

**Advancing the Ascent into Higher Education:  
An Exploration of College Access Programming**

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## **Abstract**

The following case study was conducted as a master's thesis on Breakthrough Twin Cities, a college access program located in the Minneapolis/St. Paul metropolitan area of Minnesota. This study explored the perspectives of participating students, parents, staff members and the board of directors through individual interviews and online surveys to better understand the successful components of college access programs and the deep-rooted barriers they continue to face. Marks of program success include the utilization of future orientation, individualization, community based developmental relationships, unrestricted learning and mirrored perspectives. These practices have implications for fellow college access programs as well as public schools and deserve additional research in order to expand their reach as high leverage habits of successful, equitable organizations.

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### **Research Topic & Significance**

Previous research has shown that college access programs can create a college going culture, provide necessary cultural capital and ultimately lead to higher rates of application, acceptance and retention of first generation college students. This research on Breakthrough Twin Cities focused on the experience of middle and high school aged students participating in the college access program. It should be noted that Breakthrough, through both its own internal data and the data shared through Saint Paul Public Schools and Wilder Research external evaluations, have demonstrated success in meeting its mission of college access for its participating students.

This study concentrated on the *experience* of students, parents, staff and board members in *creating* and *sustaining* a college going mindset for these under resourced students. The goal of this study was to identify what strategies, mindsets and cultural capital a successful college access program put forth in order to positively influence traditionally marginalized and under-represented students pursuing higher education as well as the implications this may have on better serving these students in a public school setting. It utilized surveys and individual interviews to gain insight into the perspectives of Breakthrough Twin Cities students, parents, staff and board members to better understand the practices, attitudes and existing barriers faced by underrepresented, first-generation college students.

### **Researcher Positionality**

It was when I began my work in educational policy studies at the University of Wisconsin as an undergraduate that I began to learn the magnitude of disparity present in American public education, particularly for students who attend schools in urban environments, live in poverty and identify as people of color. I found these inequities,

based entirely on factors outside of one's control to be disheartening but, more importantly, inequitable. I myself come from a background of privilege in which I received outstanding public schooling in my P-12 experiences, as well as into my undergraduate and present graduate studies. My successful encounters with public education are greatly due to my position as a white, middle class female from a two-parent household in which English was the primary language. Both of my parents had the opportunity to attend and graduate from college, one of whom also went on to pursue a master's degree. Throughout my own life, I have never questioned whether or not I would be able to attend an institution of higher education, but rather considered it a given based on my family's experiences. It was and remains my belief that every young person deserves quality public education and access to higher education; not due to privilege but provided widely and equitably- as a basic human right. As both a former public-school teacher and present college access affiliate, it has always been my goal to promote and assert educational equity for *all* students regardless of race, ethnicity, language, socioeconomic status, and other obstacles that face American public school students today.

My relationship with Breakthrough Twin Cities began when I was a summer Teaching Fellow as an undergraduate student. I applied and chose to teach for two summers in order to promote educational equity and confront these continued injustices for under resourced students. I encountered rich cultural backgrounds, bright personalities and palpable energy from my persistent, motivated students. Their thirst for knowledge, as well as their determination and desire to set new traditions for their families have been awe inspiring to me. I never had to fight for the opportunity to go to college, and through

this program I have witnessed these amazing young people do so with greatest of enthusiasm and resilience. As an Instructional Coach in later years, I have continued to provide them the quality education I believe every child deserves. It continues to plague me that the need for such programming exists. As a researcher, it is my hope to discover what strategies, mindsets and supports successful college access programs, like Breakthrough, implement effectively. It is my aim to take these organizational methods and expand their success to similar programs and public schools in order to further promote the strides towards educational equity that these programs have established.

### **Literature Review**

A great deal of literature and research exists on the topic of college access as it pertains to students who have not historically attended institutions of higher education, including people of color, and students from low socioeconomic and immigrant backgrounds. This struggle for access is a pervasive problem exhibited across the United States and continues to marginalize under resourced students in their pursuit of higher education. The majority of this literature has been published in the last twenty years, much of which has been written by authors that identify as people of color. While not exhaustive, the following literature review looks at a variety of perspectives regarding educational equity, most specifically regarding the experience of prospective first-generation college students coming from under-represented backgrounds.

### **Access to Colleges and Universities in the United States**

College access in the United States has been and continues to be a pertinent and on-going topic in the field of education, especially over the last thirty years. A push to improve equity in education institutions so that they are representative of the general

population of the U.S. has been and continues to be a significant topic for the worlds of P-12 and higher education alike. *Cultural Competence, Race, and Gender: Portraits of Teaching in High School College Access Programs*, a large study completed on AVID, a national level college access program, deems that purpose of college access programming is to “serve to compensate for unequal opportunities in learning and access to college knowledge and resources” (Brooks, 177, 2018). Access to higher education remains a contentious conversation in education for its historical lack of equitable participation and, therefore, continued oppression of future earning potential for those left out of higher education opportunities. The following literature review explores the historical and present contexts of college access and explores college access programming as a potential solution to the struggle for equity of access to colleges and universities.

### **High School Graduation in the United States**

The first step in understanding college access is to explore those that qualify to attend colleges and universities. The most basic of these qualifications is a high school degree, a concrete indicator of the access to higher education. According to annual reports put out by the National Center for Educational Statistics (NCES), the national average high school graduation rate for public schools’ class of 2016 was 84%, which is claimed to be the highest since 2010-2011 when this type of data was first collected (National Center for Educational Statistics, 2018). There is variation on a state by state basis, but the average shared is indicative of the nation as a whole, the lowest graduation rate state being New Mexico at 71% and Iowa as the highest at 91%. NCES also reports these statistics by race, which tracked the six-year completion for the classes from 2010 to 2016. In 2010, the national average graduation rate was 78%, with 83% of white

students, while only 71% of Latinx students, 69% of Indigenous students, and 66% of black students graduating on average (National Center for Educational Statistics, 2013).

While these rates increase slightly over the course of the data collection from 2010 to 2016, they still demonstrate tangible inequities. In 2016, 88% of white students graduated in that time frame, where only 76% of African American students, 72% of Native American students, and 79% of Hispanic students graduated within the six-year time frame. In general, white students have had and continue to have higher graduation rates and therefore immediately have higher potential access to higher education opportunities. The exception present, according to this data is Asian American students who have consistently had the highest graduation rates, ranging from 89%-93% graduation rates. While Asian students seem to have less disadvantage in terms of high school graduation, the remainder of students of color are behind their white peers in graduating high school and consequently in their ability to access higher education. These jarring statistics are important in understanding the first, most basic step to college access and present crucial understanding in improving college access in the United States.

A separate study conducted at Yale University in 2013 found that only about 65% of African American and Latinx students are graduating from high school, further limiting their potential to attend institutions of higher education (Ward et al, 312, 2013). The authors also note that this disparity is nothing new. They illustrate the perpetual disfranchisement of students of color by elaborating that “this gap has largely remained constant over the past 35 years” and has much to do with the backgrounds of students who come from low socioeconomic backgrounds and demonstrate a lack of capital resources and parental educational attainment (Ward et al, 313, 2013). It should be noted

that both of these studies did not track data on ethnicity or socioeconomic status, missing much of the nuance of student experience, although ultimately still helpful in adding to the conversation on race in college access.

### **Continuing Generation Students and First-Generation Students**

Another key factor in understanding college access is to analyze who *has had* and who *presently has* access to higher education programming. Even if a student finds success in and graduates from high school, the greater historical context of U.S. Higher education tends to serve some better than others. Historically, institutions of higher education in the United States have been dominated by affluent, white students with a generational history of college attendance. In essence, the families that have attended colleges and universities were those that *continue* to gain access to attend colleges and universities and learn at institutions of higher education, and ultimately earning the credentials that lead to higher paying jobs. In *SchoolTalk: Rethinking What We Say About- and to- Students Every Day*, Mica Pollock describes this idea as cumulative advantage and disadvantage- referring to those who have had access to higher education as those that have been cumulatively advantaged, and those who have not as cumulatively disadvantaged (Pollock, 81, 2017).

The National Center for Educational Statistics further illustrates this ideal by highlighting a 2013 study, which demonstrated that “among young adults between the ages of 25 and 34 who had a full-time job, those with a bachelor’s degree earned more, on average, than those with a high school diploma” (\$48,500 vs. \$30,000) (Redford et al, 1, 2017). This disparity marks a 39% difference in average income for college graduates compared to their peers with only high school degrees, maintaining a status quo that has

been upheld for generations for affluent, white college going students. Throughout this research, these students will be referred to as **continuing generation college students** in reference to their status as having one or more parents with a bachelor's degree or higher level of education.

On the reverse side of this perpetual inequity, are students who do not have any parental history of college attendance. These students will be addressed as **first-generation college students**. First generation college students frequently come from financially disadvantaged backgrounds. A 2017 study published by the National Center for Educational Statistics found that more first-generation college students came from lower socioeconomic status households than their continuing generation counterparts. The study reports that 27% of first generation college students came from households with incomes of \$20,000 or less and another 50% came from households with earnings between \$20,001 and \$50,000, totaling 77% of first generation students. In comparison, their continuing generation peers only identified with 6% and 23% of these statistics respectively, for a total of 29% coming from low and working-class backgrounds (Redford et al, 4, 2017). Another statistic, put out by the United States Department of Education in 2007 states that only 50% of low income, minority students enroll in post-secondary education opportunities after high school as opposed to their more affluent peers, who enroll at a rate of 80% (Ward et al, 312, 2013). The disparity among students coming from low income homes and their wealthier peers demonstrates a larger problem in how all students think about, apply to and attend institutions of higher education.

Similar studies have proven to provide similar results in reference to socioeconomic status, like a longitudinal study published by the University of California

Los Angeles in 2007. This study uncovers the historical experience of first generation college students, beginning in 1971. The study found similar results: that the majority of first generation college students come from low socioeconomic backgrounds. According to the U.S. Census, in 1975 the median annual U.S. family income was \$13,895 (U.S. Department of Commerce Census Bureau, 1976). This combined with the statistics from UCLA study illustrates that 64.1% of first generation students came from homes earning less than the median income (Saenz et al, 51, 2007). The 2005 students demonstrate comparable data, as the median annual family income in 2005 was \$46,326 (U.S. Census Bureau, 2006) and approximately 58.8% of first generation students came from families with incomes lower than the median (Saenz et al, 51, 2007). While this rate improved slightly over thirty years, it is apparent that students from low income backgrounds have been and continue to be the majority of first generation college students.

A second common characteristic of first generation college students are their diverse races and ethnicities. The same NCES study from 2013, also looked at student race identities of first generation and continuing generation college students. Of the first-generation students surveyed, 51% identified as races other than white in contrast to continuing generation college students of whom 70% identify as white students (Redford et al, 6, 2017). These statistics point to greater patterns of students of color receiving inferior opportunities to their white peers in accessing higher education. The UCLA study also explored this racialized view of college access beginning in 1971. At that time, it was found that the proportion of students of color who identified as first-generation students was much higher than that of their white peers. Of the 38.5% of first generation students, the national average for 1971, attending higher education institutions, the

proportions for Latinx students who identify as first-generation students was 69.6%. For African American students, 62.9% of students identified as first-generation students, while proportions of indigenous Americans, 44.8%, and Asian Americans, 42.5%, were also higher than the national average (Saenz et al, 10, 2007).

Over time, the representation of first generation students who also identify as people of color has decreased, but still remains disproportionately higher than that of their white peers. Thirty-four years later, in 2005, data showed that 13.2% of first generation students were white, while 19.0% identified as Asian American, 16.8% as Indigenous American, 22.6% as African American and 38.2% as Latinx (Saenz et al, 11, 2007). This ongoing discrepancy demonstrates the perpetuated inequities to opportunities in higher education, and therefore to higher paying jobs. The authors of the UCLA study warn that, “the declining proportion of first-generation college students entering four-year institutions over the last thirty years should be scrutinized” before classifying these changes in racial representations as gains for college access (Saenz et al, 12, 2007).

A final characteristic to consider for first generation college students is their first language. While race has seen marginal improvements in college access over the course of the last nearly fifty years, one component that has risen in representation for first generation students is first language. According to the UCLA study, students in 1975 dominantly spoke English as their first language 93.6%, according to their statistics. However, in 2005, this was lowered to 82.4% on a national average. While this statistic may seem small at an 11.2% change, the number of students who spoke another language nearly tripled in the thirty-four years studied. From just 6.4% of students speaking languages other than English in 1975 to 17.6% in 2005, this increase of 275% is not

negligible when considering the demographics of first generation college students (Saenz et al, 50, 2007).

While other identity frameworks are important to consider when discussing student development and college access, such as gender identity, these three components have consistently proven to be the most apparent differences between first generation and continuing generation college students. These disparities have been and continue to be the identities of many first-generation college students and play a crucial role in understanding the on-going struggles of college access for students who come from low income backgrounds, identify as races other than white and speak languages other than English. In her book, *SchoolTalk*, Mica Pollock illustrates this notion stating, “We are each born into opportunity contexts that we do not control, and any student’s everyday opportunities are affected by historical opportunity provision that happened over generations *before* his or her life began.” (Pollock, 81, 2017). In order to promote more equitable access to higher education and higher paying jobs, it is paramount to consider the historical and perpetual oppression of students who so frequently have been denied access to higher education.

### **College Access Programs**

One attempted solution at improving the representation of historically marginalized students, was the inception of college access programs. Following Pollock’s suggestion that “what people claim about opportunities and outcomes shapes who offers opportunities to whom”, college access programs are concerned with the equity regarding participation in American higher education and act to confront the under representation of many first-generation college students (Pollock, 75, 2017). Over the years, dozens of

college access programs have come about including well known organizations such as Advancement via Individual Determination (AVID), College Possible, Upward Bound and TRIO. Each of these college access programs are aimed at supporting students from under-represented backgrounds and their goals to attend higher education institutions. These programs have their own individual missions and approach the challenge of college access in their own manner based on the number of students, demographics and ages they serve.

There even exists an official network of these programs, entitled the National College Access Network (NCAN). Begun in 1995 with nine affiliates, this 501(c)3 organization looks to “share best practices and spread college access and success services around the country” to achieve equity, diversity and inclusion in higher education (National College Access Network, 2019). This network now has hundreds of members across the country including school districts, colleges and universities and programs linked to directly supporting middle and high school students pursue higher education (National College Access Network, 2019).

