation in the study at any time. (To do so, simply inform the researcher of your intention.) Neither of these actions will incur a penalty of any type.
- Your participation in this study is completely voluntary. If you decline to participate, this decision will not endanger your current or future relationship with William & Mary's School of Education.
- A copy of the study manuscript will be sent to you electronically once it is complete, using the email address that you provide.

HOW CAN YOU CONTACT US?

If you have any questions or concerns about this study, please contact Sharice Adkins (<u>sadkins@wm.edu</u>; 314-518-4893) or Dr. Judi Harris (jbharr@wm.edu) at William & Mary's School of Education, Williamsburg, Virginia. If you have additional questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact, anonymously if you wish, Dr. Tom Ward at 757-221-2358 (EDIRC-L@wm.edu) or Jennifer Stevens at 757-221-3862 (jastev@wm.edu), chairs of the two William & Mary committees that supervise the treatment of study participants.

By checking the "I agree to participate" response below, then signing and dating this form, you will indicate your voluntary agreement to participate in this study, and confirm that you are at least 18 years of age.

____ I agree to participate.

____ I do not agree to participate.

Please keep a copy of this consent form for your records.

Participant Signature:

Researcher Signature: Date:

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3862) ON ______ AND EXPIRES ON ______

Date:

Teacher and School or Classroom Level Educator Consent Form:

Challenging the Pedagogy of Poverty with Free-Choice Learning: A Multiple Case Study

WHAT DO WE HOPE TO LEARN FROM YOU?

This investigation, entitled "Challenging the Pedagogy of Poverty with Free-Choice Learning: A Multiple Case Study," is designed to examine teachers' and administrators' perceptions and experiences in implementing free-choice learning is opportunities (such as Genius Hour) in their schools.

WHY IS YOUR PARTICIPATION IMPORTANT TO US?

Much of the documented free-choice learning takes place outside of schools, in more affluent public schools, or in private school settings. I want to gather information about these learning experiences taking place specifically in under-resourced school settings.

WHAT WILL WE REQUEST FROM YOU?

As one of four classroom teachers participating in this study, we request that you:

- Confirm with your principal that you are permitted to participate in this study, off school property and outside of school hours.
- Respond, in writing or audio recording, to a prompt describing a session of free-choice learning in your classroom.
- Participate in three one-hour recorded interviews with the researcher. These interviews will take place via Zoom at times most convenient for you, outside of school hours and off of school property. Additionally, verification from the principal will be needed to ensure that you are permitted to participate in this study. During these interviews you will be asked to share your experiences around the decision to implement free-choice learning in your classroom, the logistics of implementation, and the challenges and outcomes experienced.
- Bring several artifacts to the third interview that you believe illustrate free-choice learning in your classroom. These artifacts will be the basis for a portion of the interview.
- Respond to a brief survey, the Teacher Academic Optimism Scale.
- After the conclusion of each interview, you will be asked to review a summary of the interview to check for accuracy and suggest corrections. The summary will be shared with you via email.

ADDITIONAL INFORMATION:

Please know that:

- The confidentiality of your personally identifying information will be protected to the maximum extent allowable by law.
- Your name and other identifying information will be known only to the researcher through the information that you provide. Neither your name nor any other personally identifying information will be used in any research presentation or publication.

- You may refuse to answer any questions during the initial and/or follow-up interview if you so choose. You may also terminate your participation in the study at any time. (To do so, simply inform the researcher of your intention.) Neither of these actions will incur a penalty of any type.
- Your participation in this study is completely voluntary. If you decline to participate, this decision will not endanger your current or future relationship with William & Mary's School of Education.
- A copy of the study manuscript will be sent to you electronically once it is complete, using the email address that you provide.

HOW CAN YOU CONTACT US?

If you have any questions or concerns about this study, please contact Sharice Adkins (<u>sadkins@wm.edu</u>; 314-518-4893) or Dr. Judi Harris (jbharr@wm.edu) at William & Mary's School of Education, Williamsburg, Virginia. If you have additional questions or concerns regarding your rights as a study participant, or are dissatisfied at any time with any aspect of this study, you may contact, anonymously if you wish, Dr. Tom Ward at 757-221-2358 (EDIRC-L@wm.edu) or Jennifer Stevens at 757-221-3862 (jastev@wm.edu), chairs of the two William & Mary committees that supervise the treatment of study participants.

