E²: Equity and Excellence Framework

By Adrienne Coleman* & Traci Ellis±

Both the United States and the United Nations have identified, examined, and put out a call to action to address the educational inequities that have disproportionately and negatively affected racially minoritized students, as well as those from a lower socioeconomic background, and poorer countries. Data from the Nations Report Card and the Global Monitoring Report provide evidence of disparities in academic performance and access to equitable educational resources. The outcome of these inequities impacts countries throughout the world, as their residents will not possess the skills and knowledge to thrive in a rapidly evolving global society, nor possess the critical thinking and analytical skills to solve the problems of the world. Considering there is a national and global equity focus, the Illinois Mathematics and Science Academy engaged in a process of participatory action research to institutionalize and operationalize equity and excellence, ultimately addressing educational inequities. This resulted in the development of the E²: Equity and Excellence Framework, inclusive of the following equity pathway steps: Educational Equity Impact Case, Equity and Excellence Policy, Equity-mindedness Capacity Building, Equity-mindedness Data Collection, Equity-mindedness Meaning-Making, Equity and Excellence Plan, and Equity Scorecard. This framework is a comprehensive, research-informed, equity-minded, inclusive pathway towards advancing educational equity that centers the voices of those with the most risk of experiencing inequities. Educational institutions that want to confront, diminish, and potentially eliminate educational inequities can apply this scalable and adaptable framework.

Keywords: equity, educational equity, educational inequity, inclusive education, excellence

Introduction

Equity was initially introduced in scientific literature in 1948, but it was not until 1990 that there was national and global focus on it, beginning with the evolution of equality to equity. Subsequently, in 2004 more countries began to conceptualize equity within the context of education (Jurando de los Santos, Moreno-Guerrero, Marin-Marin, & Costa, 2020). While this focus on educational equity has existed for nearly twenty years, educational inequity persists, disproportionately affecting marginalized communities including students of color and low-income students, as well as students who live in less developed countries. Specifically, in the United States, it has been reported that the education system is failing to provide equitable

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opportunities and outcomes (ECCBN, 2016; Bauman et al., 2005). Regarding students of color, the National Association of Diversity Officers in Higher Education (2021) reports that they have negative experiences in education that lead to lower academic persistence, retention, and graduation rates. In addition, both lower income and students of color are underperforming on state and national assessments (Plucker, Hardesty, & Burroughs, 2013). The Association of American Colleges and Universities (2015) states:

> Expanding access to quality education is key to making opportunity real for all. It is key to closing America’s deepening divides, strengthening the middle class, and ensuring our nation’s vitality. Yet at all levels of U.S. education, there are entrenched practices that reinforce inequities—and that lead to vastly different outcomes for low-income students and for students of color. We are failing the very students who must become our future leaders.

Without a focus on equity within the context of education, the United States could face challenges in remaining a global leader. All students will not have the knowledge and skills to succeed as contributing members of a rapidly changing, global society, regardless of factors such as race, gender, sexual orientation, ethnic background, English proficiency, immigration status, socioeconomic status, or disability (Center for Public Education, 2016). To address these educational inequities, there needs to be systemic change in education, examining culture, policies, practices, and programs through a lens of equity and developing equity-minded administrators and educators (ECCBN, 2016; NADOHE, 2021).

These same concerns with educational equity exist on the global level, especially as it relates to socio-economic status. According to the Global Monitoring Report, “there are still 58 million children out of school globally and around 100 million children who do not complete primary education” (Ainscow, 2016; International Bureau of Education, 2016).

The world’s poorest children are four times more likely not to go to school than the world’s richest children, and five times more likely not to complete primary school. Conflict remains a steep barrier, with a high and growing proportion of out-of-school children living in conflict zones. Overall, the poor quality of learning at primary level still has millions of children leaving school without basic skills (Ainscow, 2016).

On a global level, economically disadvantaged students are approximately one year behind in schooling, compared to those more economically advantaged, and they typically score 39 percent lower on educational assessments (ASIA Society, 2014). To confront these inequities, the United Nations has called for countries to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (United Nations, 2021). A model of inclusive education that entails “building upon the uniqueness of each learner and providing a personalized opportunity” has been put forth as an approach that leads to equitable outcomes in education (International Bureau of Education, 2016; United Nations, 2021).
The duration of this paper will take an intricate look into the value of advancing equity on both a national and global level. We will examine the racial and economic educational inequities, gain an understanding of why these inequities exist, and reflect on how these inequities have been addressed. In addition, a comprehensive, research-based E²: Equity and Excellence Framework will be introduced that educational institutions can apply to advance equity.

**Literature Review**

**The Language of Equity**

To confront the educational inequities that exist, there must be a foundational understanding of what equity truly is. While educational institutions have defined equity in numerous ways, there are two consistent components, fairness and inclusion (Asia Society, 2014; The Annie E. Casey Foundation, 2014; Portland Public Schools, 2021; Colorado State University, 2021). This suggests that educational institutions need to assess their policies, practices, resources, curriculum and services for fairness and inclusiveness. When it comes to educational equity, the Organisation for Economic Co-operation and Development (OECD) states that “equitable education systems are fair and inclusive and support their students in reaching their learning potential without either formally or informally erecting barriers or lowering expectations” (Asia Society, 2014). Other definitions of educational equity focus on disaggregating data by identity to identify and narrow gaps that may exist, while also having high expectations (Great Lakes Equity Center, 2016; Portland Public Schools, 2021). For purposes of this paper, educational equity includes ensuring students have meaningful access to educational opportunities, are meaningfully represented within the structures that exist in educational institutions, can meaningfully participate in their educational experiences, and have outcomes that prepare them to contribute in a positive way to the global world; and is defined as an environment in which:

when educational policies, practices, interactions, and resources, are representative of, constructed by, and responsive to all people such that each individual has access to, can participate, and make progress in high-quality learning experiences that empower them towards self-determination and reduces disparities in outcomes regardless of individual characteristics and cultural identities (Great Lakes Equity Center, 2016).

To achieve educational equity requires that institutions begin to apply an equity lens when examining and implementing such policies, practices, interactions, and resources. Through an equity lens, educational institutions can impact their systems and structures by ensuring that “no learner is denied the fair and equitable benefit of a quality, sound educational experience afforded to all students regardless of race, gender, national origin, language, economic level and special need” (ECCBN, 2016).
While there are an array of equity lenses that have been utilized by educational institutions, many have focal questions that prompt reflection on the respective policy/practice/interaction/resource; asking how learners are affected by group, asking what the data says, disaggregated by group, and ultimately asking how proposed actions address barriers, and impact change that leads to more equitable outcomes. Educational institutions to advance equity have applied the equity lenses (Table 1).

**Table 1. Equity Lenses**

<table>
<thead>
<tr>
<th><strong>How does this (practice or activity) impact all learners, including specific groups of learners?</strong></th>
<th><strong>Describe the proposed action, desired results and outcomes, and connection to PPS’ Vision</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What might create a negative or adverse impact on any identifiable population?</strong></td>
<td><strong>How have you intentionally involved external stakeholders who are also members of the communities affected by this policy, program, practice or decision?</strong></td>
</tr>
<tr>
<td><strong>How might that adverse impact be avoided?</strong></td>
<td><strong>How does the proposed action expand opportunities for racial equity and social justice?</strong></td>
</tr>
<tr>
<td><strong>What precautions should be taken as a district (campus/school, program) moves forward?</strong></td>
<td><strong>How does the proposed action disrupt barriers to equitable outcome?</strong></td>
</tr>
<tr>
<td><strong>How should implementation be monitored regarding comparable outcomes for all students and specific student groups?</strong></td>
<td><strong>Upon what information/data are you basing your decision or action?</strong></td>
</tr>
<tr>
<td><strong>How must policies, practices and processes be changed to produce fair and equitable outcomes for all students and specific groups of students and their families?</strong></td>
<td><strong>Describe any changes you have made or will make to the action after applying this lens.</strong></td>
</tr>
</tbody>
</table>


To effectively apply an equity-lens, one must develop equity-mindedness, which is “the outlook, perspective, or mode of thinking exhibited by practitioners and others who call attention to patterns of inequity in student outcomes, and are willing to assume personal and institutional responsibility for the elimination of inequity” (Center for Urban Education, 2021). This allows one to examine data in a disaggregated manner, with diminished bias, focused on centering the voices of those who have been historically marginalized, specifically students of color and low-income students. The Center for Urban Education (2021) suggests that to develop equity-mindedness, a cognitive shift needs to occur, from not looking at marginalized groups in a deficit-minded manner, but rather in one that is equity-focused, where we don’t blame students for educational inequities, but rather the educational system”. “Equity-mindedness is a way of understanding and addressing social inequities that challenges the rhetorical and enacted blame of inequities in access, opportunity, and outcomes on students’ social, cultural, and educational backgrounds; rather, equity-mindedness frames racial inequity as a dysfunction of higher education’s policies and practices” (Center for Urban Education, 2021). Those who have developed their equity-mindedness use the mindset to engage in systemic change that ultimately advances equity by possessing the following:
1. Willingness to look at student outcomes and disparities at all educational levels disaggregated by race and ethnicity as well as socioeconomic status.

2. Recognition that individual students are not responsible for the unequal outcomes of groups that have historically experienced discrimination and marginalization in the United States.

3. Respect for the aspirations and struggles of students who are not well served by the current educational system.

4. Belief in the fairness of allocating additional college and community resources to students who have greater needs due to the systemic shortcomings of our educational system in providing for them.