### **Limitations of College Access Programs**

While college access programs are making moves towards dismantling the white, affluent status quo of college attendance, they are not without their limitations. One such limitation is their piecemeal nature. While resources like the National College Access Network have helped to expand the world of college access, these organizations are still not commonplace in P-12 schooling. While many work directly in schools or in conjunction with schools, college access programs are ultimately supplemental organizations which leaves spaces for students to slip through the cracks. This is mirrored

by the need to apply and be accepted to programs, which echoes the notion that college access programs are available, but not necessarily to everyone who may benefit from them. Pollock highlights fragmented approaches such as this, saying that “internal disparities remain and require our attention in thorough Inequality Talk and public policy effort, as we seek to understand and address the opportunities students have and need” (Pollock, 97, 2017). This limited scope is one way in which college access programs are limited and, as a result, are narrowed in their potential for supporting *all* first-generation college students.

A second limitation is that college access programs exhibit varying success. As they are supplemental programs, college access programming leaves much space for variation from program to program, as there exists no standardization process across the many types of programs. Despite having a network to connect them, NCAN is focused more on providing resources, rather than creating cohesion among the many entities that are involved in and dedicated to college access for under-represented students. Since college access programs all operate differently and vary in who they serve and how they serve them, there is a range in how successful they are in meeting their missions to get students to college. For this reason, exemplars of college access programs that have proven successful require more thought and investigation into *what* they are doing to be successful and *how* these program structures, practices and involvement are being implemented to help make higher education attainable for more populations of young people.

## **Organization Introduction**

### **The Organization**

Breakthrough Twin Cities is one such college access program dedicated to advancing the equitability of college and university attendance for students from low socioeconomic backgrounds and first-generation college students as well as improving the representation of people of color in the teaching field. Located in Saint Paul, Minnesota, Breakthrough Twin Cities is a chapter of a larger organization called Breakthrough Collaborative. This organization was founded in 1978 in San Francisco, California to better educational outcomes for highly-motivated, under resourced students. Forty-one years later, the Collaborative now encompasses a total of twenty-four individual affiliate chapters that can be found across the United States and Hong Kong (Breakthrough Collaborative, 2017). While each chapter of the organization is situated in a unique community with distinct strengths and needs, the common thread of a two-pronged mission unites all twenty-four sites across the world. Breakthrough Collaborative states that, “affiliates are independently operated and carry out direct services to middle and high school students from under-resourced communities, college undergraduates serving as teaching fellows, and professional teachers serving as instructional coaches in their localities.” (Breakthrough Collaborative, 2017).

### **Organization Mission**

Breakthrough Collaborative has a two-pronged mission aimed at the goal of improving educational outcomes which they describe as: 1) “Increase academic opportunity for highly motivated, underserved students and get them into college ready to succeed” and 2) “Inspire and develop the next generation of teachers and educational leaders.” (Breakthrough Collaborative, 2017). Each affiliate of the larger organization has found ways to pursue and embody these two components of the mission and

Breakthrough Twin Cities is no exception. Breakthrough Twin Cities carries out this two-pronged mission through two sites in which it delivers all of its programming and employment.

### **The Staff**

At present, the organization employs a variety of faculty including twelve full-time staff and an intern, seventeen part time school year employees and approximately sixty employees each summer. The full-time staff includes an Executive Director, two development staff, two program directors, a donor relations director, two student support coordinators, two college counselors plus two AmeriCorps promise fellows and a program intern. These individuals are charged with funding, sustaining and improving programming, direct student support and hiring school year coaches and summer faculty.

During the summer, the faculty increases in number greatly. In the summer of 2018, this faculty included 2 Deans of Faculty, 2 Deans of Students, 42 Teaching Fellows, 8 Instructional Coaches, and multiple Program Interns between the two sites (Breakthrough Twin Cities Cumulative Statistics, 2019). These additions allow the summer program to function year after year and to produce a college going culture beginning in middle school. The school year coaches are charged with maintaining the relationships, growth and commitment to college access for students through regular meeting and encouragement. These Teaching Fellows are a specific and integral part of the “near peer” relationships and encouragement that acts as a signature for Breakthrough. An especially pertinent role, many current and former Breakthrough students choose to work as program interns or teaching fellows, which occurs regularly at both sites.

## **The Students**

Breakthrough Twin Cities students embody the identities historically under-represented at four-year colleges. As of the 2018-2019 school year, Breakthrough Twin Cities serves a total of 391 students in grades 7-12. In order to participate in the program, students must demonstrate a high level of dedication and motivation, as well as meet criteria based on need and positionality. As described by the organization, “beginning in the summer after 6th grade, we work with young people who are excited to take full advantage of the program” (Breakthrough Twin Cities, 2017). In order to qualify to participate in Breakthrough, students must meet two or more of the following criteria:

1. First in their families to attend a four-year college or university
2. Low-income (qualify for free or reduced lunch)
3. English is not spoken at home
4. Live in single-parent family
5. Racial or ethnic minority group that is under-represented in college

If students qualify, they can then apply with a five-part application including:

1. Student Statement
2. Parent Statement
3. Two Teacher Recommendations
4. Student Information Release Form (with report cards and test scores)
5. Two Recommendation forms

(Breakthrough Twin Cities, 2017).

This application process is incredibly rigorous and embodies the commitment required of the programming across middle and high school. Once accepted to the program, students are expected to participate throughout the course of the next six years, including varying time commitments during their middle and high school years.

Similarly, parents must commit to supporting their student in the program. This does not entail resources like transportation or financial contributions, but rather time such as

attending a parent teacher conference in the summer as well as other events available to parents and checking in with students at home to encourage their progress in the program.

At present, 97% of students at Breakthrough identify as races other than white, a significant increase from the 51% of first generation college going students found by the National Center for Educational Statistics. Of this 97%, 50% identify as Asian American, 29% as African American, 11% as Latinx American, 5% as multiracial and 1% as American Indian and “Other” respectively (Breakthrough Twin Cities Cumulative Statistics, 2019). This racially diverse student body demonstrates the efforts towards changing the underrepresentation of people of color in higher education. Breakthrough is dedicated to supporting not only students who come from disadvantaged socioeconomic backgrounds, but also in confronting the continued practices of white supremacy at predominantly white institutions in higher education. Breakthrough reports that 96% of their students identify as a race that is under-represented in college and has remained at a high percentage since 2007, fluctuating between 82% and 96% over the course of the last eleven years (Breakthrough Twin Cities Cumulative Statistics, 2019).

There are several factors that are salient to Breakthrough’s mission to increase college access to marginalized communities in Minnesota. One of these is status as a first-generation college student. For the 2018-2019 school year a majority 79% of students will be the first generation of their family to pursue a college degree. This has remained steady as a criteria for the program varying from 64% to 86% of the student population from 2007-2018. An important caveat to this statistic is the input of a staff member who, when interviewed, shared that although it appears that 21% of current BTC students have parents with college experience, though many of these students still have

experiences mirroring their peers who do not. The staff member shared their anecdotal noticing that many of these parents do hold a degree and have some experience, but frequently that experience is different than the typical college going experience. This unfolds for parents as returning to school as working adults, earning a degree in another country, and attending two-year institutions for example (Personal Interview, December 7, 2018). These exemplars are encouraging for students and demonstrate a dedication to education, but still leave plenty of room for the influence of Breakthrough Twin Cities to support a college going culture and provide necessary information about the four-year college experience. Therefore, the experience of these parents, and consequently their students, adds important nuance to the designation first generation college student at Breakthrough.

Three other criteria depict the realities of Breakthrough Twin Cities students including free and reduced lunch qualification, single parent households and home languages other than English. In 2018-2019, 88% of Breakthrough students qualified for free and reduced lunch, reflective of the last 11 years ranging from 74% to 90% over the last eleven years. 60% of students reported that they speak a language other than English at home which has similarly stayed within a high range of 52% to 60% over the course of the program. Finally, 27% of students currently identify living in a single parent household, ranging from 27% to 36% over the course of eleven years (Breakthrough Twin Cities Cumulative Statistics, 2019). These criteria are important not only for students to qualify for programming but are important in the larger discussion of college access.

Breakthrough Twin Cities is dedicated to improving the representation of college going students from an array of backgrounds that have not and are still not adequately represented in colleges and universities today. This push to empower and encourage middle and high school students from disadvantaged backgrounds is a cornerstone to the work done by Breakthrough Collaborative and executed by Breakthrough Twin Cities in its attempts to make colleges and universities more accessible and more equitable.

### **The Board of Directors**

Breakthrough Twin Cities, as a 501(c)3 designated non-profit organization is required to have a Board of Directors to help oversee the organization and to ensure that it is meeting its mission to increase college access for under-represented students and to prepare future educators. At present, the board consists of twelve members including a Chairmen of the Board. These members come to the table with various backgrounds, working in fields other than education such as international business, law, marketing, research, human resources and academia. The role of the board is to connect with the Executive Director and oversee large scale operations of the organization. One board member described their work as creating a roadmap, illustrating that the board is “responsible for making sure that all of the rules and regulations required of an organization like Breakthrough are written out and followed.” (Personal Interview, January 9, 2019). The board is not involved with day to day details or specifically with programming, but rather focuses its efforts on organization funding, growth and governance. Each board member serves on one of two committees, one focused on the internal affairs of the organization and another that is focused on external components.

Funding is found through grant writing, individual donations and in connection with represented school districts for resources such as bussing.

### **The Programming**

Breakthrough Twin Cities is situated in the most populated part of Minnesota, the metropolitan area of Minneapolis and Saint Paul. It began in 2005 as Breakthrough Saint Paul and was housed at a local, independent private school also located in the Twin Cities. Over the course of its life, the organization has grown to include up to three sites at its peak, maintaining two of these sites for students in the Twin Cities area over the last several years. It has and remains a multi-part program including: 1) Summer program, 2) School year programming and 3) College counseling and preparation.

The summer program, the first student experiences in Breakthrough, is set up for students in grades 7, 8 and 9. It consists of a six-week intensive enrichment program in which students attend academic and elective classes, a free choice time, referred to as “yo time”, a daily homeroom referred to as “college” and in all program meetings called All School Meeting, or ASM for a total of 8 hours. Their courses are taught by high school and college age Teaching Fellows in areas of math, science, literature and writing. These Teaching Fellows are observed, encouraged and taught by licensed teachers called Instructional Coaches who support their lesson planning, direct instruction and reflection of teaching. Throughout the summer, the students develop a college going peer group, preview material for their upcoming school year and are introduced to the steps of applying to college through routines such as word of the day, math problem of the day and “college knowledge”, which introduces a daily concept linked to college acceptance or the college experience like Grade Point Average, majors and minors and financial aid

sources. Students complete daily homework, referred to as “booyah!”, share academic and elective progress during the All School Meeting and demonstrate a culmination of their learning with a celebration at the end of the summer. This component of the programming is the most intensive of all three parts and sets cultural and academic standards for performance and participation of Breakthrough Twin Cities.

The second component is the school year coaching. Once a month, students in grades 7-12 participate in programming on a Saturday, referred to as Saturday sessions. During these sessions students are split into middle school and high school groups and pursue different areas of college access work including activities like college visits, guest speakers from colleges and universities and scholarship writing. These added lessons and experiences illustrate to students what college looks like and maintains the momentum created during the summer experiences throughout the year.

The final component of programming is focused on high school students. Students in grades 10-12 do not participate in the summer program, but instead begin to receive more individualized college preparation support. During this time, students are all provided a free ACT test preparation course and book to prepare for the exam. They also receive a specific time to work on their personal statements for applications, referred to as “essay bootcamp” where college graduates and professionals do a deep dive with students into their writing to polish it for the application process. Perhaps the most impactful part of this stage, though, is the one on one college counseling. This step allows for personalization of the college application process, application fee waivers, financial aid offerings and ultimately finalizing the right “fit” for each student as they choose their

higher education institution. This step is carried out by the college counselors and is done so in an individualized way to meet each student's specific needs and aspirations.

Despite their differences in age levels, structure and time involved, all three of these programming pieces maintain the same goal- to advance academic and social emotional growth towards a college pathway for each student. This focus on academics manifests in ways such as commitment by students taking courses over the summer program in middle school and maintaining sufficient grades at school as well as taking at least one honors, Advanced Placement or International Baccalaureate course at school. Students are given feedback and evaluations on their progress in their academics through verbal, written and progress reports throughout their participation in the program.

Equally important to academics at Breakthrough is the role of social emotional growth. One tangible manner in which Breakthrough approaches behaviors and attitudes linked to college access is through their Codes to College Success, more commonly referred to as "the codes". In essence, the codes are seven core skills intended to help students and Teaching Fellows navigate academic and professional settings. These codes include and are described by Breakthrough Twin Cities as:

1. **Be Breakthrough:** Demonstrates motivation to learn, work hard, and find their own, unique path to college
2. **Strive to Understand:** Appreciates differences in others and seeks to learn more about others' points of view
3. **Relish Hard Work Together:** Tries to work well with teachers, school counselors and family members. We're here as a team, so parent(s) and guardian(s) also have to be committed to student's success in the program
4. **Be Grateful:** Shows respect towards peers and adults and works to make Breakthrough a great place for everyone

5. **Be Curious:** Demonstrates excitement about learning and eagerness to explore their passions and interests
6. **Live the Growth Mindset:** Willing to accept feedback
7. **Persist:** Knows that getting to college takes a lot of work and is fully committed to the 6-year Program

(Breakthrough Twin Cities, 2017).

The codes not only provide a framework for exploring, discussing and reflecting upon social and emotional growth, but establish a common language to be used by students and staff alike. These behaviors are brought up in each meeting of Breakthrough Twin Cities and remain a central focus to the prospects of college access, application and acceptance for students. Students are even evaluated on social emotional growth through the codes in the same manner that they are evaluated on their academic progress throughout their summer programming. The emphasis on social emotional growth is a core piece of the programming at Breakthrough Twin Cities and a unique component in the pursuit of and navigation of college application and attendance for under resourced middle and high school students in Minnesota.

### **Program Limitations**

It should be noted that Breakthrough Twin Cities also experiences challenges, as any organization does. One of the most prominent and continual limitations of the programming is in its finances. As a 501(c)3, it is up to Breakthrough and its Board of Directors to finance these endeavors in their entirety. This requires tireless fundraising and funding strategy, and is largely the responsibility of the Board, though it demands the time, effort and resources of every operating member of the organization including full time staff, seasonal faculty and students.

