

Senior Projects

2023–2024

An abstract 3D graphic featuring several thick, curved, ribbon-like shapes that appear to be floating or overlapping. The shapes are illuminated from below, creating a strong orange and red glow that transitions into a cooler blue and purple at the top. The background is a gradient of these colors, with a textured, metallic-looking surface on the right side.

BASIS WASHINGTON, D.C.



SENIOR PROJECTS

At this point in their senior year, BASIS Charter School students have completed a set of four BASIS Capstone classes to earn their BASIS Honors Diploma. In addition, many students are in the process of completing the College Board's AP Capstone Diploma™, a challenging, two-year sequence of AP Seminar™ and AP Research™, plus four other AP® Exams—all of which require extensive research, writing, and oral defense. The BASIS Diploma Senior Project marks the culmination of this hard work and perseverance.

Completed in the third trimester of a student's senior year, the Senior Project is unique, self-designed, and reflective of each student's varied academic interests and passions. Regardless of the discipline—business, art, humanities, science, engineering, social work, medicine, or law—each senior must develop and explore a research question. Creating an abstract that sets the tone of the research, participating seniors must submit a project proposal, and later, orally defend their methodologies.

Under the guidance of an external advisor who is a professional in their field, as well as a faculty advisor from their school, students dedicate 10–15 hours per week to the completion of their Senior Project. To document their journey, students post weekly blog entries about their experiences, successes, and challenges as they explore their guiding question. This journaling provides a unique viewpoint on the students' activities and adds a reflective layer to their research process.

Throughout the development of the Senior Project, BASIS Charter Schools support their seniors every step of the way. The project summaries in this publication clearly illustrate each senior's ability to apply the knowledge and intellectual curiosity they have acquired in the classroom to professional research methods. At the successful conclusion of this project, students are eligible for a BASIS Diploma with High Honors, the most distinguished accolade offered by BASIS Charter Schools.

Each member of the BASIS Charter Schools network commends our seniors for their dedication and motivation—not only for completing this Senior Project, but for their commitment to the BASIS Charter School Curriculum. Congratulations to them on this powerful achievement, and our best wishes as they move forward on their educational journey.



Carolyn McGarvey
Chief Executive Officer
BASIS Ed AZ, DC, LA



David Hubalik
Chief Executive Officer
BASIS Ed Texas



Washington, D.C.™ SENIOR PROJECTS

NORA A.



THE LITTLE PICTURE AND HOW IT'S PAINTED: A STUDY OF ART CURRICULUM AND TEACHING STYLES

SUMMARY: Not a day goes by without a child having ideas and wanting to express them visually. The task of teaching this ability goes to art teachers, but the ways they teach this vary greatly. There is controversy regarding choice-based art education (CBAE) and discipline-based art education (DBAE) and whether one is more effective or important than the other. Choice-based lessons provide freedom for students, but often lack a place for learning specific skills or are impractical for certain classes. Discipline-based lessons eliminate student choice and lead to many uniform pieces, focusing on skill and technique over creativity. Logically, the middle ground of these two practices holds the answer to an art curriculum that benefits everyone involved. At Brent Elementary School, I observed and assisted in an art classroom that functioned using a mix of CBAE and DBAE. This balance seemed to please everyone involved and the experience was remarkable. I surveyed parents and students regarding the art program at Brent and surveyed a wide range of art teachers regarding their teaching styles and experiences with CBAE and DBAE. Using responses from my surveys alongside further research, my understanding of the delicate balance of choice in any art class greatly improved. I developed an idea of good practice in the art classroom, not just for students, but also for parents and teachers. In the end, I used this knowledge to develop my own lessons both for this project and my future career in art education.

• **BASIS ADVISOR:** Lydia Parnell • **ON-SITE MENTOR:** Liz Dittamo • **LOCATION:** Brent Elementary School

NNENNIA A.