5. Recognition that the elimination of entrenched biases, stereotypes, and discrimination in institutions of higher education requires intentional critical deconstruction of structures, policies, practices, norms, and values assumed to be race neutral (Association of American Colleges and Universities, 2015).

Educational Inequities

In order to advance equity, one must first understand the inequities that exist by group. According to the Association of American Colleges and Universities (2015), deep, persistent, and unacceptable inequities in education begin in pre-K and continue through higher education. Such inequities exist along economic, racial, and ethnic lines, disproportionately and negatively impacting students of color and low-income students (American Psychological Association, n.d.; Plucker, Hardesty, & Burroughs, 2013; Association of American Colleges and Universities, 2015; ECCBN, 2016; Nations Report Card, 2019; National Center for Education Statistics, 2019). These inequities are evident in a number of areas within the educational system, including:

1. disparities in achievement between white students and students of color;
2. disproportionality in special education referral, identification and placement;
3. high dropout rates for students of color;
4. disproportionate discipline and referrals for students of color;
5. under-enrollment of students of color in higher education; and
6. an array of other issues related to decreased education and life opportunities for students of color, students from lower socio-economic backgrounds, students from immigrant families and students in urban areas (ECCBN, 2016).

Data from the National Assessment of Educational Progress (NAEP), “the largest nationally representative assessment of what students across the United States know and can do”, provides evidence that racial-based inequities exist in mathematics, reading, and science disciplines (Nations Report Card, 2019). Upon examining this data in an equity-minded manner, White and Asian/Pacific Islander students are outperforming their peers in all academic areas, with Asian/Pacific Islander students scoring the highest across all areas as well as fourth, eighth and twelfth grade levels.
Black, Hispanic, and American Indian/Alaskan Native students are underperforming in all academic areas in relation to their peers, with Black students scoring the lowest across the board. There is an approximate thirty to fifty point difference between groups with the highest and lowest scores. This suggests that educational institutions need to apply an equity lens in examining all educational structures that may be contributing to racial inequities, proposing actions to advance equity. In Table 2 is a snapshot of the 2019 NAEP assessments from a racial perspective.

Table 2. 2019 NAEP Assessments (Math/Reading Scale, 0-500; Science Scale, 0 - 300)

<table>
<thead>
<tr>
<th>Race</th>
<th>4th math</th>
<th>8th math</th>
<th>12th math</th>
<th>4th reading</th>
<th>8th reading</th>
<th>12th reading</th>
<th>4th science</th>
<th>8th science</th>
<th>12th science</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>249</td>
<td>292</td>
<td>159</td>
<td>230</td>
<td>272</td>
<td>295</td>
<td>163</td>
<td>165</td>
<td>161</td>
</tr>
<tr>
<td>Black</td>
<td>224</td>
<td>260</td>
<td>128</td>
<td>204</td>
<td>244</td>
<td>263</td>
<td>130</td>
<td>133</td>
<td>125</td>
</tr>
<tr>
<td>Hispanic</td>
<td>231</td>
<td>268</td>
<td>138</td>
<td>209</td>
<td>252</td>
<td>274</td>
<td>138</td>
<td>141</td>
<td>136</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>260</td>
<td>310</td>
<td>173</td>
<td>237</td>
<td>281</td>
<td>299</td>
<td>166</td>
<td>167</td>
<td>164</td>
</tr>
<tr>
<td>American Indian/Alaskan Native</td>
<td>227</td>
<td>262</td>
<td>136</td>
<td>204</td>
<td>248</td>
<td>272</td>
<td>141</td>
<td>144</td>
<td>142</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>244</td>
<td>286</td>
<td>157</td>
<td>226</td>
<td>267</td>
<td>295</td>
<td>159</td>
<td>159</td>
<td>156</td>
</tr>
</tbody>
</table>


The NAEP data also provides evidence of socioeconomic-rooted academic inequities across math, reading, and science disciplines (Nations Report Card, 2019). Students of a higher socioeconomic status, who do not qualify for the National Student Lunch Program (NSLP), have outperformed their peers in math, reading, and science, across fourth, eighth, and twelfth grades. Those of a lower socioeconomic status who do qualify for the NSLP are scoring on average twenty to thirty points lower than their peers. This suggests that educational institutions need to apply an equity lens in examining all educational structures that may be contributing to economic-rooted inequities, proposing actions to advance equity. In Table 3 is a snapshot of the 2019 NAEP assessments from a socio-economic perspective.

Table 3. 2019 NAEP Assessments (Math/Reading Scale, 0-500; Science Scale, 0 - 300)

<table>
<thead>
<tr>
<th>Status</th>
<th>4th math</th>
<th>8th math</th>
<th>12th math</th>
<th>4th read</th>
<th>8th read</th>
<th>12th read</th>
<th>4th science</th>
<th>8th science</th>
<th>12th science</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSLP Eligible</td>
<td>229</td>
<td>266</td>
<td>136</td>
<td>207</td>
<td>250</td>
<td>271</td>
<td>137</td>
<td>140</td>
<td>135</td>
</tr>
<tr>
<td>NSLP Not Eligible</td>
<td>253</td>
<td>296</td>
<td>160</td>
<td>235</td>
<td>275</td>
<td>294</td>
<td>266</td>
<td>166</td>
<td>160</td>
</tr>
</tbody>
</table>


June Rimmer, Associate Director of the Center for Educational Leadership at the University of Washington says, I have seen many students of color and those living in poverty survive and even thrive in our public schools. But I have seen far too many
who did not survive our school systems and instead, fell onto pathways of limited- or under-employment, poverty and even more destructive lifestyles of drugs, crime and incarceration (ECCBN, 2016). There is an indirect relationship with those who fall into these lifestyles and those who drop out of high school. Data from the 2016 National Center for Education Statistics indicates there are racial and economic inequities related to those who do not complete high school (2018 & 2019). American Indian/Alaskan Native (11%), Black (7%), Hispanic (9.1%), and Pacific Islander (6.9%) students have higher dropout rates than their White (4.5%) and Asian (2%) peers, with American Indian/Alaskan Natives having the highest rate (National Center for Education Statistics, 2019). The data further shows that students from lower socioeconomic backgrounds have a higher high school dropout rate than their peers from higher socioeconomic backgrounds. Students in the lowest economic quartile have the highest dropout rate of 9.7 percent, followed by those in the middle-low economic quartile who have a dropout rate of 7.3%, while those in the middle-high quartile have a dropout rate of 5.4% and those in the highest quartile have the lowest dropout rate of 2.6% (National Center for Education Statistics, 2018). Applying an equity lens, educational institutions need to propose systemic change that will reduce the dropout rate and advance equity.

There are a number of factors that contribute to these inequities including a lack of “access to such resources as quality pre-school education, the highest quality teachers, maximum amounts of instructional time, enriching life experiences, college preparatory curriculum, engagement with rigorous content and authentic learning that allow students to develop and create meaningful, useful outcomes and the supports essential for student success” (ECCBN, 2016). In fact, the National Academies of Science, Engineering, and Medicine has identified nine indicators of disparities in access to educational opportunities that contribute to these inequities, including:

1. Disparities in students’ exposure to racial, ethnic, and economic segregation
2. Disparities in access to and participation in high-quality pre-K programs
3. Disparities in access to effective teaching
4. Disparities in access to and enrollment in rigorous coursework
5. Disparities in curricular breadth
6. Disparities in access to high-quality academic supports
7. Disparities in school climate
8. Disparities in non-exclusionary discipline practices

Students who attend schools in racially segregated and lower-socioeconomic communities typically have more inexperienced, uncertified, and less skilled teachers (Growe & Montgomery, 2003; ECCBN, 2016). In addition, many of these schools are not providing access to coursework needed to matriculate to be successful in higher education, such as Algebra I/II and laboratory science (Center for Public Education, 2016). Even when access to experienced teachers and rigorous coursework exists, due
to discrimination, implicit/racial bias in the classroom, teacher bias in grading, microaggressions in feedback, and low expectations based on stereotypical perspectives, inequities persist (Macro Learning, 2018). Sometimes these inequities exist just because students are not in the classroom, not out of choice, but due to feeling unsafe in school and/or out-of-school suspensions. Students have reported being threatened or injured with a weapon, gang presence, and fear of attack as safety concerns, impacting Pacific Islander, Black, and Hispanic students at greater rates (National Center for Education Statistics, 2019). Due to racial discrimination and bias in discipline affairs, “African American, Latino and Native American students, in particular, are far more likely to be suspended, expelled, and arrested than their white peers, even when accused of similar behavior” (Center for Public Education, 2016).

Due to these contributing factors, along with others, educational inequities continue to persist even at the collegiate level. There are fewer students of color who are academically prepared for higher education, with many having to enroll in non-credit college development courses which delays their matriculation through and completion of college, as well as diminishes their financial aid (Association of American Colleges and Universities, 2015). Once fully enrolled, the lack of access for Black and Latino students to various collegiate experiences such as research opportunities, internships, study abroad, and capstone course, contribute to further educational inequity, as evident in Table 4.