Another limitation is BTC's organizational capacity. Dominantly due to finances, at the present time Breakthrough Twin Cities can only provide a finite amount of support to deserving students in the Twin Cities area. As the organization grows, it requires increased funding, personnel and infrastructure which presents new barriers to the organization and its attempts to meet its mission, which has historically kept BTC small in order to maintain a high-quality program with minimal resources.

Ultimately, these limitations of funds and capacity limits the reach of BTC. Staff members, students and board members all recount hearing that others have not heard of this program or its reach in the community. With increased funding, the program can increase its site numbers and students serviced and therefore its reach within the Minneapolis/St. Paul metropolitan area. However, the reach of such an organization is very much dependent on these needs.

### **Program Results**

This year, 2019, Breakthrough Twin Cities will head into its fifteenth summer of providing college access programming in the Twin Cities metropolitan area. An independent, non-profit organization that has established its standing as a 501(c)3, and has existed for fifteen years, must be demonstrating some level of success towards its college access mission. Four tangible pieces of evidence demonstrate Breakthrough Twin Cities progress.

Perhaps the most obvious data to support this organization's success are their self-reported statistics. One such piece of evidence is that 99% of Breakthrough students surveyed said that they were more excited about learning after attending BTC. Similarly, 91% of high school students were enrolled in at least one advanced course, as opposed to

76% of peers in other college access programs. This echoes Breakthrough's intent to focus on the habits and progress of students throughout their involvement, not simply on the act of applying to college.

In regard to actual college application and acceptance, Breakthrough celebrates equally impressive marks. According to Breakthrough, the class of 2017 had a 100% high school graduation rate, with 98% of students pursuing a post-secondary education. 93% of these students are enrolled in four-year college programs, 5% are enrolled in two-year programs and 2% chose to enter the military (Breakthrough Twin Cities, 2017). The class of 2018 had similar results, 25% attending two-year colleges and 75% attending four-year colleges, totaling a 100% success rate at accessing higher education (Breakthrough Twin Cities Cumulative Statistics, 2019). An NCAN 2017 report shared that average college attendance in the year after high school graduation for college access program attendees was 74% for the class of 2015, similar to other years data was collected for in 2010, 2011 and 2012 (National College Access Network, 2018). While these years are not a perfect comparison of graduation years, the evidence still suggests that Breakthrough Twin Cities is making an impact on these students' long-term goals and at a higher rate than other programs with similar missions.

Another impressive piece of evidence of Breakthrough's success is that 99% of its graduates head off to college with an average of \$25,000 in scholarships to support their higher education attendance (Breakthrough Twin Cities, 2017). This is also supported by the financial load each student takes on, which averaged just \$5,817 per student per year for the class of 2018 (Breakthrough Twin Cities Cumulative Statistics, 2019). According to the Institute for College Access and Success, which collects data on the cost of both

public and private colleges in each state, Breakthrough beats the state average as a result of the cultural capital support on finances it provides the students. Breakthrough students, on average, have a student debt of \$23,268 over the course of four years. According to College InSight Minnesota, the state average in Minnesota in 2016-2017 (which is only contributed to 68% of students) is \$31,734, making Breakthrough students better off financially than their peers on average by \$8,466 (College InSight Minnesota, 2018). While not a complete relief of financial burden, Breakthrough Twin Cities students have affordable cost of college expenses when considering the high amount of financial support, they earn. It is obvious that Breakthrough is meeting its goals to improve the college going rate for under-represented students in colleges and universities.

A secondary, although equally important, reflection of Breakthrough's mission lies in the second prong of their mission, a critical component to the functionality of Breakthrough Twin Cities programming: the summer Teaching Fellows. 60 % of these young educators identify as people of color, as opposed to the 5% of current Minnesota teachers, and 40% identify as male, a significant increase from 27% of present teachers in Minnesota (Breakthrough Twin Cities, 2017). In 2011 through 2016, approximately 60% of the teaching fellows identified as white. Since then, a spike in racial and ethnic diversity for Teaching Fellows that identify as people of color has occurred, increasing from 39% in 2016 to 61% in 2017 and 60% according to a 2018 survey conducted by BTC (Breakthrough Twin Cities Cumulative Statistics, 2019). This has been an area of growth for Breakthrough Twin Cities as an organization across their time and demonstrates a concerted effort to diversity not only college attendance for its students

but to diversify who its teachers are, ultimately reinforcing the second prong of its mission.

Another notable barometer for BTC's achievement is their retention.

Breakthrough records their students' progress across their six-year timeline through a waterfall analysis, keeping track of each class and the number of students who complete each consequent year. They have done so since 2011 and keep track based by site and in total number of students. The available information tracked three classes that have completed the entire program. The class of 2016 maintained a 75% retention rate from grade 7 through high school graduation while 2017's graduating class held a 66% retention rate, the class of 2018 at 74%, and the class of 2019 at 70% respectively. The classes of 2020 at each site, present day 11th graders, demonstrate retention rates of 67% and 82% respectively, and the class of 2021, current 10th graders, sit at 84% and 94% retention at this point in time (Breakthrough Twin Cities Waterfall Analysis, 2018).

Retention rates on comparable organizations were not readily available, but it is pertinent to note these retention rates as a component of the organizations success in achieving its mission.

Another facet of program retention, has been the increase in the number of families that continue to choose Breakthrough Twin Cities. With two solidified sites for the past six years, BTC has had an influx of siblings join the program. Families are feeling encouraged by the support provided and are working to include more of their children based on the model that exists at Breakthrough and buy in has increased based on this family buy in to the program, echoing the retention rates of present students. While Breakthrough Twin Cities has not kept data on this specifically, the anecdotal

increase in family involvement and retention may influence the results for the organization.

A mirror of the student retention at Breakthrough is the retention of faculty and staff. Year after year, the summer program has returning Teaching Fellows that have chosen to pursue the fellowship again. In 2017, 65% of teaching fellows were “returners” to the teaching fellowship (Breakthrough Twin Cities Cumulative Statistics, 2019). There appears to be a significant portion of returning Teaching Fellows, demonstrating a desire to remain a part of the organization, echoing the level of student retention. Just as pertinent are the amount of Breakthrough students that pursue the Teaching Fellowship in high school or college. Only one year of data was available, but in 2018 20 of the 42 teaching fellows, 48%, were former Breakthrough students (Breakthrough Twin Cities Cumulative Statistics, 2019). This can also be seen in full time staff responses, 50% of whom have been with the organization for 3 or more years, according to the staff survey. The retention of students is clearly a marked influence for Breakthrough Twin Cities, but similarly is the ongoing participation of its teaching fellows and full-time staff.

### **Existing Research**

Finally, outside organizations have also evaluated the effectiveness of Breakthrough’s programs. Two major studies demonstrate the success of Breakthrough Twin Cities through statistical measures. The first, completed by Wilder Research in 2011, was a program evaluation done of what was then Breakthrough Saint Paul. This evaluation focused on the outcomes of student participants by exploring how well students were doing on the academic outcomes established by the program, if Breakthrough had a substantial positive impact on the academic achievement of

participating students, the potential impact of characteristics of participants on the program, and the participants' views of the program (Mueller et al, 1, 2011)

These questions were answered by focusing on students in grades 7, 8 and 9 during the 2009-2010 school year. The researchers looked at student academic achievement in the form of grades for the 2009-2010 school year, comparing these academic outcomes with peers with similar backgrounds and by conducting focus groups and interviews with students (Mueller et al, 2, 2011). This study was comprehensive in its attempts to understand Breakthrough as an organization and determine its strength and its areas of improvement. Wilder Research found responses to each of their research questions about Breakthrough citing evidence such as grade point averages in honors classes, a B in all grades, versus grade points averages in all courses, averaging a B/B+ for 7th and 8th graders and B- in 9th grade (Mueller et al, 21, 2011).

Ultimately, the Wilder Research program evaluation found that there is “promising evidence of positive program impacts on student achievement, especially in middle school” and that participant views support the quantitative and qualitative data collected (Mueller et al, 33, 2011). However, the evaluation also warned that “caution should be exercised in attributing all of the Breakthrough-comparison group difference in academic outcomes to the program” which is a sensible note on understanding causation in a case such as Breakthrough where students are already highly motivated and come from complex, intersectional backgrounds (Mueller et al, 33, 2011). The Wilder study of Breakthrough Saint Paul appears to be carried out in an ethical way to create a reliable evaluation framework. Nevertheless, the Wilder Research program evaluation is eight years old and is now antiquated in the eyes of the current programming of Breakthrough

Twin Cities, which has grown in size, programming components and both student and staff diversity.

Saint Paul Public Schools (SPPS) has also conducted a study, which included Breakthrough Twin Cities. The school district looked at the college access programs in which its students participate in on a large scale. This district level evaluation has presently collected three years of data and recommendations, which have been consistently, and reliability considered by the department of Research, Evaluation and Assessment (REA). This comprehensive study explores sixteen total college access programs including such organizations as Advancement Via Individual Determination (AVID), TRIO programs associated with colleges and universities, College Possible, Genesys Works and, of course, Breakthrough Twin Cities. The evaluation gathers data from principal interviews, quasi-experimental design to compare participants to non-participants and used weighting to create statistical significance (Jacobson et al, 2018). According to SPPS, Breakthrough Twin Cities is one of only six programs that serves students in 7th grade on, as opposed to the other programs- most of which begin in high school (Jacobson et al, 22, 2018). BTC is also one of the most widespread programs by school in Saint Paul Public Schools- only one program serves more schools than BTC does (Jacobson et al, 23, 2018). The evaluation went on to look at the types of programming each college access organization provided, tallying up the types of social emotional, college application, career readiness and academic support they provide. As a whole SPPS found that BTC serve many students and showed their success in comparison with other programs. However, this evaluation does not provide new information about the reach Breakthrough Twin Cities has and has no information on the

programming offered or the results of its mission. The intent of this evaluation was to gain a comparative perspective at the district level of the many college access programs available to its students and, therefore, is not specific enough to shed any new or helpful light on the progress of BTC.

The previously conducted evaluations, while notable and well implemented, are either outdated or too broad to offer insight into what lies behind Breakthrough's effectiveness. It is apparent that Breakthrough Twin Cities is producing successful results based on the continual data being collected by the organization itself on retention, high school graduation, college acceptance and college attendance. However, there is not recent enough evidence to decipher *how* and *why* BTC continues to be successful and the implications for the growth of that success for both the organization itself and for the schools that serve these students. For these reasons, a new case study on Breakthrough Twin Cities is fundamental to understanding, duplicating and spreading its successful programming.

## **Case Study Empirical Research**

### **Research Topic & Significance**

As illustrated, previous research has shown that college access programs can create a college going culture, provide necessary resources and ultimately lead to higher rates of application, acceptance and retention of under-represented students. This research on Breakthrough Twin Cities focused on the experience of middle and high school aged students participating in the college access program. Breakthrough, through both its own internal data and the data shared through Saint Paul Public Schools and Wilder Research external evaluations, have clearly demonstrated the success in meeting its mission of

college access for its participating students. This study concentrated on the *experience* and *perceptions* of students, parents, staff and board members in *creating* and *sustaining* a college going mindset for these under resourced students. The goal of this study was to identify what strategies, mindsets and resources a successful college access program offered in order to positively influence traditionally marginalized and under-represented students pursuing higher education as well as the implications this may have on better serving these students in a public-school setting.

### **Theoretical Framework**

Four key theories steered the creation of this study including research question development, data collection, conceptual framework development and in qualitative data analysis. Each of the included theories is described and grounded in volumes of literature developed over time.

#### **The Myth of Meritocracy**

Used by educational, public policy and social justice researchers, The Myth of Meritocracy explores the perpetuated idea that inequalities are a result of individuals' choices, rather than the repercussions of systemic and historical barriers. In *Trading Action for Access: The Myth of Meritocracy and the Failure to Remedy Structural Discrimination*, Harvard Law Review explores the idea that the failings of an individual in an organization are due to that individual's merit alone, which have ultimately limited their opportunities for success in the work place. The piece describes this individualized nature as a source of workplace discrimination which "suggests that the workplace is meritocratic therefore individuals, through the choices they make, are responsible for any resulting inequality." (Harvard Law Review, 2157, 2008). The myth of meritocracy was

employed in law firms, the way that these organization “use the success of women and minorities as proof of an absence of institutional barriers to advancement.” (Harvard Law Review, 2158, 2008).

The counter to the myth of meritocracy considers the disparities that explain the inequitable effects of policies and practices within the organization such as businesses or schools. Harvard Law Review illustrates two explanations for the continuation of the myth of meritocracy over structural discrimination: 1) Individual Failings in a Meritocracy and 2) Systematic Discrimination. The first treats employment discrimination as an “anomaly”, in which the experiences of the marginalized employee is simply a glitch (Harvard Law Review, 2159, 2008). The other explanation, systemic discrimination, is defined here as “the consequence of institutional or organizational practices and policies that have unequal effects on certain groups though they are neither designed or intended to have such effects” (Harvard Law Review, 2161, 2008). These two ideas to explain the rise and maintenance of the myth of meritocracy in the United States. “It is perhaps unsurprising that individuals who are members of groups that traditionally have been advantaged by society, and who have achieved high-status positions, believe that the system that has elevated them is meritocracy” (Harvard Law Review, 2161, 2008).

The myth of meritocracy is directly applicable to the study of disproportionate college access and attendance by under-represented college students, like the participants in college access programs like Breakthrough Twin Cities. This study employed the myth of meritocracy to explore student and parental perceptions of meritocracy as it pertains to the challenges faced by hopeful first-generation college students. This will discern

whether or not structural discrimination and a continued myth of meritocracy remain a barrier in college access to the students participating in Breakthrough Twin Cities.