SCHOOL-TO-PRISON PIPELINE: THE EFFECTS OF SCHOOL RESOURCE OFFICERS

SUMMARY: The school-to-prison pipeline is defined by the American Bar Association as "a series of practices and policies that funnel children and adolescents from public schools into our juvenile and criminal systems." We see that the groups most affected by the school-to-prison pipeline are youth of color, youth with mental health issues, youth with educational disabilities, and youth who identify as LGBTQ+. The presence of school officers has also heightened the effects of school punishments. There are 60 schools in DC with school officers, but there have been discussions about their purpose and effectiveness in making schools safer. My internship placement was at the Howard Law School with the Education Rights Center. This specific section of the Howard Law School focuses on the "practice of education as a tool for the creation of peace." I conducted my research through articles focused on School Resource Officers across the United States and DC specifically. In addition, to the articles I have also looked at statistics through DC Public Schools and the Metropolitan Police Department. With the help of my on-site mentor and her students, I was able to conduct interviews with students at local DC high schools to hear the opinions of those whom the system directly affects. While I have learned that SROs typically impact students negatively, there are also outside factors such as family and home environment that affect a student's actions, showing the complexity of the issue.

• **BASIS ADVISOR:** Steven Johnson • **ON-SITE MENTOR:** e. christi cunningham
• **LOCATION:** Howard University School of Law

ATALIA B.



MORPHING MORPHOLINOS: CURRENT AND FUTURE USES OF MORPHOLINO OLIGONUCLEOTIDES

SUMMARY: Genetic engineering and modifications are the future of medicine and are rapidly becoming the present as well. Morpholinos (MOs), synthetic molecules that physically block mRNA translation and splicing, are one of the more fascinating tools. The newest and most popular treatments right now are related to genetic engineering, but the potential of post-transcription, RNA-modifying tools is often overlooked. Potential applications range from cosmetics to life-saving medical treatment, and to explore the full range of potential, we need to fully understand the tools we have. MOs are currently most frequently used in developmental biology, but they have great potential for treating genetic illnesses, controlling gene expression in developed organisms, and even as an antiviral. At my internship in the Silva Lab, I worked with CRISPR and morpholinos in a neurodevelopmental biology setting, using MOs to control gene expression in developing *X. laevis* frogs. My research paper explores morpholino structure and function, the effectiveness of MO edits, and the current research into the tool's potential, with the aim to facilitate comprehension of a topic with so little consistency and oversight. I explain the benefits and drawbacks of morpholinos in comparison with genetic techniques. Despite morpholinos having been in use for decades, there is little research on applications of this technology to human disease and the volume of writing on the topic is quite small. As I have researched and written about this topic, I have learned about the myriad uses for morpholinos and the many possibilities for future applications.

- **BASIS ADVISOR:** Dr. Nathaniel Green • **ON-SITE MENTOR:** Dr. Doreen Cunningham
- **LOCATION:** The Silva Lab at Georgetown University

YUMI C.



ARCHITECTURAL HARMONY: THE CULTURAL SIGNIFICANCE OF TRADITIONAL CHINESE ARCHITECTURE

SUMMARY: Architecture is a manifestation and expression of culture and a reflection of the beliefs and ideology of society that helps us feel more human, alive, and satisfied in the place we live. As traditional buildings are replaced with modern ones, many unique ideas and factors are left out of these new designs. The effects of culture on traditional Chinese architecture and the history of Chinese architecture serve as a visual expression of cultural identity and societal values. Recognizing that the world is constantly changing, it has become completely modernized, losing its traditional identity and being mainly influenced by Western-style appearances. While change is good, it is also important to preserve the ideas and factors in the architecture that surrounds us to make us feel more comfortable and prevent cultural identity from being lost. My site placement at the 1882 Foundation gave me a deeper insight into the cultural and historical aspects of Chinatown DC. I consulted with the foundation's members and gathered resources to develop a final report that analyzes the historic buildings and notable design elements in the Chinatown area. Through this experience, I learned more about the Chinese characteristics and the notable places that make up the Neighborhood Chinatown. I hope to spread awareness towards the preservation of traditional architecture and the importance of culture in architecture.

- **BASIS ADVISOR:** Jack Jensen • **ON-SITE MENTOR:** Richard Wang • **LOCATION:** 1882 Foundation

ALEXIS G.