<table>
<thead>
<tr>
<th></th>
<th>Asian</th>
<th>Black</th>
<th>Latino</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate Research</td>
<td>25%</td>
<td>17%</td>
<td>19%</td>
<td>24%</td>
</tr>
<tr>
<td>Internship or Field Experience</td>
<td>46%</td>
<td>40%</td>
<td>41%</td>
<td>51%</td>
</tr>
<tr>
<td>Study Abroad</td>
<td>12%</td>
<td>8%</td>
<td>10%</td>
<td>13%</td>
</tr>
<tr>
<td>Capstone Experience</td>
<td>42%</td>
<td>38%</td>
<td>36%</td>
<td>47%</td>
</tr>
</tbody>
</table>

Source: Association of American Colleges and Universities, 2015.

This affects their future education and work, as these opportunities develop analytical, problem-solving, and critical thinking skills (Association of American Colleges and Universities, 2015). There are also inequities in terms of higher education completion. “In 2013, individuals from high-income families were eight times more likely to earn a bachelor’s degree by age twenty-four than were those from low-income families” (Association of American Colleges and Universities, 2015). In addition, only 21% of Black, 17% of American Indian/Alaskan Native, and 15% of Hispanic students attain higher education degrees, compared to 35% of White and 51% of their Asian peers (Association of American Colleges and Universities, 2015).

**From Equality to Equity: A Historical Perspective**

For nearly seventy years, the United States has been actively working to improve the state of education. Initially, beginning in 1954, the focus of such efforts was on equality, providing students with the same resources, opportunities, and supports
(Center for Public Education, 2016; Jurando de los Santos, Morento-Guerrero, Marin-Marin, & Costa, 2020). “Equality is about sameness; it focuses on making sure everyone gets the same thing” (Association of American Colleges and Universities, 2015). Even though the first mention of equity in professional literature occurred in 1948, it was approximately thirty-five years into the national focus on educational improvement that the notion of equity emerged in a 1983 national plan. However, it was not until seventeen years later, in 1990, that the focus truly shifted towards advancing equity on a state and national, with a focus on identifying and addressing inequities. In Table 5 is a historical snapshot of a national focus on educational improvement, from equality to equity.

Table 5. History of Education Improvement from Equality to Equity

<table>
<thead>
<tr>
<th>Generation/Years</th>
<th>Focus</th>
<th>Actions</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1954-1964</td>
<td>Litigation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Generation:</td>
<td>Equality</td>
<td>Civil Rights Act of 1964</td>
<td>Prohibited discrimination against children and opened access for them to schools and programs within those schools, regardless of race, sex, national origin, religion, economic status or disability.</td>
</tr>
<tr>
<td>1964-1983</td>
<td>Legislation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Third Generation:</td>
<td>Equality to</td>
<td>A Nation at Risk In Pursuit of</td>
<td>Focused on the elimination of re-segregation in schools and classrooms, the elimination of achievement disparities among identifiably different students and the production of comparable outcomes in school performance.</td>
</tr>
<tr>
<td>1983-1990</td>
<td>Equity</td>
<td>Equity</td>
<td></td>
</tr>
<tr>
<td>Fourth Generation:</td>
<td>Equity</td>
<td>National Governors Meeting on</td>
<td>To create new schools that work for diverse students, produce world-class students with world-class skills and to create new paradigms for civil rights and equity-based excellence.</td>
</tr>
<tr>
<td>1990-2000</td>
<td></td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Fifth Generation:</td>
<td>Equity</td>
<td>No Child Left Behind Act</td>
<td>Systemic equity, defined as the transformed ways in which systems and individuals habitually operate to ensure that every learner had the greatest opportunity to learn, enhanced by the resources and supports necessary to achieve competence, excellence, independence, responsibility and self-sufficiency for school and for life.</td>
</tr>
<tr>
<td>2001-2011</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sixth Generation:</td>
<td>Equity</td>
<td>Blueprint for Reform</td>
<td>Challenging public schools to be more focused on rigorous curriculum presented by highly qualified, effective teachers under the supervision of dynamic principal leadership.</td>
</tr>
<tr>
<td>2012-Beyond</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: ECCBN, 2016.
Educational Equity from a Global Perspective

There is a similar history of a philosophical shift from equality to equity on the global level. Article Six of the 1948 Universal Declaration of Human Rights (Article 26) discusses education as an inherent right. “Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages” (UNICEF, 2015). Today, the United Nations (2021) has put forth Sustainable Development Goal #4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This goal was put forth to address the inequities that exist on a global scale. Data from 2019 reports that 85% of students around the world completed primary education, while only 53% completed secondary education (United Nations, 2021). In fact, there are 58 million children out of school globally and around 100 million children who do not complete primary education (Ainscow, 2016; International Bureau of Education, 2016).

Many of these students yield from poorer countries and/or lower socioeconomic backgrounds. “The world’s poorest children are four times more likely not to go to school than the world’s richest children, and five times more likely not to complete primary school” (United Nations, 2015). In fact, children from poorer countries are about one year behind in mathematics and three to four times more likely to underperform in math assessments (OECD, 2008; Asia Society, 2014). Furthermore, these students tend to struggle with reading and writing, are twice as likely to underperform academically and never develop basic life skills (OECD, 2008; UNICEF, 2015; United Nations, 2021). “Even in wealthier countries, many young people leave school without worthwhile qualifications, some are placed in various forms of special provision away from mainstream educational experiences, and others simply choose to drop out since the lessons seem irrelevant to their lives” (International Bureau of Education, 2016). COVID-19 has further exacerbated these educational inequities, as 101 million or 9% of children in first through eighth grades fell below minimum proficiency levels in 2020 (United Nations, 2021). In addition, 65% of lower income countries and 35 percent of higher income countries reduced educational funding (United Nations, 2021).

Many of these educational inequities exist because of students living in “conflict-afflicted regions and emergency situations”, which prevent them from attending school (UNICEF, 2015). Others face racism, genderism, xenophobia, ableism, and language injustice, which contribute to the perpetuation of educational inequities (UNICEF, 2015). In addition, some of the poorer countries lack the infrastructure to host school in a physical space, with limited or no access to drinking water, electricity, and handwashing facilities (United Nations, 2021). To address these global educational inequities, research suggest equitable resource distribution, building capacity of educators to be equity-minded, and the application of an equity lens to modify and develop policies to advance equity, as well as a system of accountability (Asia Society, 2014).
Since “the highest performing education systems across OECD countries are those that combine quality with equity”, there is a global challenge to review educational policies (OECD, 2008). These questions should be reflected on in said review process:

1. Is there a common understanding that equity (inclusion and fairness) should be seen as a principle that guides all education policies?
2. Where are the areas of strength within the national education system that can be built on?
3. What are the levers for change that can be used to move thinking and practice forward?
4. What are the barriers to progress and how can these be addressed (Ainscow, 2016)?

In direct response to the United Nations Sustainable Development Goal #4, to ensure that inclusive and equitable quality education, the concept of inclusive education has been promoted. Inclusive education suggests that we have a moral responsibility to ensure students who are victims of educational inequity are able to fully participate within the educational process, and includes outcomes related to cultural belonging, high expectations, inclusive classrooms, academic supports, unbiased discipline practices, student advocacy, and equitable assessments (International Bureau of Education, 2016).

Advancing Equity Approaches

While thus far there has been a focus on equity within the context of education, advancing equity has become a goal for other types of organizations, including government, law enforcement, non-profits, social-service, and civic groups, to name just a few. Some of the approaches are focused on all identity-based equitable outcomes, while others are specific to advancing racial equity. Common components of all approaches include defining and/or developing awareness of equity, data collection and utilization of disaggregated data to identify inequities, implementing targeted strategies to address inequities, and having a system accountability and/or process of measuring the advancement of equity (The Annie E. Casey Foundation, 2014; ECCBN, 2016; Equity in the Center, 2018; Equity Literacy Institute, 2021; NADOHE, 2021). Some unique, but valuable aspects of these various approaches that should be considered to advance equity include: (a) the Direct Confront Principle, (b) an examination of institutional commitment and capacity to make equity-minded, data informed decisions, (c) a comprehensive understanding of the root causes of inequities, as well the (d) #FixInjusticeNotKids Principle (The Annie E. Casey Foundation, 2014; ECCBN, 2016; Equity in the Center, 2018; Equity Literacy Institute, 2021; NADOHE, 2021). To advance equity, institutions must be willing to directly confront inequities that emerge, and not avoid them. They must understand the readiness and
build the capacity of their organization to engage in an equity-minded process that advances equity. In addition, they should understand the underlying causes as systemic in nature, and not attribute them to the behaviors and attitudes of individuals who have historically been marginalized.

To advance equity within the context of education, there needs to be a multifaceted approach. One study that examined educational programs that positively impacted racially minoritized students stated; “no magic bullet was found, that is, no one strategy is common to all programs that have good findings” (Growe & Montgomery, 2003). The components of these programs that contributed to advancing equity include a system of accountability, academically rigorous curriculum, equity-minded professional learning, family and community engagement in the academic process, smaller classrooms, as well as personalized academic, social-emotional supports and financial supports (Growe & Montgomery, 2003). The research also suggests that to understand the inequities, a comprehensive data collection process must be conducted that incorporates an array of constructs to measure, including academic performance disaggregated by race, teacher credentials, availability of advanced and rigorous coursework, access to assistive supports, school climate, and discipline records (Center for Public Education, 2016; The National Academies of Sciences, Engineering, Medicine, 2019).