### **Cultural Capital**

Originally proposed by the French sociologist, Bourdieu, cultural capital explores what items, language and other cultural aspects are valued by the dominant class in a society or organization (Bordieu, 1977). Examples of this may include the use of the preferred language, access and use of valued resources like books and music, and knowledge of useful processes such as how to *access* more cultural capital. Those who exhibit and are fluent in the use of the dominant cultural capital are those who are most successful in a given culture, regardless of efforts or merit. As described by *The Columbia Dictionary of Modern Literacy and Cultural Criticism*, this applies directly to the study of under-represented students in that “public schooling in capitalist democracies is supposed to be meritocratic, the students who most often succeed are not necessarily the most talented but those whose families enjoy a higher social, economic, and cultural status” (Childers et al, 362, 1995). As the dominant culture of both their greater society, and frequently their school environments, is white and middle class, students from low socioeconomic backgrounds, students of color and immigrants all experience disadvantage according to this theory. Cultural capital relating to higher education has the potential to be a significant barrier to under resourced students for this reason. Breakthrough employs strategies for accessing cultural capital necessary for understanding and pursuing higher education, which was a focus of this study’s goal to explain the organization’s success.

### **Future Orientation**

As proposed by Nurmi in the late 1980s and early 1990s, future orientation explores the connection between three concepts: motivation, planning and evaluation. In his theory, Nurmi asserts that individuals who utilize a combination of these skills have “opportunities of controlling their future” (Seginer, 2009). The idea that individuals, with careful planning, evaluation and motivation, can positively influence their future is a core belief of many college access programs, including Breakthrough Twin Cities. This is because of what Nurmi found “adolescents with a high socioeconomic status tend to plan their future more than youths with a relatively low socioeconomic position” (Nurmi, 25, 1989). Seigner expands upon Nurmi’s work to study specific age groups and culture groups in relation to future orientation. She notes that, “the effect of future orientation on academic achievement is consistent across cultural settings but varies with prospective domains and age. Specifically, the effect of each of the instrumental domains (i.e., higher education, work and career) on academic achievement” highlighting the many capabilities of *all* young people when given the proper tools (Seigner, 172).

While this may appear to contradict the myth of meritocracy, it does not negate its general premise as a societal phenomenon, but rather suggests that despite societal norms or historical injustices, that some level of power lies with individuals in the promise of shaping the future. This idea is regularly exhibited in college access programs that encourage students to maintain high motivation, plan for the future over the course of several years, to apply and expand planning and evaluation skills to higher education access. For this reason, the concept of future orientation is critical in looking at the perceptions, planning and success of college access programs, like Breakthrough Twin Cities.

## **Developmental Relationships**

According to Li and Julian, developmental relationships can be defined as “reciprocal human interactions that embody an enduring emotional attachment” and “a balance of power that gradually shifts from the developed person in favor of the developing person” (Li et al, 2012). As exhibited through mentorship in college access programs, developmental relationships are a key piece in transferring specific knowledge connected to higher education to under resourced and first-generation college students, like the students who participate in Breakthrough Twin Cities. Through meaningful mentorship, one on one advising during summer programming, one on one financial counseling and other mentorship regarding college terms and necessities, college access programs utilize developmental relationships as a component of their organizations, making this theory directly applicable to the ongoing mentorship of programs like Breakthrough.

## **Guiding Research Questions**

Rooted in the theories outlined above, the following five research questions helped to guide the research process including the choice in research methods, survey and interview questions that help explore and identify critical features of college access programs that underlie their success in supporting under served and under-represented students.

1. How do college access programs influence the perceptions of college for both students and parents from traditionally marginalized backgrounds?
2. In what ways do college access programs shape self-concept, self-expectations, future orientation, and asset-based mindsets for their participants?
3. What are college access programs doing successfully to promote a college going culture?

4. What continued challenges or personal dilemmas do participating students encounter? In what ways does this influence their decisions about college attendance?
5. What implications exist for promoting educational equity in public schools based on the successful approaches of college access programs?

### **Study Design and Setting**

This study was designed to develop insight into about the successful components of college access programs as a whole; both the macro understanding of programming and the micro experience of a group of students participating in one specific program, Breakthrough Twin Cities. By combining these resources, the study will be informed by exploring the current climate for first generation college students by focusing on the students at Breakthrough Twin Cities as a case study for successful college access programs.

### **Sample**

In addition to the literature review and analysis of existing data provided by these organizations, there was empirical data collection. This encompassed surveys and interviews of multiple stakeholders associated with Breakthrough Twin Cities including participating middle and high school students, parents, Breakthrough staff and Breakthrough board members. Participants from all four stakeholder groups were selected on a voluntary basis and at the participants willingness to contribute their thoughts and experiences to the study.

### **Survey**

A total of 49 individuals participated in the short survey implemented using the survey platform Qualtrics. These participants included both year-round and seasonal staff members, members of the board of directors, student participants and parents. Survey Questions can be found in Appendix I.

| <b>Stakeholder Group</b>   | <b>Number of Respondents</b> |
|----------------------------|------------------------------|
| Board of Directors         | 11                           |
| Staff (including seasonal) | 15                           |
| Students (grades 7-11)     | 18                           |
| Parents                    | 6                            |

### **Interviews**

One on one interviews were also conducted. There were 19 total interviews conducted, many through in person meetings and several others through phone or video chat in order to meet the comfort levels and availability of participants. These interviews added nuance and support to the data found in surveys, in addition to providing more in-depth insights on emergent patterns found in this study. Below is specific information on the interviews including who participated and the formats in which they were conducted. Those participants who completed interviews also completed the survey, overlapping the total 49 participants noted previously. Interview questions used can be found in Appendix II. To respect the privacy of all participants, all names have been changed in the presentation of this study.

| <b>Stakeholder Group</b> | <b>Interview Format</b> |
|--------------------------|-------------------------|
| Student (grade 7)        | Video Chat              |
| Student (grade 8)        | Video Chat              |

|                                   |            |
|-----------------------------------|------------|
| Student (grade 10)                | Phone      |
| Student (grade 10)                | In Person  |
| Student (grade 10)                | In Person  |
| Student (grade 10)                | In Person  |
| Parent (students in grades 7 & 9) | Video Chat |
| Staff                             | In Person  |
| Staff                             | In Person  |
| Staff                             | In Person  |
| Staff                             | In Person  |
| Staff                             | In Person  |
| Staff                             | In Person  |
| Staff                             | In Person  |
| Board of Directors                | In Person  |
| Board of Directors                | In Person  |
| Board of Directors                | In Person  |
| Board of Directors                | In Person  |
| Board of Directors                | In Person  |

**Data Collection**

Data was collected through surveys using Qualtrics software and one on one interviews. These interviews were conducted both in person and using technology, such as FaceTime, and with the aid of a transcription software. Surveys were available electronically, accessible through the iPads available to students per their district policy and available technology for staff and board members.

## **Trustworthiness Criteria**

In order to ensure a credible, accurate portrayal of the influence and implications of college access programs, several measures were taken. One of these was clear record keeping and documentation of data collected which was verified through referential adequacy. Another key criteria for trustworthiness was that this study occurred over a prolonged period of time, spanning the length of the 2018-2019 academic year.

Triangulation of sources and participants were also implemented as a trustworthiness criteria (Lincoln et al, 2011). Finally, this study was read and edited through peer review by a classmate and graduate advisor to ensure dependability and confirmability of the data shared and collected and their relation to the conclusions posited.

## **Study Limitations**

A limitation of this research study lies in the amount of data collected on parent perspectives. Despite multiple efforts to contact parents, few signed up and were able and willing to share their insights on Breakthrough Twin Cities. Similarly, some parents that had signed up did not complete interviews and surveys. This results in limited knowledge of how parents feel and what they think about their students' participation in the college access programming. Based on feedback shared from students, this may be due to language barriers as well as non-traditional work schedules that made participating challenging for parents. This continues to be a barrier for Breakthrough Twin Cities as well and is an area of programming the organization continues to work on improving. While there was an insufficient sample size to draw conclusions on parent data alone, the parent perspective shared adds critical nuance to the understanding of Breakthrough's success.

Another limitation is the lack of perspective from students in grade 12. All of the student respondents are individuals in grades 7-11. While they gave important, generalizable insight into these years of the program, the point of view of the oldest students is not represented. More input from students in 12th grade would add important detail to the understanding of the organization and on the specific experiences and barriers of the actual college application, advising, choice and attendance process in which Breakthrough has demonstrated such success. It may be that these students are busy in actively planning their approaching college attendance but added understanding on the perspective of students who are nearly done with programming would add pertinent reflection on Breakthrough Twin Cities as an organization.

### **Findings: Successful College Access Programming Components**

|   |
|---|
| 1. Successful college access programming is tied to the teaching and use of cultural capital, rather than a focus on motivation.  |
| 2. College access programs shape self-concept and create asset based mindsets for participants through <ul style="list-style-type: none"> <li>● Future orientation</li> <li>● College going peer groups</li> <li>● community-based developmental relationships</li> </ul> |
| 3. The key factors of a successful college going culture are: <ul style="list-style-type: none"> <li>● Individualization</li> <li>● Unrestricted learning</li> <li>● Mirrored Positionality</li> </ul>  |

#### **1. Cultural Capital in Place of Motivation**

Through the surveys and interviews, it was found that college access programs change perceptions of college for traditionally marginalized backgrounds not necessarily through motivation or encouragement, but through awareness and support in using

cultural capital and other access related resources. Of the staff and students interviewed, each described having a deep desire to pursue higher education before entering Breakthrough Twin Cities, which is not surprising when considering with Breakthrough's rigorous application process and the highly motivated students they accept. This enthusiasm about college was echoed by each of the interviewed students who shared their reasons for joining BTC. From a 7<sup>th</sup> grader who replied, "I just really want to go to college", to an 8<sup>th</sup> grade student who reflected, "It's a really good investment for college. There's a lot of scholarship money you can earn" to a 10<sup>th</sup> grade student who shared, "mostly because my parents didn't go to college I kind of wanted to support base to help me go to college".

Parents feel similarly, for example Blong, a father of a 7<sup>th</sup> and a 9<sup>th</sup> grader participating in BTC said, "I wanted them to have something that I didn't have" and "Breakthrough gives them a heads up". Staff echo this sentiment, as one staff member stated, "I really like that [Breakthrough] had a focused mission, it seemed to have real impact on kids. I'm really committed to helping under resourced and under-represented youth to find success." Board members echo this, including one that is a first-generation college student herself who said, "I faced a lot of the very similar situations and lack of information" and "didn't have people in my circle that have attended higher education."

### **Capital in place of Motivation**

College access programs are often associated with motivation and attempts to engage students. In place of motivation, students, staff and board members allude to the additional resources and college going knowledge as a key to helping them feel prepared to approach college. This starts at the program level, creating and supporting opportunities to talk about, engage with and experience the many components needed to pursue higher education. Michi highlighted this point: “I frame how Breakthrough operates less about *helping* the under resourced kid and more about what I can do to move stuff out of your way. So that people can see your light, so that people can see how vibrant and brilliant you are.” This takes shape in many different ways including through “college knowledge”, experiential opportunities and outside opportunities. Students also feel this way, demonstrated by the below graph (figure 1), which shows the types of knowledge and resources students have been exposed to at BTC and find most significant, such as academics, choosing a higher education institution and major, and understanding the steps to applying to college. Staff (figure 2) and board members (figure 3) echo these sentiments and report similar cultural capital gains as demonstrated below. Each stakeholder group was asked about the types of support Breakthrough provides.

Figure 1-Student

Q9 - Breakthrough has supported me in the following

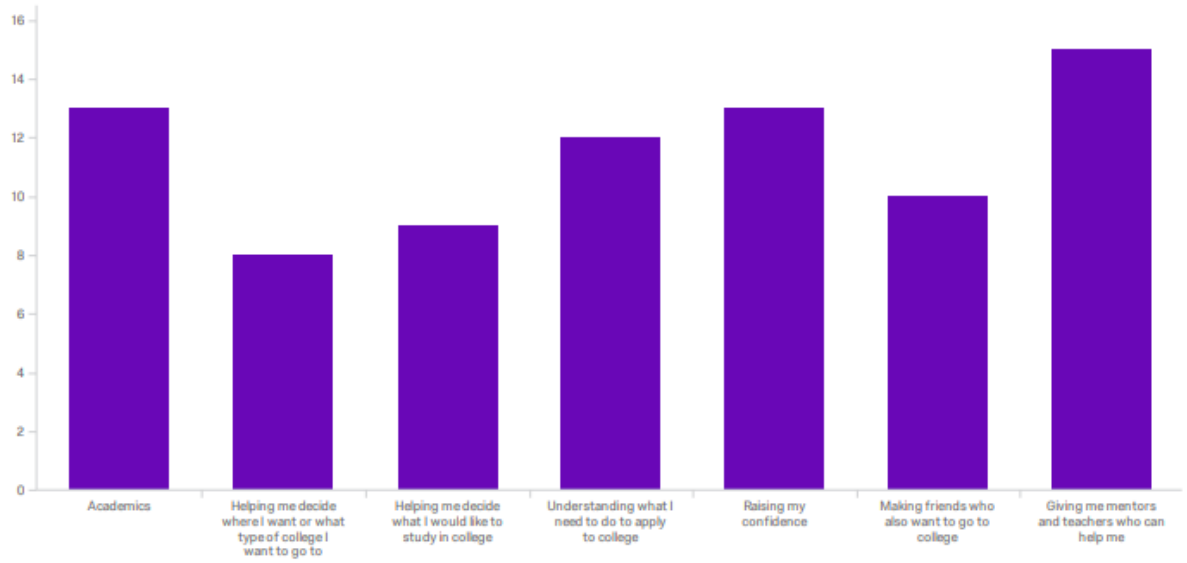


Figure 2-Staff

Q7 - I have seen Breakthrough support students in the following ways:

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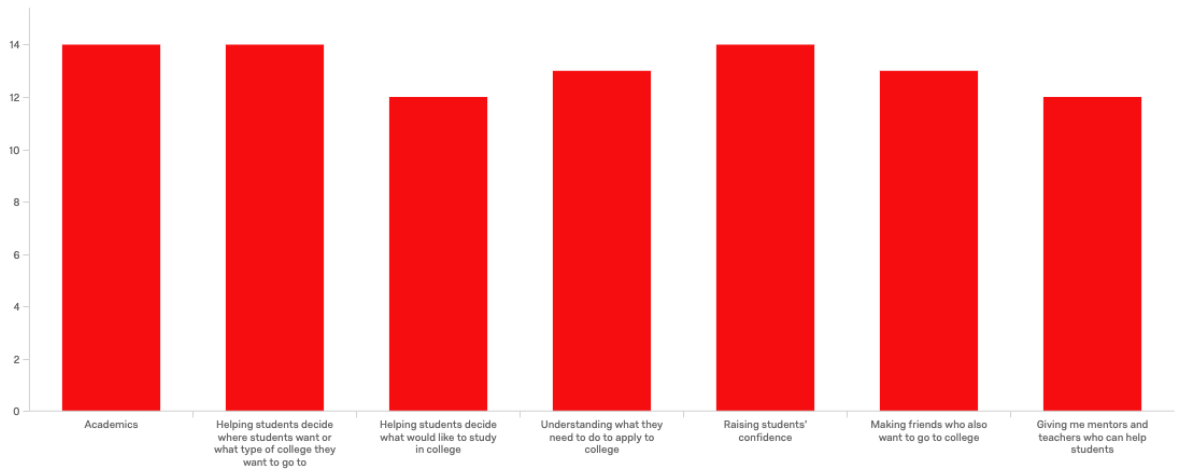
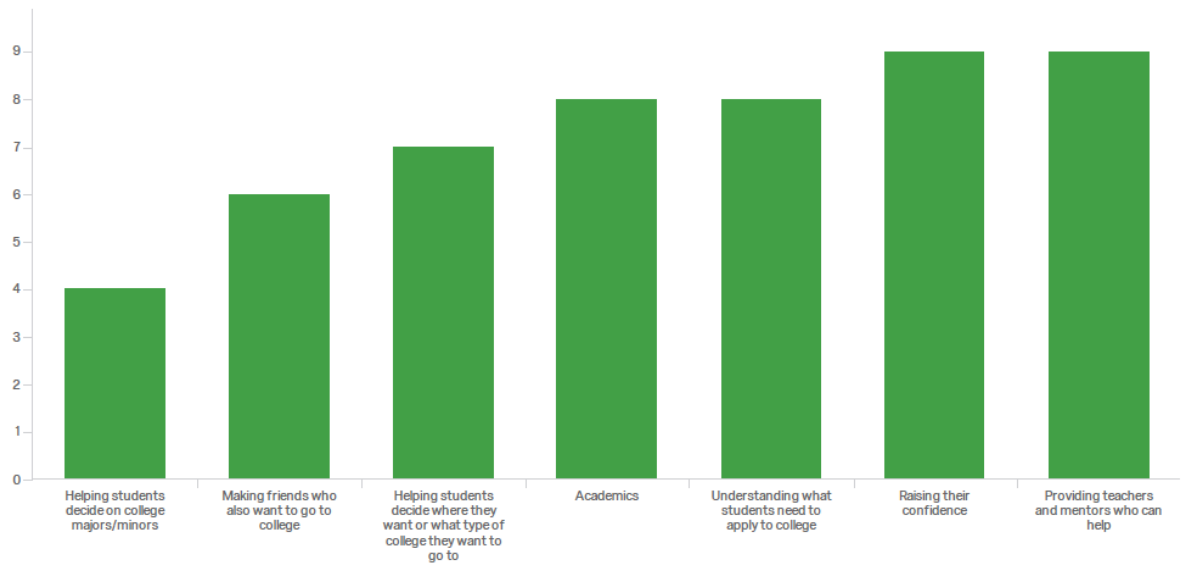


Figure 3-Board of Directors

Q7 - I have seen/heard Breakthrough support students in the following ways:



It is evident through these graphics of stakeholder opinion that Breakthrough is providing a variety of cultural capital with which students can interact and develop throughout their participation in the program.

### **Concrete Cultural Capital**

The first of these are more concrete, specific cultural capital necessary for accessing college. This includes information such as understanding college majors and minors, explaining Free Application for Federal Student Aid (FAFSA), the difference between public and private universities and ways to finance a college education including scholarships, grants and loans. This type of knowledge is spread through the use of daily College Knowledge questions posed to students, lessons presented during their homeroom, referred to as College, messages in All School Meeting (ASM) and other formalized opportunities to transfer of cultural capital related to going to college. This also happens at the Saturday sessions and college counseling sessions where students participate in specific workshops on resources like scholarship application and school choice.

The information on finances may be one of the most pertinent types of knowledge specific to college access that students get support in. One of the college counselors, for example, shared that a huge part of their job is explaining financing options including introducing Pell grants, nationally funded grants for higher education established for students from low socioeconomic backgrounds. It is because of this support that, “about 90% of our students at least get a partial [Pell grant], most of those will be full.” The same can be said for Minnesota level grants that work the way Pell grants do for students if they stay at Minnesota institutions.

Knowledge and language on college application steps, academics and finances are clearly one of the major takeaways students appear to gain from BTC programming. When asked about their comfort level with the steps of applying to college, students demonstrated varying levels of comfort before joining BTC. Each group was asked about their perception of college readiness, students and parents before and after, as well as staff and board members about their perceptions of impact too.

Figure 4-Students (Before)

Q6 - Before beginning Breakthrough, how comfortable did you feel understanding the high school steps in applying to college (i.e. GPA, ACT/SAT, applications, financial aid)

(Gradient)

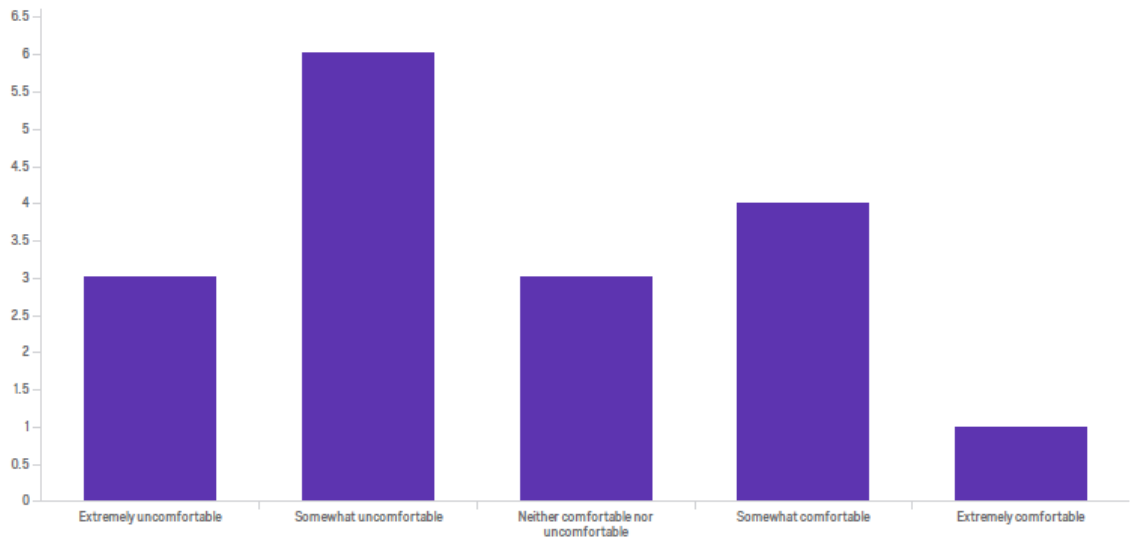


Figure 5- Students (After)

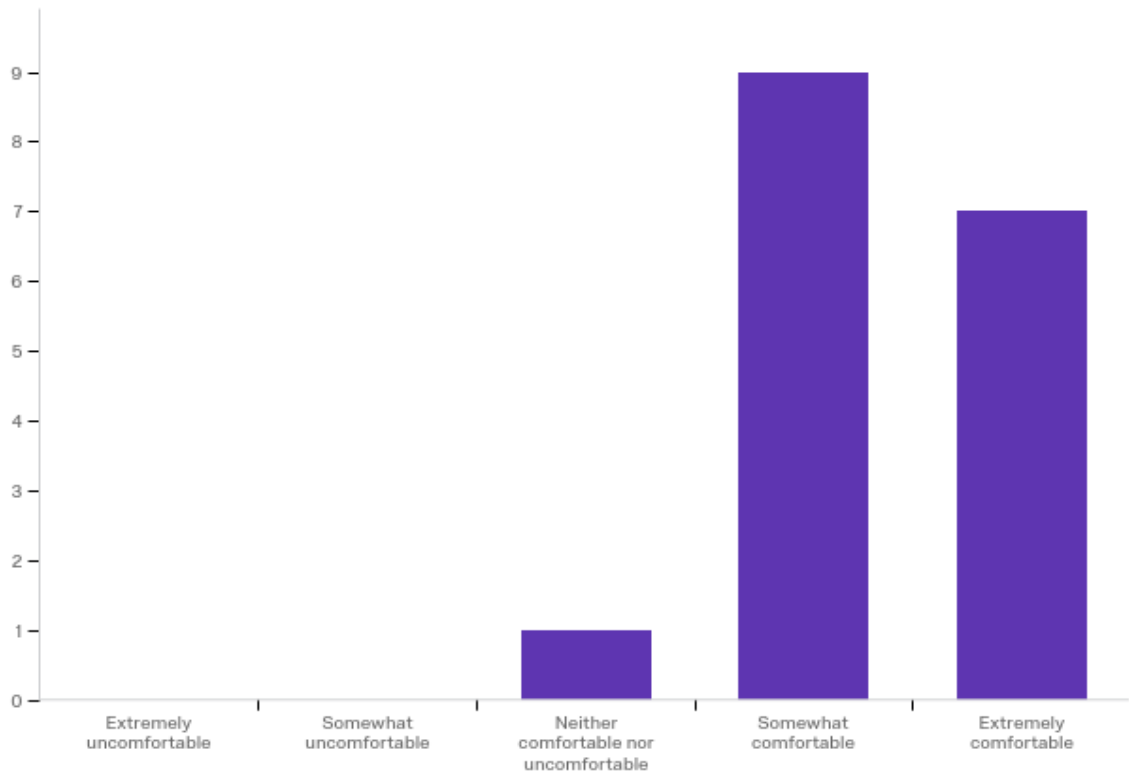


Figure 6- Parents (Before)

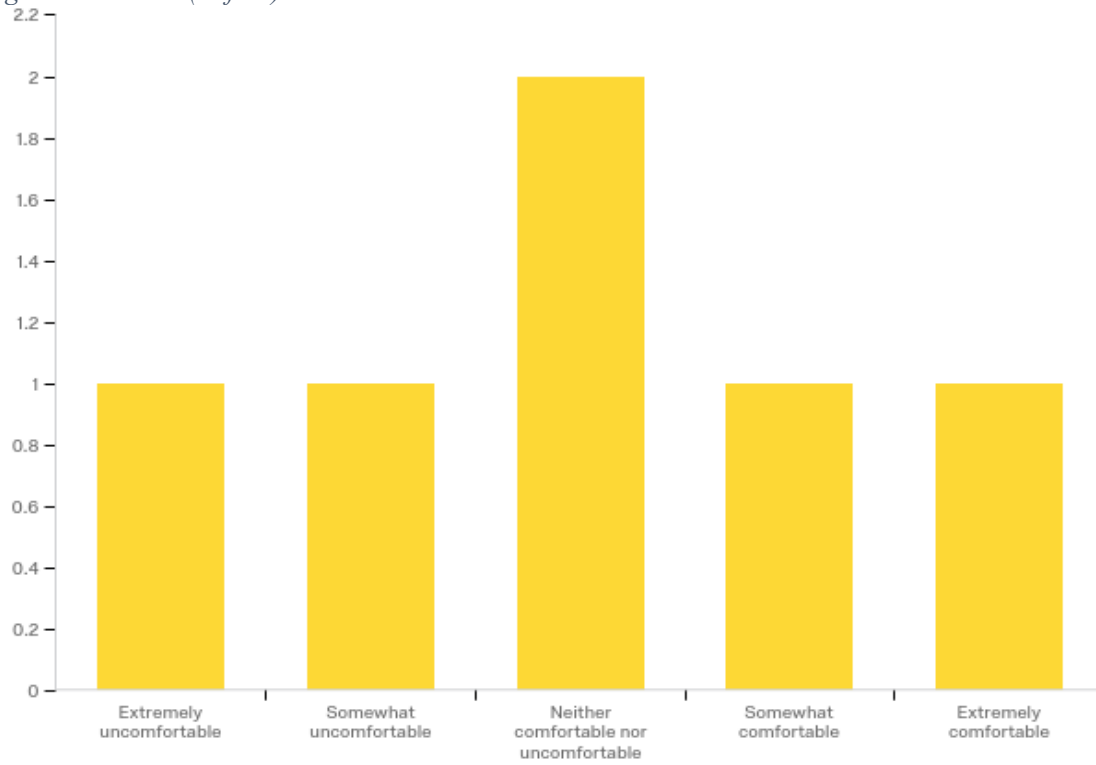


Figure 7- Parents (After)

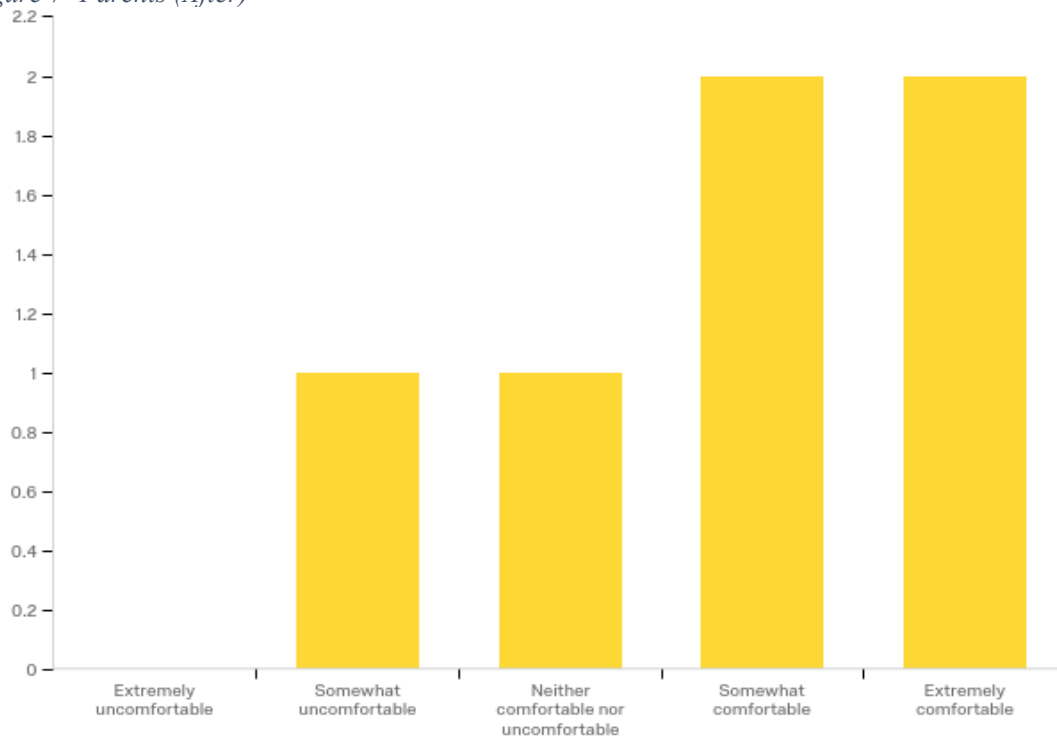


Figure 8- Staff (Breakthrough's perceived influence on students)