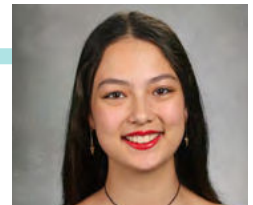


CLOSED LOOP CONTROL IN OPEN-SOURCE ROBOTICS

SUMMARY: Robotics has been of increasing interest to academic and industrial researchers because robot technology can be safer, more efficient, and more reliable than humans in certain roles. This professional interest has driven a more casual interest: that of hobbyist roboticists, people who focus on robotics as entertainment. Hobby robots operate under similar principles as professional robots, but with limited budgets and reduced access to industrial-grade components. My Senior Project focused on designing and building an inexpensive sensor feedback system targeted at hobby roboticists. My internship at NASA's Goddard Space Flight Center with NASA's Exploration and In-Space Services (NEXIS) division allowed me access to knowledge and advice from experts in robotics and robotic servicing. NEXIS's focus is on building and repairing spacecraft with robotics. My internship responsibilities aligned almost perfectly with my project goals, allowing me to gain knowledge and help from robotics experts, which I was able to apply to my Senior Project. My research and testing resulted in a fully implemented closed-loop control system for my robot arm. I was then able to generalize the process I followed to create a short resource for others who wish to implement similar concepts in their own hobby robots with an accompanying small model to demonstrate concepts and principles I learned along the way.

• **BASIS ADVISOR:** Kevin Gilbert • **ON-SITE MENTOR:** Zakiya Tomlinson • **LOCATION:** Goddard Space Flight Center

SOPHIE H.



PUELLA, FEMINA, DOMINA: EXPLORING THE ROLE OF WOMEN IN ANCIENT ROME DURING THE SPREAD OF CHRISTIANITY

SUMMARY: The study of Classics, as with other aspects of history, is important primarily in that it provides context for the world we now live in. Knowing more about our world and our history is, in my opinion, always a worthy pursuit, and it can help advise us on what to do in the future. My project explores the role of women in the Roman empire as they relate to the spread of Christianity, and helps to shed light on female authors of Latin. The vast majority of Classical Latin authors are male, so researching ancient women can help to provide more diverse perspectives on the Classical world and make our understanding of it more complete. I have combined information from varying sources, including historical authors like Proba, Sulpicia, and Perpetua, to create a cohesive picture of the impact of women, particularly female authors, on the spread of Christianity in the ancient world. To supplement my research, I worked with Haverford's Professor Bret Mulligan to lemmatize selections from the *Itinerarium Egeriae* and Proba's *Cento Vergilianus de laudibus Christi*. These texts will be added to the Haverford Bridge, a suite of virtual tools which aim to make classical texts more accessible to instructors and students of Greek and Latin. Working through these texts has improved my ability to read Late Latin, and gaining exposure to the few texts we have written by female authors has given me important primary-source perspectives for my own project.

• **BASIS ADVISOR:** Maureen Beabout • **ON-SITE MENTOR:** Dr. Bret Mulligan • **LOCATION:** Haverford College

GRACE H.



“I HATE DOCTORS”: BLACK BIASES TOWARDS HEALTHCARE

SUMMARY: Black people in America have been dealing with racism for the past 400 years. Slavery and discrimination have affected Black people in all aspects of their lives. In the healthcare sector especially, the effects of racism have been reflected in the Black mistrust and hesitancy towards Western healthcare. My research focused on how African Americans and African immigrants are biased against the U.S. healthcare system and how those biases lead to hesitancy and lack of access to healthcare. This research highlighted the interpersonal factors preventing the Black population in the U.S. from seeking healthcare. It's fundamental for individuals in the Black community to know their biases and to recognize when they're not being given inclusive healthcare. The result from this research is also enlightening for non-Black people to gain insight into the different factors disproportionately affecting Black people in the U.S. healthcare system. My internship at Whitman Walker Health helped me learn about the overlapping themes that health officials face when attempting to reach another vulnerable population and combating their hesitancy. I used those themes to analyze how health clinics create trust and safe spaces for their targeted demographic. I learned more about the current experiences and health outcomes that come with being a Black patient. Due to the few research studies surrounding specifically African immigrants, this research study is a means of expanding the thought on African immigrants along with African Americans as patients.

• **BASIS ADVISOR:** Dr. Nathaniel Green • **ON-SITE MENTOR:** Sarah Lawson • **LOCATION:** Whitman Walker Health

HARPER H.