Methodology

The Illinois Mathematics and Science Academy (IMSA), a residential high school for advanced learners, sought to address internal educational inequities and advance, as well as institutionalize equity and excellence. Thus, the research question was how does the Illinois Mathematics and Science Academy shift from a focus on diversity and equality to one of equity and excellence? IMSA engaged in a process of participatory action research (PAR), an approach to inquiry that “involves researchers and participants working together to understand a problematic situation and change it for the better” (Institute of Development Studies, n.d.). This process focuses on social change that challenges inequity, and includes an iterative cycle of (a) planning/research, theoretical perspectives/understanding research problem; (b) action, collaborative involvement in addressing problem; and (c) reflection, findings, analysis, and conclusions (Institute of Development Studies, n.d.; Rose, Spinks, & Canhoto, 2015). The ultimate purpose of IMSA’s study was: to develop an equity and excellence pathway to advance educational equity, rooted in Theory of Change, informed by data, and facilitated through an inclusive, equity-minded frame. During the PAR planning/research aspect, the researchers engaged in a comprehensive review of the literature related to equity, equity lens, equity-mindedness, evolution of equality to equity, educational inequities, excellence, inclusive excellence, and organizational change. Based on the professional diversity, equity, and inclusion expertise of the researchers, their understanding of organizational
change, and the analysis of the literature review, a framework was developed, the pathway taken by IMSA to shift towards educational equity. The researchers theorized that the following seven equity pathway steps would assist IMSA in shifting from diversity and inclusion towards equity and excellence:

1. Educational Equity Impact Case
2. Equity and Excellence Policy
3. Equity-mindedness Capacity Building
4. Equity-minded Data Collection
5. Equity-minded Data Meaning-Making
6. Equity and Excellence Plan
7. Equity and Excellence Scorecard

Each of these equity pathway steps build upon, and inform one another, with the central outcome as equity and excellence, defined by Illinois Mathematics and Science Academy (2018) as:

1. Equity is access for culturally, linguistically and economically diverse and marginalized students to differentiated academic and social-emotional supports and interventions that create opportunity for them to participate in educational programs and co-curricular activities that are capable of closing the excellence gaps in student experiences, success and retention. Additionally, with respect to the Academy’s workforce, equity means differentiated strategies and resources to attract, retain and professionally develop culturally, linguistically and economically diverse and marginalized applicants and employees.

2. Excellence is the expectation and standard that whatever the Academy does in teaching and learning, research, innovation, student and workforce development, institutional functioning, and participation in local and global communities, is of the highest quality, is on the cutting edge, rigorous, nourishes critical and creative thinking, is responsive to stakeholders and advances equity (Illinois Mathematics and Science Academy, 2018).

During the PAR action aspect, an equity-minded frame, was applied during the facilitation of capacity building, and creation of the impact case, policy, and plan, as well as in the data collection process. The PAR reflection aspect was applied during the data meaning-making and scorecard development.
**E²: Equity and Excellence Framework**

Soul food didn’t come from emulating White cooks; Jazz, rock-n-roll, and hip hop didn’t come from emulating White musicians; and good Black stats won’t come from emulating White scholars. I cook my research in a rusty pot, with lots of spice, and serve it ostentatiously on two turntables and a mixer. You can acquire a taste for my tone, or let it offend your sensibilities. I’mma be steadfast with my hustle until they start emulating me (Todson, 2019).

The E²: Equity and Excellence Framework is a comprehensive, research-informed, equity-minded, inclusive pathway towards advancing educational equity that centers the voices of historically marginalized groups. It’s a culturally responsive, student-centered approach designed by Black scholars to advance educational and racial equity, as well as STEM (science, technology, engineering, and mathematics) equity. Rooted in equity-mindedness and considering the current state of inequities that exist in education, the research presented throughout this paper, as well as the STEM and advancing humanity context of the Illinois Mathematics and Science Academy (IMSA), the E²: Equity and Excellence Framework was developed, depicted in Figure 1.

**Figure 1. E²: Equity and Excellence Framework**

| Educational Equity Impact Case | The Value of Equity and Excellence |
| Equity and Excellence Policy | The Outcome of Equity and Excellence |
| Equity-mindedness Capacity Building | The Embracing of Equity and Excellence |
| Equity-mindedness Data Collection | The Truth of Equity and Excellence |
| Equity-mindedness Data Meaning-Making | The Inclusiveness of Equity and Excellence |
| Equity and Excellence Plan | The Heart and Soul of Equity and Excellence |
| Equity and Excellence Scorecard | The Impact and Future of Equity and Excellence |

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The duration of the results section will further define each of the equity pathway steps of the E²: Equity and Excellence Framework, share IMSA’s application of the framework, including a discussion of the Scorecard data.
Education Equity Impact Case

The education equity impact case discusses the value-add of focusing on equity within the context of an educational institution. In general, education is integral to reducing poverty, improved health, economic growth, conflict reduction, and overall human development (Association of American Colleges and Universities, 2015; UNICEF, 2015). With a focus on educational equity, all students, especially those from historically marginalized communities, will have “an opportunity to survive, develop and reach their full potential, without discrimination, bias or favoritism” (UNICEF, 2015). Thus, discussing the value of a focus on educational equity will assist those working in the educational system in becoming vested in equity work, as they will see the value-add. It will also assist those who may be resistant to better understand equity and how it can lead to improved educational outcomes.

IMSA focused its educational equity impact case on the value-add of equity in four areas: teaching and learning, higher education alignment, advancing STEM, and global impact. These focal areas are aspects of IMSA’s mission, beliefs, vision, and/or impacts and outcomes statement. Regarding teaching and learning, IMSA utilizes the Danielson Framework as a guide. According to this framework, teachers strive for excellence, but “a commitment to excellence is not complete without a commitment to equity”; and thus, the educational equity impact case discussed how IMSA could be intentional and strategic in applying it as designed, with equity at the heart of it (The Danielson Group, 2019; Ellis & Coleman, 2020). While IMSA is an institution of secondary education, it is situated under the Illinois Board of Higher Education. Considering this, IMSA’s educational equity impact case discussed alignment with trends within higher education of inclusive excellence, diverse representation, culturally responsive pedagogy, and intercultural communication, all elements that advance equity (Ellis & Coleman, 2020). As part of IMSA’s mission is “to advance the human condition”, the United Nations Sustainable Development goals have recently been integrated into the curriculum as problems to solve through an approach of inquiry; the educational equity impact case discussed how a focus on equity can impact the global world by assisting in the achievement of goal #4, to ensure inclusive and equitable quality education (Ellis & Coleman, 2020; United Nations, 2021). Given that IMSA has a legislative charge to advance STEM education, the educational equity impact case further discussed how a focus on equity within STEM could help to diversify the field, and assist the United States with maintaining their status as a global leader (Ellis & Coleman, 2020).

This educational equity impact case was built to discuss how a focus on equity leads to continuous educational improvement with outcomes that are more equitable. This served as the foundation for IMSA to institutionalize equity work by creating shared understanding of what equity is and getting individuals vested by discussing the positive impact it will have on the organization and education. Ultimately, the educational equity impact case justifies and provides a research-based rationale for the time, resources, and commitment needed to advance educational equity.
**Equity and Excellence Policy**

The Equity and Excellence Policy shares the outcomes that will occur with a focus on equity, along with excellence. The focus on excellence aligns with both the Danielson Framework and Higher Education’s focus on inclusive excellence, as well as serves as a response to those who may assume that to advance educational equity means to lower expectations. This focus on both equity and excellence “combines high levels of student performance with an equitable distribution of learning opportunities” (Asia Society, 2014). Having a leadership approved Equity and Excellence Policy sends the message that the educational institution is taking this work seriously, is accountable for producing equitable educational outcomes, and will monitor its progress (Bauman et al., 2005). In addition, an approved policy ensures the sustainability of equity and excellence, especially during leadership changes, as well as embeds this work into the fabric of the educational institution (ECCBN, 2016).

IMSA applied the framework of inclusive excellence and the Theory of Change, “a predictive assumption about the relationship between desired changes and the actions that may produce those changes”, as part of the Equity and Excellence Policy development process (Ellis & Coleman, 2020). The first step of this process was to define both equity and excellence within IMSA’s context as a STEM school focused on advancing the human condition (IMSA, 2018). From there, the long-term outcome, along with seven intermediate outcomes were established. The intermediate outcomes were designed to lead to the achievement of the long-term outcome, which serves as “the intended impact on the world and how IMSA will be different because of equity and excellence” (IMSA, 2018). For IMSA, the long-term outcome is as follows:

We are committed to advancing equity in STEM education and representation and creating a diverse, inclusive community of global citizens who can realize their full potential, and execute our mission to advance the human condition, through a model of Equity and Excellence (IMSA, 2018).

IMSA’s intermediate outcomes are as follows:

1. Providing professional learning that continuously develops the Cultural Competence and equity awareness of staff, including faculty, as well as board members and external partners.
2. Implementing strategies based on the Equity and Excellence Model to recruit, support and retain staff, including faculty, as well as board members and external partners.
3. Differentiating resources as necessary to provide every student with access to Culturally Competent pedagogy, curriculum, co-curriculum, support, facilities and other educational resources with an ultimate goal of achieving Excellence.
4. Supporting research, scholarship and innovative expression of staff, including faculty as well as external partners that either address or promote the Equity and Excellence Model.

5. Developing and using an equity lens when considering major policies, programs, practices, or decisions in order to realize more equitable outcomes.

6. Addressing Culturally, Linguistically and Economically Diverse and gender-based STEM education/career gaps by developing student and professional programs and services, as well as conducting research, that will inform strengthening and diversifying the STEM education to career pipeline.