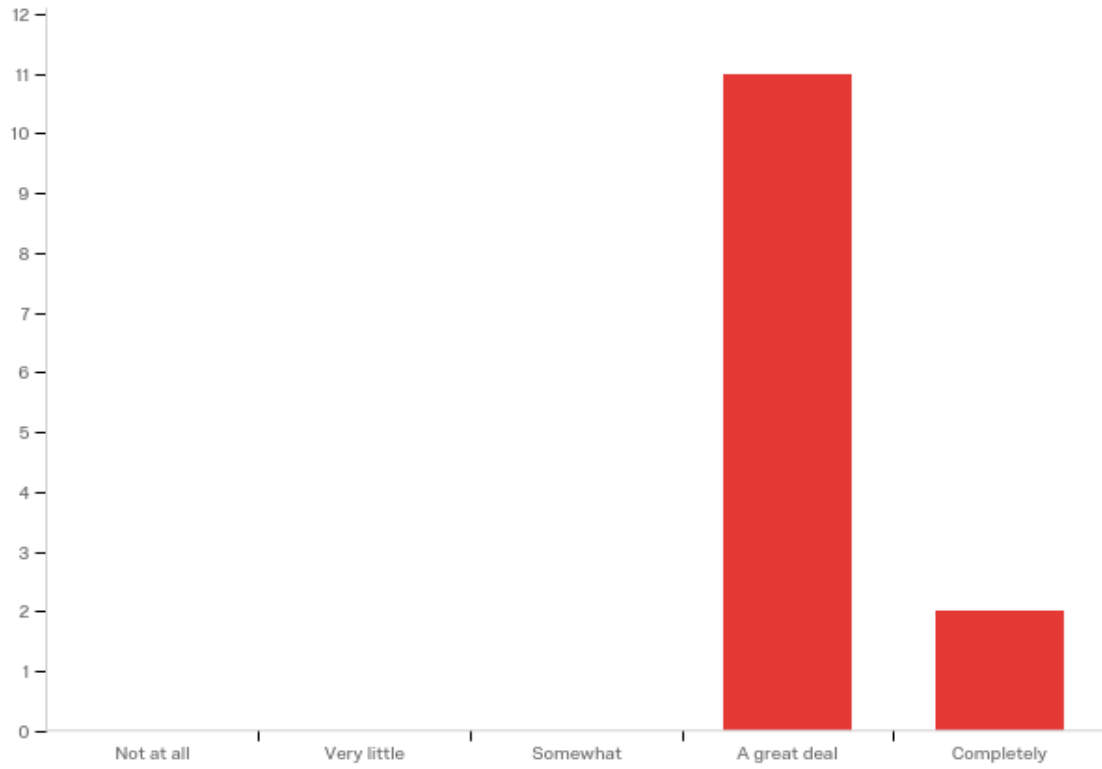
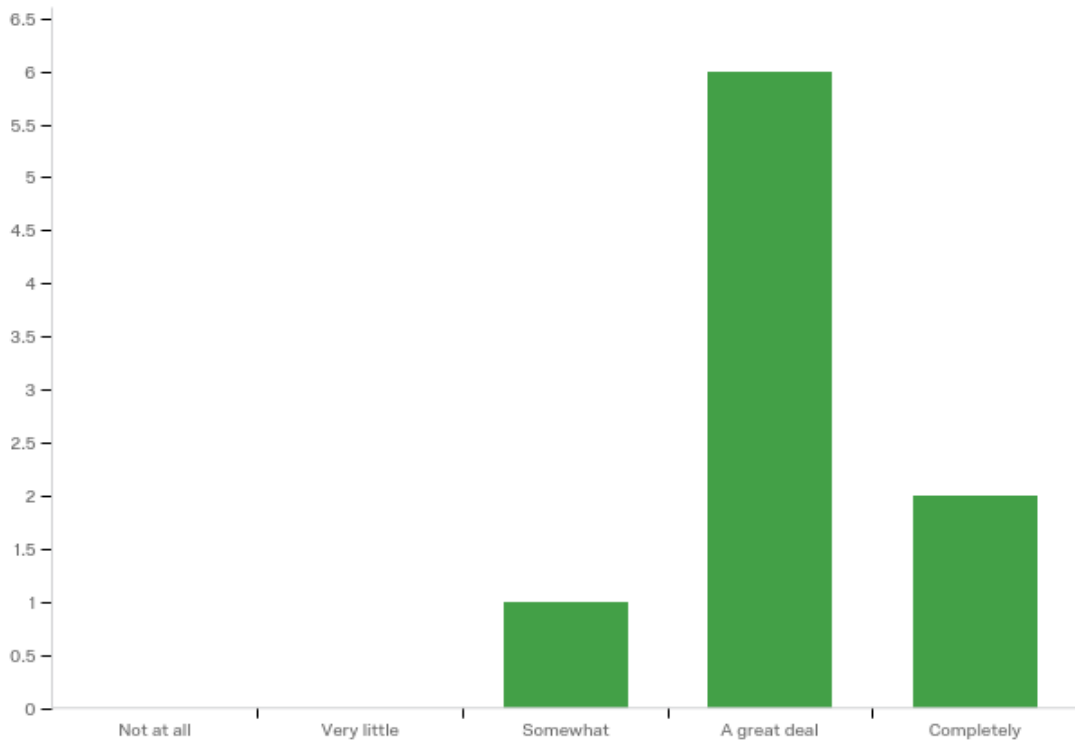


Figure 9- Board of Directors (Breakthrough's perceived influence on students)



These graphs illustrate the impact teaching explicit higher education cultural capital has in removing barriers to college access. After participating in Breakthrough nearly all students felt either somewhat comfortable or extremely comfortable with the steps of applying to college (figure 5). Parents reflected student's views, beginning with a variety of answers, but demonstrating increased comfort in college application steps (figures 6 & 7). Staff (figure 8) and board members (figure 7) alike report a positive influence on concrete cultural capital made by Breakthrough Twin Cities' programming. Each of these graphs illustrates the perceived influence Breakthrough has had on introducing and reinforcing cultural capital related to college attendance for students and parents, as well as from staff and board members.

### **Experiential Cultural Capital**

In addition to factual, concrete knowledge on college are the experiences that Breakthrough provides, each summer and every school year, Breakthrough provides opportunities to tour and explore college campuses in the area. Some of the campuses students have had the opportunity to visit include Hamline University, the University of Minnesota, St. John's University and College of St. Benedict, and the University of Wisconsin-Stout. Mai describes these types of Breakthrough experiences as "exposure", highlighting that "It helps because then we can ask [college students] like, how's it feels to be [in] college today? ... It's kind of cool that we get to know beforehand what college is like." A similar experiential resource shared with Breakthrough students are panels with college admissions personnel. When available, Breakthrough provides opportunities to sit in and ask questions of admissions counselors from different schools in person or through the use of technology. Henry, a particularly motivated 10th grader who hopes to

attend a prestigious university describes this opportunity: “Something that really helps you just said it was just like connecting with real people. Breakthrough got an admissions officer from MIT to come over. That was really helpful. And I also went to Princeton admissions thing, and Breakthrough set up both of those.”

These types of opportunities make space for students to interact with the types of institutions they hope to attend, connecting students’ goals with reality.

### **Outside Cultural Capital**

The final component of this cultural capital sharing through which Breakthrough encourages its participants is through connecting them with opportunities outside of the program. Sometimes this takes place in their school as a bridge from Breakthrough to school. Alex, a staff member who has served in several roles at BTC, describes his current role as an outside resource in which he helps to support students who, for a variety of reasons, are less involved in programming. He describes his position as being an advocate- “I’m there to offer support or guidance or be somebody who advocates for them at school and keeps coming back.” These types of added opportunities for students outside of regular programming provide space to meet students where they are in their journey to college and give an extra boost if they need it. On the flip side are students who are already very involved and desire additional chances to bolster their journey to college. Eh, a quiet, yet passionate 10th grader described this in reference to an outside medical field camp she attended because she found out about it through a Breakthrough staff member. “I would never have joined like, signed up for like Camp Cardiac if it wasn't for Breakthrough”. Whether for additional help in facing adversity or striving to

participate in new activities, Breakthrough creates opportunities for their students both inside and outside of their programming.

The combination of cultural capital provided to students including “College Knowledge”, experiences at colleges and universities and outside supports depicts how Breakthrough combines deeply impacts student’s self-concept regarding their own college going future. John illustrates that Breakthrough is tasked with breaking down barriers around this capital, stating “It’s just not necessarily knowing what you don’t know.” Others felt this way too, as evidenced by graph data below. These views included opinions from students (purple), parents (yellow) and staff (red) when asked, to what extent Breakthrough has helped prepare students for college. The answers are overwhelmingly positive, as 71% of student respondents said either “a great deal” or “completely” as well as 80% of staff responding the same way.

Breakthrough takes the time, effort and resources to connect its already highly motivated students with the knowledge, people and spaces needed for them to begin seeing themselves in higher education. James, a precocious 8th grader, illustrates this point saying that, “Actually, I really want to go to college now. It's, it seems like a much bigger possibility for me now than it did before.” BTC’s programming is not about *saving* or *motivating* students, but rather giving them the language and tools to be able to access college in a meaningful, relevant way.

## **2. College Access Programming’s Self-Concept Development & Asset-Based Mindsets**

Breakthrough Twin Cities also focuses on developing student self-concept, self-expectations and orientation through their seven Codes to College Success. Many college

access programs have been criticized for reproducing meritocratic and white supremacist practices, a result of approaching students with deficit mindsets. One such program was studied in *Cultural Competence, Race, and Gender: Portraits of Teaching in High School College Access Programs*. The author found that “on many levels, the deficit discourses ... reveal deep-seated ideas about how lacking their students are, both in terms of educational ability and racial identity” (Brooks, 195, 2018). One component which Breakthrough prides itself on and which students, staff and board members confirm, is the sense of growth mindset instilled in students as well as staff throughout all programming.

### **Future Orientation**

“The codes”, the social emotional learning targets at BTC, are exemplified in many spaces within BTC, but perhaps most notably in its approach to developing future orientation. Future orientation involves motivation, planning and evaluation for students. As previously discussed, students enter Breakthrough with high levels of motivation developed in their lives prior, but Breakthrough exists to help with the planning and evaluation of student actions and emotions during their journey to college. One critical piece to this, which Breakthrough and few other college access programs , is their early start to programming. Most programs begin in high school, but BTC begins their programming for rising 7th graders; students who have completed 6th grade and will begin 7th grade in the Fall. John illustrates the impact of starting early: “I think starting early and having a long-term focus are two integral parts that work together... Those are profound and powerful times for young people and their identification of who they’re going to be.” Henry noticed this as well, highlighting in his interview: “I’ve noticed a lot

of the lot of the resources given out like, planning for the future and just like looking at colleges.” This early start and continual support over the course of their adolescence results in students who have a sense of community, guidance in making strong academic and financial choices and feel prepared to take on a challenge that is often new to their family.

### **College Going Peer Groups**

Strive to understand and relish hard work together, two other codes, are also embodied in programming through student and staff approaches at Breakthrough. Breakthrough’s established cohort program, in which students are provided a designated site and take courses dominantly with other students in their grade level, immediately begins establishing a sense of belonging to a college going peer group. Naw described this as a key to her success and enjoyment of Breakthrough: “It gave me good friends that I can relate to who want to go to college and [have] the same type of interests as me... we relate to each other and help each other out”. Henry also depicts these goal-oriented friendships: “there are a couple of committed Breakthrough students that really like push to get good grades seek opportunities and some friends at school just aren't really like active in seeking out opportunities that will help them get to colleges.”

### **Community-Based Developmental Relationships**

Finally, is the creation of developmental relationships at Breakthrough Twin Cities. While developmental relationships have been traditionally viewed as a mentor-mentee relationship that applies to two individuals, BTC has expanded these relationships to be more community based. These collective relationships focus on a sense of belonging within a group, rather than among individuals as relationships are so often

considered. Per the nature of the programming, Teaching Fellows spend 1-3 summer teaching on average, due to their eligibility as high school and college students. This prompts Breakthrough to develop more collective relationships throughout the program, rather than only individualized relationships, to maintain the integrity and support of the program. John illustrates this point, saying “I think that’s a true goal of ours and a secret to sustainability. Because if your relationship with Breakthrough is dependent upon one adult, that is vulnerable to lots of life transition on either side. So, a relationship that is built to the organization and to multiple people and other students within the organization is much more able to support students through a variety of life experiences”. Paul, a board member who was a first-generation college student and is an immigrant himself, cites these relationships as being a key to low attrition too. “Attrition is relatively low. And when you look to the attrition... the parents are moving or there is simply something major happening in their life that they cannot control. But otherwise they stick with us. Then they try to bring in their brothers and sisters, so [relationships] are so important.” He credits relationships formed at Breakthrough for the progress and consistent participation and, therefore, the low levels of students leaving the program across their six-year commitment.

The second critical component to a developmental relationship, or in this instance developmental community relationships, is the changing of the relationship over time. As the students move through the program, they are given more and more responsibility towards their academic pursuits, expectations for participation and ultimately on their choices for application and college or university attendance. This is true of their friendships and personal relationships that develop within BTC too, which ebb and flow

just as the community based developmental relationships do. John: “As students get older, their understanding of that relationship shifts and changes as they participate in other things, see Breakthrough less frequently. Their friendships grow in different directions”. These shifts in friendships and mentorship at BTC embody a new facet of the theory of developmental relationships, which is a key marker to their low attrition and supported self-concept regarding college access.