THE CHALLENGES OF SPELLING WRITE: THE INTERACTION BETWEEN HANDWRITING AND SPELLING IN ELEMENTARY-AGED CHILDREN

SUMMARY: Handwriting—a lost art and useful skill. Spelling—an important skill that is becoming less emphasized due to autocorrect. In my research, I wanted to explore if there is a connection between these two deemphasized skills, and the degree they may have been affected during virtual schooling. My placement in a second-grade English classroom allowed me to collect and evaluate spelling tests and compare them to those of fifth graders who took second grade virtually. The Spelling and Handwriting Legibility Tests (SaHLTs) allowed me to quantitatively compare spelling and handwriting skills to those of fifth graders who took second grade virtually. My goal was to show whether virtual schooling could be said to have had any effect on handwriting legibility and spelling, two skills that seem to be slowly phasing out of our increasingly virtual society.

• **BASIS ADVISOR:** Natalie Jackson • **ON-SITE MENTOR:** Katie Linn • **LOCATION:** Maury Elementary School

CHRISTIAN L.M.



SOCIAL NIGHTMARES: A TIMELINE OF SOCIAL CHANGE THROUGH THE LENS OF HORROR CINEMA

SUMMARY: The state of art in the modern world is shaped by the changes in the society that creates it. As social dynamics pave the road to advancement, they leave a mark on the media created by those affected by these changes. Film is a medium in which stories reflecting the experienced world are shared, and when the world changes, film changes. Out of the variety of genres offered by cinema, horror is the one that demonstrates the most proactive change when displaying the state of a current society. Horror movies have consistently been at the forefront of conversations surrounding change and advancement since their inception. In my internship, I worked with Unchained Stories, an activism based multi-media organization. Their work in documentary filmmaking allowed me access to historical archives and articles, while their expertise in social issues granted me unique perspectives when analyzing these films. Through my work and research, I found that the horror genre has been first to reflect social advancements. We must understand art to understand ourselves, and although horror films are often disregarded as an unintelligent genre, they have proven to be a very effective form of analyzing the changes we go through. My final project is a video relating these scary movies to the radical advancements of their time, displaying their effectiveness in representing these advancements through a detailed timeline, allowing modern audiences to appreciate the work horror has done to change the art and media we consume.

• **BASIS ADVISOR:** Kyra Zemanick • **ON-SITE MENTOR:** Kristin Adair • **LOCATION:** Unchained Stories

SYDNEY L.



STUDY BUDDIES: EMPOWERING EDUCATION THROUGH PEER TUTORING

SUMMARY: As a senior at BASIS DC, I am familiar with the rigor of the curriculum and the benefits of a support system through peer tutoring. This was my personal experience in fifth grade when my math teacher assigned me a peer tutor. Would middle school students at BASIS DC benefit from a resource allowing them to connect, across grades and elements, to locate a study buddy for a class they may require additional support? To answer this question and gain experience with creating a prototype application, I interned at Swenson He, a Los Angeles-based digital solutions provider that specializes in mobile and website application development. There I learned about what it means to be a product manager and the process of guiding a product from a concept to market and through its lifecycle. I gained new skills necessary to investigate the viability of an application. For example, creating a customer journey (jobs to be done) diagram, a feature set, a core loop, a wireframe, and a data structure. With this knowledge, I was able to better understand the required components for my proposed application. During my research, I surveyed current BASIS DC fifth through eighth grade students about their participation in locating study partners and tutors in school. The results from the survey supported my theory that there is a minimum viable product (MVP), indicating sufficient interest in my recommended prototype, a BASIS DC Study Buddy Application.

• **BASIS ADVISOR:** Kevin Gilbert • **ON-SITE MENTOR:** Valerie Moore • **LOCATION:** Swenson He

ELLEN L.