7. Implementing strategies to recruit, support and retain Culturally, Linguistically and Economically Diverse groups and support and retain Marginalized groups (IMSA, 2018).

The final element of the Equity and Excellence Policy development process included defining the model of Equity and Excellence; cultural competence, diversity, equity, equity-minded frame, excellence, and inclusion, within IMSA’s context to create shared meaning. Throughout the Equity and Excellence Policy process development, feedback from students and staff, including faculty, was gathered and considered.

This policy was developed to institutionalize and prioritize equity and excellence in a sustainable manner. This ensured the development of a theory-based, equity-minded policy that is inclusive of the voices within IMSA, centering those from historically marginalized groups. In addition, the policy was tailored to advance equity in alignment with the strategic direction of IMSA.

**Equity-mindedness Capacity Building**

Equity-mindedness Capacity Building is the pathway each individual is on towards embracing equity and excellence. It is the process of preparing an educational institution to operationalize the Equity and Excellence Policy. Equity leaders say, “equity-centered capacity building is a complex process coupling both structural and technical processes with those that are more social, cultural and political”, and includes these six essential elements:

1. Equity-Focused Content
2. Opportunity for Self-Reflection
3. Communities of Practice
4. Job-Embedded Learning
5. Differentiated Support for Principals
6. The Use of Inquiry (ECCBN, 2016)

With an understanding of equity and its complexity, as well as skill development, ideally individuals will begin to embrace the work involved with advancing educational
equity and be prepared to collect and make meaning of data in an equity-minded manner. The United States Department of Education Office of Elementary and Secondary Education actually provides funding to ten equity assistance centers that provide equity-minded capacity building professional learning to educational institutions, and should be considered as a possible resource (ECCBN, 2016).

IMSA partnered with such a center, the Midwest and Plains Equity Assistance Center (MAP), currently known as the Great Lakes Equity Center, to provide equity-minded professional learning, as well as to guide the equity-minded data collection and meaning-making processes. This partnership was beneficial to IMSA, providing the knowledge, skills, and tools to apply the E2: Equity and Excellence Framework, described below:

We engage in sustained partnerships of transformative professional learning and improvement grounded in examination of local data and historical contexts and action-research case studies that bring practitioners and researchers together in inquiry (Great Lakes Equity Center, 2021).

The equity-minded professional learning included a three-part series for all IMSA employees that allowed for self-reflection, shared equitable practices, and discussed equity-mindedness in relation to IMSA’s Educational Equity Impact Case and Equity and Excellence Policy, evident in their titles below:

2. Critical Consciousness: Moving Beyond Critical Reflection to Critical Action
3. Critical Reflection to Critical Action: Planning to Operationalize the IMSA Equity and Excellence Model & Policy

IMSA representatives attended other related sessions offered by the MAP Center, designed for board members, principals, faculty, and equity practitioners. This Equity-Mindedness Capacity Building equipped IMSA with the knowledge, skills, and research-informed practices to ultimately embrace and advance equity and excellence.

**Equity-Minded Data Collection**

To advance educational equity, institutions must discover the truth of equity and excellence by first identifying the inequities that exist. As previously discussed, the examination of an array of educational data constructs through an equity-minded lens, disaggregated by race, ethnicity, socioeconomic status, along with other identity groups, is an integral part of equity approaches. Considering this, IMSA engaged in a comprehensive, equity-minded process that engaged the community in the actual collection of the data.
Continuing the application of the Theory of Change, IMSA implemented a two-phase process that entailed:

1. Phase 1 included extracting the long-term/intermediate outcomes from the Equity and Excellence Policy, drafting a rationale focused on the value of equity and excellence in relation to the Equity and Excellence Policy outcomes, and implementing a data collection process to identify assumptions, preconditions and strategies.

2. Phase 2 included having modified focus groups with IMSA departments, teams, and leadership/cultural student groups to inform them of IMSA’s progress and approach to the development of the Equity and Excellence plan, address Equity and Excellence policy questions, rank/prioritize assumptions, preconditions and strategies, and discuss additional department/role-specific strategies (Ellis & Coleman, 2020).

This process allowed IMSA to better understand the current state of educational equity within the context of the outcomes discussed in the Equity and Excellence Policy. Furthermore, it proposed strategies that could be potentially included in the development of the equity and excellence plan.

In addition, IMSA implemented the MAP Center’s, Equity Context Analysis Process (ECAP), a comprehensive tools and data collection and analysis process that centers the assessment of equitable practices, is organized around seven equity indicators, and engages multiple stakeholders in the coordination, collection and interpretation of data (2020). IMSA convened a sixty-two member team that included representatives from leadership, faculty, staff, students, parents, and three external reviewers. To center the voices of historically marginalized communities, IMSA was intentional about having Black and Latino representation, especially among the students, parents, and external reviewers. This team went through two equity-minded professional learnings to understand and build their capacity to implement the ECAP. The ECAP process examined seven equity indicators: climate, environment and resources, leadership and governance, continuous improvement and inquiry, instruction and assessment, student engagement and outcomes, and family and community partnerships. The following data collection activities occurred during this process:

- ECAP Climate Surveys to better understand the diversity and inclusion climate from the perspective of students, administrators, staff, including faculty, and parents.
- Classroom Observations focused on equity-minded assessment of relationship rigor, safety, inclusion, responsiveness, curriculum instruction, instructional praxis and academic growth.
- Faculty Interviews focused on equity-minded assessment of educational equity elements of being student-centered and cultural responsiveness.
IMSA Building Walk-Through focused on assessment of building climate, historical and current events displayed, relationships, inclusion and safety/security.

IMSA Internal data that included course enrollment, discipline, co-curricular/organization involvement and demographic data by race, socio-economic status, geographic location, and biological sex (Ellis & Coleman, 2020).

Through this equity-minded process, IMSA was able to discover the truth of equity and excellence by collecting evidence of equitable practices, as well as educational inequities in a disaggregated manner. Below is a snapshot of the equity-minded data collection responses (Table 6).

**Table 6. Equity-minded Data Collection Responses**

<table>
<thead>
<tr>
<th>Equity-minded Data</th>
<th># of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory of Change Survey – Phase 1</td>
<td>119</td>
</tr>
<tr>
<td>Theory of Change Survey – Phase 2</td>
<td>114 respondents from 15 departments/3 teams &amp; 99 students</td>
</tr>
<tr>
<td>ECAP Parent Survey</td>
<td>131</td>
</tr>
<tr>
<td>ECAP Administration Survey</td>
<td>8</td>
</tr>
<tr>
<td>ECAP Faculty/Staff Survey</td>
<td>69</td>
</tr>
<tr>
<td>ECAP Faculty Interviews</td>
<td>24</td>
</tr>
<tr>
<td>ECAP Classroom Observations</td>
<td>43</td>
</tr>
<tr>
<td>ECAP Building Walk-Through</td>
<td>24 individuals conducted 155 observations of 39 physical spaces (main building, residence halls, external areas)</td>
</tr>
<tr>
<td>IMSA Fall 2019 Course Enrollment Data (by race, sex, socioeconomic status and geographic location)</td>
<td>21 Math and Science Courses</td>
</tr>
<tr>
<td>IMSA Student Diversity Climate Survey</td>
<td>4 years of data, average response rate = 526/650</td>
</tr>
</tbody>
</table>

Source: Coleman & Ellis, 2020.

This multi-faceted Equity-Minded data collection process provided IMSA with the information to better understand the current state of equity and excellence.

**Equity-Minded Data Meaning-Making**

The Equity-Minded Data Meaning-Making is a process of inclusiveness in which the equity and excellence team analyzes and interprets the summarized ECAP data (Ellis & Coleman, 2020). This allows for multiple, equity-minded, diverse perspectives related to what the data is actually saying. IMSA’s Equity and Excellence team approached this equity-minded meaning-making session by triangulating the data sources, and through a process of co-interpretation. Considering the summarized data from multiple sources and perspectives including student, stakeholder, and school data, validity of the data was established (Great Lakes Equity Center, 2019; 2020a; 2020b). From there, the Equity and Excellence team engaged in co-interpretation of
the data, a process of determining through an equity-minded and identity frame, what the data truly means. Next, a summative determination was made about the extent to which each of the equity indicators was evidenced, and of which environment and resources, leadership and governance, and instruction and assessment emerged. See Appendix A for meaning-making session data (rationale) that ultimately informed the Equity and Excellence Plan.

**Equity and Excellence Plan**

The Equity and Excellence Plan Development is the heart and soul of the E²: Equity and Excellence Framework, as it provides specific strategies and interventions that assist in operationalizing the Equity and Excellence Policy, is informed by the Equity-minded data collection and meaning-making processes, and designed to advance equity and excellence, and achievement of the long-term policy outcome. For IMSA, the Equity and Excellence Plan was situated within the operational dashboard, aligning each immediate policy outcome with an IMSA pillar. Those immediate policy outcomes were then related to the prioritized equity indicators that emerged during the meaning-making process. Utilizing the Theory of Change and ECAP data, as well as considering the meaning-making sessions, IMSA developed a rationale, sharing the inequities that emerged related to each immediate outcome. In response to the rationale, specific strategies were created to advance equity and excellence as well as achieve each immediate outcome, and ultimately the long-term outcome. For each immediate outcome, assessments were identified as tools to measure progress. As equity and excellence is the collective responsibility of all in an educational institution, IMSA added the departments’/teams’ accountable for each of the strategies and related interventions. See Appendix A for IMSA’s full Equity and Excellence Plan, which shares IMSA’s long-term outcome, intermediate outcomes, situated within IMSA’s context (i.e., pillars and priority outcomes), meaning-making data that informed the plan development, strategies, instruments to measure progress, as well as accountable parties for implementation.