By checking the "I agree to participate" response below, then signing and dating this form, you will indicate your voluntary agreement to participate in this study, confirm that you are at least 18 years of age, and confirm that the principal has ensured you are permitted to participate in this study.

____ I agree to participate.

____ I do not agree to participate.

Please keep a copy of this consent form for your records.

Participant Signature: Date:

Researcher Signature: Date:

THIS PROJECT WAS FOUND TO COMPLY WITH APPROPRIATE ETHICAL STANDARDS AND WAS EXEMPTED FROM THE NEED FOR FORMAL REVIEW BY THE COLLEGE OF WILLIAM AND MARY PROTECTION OF HUMAN SUBJECTS COMMITTEE (Phone 757-221-3862) ON _____ AND EXPIRES ON _____

Appendix C

Interview Guides

Teacher and Other School or Classroom Level Educator

- Interview 1:
 - Begin with follow-up or clarifying questions related to the response to the prompt.
 - Why did you decide to implement free-choice learning in your classroom?
 - What do you believe about free-choice learning?
 - Would you please describe your decision-making process around the implementation of free-choice learning?
 - Do you have prior experience with free-choice learning? In what roles and times in your lifetime?
 - Did you feel it was important to implement free-choice learning in your classroom? Why or why not?
 - Do your students have free-choice learning available to them during the current school year? If you have implemented free-choice learning in prior school years, why have you decided to continue providing this opportunity to your students?
 - Questions related to their responses on the Teacher Academic Optimism Scale.
- Interview 2:
 - Implementation of free-choice learning
 - When does it occur?
 - How does it occur?
 - Have you changed implementation over time? How and why? Please explain.

- What, if any, challenges have you experienced in the implementation of freechoice learning in your classroom?
- Would you please describe the outcomes of implementing free-choice learning in your classroom?
- Interview 3:
 - Please describe the artifacts you brought with you.
 - What about these artifacts illustrate free-choice learning?

Interview Guide: School Administrator and Other School/District Level Leaders

- Please describe free-choice learning as it occurs in your school.
- What do you believe about free-choice learning?
- What are your roles related to free-choice learning in your school?
- How, if at all, do you support classroom teachers with free-choice learning?
 - Do you have prior experience with free-choice learning? In what roles and times in your lifetime?
- What, if any, challenges have you experienced with the implementation of free-choice learning in your school? How, if at all, did you respond to these challenges?
- Would you please describe the outcomes of implementing free-choice learning in your school?
- What, if anything, might you share with other educational leaders about free-choice learning? Why would you share this with them?
- Questions related to their responses on the School Academic Optimism Scale.

Appendix D

Academic Optimism Scales

Elementary Teacher Academic Optimism Scale (TAOS-E)

TAOS-E

<u>Directions</u> : This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	Nothing		Very Little		Some Influence		Quite a bit		A Great Deal
1. How much can you do to get students to believe they can do well in school work?	1	2	3	4	5	6	7	8	٩
2. To what extent can you craft good questions for your students?	1	2	3	4	5	6	7	8	۹
3. How much can you do to get children to follow classroom rules?	1	2	3	4	5	6	0	8	9

<u>Directions</u> : Please indicate the extent to which you agree with each of the statements below from Strongly Disagree (1) to Strongly Agree (5).	Never	Rarely	Sometimes	Often	Always
4. I trust the parents of my students.	1	2	3	4	5
5. I can count on parent support.	1	2	3	4	5
6. I trust my students.	1	2	3	4	5
7. I have confidence in my students.	1	2	3	4	5
8. I ask students to explain how they get their answers.	1	2	3	4	5
9. I don't accept shoddy work from my students.	1	2	3	4	5
10. I give my students challenging work.	1	2	3	4	5
11. I press my students to achieve academically.	1	2	3	4	5

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Note: From "Teacher Academic Optimism: Elementary Teacher," by W.K. Hoy, n.d., Wayne K.

Hoy, (https://www.waynekhoy.com/elementary-teacher-ao/). Copyright 2009 by Beard & Hoy.