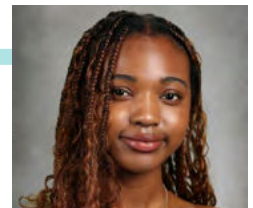


**BEYOND THE BALLOT: GENDER DIFFERENCES
IN YOUTH POLITICAL AFFILIATION**

SUMMARY: In a 2021 study by The Center on American Life, polling revealed that, among voters aged 18–29, a severe gender gap in political affiliation has emerged over the past 10 years. This research reported that 44% of young women considered themselves liberal, while only 25% of young men indicated the same. In contrast, there existed relative homogeneity in youth political affiliations between genders 10 years prior (30% and 27%, respectively). Alongside this statistical observation comes a subsequent line of historical inquiry: What events, trends, and movements from the past decade have motivated this rise in female progressivism? What phenomena, if any, have dissuaded young men from following the same path? What may these data reveal about generations to come? In working with my advisor, Ms. Liberatore-Herrick, I have accumulated a broader understanding of how social media, advertisements, and even branding impact an individual's perception of an organization, entity, or piece of news. Altogether, the conclusions I have come to through this research serve to build upon the gender and politics interdisciplinary field by introducing a more forward-thinking approach to what such data may imply for the future of youth politics.

- **BASIS ADVISOR:** Celleste Stafford • **ON-SITE MENTOR:** Alexis Liberatore-Herrick
- **LOCATION:** Independent Project

AZIZA M.B.



**BEYOND THE SCAN: ASSESSING RACIAL DISPARITY
IN PATIENT OUTCOMES THROUGH MAMMOGRAM
USE IN BREAST CANCER TREATMENT**

SUMMARY: Research shows that breast cancer is the leading cause of cancer death for many women, but early detection can play a significant role in reducing the mortality rate. Notably, Black and Hispanic women have a higher mortality rate compared to their White counterparts in terms of breast cancer, and a lower rate in utilizing mammograms. Deconstructing the racial and ethnic disparities around breast cancer treatment is crucial in the development of cancer research. Progress cannot be made if the attention and resources are focused on one specific group. By assessing racial disparity within a local medical clinic such as Mary's Center, the research gathered brightened the light already shining on this issue in healthcare. Interning at Mary's Center, I provided the clinic with data for their quality improvement efforts to better market mammography to their patients. I conducted a regression analysis using patient data, on the different dependent and independent variables that factor into these racial disparities in mortality and mammography rates. Researching this topic also adds crucial evidence to the breast cancer treatment community by deepening the understanding of healthcare disparities, allowing for there to be specific changes to the challenges faced by different racial groups. Overall, my goal was to offer possible solutions to the growing racial gap in breast cancer research to enhance quality care.

- **BASIS ADVISOR:** Vageesha Pathak • **ON-SITE MENTOR:** Elizabeth Hamilton • **LOCATION:** Mary's Center

HEMANI P.



TOO HOT TO HANDLE: HOW CLIMATE CHANGE FUELS GENDER INEQUITY

SUMMARY: The climate crisis is only worsening as time goes on. By 2050, water is predicted to be the scarcest resource on the planet. Women are heavily impacted by shortages. In the developing world, many women's livelihoods depend on their ability to secure natural resources for their families. When families are not able to provide necessities, girls are often pulled out of school to help their families cope, which has detrimental effects on their livelihoods and future. The linkages between climate change and gender inequity are inextricable. I am interning at AMP Global Youth to develop a podcast, EmpowerHer, on the intersections of gender and the environment. Through my research, I have analyzed women's accessibility to water and the subsequent educational and economic effects. Through my podcast, I hope to be teaching high schoolers and other youth how to cultivate actionable plans to advocate and address gender inequity fueled by climate change. Through advocacy and education, youth and the next generation will be able to create public policy solutions to climate change that can tackle its multifaceted nature efficiently.

• **BASIS ADVISOR:** Taneea Yarborough • **ON-SITE MENTOR:** Aris Hines • **LOCATION:** AMP Global Youth

OWEN S.