**Equity and Excellence Scorecard**

The Equity and Excellence Scorecard dictates the impact of equity and excellence, as it measures progress in advancing educational equity, helping to inform interventions, and future plans. Both the Diversity Scorecard and the Equity Scorecard™ are action-oriented data tools and inquiry processes that inform change and allows educational institutions to establish indicators and assessments that measures the progress in advancing educational equity (Bauman et al., 2005; USC Center for Urban Education, n.d.). Applying elements of each of these scorecard processes, IMSA developed its Equity and Excellence Scorecard, inclusive of six assessments that align with the immediate outcomes and measure their progress. These reliable and valid instruments that invoke action include the following:
- Intercultural Development Inventory® (IDI), assesses intercultural competence – the capability to shift cultural perspective and appropriately adapt behavior to cultural differences and commonalities.
- Trauma Responsive School Implementation Assessment, an evidence-informed self-assessment tool that can be used to identify strong trauma responsive programming and policy domains, as well as domains that have greater room for improvement.
- Student Diversity Climate Survey, collects information about students’ experiences at IMSA related to discrimination, biased language, and availability and accessibility of supportive resources.
- STEM Education Equity Analysis Tool, a self-assessment instrument that fosters an opportunity to critically reflect on current school policies and practices.
- STEM Equity Program Evaluation Rubric, designed to help program administrators, designers, implementers, and funders identify the critical attributes of a STEM program to determine the degree to which it is inclusive and supports access and success for students who historically have not engaged in STEM.
- Institutional Model for Increasing Diversity and Self-Assessment Tool, evaluates the actions taken to effectively hire, retain, and support the success of underrepresented faculty in STEM. (Coleman, Ellis, & Anderson, 2021).

The assessments were administered during year one of the Equity and Excellence Plan, to establish baseline data, and will be re-administered during year three to measure progress. The departments/teams responsible for each immediate outcome were provided with the data to inform interventions. Ultimately, this Equity and Excellence Scorecard will determine if IMSA made progress in each of the immediate outcomes and achieved the long-term outcome of advancing STEM equity. Furthermore, it will identify any areas that may still need development, informing future equity and excellence policies and plans. The duration of this section will discuss IMSA’s Equity and Excellence Scorecard results, as well as the interventions put in place to advance equity, informed by the data.

Regarding the Intercultural Development Inventory, it uses the Intercultural Development Continuum (IDC™) that includes the following orientations: denial (55 – 70), misses difference; polarization (71 – 85), judges difference; minimization (86 – 115), de-emphasizes difference; acceptance (115 – 130), deeply comprehends difference; and adaptation (130 – 145), bridges across difference, to measure cultural competence. According to the voices of 197/204 staff, IMSA is in a space of minimization (97.28) and has put in place strategies to move along the continuum towards acceptance. This suggests that IMSA needs to implement more professional learning focused on culturally responsive pedagogy and develop cultural competence skills.
In terms of the Student Diversity Climate Survey, it asks students if they feel unsafe on campus due to an array of social identities, including race/ethnicity, religion, gender, expression of gender, socio-economic status, sexual orientation, skin color, and ability level. Based on the perspectives of 551/650 students, it was found that IMSA has 61.2% of students who feel safe on campus related to one or more of their social identity and aspires to increase this to 75%. This data suggests that IMSA needs to put more services in place to support Culturally, Linguistically, and Economically Diverse Students, as well as create a culture of inclusiveness.

Regarding the Trauma Responsive School Implementation Assessment, the scale is as follows: emerging (1.0 – 1.9), progressing (2.0 – 2.9), and mastery (3.0 – 4.0). Inclusive of the voices of 8 trauma team members, IMSA’s trauma responsiveness overall score demonstrates progressing (2.04). The individual categorical scores demonstrate emerging in three areas, whole school trauma programming (1.5), classroom strategies (1.6), and staff self-care (1.6); and progressing in five areas, school safety planning (2.4), school prevention planning (2.9), prevention/early intervention programming (2.0), targeted trauma-informed programming (2.4), and family and community engagement (2.1). IMSA’s aspiration is to move from emerging to progressing, and from progressing to mastery, in the respective areas. This data suggests that IMSA needs to focus more on being trauma responsive overall, but specifically in the classroom and with staff.

Regarding the STEM Education Equity Analysis Tool, the scale is as follows: beginning (1.0 – 1.9), developing (2.0 – 2.9), and mature (3.0 – 4.0). IMSA’s STEM Education Equity overall score demonstrates mature (3.18). The individual categorical scores demonstrate developing in three areas, leadership (2.29), professional learning (2.41), and partnerships (2.40); and mature in 6 areas, staffing (3.13), curriculum and instruction rigor (3.57), culturally responsive curriculum (3.25) and instructional practices (3.55), assessment (3.28), and ongoing engagement (3.26). The intent is to move from developing to mature in the respective areas, and the areas that are already mature, to move closer to a perfect score of 4.0. This data suggests that there is a focus on building IMSA’s capacity to advance STEM equity.

Related to the STEM Equity Program Evaluation Rubric, the scale is as follows: developing (1.0 – 1.9), established (2.0 – 2.9), and accomplished (3.0 – 4.0). From the perspective of all 64 academic affairs staff, IMSA’s STEM Equity Program overall score demonstrates established (2.80). The individual categorical scores demonstrate established in six areas, equity focus (2.60), capacity (2.77), career connection (2.09), professional development (2.34), leadership (2.94), and community (2.67); and at the accomplished stage for STEM content (3.11) and instruction (3.28). While IMSA is strong in STEM content and instruction, the data suggests there needs to be a focus on equity-mindedness development of staff, collaboration with the community, and an added component to the programs focused on STEM careers.

In terms of the Institutional Model for Increasing Faculty Diversity, it asks 86 institutional context, recruitment, transition, and retention questions, that elicit a yes/no response, with yes being indicative of the practice being in place, and no,
indicative that the practice is not in place. Utilizing a consensus decision-making process, all seven staff of IMSA’s Human Resources and Principal’s offices reflected and responded. This process yielded the following results: 61.5% for institutional context; 0% for recruitment – hiring, 20% for recruitment - outreach, 0% for recruitment – yield; 16.6% for transition; 21% for retention – professional development, .08% for retention –advancement, and 20% for satisfaction/support. This data suggests that IMSA needs to develop targeted, culturally responsive strategies focused on diverse recruitment, transition, and retention.

IMSA received an overall scaled score of 49.99 put of a possible 100. While some may view this as failure, considering the evolution that IMSA is going through and the complexity of institutionalizing equity work, IMSA is half-way there in advancing Equity and Excellence. In addition, it shows that IMSA took an intentional, strategic, equity-minded, data-informed approach to advancing equity and excellence. In Table 7 is a snapshot of IMSA’s Equity and Excellence Scorecard quantitative results, actual and scaled, along with aspirational scores, for the Equity and Excellence Policy intermediate outcomes.

### Table 7. Equity and Excellence Scorecard

<table>
<thead>
<tr>
<th>IMSA Policy Intermediate Outcome</th>
<th>Assessment</th>
<th>Overall Score</th>
<th>Instrument’s Scale</th>
<th>Aspirational Score</th>
<th>IMSA’s Scaled Scores (Out of 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Learning</td>
<td>Intercultural Development Inventory</td>
<td>97.28</td>
<td>55</td>
<td>145</td>
<td>115 acceptance</td>
</tr>
<tr>
<td>Student Recruitment, Support, Retention</td>
<td>Student Diversity Climate Survey</td>
<td>61.2% students safe</td>
<td>0</td>
<td>100</td>
<td>75% students safe</td>
</tr>
<tr>
<td></td>
<td>Trauma Responsive School Implementation Assessment</td>
<td>2.04 progressing</td>
<td>1</td>
<td>4</td>
<td>3.00 mastery</td>
</tr>
<tr>
<td>Differentiation</td>
<td>STEM Education Equity Analysis Tool</td>
<td>3.18 mature</td>
<td>1</td>
<td>4</td>
<td>3.5 mature</td>
</tr>
<tr>
<td>CLED Student STEM Gaps</td>
<td>STEM Equity Program Evaluation Rubric</td>
<td>2.8 established</td>
<td>1</td>
<td>4</td>
<td>3.3 accomplished</td>
</tr>
<tr>
<td>Staff Recruitment, Support, Retention</td>
<td>The Institutional Model for Increasing Faculty Diversity and Self-Assessment Tool</td>
<td>21</td>
<td>0</td>
<td>86</td>
<td>37</td>
</tr>
</tbody>
</table>

Source: Coleman, Ellis, & Anderson, 2021.