Through the use of future orientation, college going peer groups and the creation of community-based developmental relationships, Breakthrough Twin Cities has helped foster asset-based mindsets for its participants and supported the building of their self-concept as college going young people.

### **3. Practices of Successful College Access Programs**

It has been and continues to be evident that Breakthrough Twin Cities has demonstrated itself to be a successful organization in its ability to provide necessary cultural capital, encourage students to plan for the future and by helping students develop a sense of community filled with a variety of relationships. Many organizations that students are involved in may be doing similar things for students too, but there are practices that make Breakthrough different than other college access programs, school spaces and extracurricular activities for these highly-motivated students including individualization, unrestricted learning and mirrored positionality.

#### **Individualization**

One of these practices, mentioned by staff, students and board members alike is the individualization available at Breakthrough. For many logistical reasons, including small class sizes ranging from 8-15 students, this individualization is not only possible,

but a flourishing component of the programming. When asking students how Breakthrough was different than school, nearly all of them illustrated that Breakthrough was able to provide them more support at the individual level. James elaborates, reporting that “Breakthrough has a lot more one on one help, I guess you could say the staff is super friendly. I feel like at home there... because Breakthrough is a lot smaller than school, I get a lot more help there than I do at school.”

This personalized support is helpful at the middle school level but becomes a critical point of college access in grades 11 and 12. At this point, students get small group ACT preparation courses and meet with college counselors one on one at multiple points to discuss everything from school finances to school choice to how to sign up for housing at their chosen schools. Kyle described his role in supporting students in an individualized role: “We do a very individualized process. It's very interesting in the sense that you get to know each student and help them with what they need, you develop relationships with the students. We don't really do it as a classroom, one size fits all model, which is sort of an exaggeration of what other college access programs do.” The individualized nature allows students to ask questions and gain backing specific to their needs and hopes for college. Kyle went on to describe how this is different than school set ups: “the ones that are based in schools do more of a curricular approach” which John also discussed in his interview. “There is one or less than one full time person serving every senior in high school, which is absurd, for a very complicated and nuanced process of applying to, seeking financial aid, evaluating the right decision, making decisions about potential data that could have yearlong implications.” In this way, Breakthrough is

particularly determined in its attempts to remove barriers to both learning and actually applying to and choosing a college.

### **Unrestricted Learning**

Another key component that is specific to Breakthrough's success is *how* teachers teach and *how* students learn. While teachers are high school and college age students themselves, they are given standards aligned curriculum and licensed teachers, who serve as coaches, to support them in the scope and sequence of curriculum, lesson plan writing and student assessment. They have the supports needed to approach teaching, but also have the space to be creative and use culturally relevant pedagogy, a practice coined by Gloria Ladson-Billings which "helps students to accept and affirm their cultural identity while developing critical perspectives" (Ladson-Billings, 469, 1995). These teachers, though still adhering to standards and some classical approaches to teaching, are far less restrained to specific curriculum, methods or standardized assessments than licensed teachers in public schools. The result are students who genuinely and actively engaged in their learning and feel that their academic work is culturally relevant. Tim, a long-time board member, describes this saying, "we don't have rules and regulations for teachers, we just want them to be engaged, and to be enthusiastic, and to impart that enthusiasm on the students when they do it". This space for creative approaches and supportive problem solving are unique to Breakthrough and are practices that will be referred to as **unrestricted learning** throughout the remainder of this study.

Unrestricted learning is not simply noticed by board members, but by teachers and students too. Eh refers to a favorite literature teacher saying that, "was more interesting than at school and I was able to enjoy [...] the books I was reading a lot more

at school.” Ci, a shy 7th grader, echoes this very plainly referring to his math teacher- “He taught us math and yeah it was fun... He taught it in better ways” and “we get more free time and more time to communicate with other students.” Students find a palpable difference in the approaches and engagement of their teachers, which is sensed not only by students, but by visitors too. Carole, a board member recalls attending a visitor's day and noticing “The students seem very engaged. It was not passive learning at all... They seemed not just engaged, but super enthusiastic.” John explains this approach to unrestricted learning, reflecting on his own past as a teaching fellow. He reflects that, “Young people like myself were invited to be owners and stakeholders of the program culture and have a responsibility to invest, create, shape, and steward the work that was happening. It was really fun to watch students really come alive in that positive and accepting space.” This type of unrestricted learning is a key to what makes Breakthrough such a successful organization.

### **Mirrored Positionality**

Lastly, is the use of the “near peer” relationships employed at Breakthrough Twin Cities. As previously mentioned, Teaching Fellows are all high school and college age students, as are the majority of school year coaches that support students during their Saturday sessions. “Near peer” refers to individuals close in age, here specifically to those working together who have an age gap of 10 years or less. Staff members have much to say on this fact in reference to program success, like Michi, who says that “Our teachers are really young. And that’s, I think, a really cool thing for our students to see young people being so powerful in spaces that are traditionally not for young people.” Students also note the importance of having teachers who are close in age to them. James

recalls a time where his teacher was able to give him personalized, relatable support on a tough day: “I remember this one time where I was really sad, and I kind of just ran out of the classroom crying... Heather bumped into me... she gave me a hug. And then we walked around the track and we worked things out. We sat down, and we talked about it, and then we got to evaluate it and evaluate my actions”. These near peer relationships are frequently referenced at Breakthrough, but through this research there appears to be an even deeper meaning to these relationships.

While the age of Teaching Fellows and other staff has shown an impact on students, so have the identities of these individuals. Overwhelmingly, students shared anecdotes and details about mentors who they related to on the basis of identity, in addition to age. This will be called **mirrored positionality**, henceforth, and refers to the impact of being able to see oneself in the position of another with whom there is a positional similarity, such as race, ethnicity, language, or socioeconomic status. For adolescents at Breakthrough, this may mean having a teacher of the same race, a staff role model who speaks the same home language or program alumni successfully navigating college from a low socioeconomic background. Victor, a board member, notes the mirrored positionality of student to Teaching Fellow, stating that “you get to experience the activity level of a brown student being in a classroom with a teacher who's let's say, maybe 10 years older? They're not that far removed. Yeah. And they've, they've got the ability to see *I* could do that. That could be *me*.” Much of this is rooted in Breakthrough's efforts to get more diverse perspectives leading classrooms, demonstrating a level of teachers of color and male teachers much higher than the Minnesota average, as noted previously. Matt, a staff member illustrates the importance

of this part of the mission. “I would say the other part is the near peer relationships that come. It's like you're seeing someone in the front of a classroom who, you know, either matches your background or has gone through similar things.”

Staff and the board definitely see the impact of mirrored positionality at BTC, but perhaps the most convincing is what students have to say. Henry tells, both in his interview and on his survey, of a Teaching Fellow who also identifies as a person of color and a male that attends a prestigious university. “Rogelio was a big influence on my work ethic. And then also just my motivation, because, I don't know, whenever we're in class, he was just, like, telling us to, like, like, he knew that I had the capabilities of answering questions, but sometimes I wouldn't answer, I wouldn't raise my hand. And then he would like, like, call me out. And like the most [...] friendly way you would say, like, like, stop slacking, you can do much better than this. [...] I think that really helped me and also cause he knew a lot about prestigious schools, because he goes to Princeton now.” Henry speaks of this with such respect and admiration, perhaps in a way that could only be prompted by the impact of mirrored positionality.

Michi also depicts the profound effect a Teaching Fellow was able to have on a student, based in their shared identities. She tells of a kudos card, a type of thank you given to Teaching Fellows at the end of the summer program, from Terrence to Destin—both of whom identify as black males. Destin shared the kudos card in his Presentation of Learning at the end of the summer. Michi recalls that, “Terrence explicitly thanked him for being a black man in the classroom... it was the first time he had had a teacher who's black who looked like him.” In addition to demonstrating Breakthrough's code, “Be Grateful”, Terrence also demonstrates the deep impression having a teacher who

identifies in a similar way that one can have on the way educational experiences can be perceived.

Several other students, in both interviews and surveys, reflect on the mentors who were most meaningful to them being individuals they identified with as *both* close in age and connecting with another through cultural identity. A Hmong male student identifies a Hmong male science teacher he had at BTC. Eh, an Asian female student describes how Michi, a fellow Asian female, supported her in scholarship writing and check in. Another Asian identifying student notes three teachers in their response to being asked about mentors- all three were also Asian identifying. While not all of the role models and mentors mentioned by students identified the same way by race, gender or other key identity points, a critical component for many students' experience was having a mentor that mirrored their own positionality.

Breakthrough Twin Cities' individualized nature, its freedom of unrestricted learning and its dedication to mirrored positionality have all demonstrated integral, specific practices leading to the organization's success. These rituals and thought processes are core to the program and have served as a foundation to the organization's aim and improving equity in higher education.

#### **4. Persistent Barriers**

Despite the many positive influences and barrier breaking capabilities of Breakthrough Twin Cities, challenges and personal dilemmas still exist for its participating students- both within and outside of Breakthrough. These challenges demonstrate the limitations of a single program and orientate BTC in the larger context of a student's life.

##### **Internal Barriers**

As a whole, students feel generally supported by the programming, staff and relationships they encounter at Breakthrough Twin Cities. However, there are instances in which students do not feel fully served by the organization. One example of this is Henry's experience with Saturday sessions. While individualization occurs frequently during the summer program and during the college counseling process, there is a lack of differentiation available at Saturday sessions. Henry describes some frustration with Saturday sessions, elaborating on a time where students were asked to look up basic information on colleges. Henry had already done some of this work independently, due to the fact that he has access to technology at home and was self-motivated to begin this process on his own. He elaborated saying, "I think it really provides kids with resources that a lot of people don't have access to. However, for me, I would say that hasn't been beneficial recently, because just a lot of the stuff I can access." This is reflected in some survey data in which students had varying answers to the question: To what extent has Breakthrough helped you prepare for college? Of the 15 student respondents, 1 replied "completely", 9 said "a great deal", which demonstrates the positive impact BTC has had, but 4 students answered "somewhat". This highlights the effectiveness of Breakthrough on self-concept, but also acknowledges the variance in student experience. In this way, some programming aspects could benefit from differentiation, demonstrating one internal barrier illustrated within BTC.

### **External Barriers**

While there are some internal barriers that inhibit students at Breakthrough, it appears that outside factors have and still pose the most significant on-going challenges. One of these continues to be the presence of obstacles in the other spaces these students

inhabit, such as their schools, neighborhoods or extracurricular activities. Alex notes this as a core function of his position is to individually support students who are struggling outside of Breakthrough. He reflects, “I think that what I'm seeing is a lot of these kids who I work with maybe started out as highly motivated but have gotten the impression over the years that they're just not going to succeed. I think that in many cases, it's because students are dealing with a lot at home that makes it tough for them to prioritize school work.” Thomas alludes to similar outside barriers, sharing that students often have additional responsibilities and struggles BTC students often have outside of the program, such as financial struggles and intensive family roles.

Breakthrough works within its reach to push these obstacles, while still acknowledging its capacity as a single part of students' lives. John phrased this notion as a way to *empower* students to *solve problems* when they face them. He highlights that, “Recognizing that really our students come into our program with everything that they need. And it's really a system that is constructed in a way that is actively working against them. So being a program that is really empowering students to solve problems, to unleash their full potential... not fixing the students, but helping students play the game.”

Though Breakthrough Twin Cities has demonstrated success in meeting its mission, it should be acknowledged that this program alone cannot entirely dismantle the barriers its students face. These barriers, though hindering, are important to understand and reference in understanding each student's journey through Breakthrough to college.

## Conclusions & Recommendations

This case study contributes new understandings of the components and practices that have led to Breakthrough Twin Cities' success in supporting under resourced and under-represented students access higher education. These programmatic practices include sharing cultural capital and resources, creating community based developmental relationships, encouraging future orientation of planning and evaluation, increasing individualization, limiting restrictions (or removing them when possible) on learning and employing individuals with whom students can see their own identities mirrored. Illustrated by Michi, "It's not just about sending poor brown kids to college, it's about also making it sustainable. So, we're going to start in middle school, we're going to start talking about college, and we're going to start developing good study habits. And then when we get to high school, you're going to maintain those good study habits. And we're going to talk about what it looks like to navigate predominantly white spaces. And then when you get to college, we're going to make sure that you receive an obscene amount of money and make it truly accessible, so that we're not actually perpetuating the cycle of poverty."

From this research, several recommendations have arisen based on the feedback of participants and interpretation of their voices and experiences. . One such suggestion centers around the 10th grade experience of BTC students. While students in grades 7-9 have the support of the summer programs and students in grades 11 and 12 have support from the college counselors and ACT preparation course, students in grade 10 only have Saturday session. A 10th grade student shared in their interview that Saturday sessions are the only programming that 10th graders receive. They illustrated this point, saying that the staff "doesn't have enough ideas to help us because they also know that we're in

an awkward spot”. A staff member also highlighted this point by saying that “I've put a lot of thought into what that could look like, and what that could mean for our kids who are in that transition, where you're not quite ready to apply for college, and scholarships, and take your ACT, you're but you're past the point of developing study skills.” This continues to be a challenge for Breakthrough and is a space that requires some added support and intentional programming implementation such as additional outside resources and activities that may inspire and foster their interests.

Another recommendation for progressing Breakthrough Twin Cities would be to create and track an alumni database of BTC alumni and Teaching Fellows. While some degree of this exists on the part of the staff, it may be helpful to connect students with this type of information in order to connect current students with older students attending the institutions they are considering or pursuing the majors in which students are interested. By setting up a space with names, institutions, majors and contact information, students can take initiative in learning more about specific experiences through a lens of mirrored positionality in a comfortable manner. A 10th grade student described a school they hope to attend in their interview which could be connected with a Teaching Fellow alumna, making an easy link to continue the support students receive at Breakthrough while simultaneously keeping in contact with their former students and faculty members. This may also help in supporting students who are already in college to provide a sense of continued community. According to Thomas, “one of the biggest factors in dropping out of college even once you've gotten to college is not being able to be academically or socially supported”. This may be a simple solution to minimizing the possibility for isolation in navigating Predominantly White Institutions or in experiencing a type of hero

complex. John explains that, “So many times students at Breakthrough serve are kind of forced into this box of being a hero... they don’t need to be perfect for our program to be a success.” An alumni network may help to alleviate feelings of isolation and hero complex while also providing networks for current students interested in learning more about a major or an institution.