THE FUTURE OF OUR SCHOOLS: AN INSIGHT INTO THE EFFECTS OF AI ON EDUCATION

SUMMARY: For the past decades, AI has been a key component of pop culture, with movies like The Terminator and The Matrix reaching theaters across the world. But as more realistic research comes to light, the possible benefits AI can have on our society have been revealed as well. This is especially prevalent in education, a field essential to society. Whether seen in the careers that we take on or in the success that we achieve later in life, education has a visible impact on our lives. With new methods of technology like AI growing immensely, forms of cheating and generating assignments with applications like Chat GPT are becoming easily accessible and popular. This is exactly why it's so important to understand this ever-changing technology and the role it will play in our education system, good and bad. I conducted my research on this topic through the knowledge I gained working with the Assistant Dean of Academic Integrity at American University. I compared opinions on artificial intelligence through a combination of surveys on student opinion and existing research from professors, learning new facts like the impact AI has had on college applications and the profound Chat-GPT usage by students. Additionally, I tested the effectiveness of applications like Chat-GPT Zero in mitigating the use of AI among students through experimentation with the software. Through this research, I have formed an understanding of the role that AI can play in our education system and society that I can then share with the public.

• **BASIS ADVISOR:** Kevin Gilbert • **ON-SITE MENTOR:** Alison Thomas • **LOCATION:** American University

JUAN S.



A STUDY OF ENVIRONMENTALLY SUSTAINABLE AGRICULTURE IRRIGATION MODELS

SUMMARY: Amidst the escalating climate crisis, we witness its pervasive impact on our daily existence, ranging from pollution to the surge in natural disasters. One alarming trend that has gained prominence in recent years is desertification, caused by the global trend of climate degradation and/or unsustainable local agricultural practices. For communities inhabiting regions grappling with desertification, where livelihoods hinge on a thriving agricultural sector, this issue is nothing short of existential. Although much progress has been made in researching different agroecological changes that would make agriculture more environmentally sustainable, I wanted to focus on one important detail: methods and techniques of irrigation and their relation to water management. In my project, I explored these methods and techniques through an in-depth cumulative literature review. Furthermore, with my internship at Hillwood Estate, Museum & Gardens, I had first-hand experience with automatized irrigation systems, turning theory into practical application. Identifying the best irrigation method/techniques which may be implemented on a mass scale is key in managing desertification and supporting livelihoods.

- **BASIS ADVISOR:** Micha Lemen • **ON-SITE MENTOR:** Jessica Bonilla
- **LOCATION:** Hillwood Estate Museum & Gardens

GABRIEL T.C.

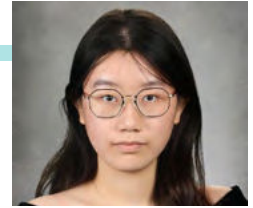


ENCODING THE FUTURE: A STUDY INTO THE USES AND DANGERS OF GENETIC ENGINEERING

SUMMARY: The first instance of transferring DNA into another organism's genome took place in 1973 during an experiment by Herbert Boyer and Stanley Cohen. Since then, the techniques and uses of genetic engineering have only expanded. A recent development in the field of genetic engineering is the practice of CAR-T, where the immune system's Killer T cells are genetically modified to target and kill cancer cells. During my research, I worked with Arcellx, a CAR-T and genetic engineering firm to study how CAR-T cells are created, the side effects and dangers of the treatment, and how these risks are being mitigated. I've also studied multiple other types of cancer treatments, and evaluated their risks and effectiveness compared to CAR-T alongside comparing the ethics and risk of different cancer therapies. From this, I hope to teach and inform others on CAR-T in cancer treatment, and I hope to inform others on how it compares to the more commonly used treatments available today.

- **BASIS ADVISOR:** Vageesha Pathak • **ON-SITE MENTOR:** Laura Tan • **LOCATION:** Arcellx

ESTHER W.



FORGOTTEN CRAFTSMANSHIP: THE SIGNIFICANCE OF CHINESE CULTURAL HERITAGE ARTS THROUGHOUT CHINESE HISTORY

SUMMARY: Traditional Chinese arts were practiced for centuries in China, becoming a major aspect of their culture. Many were used for daily necessities and festivities, while others served entertainment and economic purposes. However, as history progressed, many craft roles shifted to adapt to the modern day. Despite their popularity in previous eras, such arts have experienced a decline and are no longer as commonly practiced. To preserve the continuation of Chinese heritage, multiple societal factors brought intangible arts back into civilian view, including through modern media and historical research. By exploring the historic roles of such intangible heritage, I examined the transformations of traditional arts in modern expressions, comparing them to earlier centuries and observing their progression in the community. In collaboration with the Chinese Culture Institute, led by Dr. Cindy Shao, I observed how modern artisans and teachers portray traditional heritage arts such as calligraphy, watercolor paintings, and poetry. I explored and analyzed their art and compared their methodology to the original forms of craftsmanship. Through delving into the dynamic interplay of traditional Chinese arts in various aspects and their significance in impacting present society and culture, I found that traditional arts have evolved to become a part of the educational and cultural field, rather than solely for entertainment and economic purposes. For example, bringing shadow puppetry into classrooms aids students in visual presentations. As intangible Chinese heritage arts adapt to the modern day, they transcend their historical roles to continue the legacy of Chinese arts for future generations.