The following interventions were put in place to assist IMSA in obtaining their aspirational scores, advancing equity and excellence (Table 8).
Table 8. E²: Equity and Excellence Scorecard Informed Interventions

<table>
<thead>
<tr>
<th>IMSA Policy Intermediate Outcome</th>
<th>Interventions</th>
</tr>
</thead>
</table>
| Professional Learning            | ✓ Cultural Competence e-Learning course for all staff, developed by the Office of Diversity, Equity, and Inclusion  
✓ Provide discipline specific equity-mindedness and cultural competence professional learning for faculty.  
✓ Develop Gender and Sexuality and Bystander Intervention e-learning courses.  
✓ Develop and implement train-the-trainer social justice curriculum for Residence Life staff.  
✓ Integrate individual employee Cultural Competence Action Plan into performance goal and evaluation process. |
| Student Recruitment, Support, Retention | ✓ Utilizing the National Science Foundation Indicators of Disparities in Access to Educational Opportunities, develop an access scorecard to be used as part of the admissions review process, as a means to quantify students' lived educational experiences.  
✓ Create a comprehensive, equity-minded educational program for students that is rooted in social justice and develops cultural competence, with an intentional focus on anti-racist education.  
✓ Informed by social-emotional focus groups held with Black, Latino and LGBTQIA+ students, implement culturally responsive trauma interventions that are equity-minded and differentiated supports.  
✓ Implement Racial Equity Task Force Initiatives related to Black/Latino student safety inclusive of Educational Equity/Social Justice living, the Hub with identity development programs, trauma-responsive counseling, cultural experiences, and tutoring/mentoring services.  
✓ Implement Gender Inclusivity Project, including gender support plan, pronoun practice/policy, and the development of gender inclusive living. |
| Differentiation                  | ✓ Rejuvenate mathematics problem sets to be culturally relevant and utilizing reality pedagogy, a form of Culturally Responsive Pedagogy, coach the Mathematics faculty on application of respective techniques in their teaching and learning practices.  
✓ Utilizing Culturally Responsive Education embedded within a sound historical model, continue to build the capacity of English and Social Science faculty to understand culture and how to teach within frames of students’ histories, identities and literacies.  
✓ Implement equity/mastery grading pilot. |
| CLED Student STEM Gaps           | ✓ Informed by the D-STEM Equity Model assessment and the STEM Equity Program Evaluation Rubric, align pre-existing IMSA programs to create a STEM pre-enrichment pathway that prepares CLED students for IMSA. |
| Staff Recruitment, Support, Retention | ✓ Complete the Equity and Excellence in Teacher Recruiting at IMSA guide. |
Continue to implement a modified version of the Rooney Rule, in that every faculty opening requires interviewing at least two racially diverse candidates.

Create faculty pathway program of faculty development institute, diverse fellows, visiting scholars, faculty exchange, adjunct faculty, student teachers.

Establish a process of "cluster hiring" to recruit diverse candidates with interdisciplinary backgrounds.

Discuss the creation new faculty/adjunct faculty positions that teach cultural-related studies.

Create a professional development program in which members of the Senior Leadership Team and Academic Discipline Teams serve as mentors for new employees.

While this Equity and Excellence Scorecard is the final equity step of the E:\ Equity and Excellence Framework, it is not the conclusion of advancing educational equity. Instead, it brings to light the impact of the equity work in both areas of growth and those that need improvement, thus informing future equity and excellence work.

### Discussion

While the E:\ Equity and Excellence Framework was designed by a secondary STEM high school whose mission is to advance the human condition, any educational institution with a commitment to advancing equity and excellence can apply it. It is an equity-minded, research-based, inclusive framework with the underlying premise of advancing equity and excellence, centering historically marginalized groups. In addition, it is adaptable so that educational institutions can apply it within their context, as well as applicable to other marginalized groups, including, but not limited to the ethnic/racial, lower socio-economic status, LGBTQ+, neurodiverse, female, rural, twice-exceptional, and/or undocumented citizens.

The ideal manner to apply E:\ Equity and Excellence Framework is through following each equity step sequentially, as they build upon and inform one another. However, specifically with the Equity and Excellence Policy, this equity step can potentially occur at any point in the application of the framework, as an educational institution may face barriers in getting this board policy approved. If such barriers occur, an educational institution may choose to create an equity and excellence statement, inclusive of the same policy elements. Other equity steps that can be taken throughout and upon conclusion of the implementation of the Equity and Excellence Framework include equity-minded capacity building, data collection, and data meaning-making, to aid in the evolution of the equity and excellence policy and plan. In Table 9 is the E:\ Equity and Excellence Framework in action.
<table>
<thead>
<tr>
<th><strong>Table 9. E²: Equity and Excellence Framework</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>E² Framework Step</strong></td>
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</table>
| Education Equity Impact Case | The Value of Equity and Excellence | - Research and share concepts of equity and equity trends.  
- Review and identify aspect of the organization’s mission, vision, beliefs, strategic plan in which a focus on equity can strengthen the outcome.  
- Based on the research, discuss the value of engaging in equity work in relation to the organization’s mission, vision, beliefs, and strategic plan.  
- Connect the value add of equity to improved teaching and learning. |
| Equity and Excellence Policy | The Outcome of Equity and Excellence | - Define equity within the context of the educational institution.  
- Apply a model of Inclusive Excellence  
  o Define excellence  
  o Seek feedback from constituent groups throughout the process, centering the voices of individuals from historically marginalized groups.  
- Apply the Theory of Change  
  o Considering the Educational Equity Impact Case, identify the long-term outcome of institutionalizing and prioritizing equity and excellence.  
  o Considering the Educational Equity Impact Case, identify 5 - 7 intermediate outcomes of institutionalizing and prioritizing equity and excellence.  
- Define terms mentioned in the outcome statements for shared meaning. |
| Equity-mindedness Capacity Building | The Embracing of Equity and Excellence | - Identify and partner with an organization that provides equity-minded professional learning for educational institutions.  
- Provide on-going equity-minded professional learning that develops knowledge and skills, as well as shares research-informed practices.  
- Offer opportunities for leadership and discipline/department specific equity-minded professional learning. |
| Equity-Minded Data Collection | The Truth of Equity and Excellence | - Conduct Theory of Change assessment, identifying assumptions, pre-conditions, and strategies for each intermediate outcome defined in the Equity and Excellence policy.  
- Create equity and excellence data |
collection/meaning-making team that is inclusive of representatives from all internal constituent groups and the external community, intentionally including those from historically marginalized groups.
- Provide professional learning that builds the capacity of the team to engage in equity-minded data collection and meaning making processes.
- Implement Equity Context Analysis Process or similar process that includes:
  - Climate Surveys
  - Faculty interviews
  - Classroom observations
  - Building walk-throughs
  - Internal data such as academic performance, teacher credentials, enrollment in advanced and rigorous coursework, and discipline, desegregated by race, income, gender, sex, ability.

<table>
<thead>
<tr>
<th>Equity-Minded Data Meaning-Making</th>
<th>The Inclusiveness of Equity and Excellence</th>
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<tbody>
<tr>
<td></td>
<td>- Summarize information collected during the Equity-Minded Data Collection Process</td>
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<td></td>
<td>- Equity and Excellence team examines the data in an inclusive manner using triangulation and co-interpretation approaches</td>
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<tr>
<td></td>
<td>- Identify the most significant inequities that emerged from the data</td>
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<tr>
<th>Equity and Excellence Plan Development</th>
<th>The Heart and Soul of Equity and Excellence</th>
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<td></td>
<td>- Determine the length of the plan, with a recommendation of a three or five year plan.</td>
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<td></td>
<td>- Situate each policy immediate outcome within the organization’s structure, i.e. operational dashboard, strategic plan, etc.</td>
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<td></td>
<td>- Align each immediate outcome with the equity indicator.</td>
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<td>- Develop a rationale for each immediate outcome, discussing the related inequities, which emerged in the data-collection process.</td>
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<td>- For each immediate outcome, identify 3 – 5 strategies that respond to the data in the rationale.</td>
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<tr>
<td></td>
<td>- For each strategy, develop year one interventions. Additional interventions for the following years will be determined by progress made and informed by benchmark data that will emerge from the Equity and Excellence Scorecard.</td>
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<tr>
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<td>- Identify assessments to measure progress for each of the immediate outcomes.</td>
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</tbody>
</table>
Conclusion

An intricate examination of equity, equity lens, equity-mindedness, inequities, and excellence, along with equitable practices within the context of education on both a national and global levels were discussed throughout this paper. Based on research and both the professional and personal experiences of Black scholars, the E²: Equity and Excellence Framework was developed as an approach that educational institutions can apply to advance equity and excellence. While the framework was developed for a STEM focused, secondary school, located in the United States, it is designed with global scalability. As discussed previously, educational inequities exist both nationally and globally. Although the underlying premise of the inequities may differ in nature and negatively impact different groups, this framework is designed in a manner that considers equity within the context of the country and educational institution, its mission, values, beliefs, and strategies, as well as approaches to teaching and learning. As educational institutions around the globe begin to apply this E²: Equity and Excellence Framework, they should reflecting and build upon the value, outcome,
embracing, truth, inclusiveness, heart and soul, as well as impact and future of equity and excellence, contributing to the evolution of the framework, addressing current and forthcoming educational inequities. With an informed evolution, along with persistent, intentional, and equity-minded application of the E²: Equity and Excellence Framework, educational inequities can be vastly diminished and potentially eliminated.

Acknowledgments

Thank you to the Illinois Mathematics and Science Academy for prioritizing and institutionalizing the advancement of educational equity. A special thanks to Dr. Jose Torres, president emeritus, for his commitment to educational equity and laying the foundation to move the work forward in an intentional and strategic manner.

References

Colorado State University (2021). *Diversity, Equity, Inclusion, and Campus Climate Blueprint*. Available at: https://msfi.colostate.edu/diversity-blueprint/.
Equity in the Center (2018). *Building a Race Equity Culture*. Available at: https://equityinthe center.org/aww/.