Secondary Teacher Academic Optimism Scale (TAOS-S)

TAOS-S

<u>Directions</u> : This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.	Nothing		Very Little		Some Influence		Quite a bit		A Great Deal
1. How much can you do to motivate students who show low interest in school work?	1	2	3	٩	(5)	6	0	8	۹
2. How much can you do to get students to believe they can do well in school work?	0	٢	3	٢	6	6	0	٨	٢
3. How much can you do to get children to follow classroom rules?	1	2	3	4	6	6	0	8	9

<u>Directions</u> : Please indicate the extent to which you agree with each of the statements below from Strongly Disagree (1) to Strongly Agree (5).		Rarely	Sometimes	Often	Always
4. Most of my students are honest.	1	2	3	٩	6
5. My students' parents are reliable.	1	2	3	٩	5
6. I trust my students.	1	2	3	٩	5
7. I press my students to achieve academically.	1	2	3	٩	6
8. I give my students challenging work.	1	2	3	٢	5
9. I set high, but attainable goals for my students.	1	2	3	۲	6

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Note: From "Teacher Academic Optimism: Secondary Teacher," by W.K. Hoy, n.d., Wayne K.

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School Academic Optimism Scale (SAOS)

SAOS

<u>Directions</u> : Please indicate your degree of with each of the statements about your school from strongly disagree to strongly agree . Your answers are confidential.	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. Teachers in this school are able to get through to the most difficult students.	1	2	3	٩	5	6
2. Teachers here are confident they will be able to motivate their students.	1	2	3	٩	5	6
3. If a child doesn't want to learn teachers here give up.	1	2	3	٩	5	6
4. Teachers here don't have the skills needed to produce meaningful results.	1	2	3	٩	5	6
5. Teachers in this school believe that every child can learn.	1	2	3	٩	5	6
6. These students come to school ready to learn.	1	2	3	٩	5	6
7. Home life provides so many advantages that students are bound to learn.	1	2	3	٩	5	6
8. Students here just aren't motivated to learn.	1	2	3	٩	5	6
9. Teachers in this school do not have the skills to deal with student disciplinary problems.	1	2	3	4	6	6
10. The opportunities in this community help ensure that these students will learn.	1	2	3	4	5	6
11. Learning is more difficult at this school because students are worried about their safety.	1	2	3	٩	5	6
12. Drug and alcohol abuse in the community make learning difficult for students here.	1	2	3	٩	5	6
13. Teachers in this school trust their students.	1	2	3	④	5	٢
14. Teachers in this school trust the parents.	1	2	3	4	6	6
15. Students in this school care about each other.	1	2	3	4	6	6
16. Parents in this school are reliable in their commitments.	1	2	3	٩	5	6
17. Students in this school can be counted upon to do their work.	1	2	3	4	5	6
18. Teachers can count upon parental support.	1	2	3	4	6	6
19. Teachers here believe that students are competent learners.	1	2	3	4	5	6
20. Teachers think that most of the parents do a good job.	1	2	3	٩	5	6
21. Teachers can believe what parents tell them.	1	2	3	٩	5	6
22. Students here are secretive.	1	2	3	4	5	6

<u>Directions</u> : Please indicate the degree to which the following statements characterize your school from Rarely Occurs to Very Often Occurs . Your answers are confidential.	Rarely	Sometimes	Often	Very Often
23. The school sets high standards for performance.	1	2	3	4
24. Students respect others who get good grades.		2	3	4
25. Students seek extra work so they can get good grades.	1	2	3	٩
26. Academic achievement is recognized and acknowledged by the school.	1	2	3	4
27. Students try hard to improve on previous work.	1	2	3	(4)
28. The learning environment is orderly and serious.	1	۷	٥	•
29. The students in this school can achieve the goals that have been set for them.	1	2	3	4
30. Teachers in this school believe that their students have the ability to achieve academically.	1	2	3	4

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VITA

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Education

2024	Doctor of Philosophy
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- 2006 Master of Arts Elementary Education Truman State University, Kirksville, MO
- 2004 Bachelor of Science English Truman State University, Kirksville, MO

Additional Certifications

2018	Gifted Education Certification, Truman State University, Kirksville, MO
2017	Reading Specialist Certification, University of Missouri, St. Louis, MO
2015	STEM Education Certification, Maryville University, St. Louis, MO

Professional Experience

2022-2024	Visiting Assistant Professor of Education University of Mary Washington, Fredericksburg, VA
2021	Adjunct Instructor William & Mary, Williamsburg, VA
2019-2022	Reading Specialist Williamsburg Montessori School, Williamsburg, VA
2014-2019	Instructional Coach Koch Elementary School, St. Louis, MO Barbara C. Jordan Elementary School, University City, MO
2005-2014	Classroom Teacher Ray Miller Elementary School, Kirksville, MO Wright City Middle School, Wright City, MO Westview Middle School, St. Louis, MO