Finally, is the recommended expansion of Breakthrough Twin Cities. According to one board member, “unfortunately [Breakthrough] is a very well-kept secret, because of its size”. Expanding Breakthrough’s ability to reach more students and employ more Teaching Fellows, Instructional Coaches and full-time staff will both better help individual students and contribute to a larger movement of college access for under-represented students in two concrete ways. The first would be to add more sites to the BTC family. This has been attempted before with some success, but will require more funding, vigilant oversight and strong infrastructure. Another space that BTC can expand its reach is in the diversification of its board. There have been positive shifts in employing individuals from diverse racial, linguistic and socioeconomic backgrounds in both the full time and seasonal staff. However, the board has not yet experienced this progress. While many of the members have backgrounds similar to the students on being first generation college students and coming from low socioeconomic backgrounds, the board is not representative of BTC in regard to race, ethnicity or home language. At this point in time, only two members identify as races other than white and a small percentage speak languages other than English. One board member described this as, “you've got a lot of well-intentioned individuals and those who are able to necessarily give up their time and resources may fall within a particular bucket. Those individuals will tap others

within their network.” According to this board member, this results in a continuation of having the same demographics represented by the Board of Directors over time. By continuing to diversify the adults that represent and serve Breakthrough, the experiences of the students may be better represented at the funding, programming and evaluation levels of the program.

### **Implications**

Breakthrough’s success in minimizing and, when possible, removing barriers to equitable access to higher education has much to teach similar college access programs as well as public schools that teach similar demographics of students. The described practices, while found and implemented at Breakthrough Twin Cities, have the capabilities to exist and thrive in other organizations as well, such as fellow college access programs, public school classrooms and other education non-profit settings. These high leverage organizational components can be applied, developed and evaluated at any site supporting underserved and under-represented adolescents, though more research is required in understanding how to initiate and sustain such practices in other educational environments.

Breakthrough Twin Cities has found success in college access programming for many years, although not without their challenges. Leadership changes, funding upsets and site changes have presented obstacles to the organization, but the implementation of student-centered programming bolstered by the diversification of the teaching field have proven to be successful in meeting the two-pronged mission of Breakthrough Collaborative. This unique college access program has much to emulate in their

successful promotion of motivated, bright, enthusiastic young people determined to make higher education a reality for themselves as traditionally marginalized individuals.

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## Appendix I- Codebook

| <b>Academic Term</b>                  | <b>Definition</b>   |
|---------------------------------------|---|
| First Generation College Student      | Students who do not have any parental history of college attendance, frequently under-represented in current college spaces by race, language, and socioeconomic status.  |
| Continuing Generation College Student | Students who have one or more parent(s) with a bachelor's degree or higher level of education   |
| College Access Program                | Programs aimed at supporting first generation college students and historically under-represented students apply and get into institutions of higher education  |
| Developmental Relationships           | Reciprocal human interactions that embody an enduring emotional attachment that increases power and responsibility onto the developing person (mentee) over time. These relationships may include teacher to student relationships, student to student relationships, instructional coach to teaching fellow relationships and staff to faculty relationships. These relationships are contingent on time spent together, a transfer of knowledge or culture and in tangible progress/growth of the mentee. |
| Cultural Capital                      | The items, language and other cultural aspects are valued by the dominant class in a society or organization  |
| Future Orientation                    | The connection between motivation, planning and evaluation in preparing for future endeavors  |
| Myth of Meritocracy                   | The perpetuated ideas that inequalities are a result of individuals' choices, rather than the repercussions of systemic and historical barriers. This phenomenon attributes all progress (or lack thereof) to individuals, ignoring the roles of institutional racism and white supremacy in maintaining structural discrimination for marginalized groups within organizations and society.  |
| Opportunity Gap                       | Refers to the ways in which race, ethnicity, socioeconomic status, English proficiency, community wealth, familial situations, or other factors contribute to or perpetuate lower educational aspirations, achievement, and attainment for certain groups of students (Glossary of Educational Reform)  |
| Culturally Responsive Pedagogy        | A theoretical model that not only addresses student achievement but also helps students to accept and affirm their cultural identity while developing critical perspectives   |

|                        |  |
|------------------------|--|
|                        | that challenge inequities that schools (and other institutions) perpetuate (Ladson-Billings, 469, 1995).   |
| Mirrored Positionality | The impact of being able to see oneself in the position of another with whom there is a positional similarity, such as race, ethnicity, language, or socioeconomic status. For adolescents at Breakthrough, this may mean having a teacher of the same race, a staff role model who speaks the same home language or program alumni successfully navigating college from a low socioeconomic background. |
| Unrestricted Learning  | The phenomenon of academic engagement and enthusiasm for learning resulting from teaching and curriculum <i>not</i> bound to standardized curriculum, high stakes testing or required scope and sequence (like that found in public schools)   |

| <b>Breakthrough Term</b>     | <b>Definition</b>   |
|------------------------------|---|
| Breakthrough Twin Cities     | A college access program located in the Twin Cities metropolitan area of Minnesota that serves under-represented and underserved college going students and promotes the diversification of the teaching field.   |
| Teaching Fellow              | High school and college aged students who serve as the teachers in summer programming.  |
| Instructional Coach          | Licensed teachers who support and advise the high school and college age teaching fellows during summer programming.  |
| Yo-Time                      | Free choice time given daily during the summer and at each Saturday session meant for students to have choice and spend time socializing.   |
| All School Meeting           | A daily meeting of the entire program in which announcements are made, codes are taught and reinforced through skits and students share academic and elective learning progress.  |
| The Codes to College Success | The seven social emotional learning concepts taught and reinforced at Breakthrough including be curious, be breakthrough, strive to understand, relish hard work together, be grateful, live the growth mindset and persist. Full definitions of each can be found in the manuscript. |

|                         |   |
|-------------------------|---|
| College                 | Used to refer to daily homeroom check ins in which students get homework checks, social emotional learning support and have an opportunity to check in with their assigned advisor. |
| Boo-Yah!                | The term used for homework, which is shouted by an individual, usually a teacher, then repeated back by the audience/students.  |
| Near Peer Relationships | Relationships in which the mentor and mentee are close in age (under ten years).  |
| <b>Kudos</b>            | A verbal or written praise for the actions of another person, including students, faculty or staff, given out at ASM, faculty meetings and at the end of the summer program         |

## Appendix II- Survey Questions

### Students

- What is your name? (Box)
- What grade are you in? (Box)
- How long have you been involved in Breakthrough Twin Cities? (Multiple choice)
- To what extent has Breakthrough help you prepare for college? (Gradient)
- Before beginning Breakthrough, how comfortable did you feel understanding the high school steps in applying to college (i.e. GPA, ACT/SAT, applications, financial aid) (Gradient)
- Since being involved in Breakthrough, how comfortable do you feel with understanding the high school steps in applying to college (i.e. GPA, ACT/SAT, applications, financial aid) (Gradient)
- Breakthrough has supported me in the following (Check boxes):
  - Academics
  - Helping me decide where I want or what type of college I want to go to
  - Helping me decide what I would like to study in college
  - Understanding what I need to do to apply to college
  - Raising my confidence
  - Making friends who also want to go to college
  - Giving me mentors and teachers who can help me
- Who at Breakthrough has helped support you through the program? (Check boxes & box)
  - Teaching fellows
  - Breakthrough Staff
  - Breakthrough Board Members
  - Breakthrough Volunteers
  - Breakthrough Students
- Is there a mentor, teaching fellow or staff member who has helped you in particular? If so, how? (Box)
- Why have you chosen to participate in Breakthrough for the last several years? What has kept you involved in Breakthrough over the last 3-6 years? (Box)

### Parents

- What is your name? (Box)
- What is your student's name? (Box)
- What grade is your student in? (Box)
- How long have you been involved in Breakthrough Twin Cities? (Multiple choice)
- To what extent has Breakthrough helped your student prepare for college? (Gradient)
- Before beginning Breakthrough, how comfortable did you feel understanding and helping your student with the high school steps in applying to college? (i.e. GPA, ACT/SAT, applications, financial aid) (Gradient)

- Since being involved in Breakthrough, how comfortable did you feel understanding and helping your student with the high school steps in applying to college? (i.e. GPA, ACT/SAT, applications, financial aid) (Gradient)
- Breakthrough has supported my student in the following ways (Check boxes):
  - Academics
  - Helping them decide where they want or what type of college they want to go to
  - Helping them decide what they would like to study in college
  - Understanding what they need to do to apply to college
  - Raising their confidence
  - Making friends who also want to go to college
  - Giving them mentors and teachers who can help them
- Is there a mentor, teaching fellow or staff member who has helped your student in particular? If so, how? (Box)
- Why have you chosen to help your student participate in Breakthrough for the last several years? What has kept you involved in Breakthrough over the last 3-6 years? (Box)

### **Breakthrough Staff**

- What is your name? (Box)
- What role(s) do you serve for Breakthrough? Please name a few of your responsibilities for the program? (Box)
- How long have you been involved in Breakthrough Twin Cities? (Multiple choice)
- To what extent have you witnessed Breakthrough help prepare under resourced students? (Gradient)
- In what ways do you see Breakthrough addressing the need for understanding high school preparation for college? (i.e. GPA, ACT/SAT, applications, financial aid) (Gradient)
- Since being involved in Breakthrough, to what extent do you feel the program has impacted students' understanding and implementation of college preparation steps? (i.e. GPA, ACT/SAT, applications, financial aid) (Gradient)
- I have seen Breakthrough support students in the following ways (Check boxes):
  - Academics
  - Helping students decide where students want or what type of college they want to go to
  - Helping students decide what would like to study in college
  - Understanding what students need to do to apply to college
  - Raising students' confidence
  - Making friends who also want to go to college
  - Giving me mentors and teachers who can help students
- Who at Breakthrough has helped support the success of under resourced students? (Check boxes & box)
  - Teaching fellows
  - Breakthrough Staff
  - Breakthrough Board Members

- Breakthrough Volunteers
- Breakthrough Students
- What role does mentorship play in the programming at Breakthrough? (Box)
- Do you feel you have acted as a mentor for students as a whole? For a particular student? Please describe. (Box)
- Why have you chosen to continue to participate in Breakthrough? (Box)

### **Breakthrough Board Members**

- What is your name? (Box)
- What role(s) do you serve for Breakthrough? Please name a few of your responsibilities for the program. (Box)
- How long have you been involved in Breakthrough Twin Cities? (Multiple choice)
- To what extent have you witnessed Breakthrough help prepare under resourced students? (Gradient)
- In what ways do you see Breakthrough addressing the need for understanding high school preparation for college? (i.e. GPA, ACT/SAT, applications, financial aid) (Gradient)
- Since being involved in Breakthrough, to what extent do you feel the program has impacted students' understanding and implementation of college preparation steps? (i.e. GPA, ACT/SAT, applications, financial aid) (Gradient)
- I have seen Breakthrough support students in the following ways (Check boxes):
  - Academics
  - Helping me decide where I want or what type of college I want to go to
  - Helping me decide what I would like to study in college
  - Understanding what I need to do to apply to college
  - Raising my confidence
  - Making friends who also want to go to college
  - Giving me mentors and teachers who can help me
- Who at Breakthrough has helped support the success of under resourced students? (Check boxes & box)
  - Teaching fellows
  - Breakthrough Staff
  - Breakthrough Board Members
  - Breakthrough Volunteers
  - Breakthrough Students
- What role does mentorship play in the programming at Breakthrough? (Box)
- Tell about a time when you saw or heard mentorship or relationships in play at Breakthrough. (Box)
- Why have you chosen to continue to participate in Breakthrough? (Box)
- What else would you like to share about your experience with Breakthrough?

## Appendix III- Interview Questions

### Students

- What is your name?
- What grade are you in?
- What drew you to participating in BTC?
- How has Breakthrough impacted your desire to go to college?
- Has Breakthrough provided you with friends that also want to go to college?
  - How is this similar or different than friends you have met in school or other spaces?
- In what ways does Breakthrough support you in new ways?
  - What has Breakthrough introduced you to that your school has not?
- What kind of mentors has Breakthrough provided you?
  - How have these individuals supported you on a personal level?
  - How has this role changed over time?
- Tell me about a time when a mentor supported you through a challenge at Breakthrough...
- What else can you share about Breakthrough's role in your journey to college?

### Parents

- What is your name?
- What is your student's name?
- What grade is your student in?
- What drew you to supporting your student's participation in BTC?
- How has Breakthrough impacted your student's desire to go to college?
- Has Breakthrough provided your student with friends that also want to go to college?
  - How is this similar or different than the friends they have met in school or other spaces?
- In what ways does Breakthrough supported your student in new ways?
  - What has Breakthrough introduced you and your student to that their school has not?
- What kind of mentors have Breakthrough provided for your student?
- Tell me about a time where you feel Breakthrough helped support your student...
- What else can you share about Breakthrough's role in your student's journey to college?

### Breakthrough Staff

- What is your name?
- What is your role in Breakthrough Twin Cities?
- What drew you to working with BTC?
- What kinds of training does Breakthrough provide for students in regard to the cultural capital of going to college, such as taking AP courses, ACT/SAT, understanding financial aid and the types of college)?
- What kinds of relationships exist within Breakthrough Twin Cities?
  - To what extent do student to student relationships form? Staff to student?

- How do these relationships change over the course of a student's participation?
- What is it that Breakthrough Twin Cities is doing for under resourced students?
  - How is this different than services and supports they get elsewhere (like school)?
  - How does your role fit into this equation?
- Tell me about a time where Breakthrough really demonstrated its mission to serve under resourced students...
- What else can you share about Breakthrough's role in helping first generation college students?

### **Breakthrough Board Members**

- What is your name?
- What is your role in Breakthrough Twin Cities?
- What drew you to working with BTC?
- What kinds of training does Breakthrough provide for students in regard to the cultural capital of going to college, such as taking AP courses, ACT/SAT, understanding financial aid and the types of college)?
  - How does the board ensure that this training takes place?
- What kinds of relationships exist within Breakthrough Twin Cities?
- What is it that Breakthrough Twin Cities is doing for under resourced students?
  - How is this different than services and supports they get elsewhere (like school)?
  - How does your role fit into this equation?
- Tell me about a time where you saw Breakthrough's mission be served...
- What else can you share about Breakthrough's role in helping first generation college students?