• **BASIS ADVISOR:** Jack Jensen • **ON-SITE MENTOR:** Dr. Cindy Shao • **LOCATION:** Chinese Culture Institute

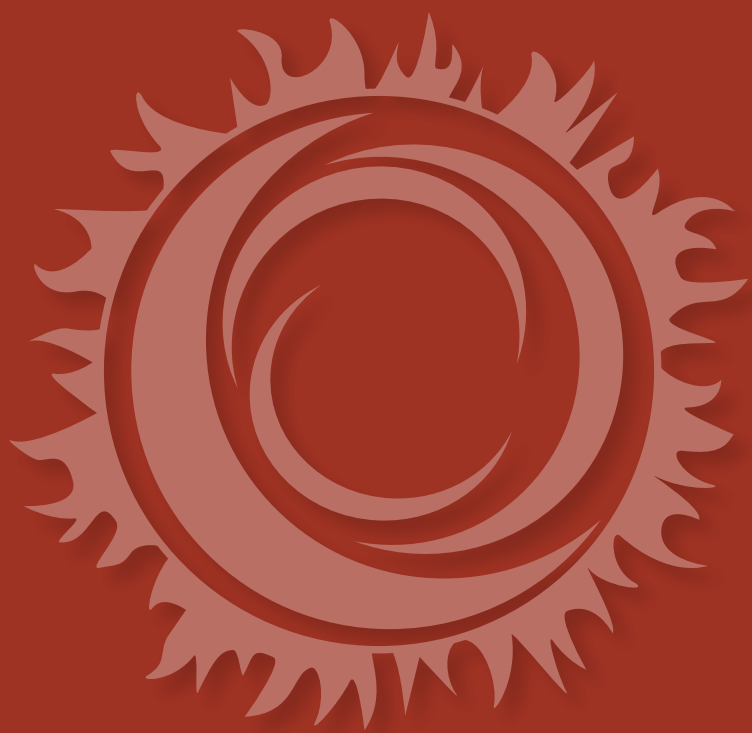
DONGYU W.



PUBLIC OR PRIVATE?: THE EFFECTS OF NEIGHBORHOOD INCOME ON PUBLIC EDUCATION

SUMMARY: As the U.S. Department of Education emphasized, education aims to shape “children into literate, moral, and productive citizens.” According to Horace Mann, education is the great equalizer. Public education aims to provide everyone with a comparable level of knowledge, fostering more equal opportunities for success. Nevertheless, as illustrated by data released by the Office of the State Superintendent of Education (OSSE), there is a notable disparity in the standardized tests scores among different public schools. My time at OSSE has revealed that one factor contributing to this inequality is the high concentration of at-risk and special education students in lower performing schools. Despite efforts by the DC Council to alleviate this disparity by allocating a larger budget to these schools, there is a limitation on the amount of financial assistance the DC Council can offer. After analyzing various data and receiving guidance from the team at OSSE, I've developed several recommendations on how funding should be allocated. I plan to present some of these suggestions during my senior presentation. Additionally, I will address the misconceptions regarding school funding and its correlation with performance.

• **BASIS ADVISOR:** Fatima Mrabet • **ON-SITE MENTOR:** Alexander Jue
• **LOCATION:** Office of the State Superintendent of Education



The teachers, administrators, staff, and executive leadership of the BASIS Charter Schools network **commend all of our seniors for their perseverance** in their research, and for their hard work throughout their BASIS Charter School journey. We give **our most heartfelt congratulations** to them for their achievements thus far, and these projects are only the beginning!



Washington, D.C.TM

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