Great Lakes Equity Center (2019). ECAP School Data Profile. Available at: https://digitalcommons.imsa.edu/EEP/3/.


Great Lakes Equity Center (2020b). ECAP Stakeholder Survey Report. Available at: https://digitalcommons.imsa.edu/EEP/5/.


USC Center for Urban Education (n.d.). *Equity Mindedness*. Available at: https://cue.usc.edu/equity/equity-mindedness/.
### Appendix A

**IMSA’s Equity and Excellence Plan**

<table>
<thead>
<tr>
<th>IMSA Pillars</th>
<th>IMSA Priority Outcome</th>
<th>Equity and Excellence Policy Outcomes</th>
<th>Rationale - What does the Data Say?</th>
<th>Strategy</th>
<th>Equity Indicators</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Equity and Excellence Scorecard</th>
<th>Responsible Parties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Develop Educator STEM Proficiency</strong></td>
<td>Providing professional learning that continuously develops the Cultural Competence and equity awareness of staff, including faculty, as well as board members and external partners.</td>
<td>According to the Equity Context Analysis Process, only 46% of staff and 38% of administrators believed there was ongoing support for professional learning and growth for all educators, staff members and administrators that is aligned with strategic improvement efforts, is job-embedded, and includes coaching and mentoring. While most believed that educational equity is centered as a cross-cutting tenet in all professional learning experiences, the Theory of Change data collection process suggested that professional learning is too general, surface-level, and does not include practical application. The ECAP further said that while there is rhetoric about advancing educational equity, there appears to be a lack of understanding of what equity is and specific instructional and curricular practices that would lead to equitable outcomes for all students. It was suggested that IMSA provides time for professional learning that extends beyond theory and is inclusive of discipline specific practical application strategies and techniques. This should include ongoing assessment of equity-minded and cultural competence. Based on the IMSA Student Diversity Climate survey which states that over four years of data, approximately 1/3 of Black students do not feel safe on campus because of their race, along with 30 years of stories shared on Black at IMSA by IMSA students, alumni, current and former staff/faculty that discuss an institutional culture of racism at IMSA, an anti-racist professional learning agenda is being put forth.</td>
<td><strong>1.1 Leadership and Governance</strong></td>
<td>Build the capacity of IMSA staff, including faculty to be equity-minded and culturally competent by providing department/discipline specific professional learning opportunities. Continue to build capacity of IMSA staff, including faculty focused on the practical application of equity-mindedness and cultural competence in teaching and learning. Provide on-going coaching, mentoring and support to continue advancing to higher levels of understanding and intentional application of equity-mindedness and cultural competence in teaching and learning.</td>
<td>Provide ongoing coaching, mentoring and support as departments/disciplines engage in anti-racist teaching and learning.</td>
<td>CAB/EMS, Senior Leadership Team, Office of Diversity, Equity and Inclusion, Academic Discipline Teams</td>
<td></td>
<td></td>
<td>Inter-Cultural Development Inventory (IDD)</td>
<td>CAB/EMS, Senior Leadership Team</td>
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<td><strong>1.2 Leadership and Governance</strong></td>
<td>Use existing qualitative and quantitative evidence to demonstrate the need to engage in anti-racist professional learning with the goal of achieving racial equity. Then utilize the Racial Equity Theory of Change to inform, implement and build the capacity of Senior Leadership Team and Academic Discipline Teams to engage their respective departments/disciplines in anti-racist professional learning agenda. Communicate the expectation to and continue building the capacity of Senior Leadership Team and Academic Discipline Teams to engage their respective departments/disciplines in anti-racist professional learning. This includes an emphasis on engaging with identity-based literacy to reduce the extra “invisible tax” placed on People of Color to improve conditions.</td>
<td></td>
<td></td>
<td>Provide ongoing coaching, mentoring and support as departments/disciplines engage in anti-racist teaching and learning.</td>
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<tr>
<td><strong>1.3 Environment and Resources</strong></td>
<td>Provide professional learning to Center for Teaching and Learning and IN2 to build their capacity to develop and implement equity-centered professional learning opportunities for IMSA partners. Continue building capacity and examine current and new professional learning offerings to external partners through an equity lens and reexamine offerings through that lens. Through Center for Teaching and Learning, provide equity-minded professional learning experiences for external partners.</td>
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**Long-Term Outcomes:**

The Academy recognizes and acknowledges the historical underrepresentation and marginalization of culturally, linguistically, and economically diverse groups, both internally, and particularly in STEM education and professions. These disparities also exist in the representation of the Academy’s workforce. We are committed to advancing equity in STEM education and representation and creating a diverse, inclusive community of global citizens who can realize their full potential, and execute our missions to advance the human condition, through a model of Equity and Excellence.
| Broader Student Interest and Participation | Implementing strategies to support access, support and retain students, culturally, linguistically and socioeconomically diverse groups and support marginalized groups. | Based on findings from the Equity Context Analysis Process, approximately 1/3 of students felt unsafe at IMSA because of their race or sexual orientation. It was further reported that racist and homophobic rhetoric were regularly heard at IMSA, and when adults were present, nearly 90% of the time, they did not intervene. During the school building walk-through, 35% agreed/strongly agreed that the building climate is not student and family centered, nor does it facilitate a safe and inclusive learning environment. The Theory of Change data suggested that IMSA needs to create a welcoming and inclusive environment that creates equity focused support plans. Based on the IMSA Student Diversity Climate survey which states that over four years of data, approximately 1/3 of Black students do not feel safe on campus because of their race, along with 30 years of stories shared on Black at IMSA by IMSA students, alumni, current and former staff/faculty that discuss an institutional culture of racism at IMSA, an anti-racist professional learning agenda is put forth. |
| | # | 2.1 Environment and Resources/ Instruction and Assessment | Recruitment: Examine and revamp the Admissions Recruitment Strategy through an equity lens and with representation goals. Recruitment: Implement equity-minded and differentiated recruitment strategy, being intentional about equitable access. | Recruitment: Monitor and measure CLED recruitment progress through an equity lens. STEM Equity Program Evaluation Rubric |
| | | # | 2.2 Environment and Resources/ Instruction and Assessment | Support: Create a comprehensive, equity-minded educational program that is rooted in social justice and develops cultural competence, with an intentional focus on anti-racist education. Support: Implement equity-minded educational program for students that is rooted in social justice and develops cultural competence, with an intentional focus on anti-racist education. Support: Continue to implement equity-minded educational program and evaluate student growth. | Student Diversity Climate Survey/ Trauma Responsive School Implementation Assessment |
| | | # | 2.3 Environment and Resources/ Instruction and Assessment | Retention: Reduce the number of CLED and other marginalized students who don’t feel safe on campus by developing a plan to assist them in transitioning into and through IMSA. Retention: Implement process to assist CLED and other marginalized students in transitioning into and through IMSA. Retention: Monitor and evaluate process to assist CLED and other marginalized students in transitioning into and through IMSA. | Office of Diversity, Equity and Inclusion, Student Life, Residential Life |
| Differentiating resources asAccompanystudents with access to Culturally Component pedagogy, curriculum, co-curriculum, support, facilities and other educational resources with an ultimate goal of achieving Excellence. | The Equity Context Analysis Process yielded that culturally responsive teaching is not evident approximately 50% of the time (score = 344/696). It was agreed upon by 50% of parents and observed during classroom interactions that 21% of the time instruction is not relevant to nor representative of students’ lived experiences and personal identities, or builds upon students’ prior knowledge. While curricular materials fostering an understanding and appreciation of students own cultural histories and practices, as well as those of groups different from themselves were only observed 19% of the time during classroom observations; instruction and assessments are differentiated and adjusted to address a continuum of student learning rates, interests, funds of knowledge, and assets, were observed 79% of time during classroom observations and agreed upon by 70% of parents. As observed, positive representations of diverse peoples (e.g., lived experiences, personal identities, and world views) are not present throughout IMSA in texts, displays, and materials, and experiences of historically marginalized groups are not represented accurately, evident 47% of the time during classroom interactions, 58% of the time during school building walk-through and agreed. |
| | Strategy # | Year 1 | Year 2 | Year 3 |
| | 3.1 Instruction and Assessment | Apply learnings from professional development to begin revising current curriculum to be culturally responsive by framing the value of differentiation within the context of the achievement of educational equity. | Implement modified culturally responsive curriculum, including assets-based racial identity development and equitable grading that is framed by the value of differentiation within the context of the achievement of educational equity. | Provide on-going coaching, mentoring and support in the implementation of a culturally responsive curriculum, as well as assess the students experiences with said curriculum to inform its’ evolution. |
| | | | | STEM Education Evaluation Tool |
| | | | | Principal’s Office (CAC, IRC, Strategies Team), Office of Community Engagement, Residential Life, Student Life, Faculty, Residential Counselors, DEI |
| | 3.2 Environment and Resources/ Instruction and Assessment | Examine access to culturally responsive and differentiated academic, social-emotional, and assistive supports and create a plan (faculty/staff collaboration) to achieve equity. | Implement a plan to improve access to culturally responsive and differentiated academic, social-emotional, and assistive supports, with the goal of achieving equity. | Measure the level of institutionalization of a culturally responsive and differentiated academic, social-emotional, and assistive supports through an equity-minded frame. |
| | | | | Trauma Responsive School Implementation Assessment |
| | | | | Principal’s Office (CAC, IRC, Strategies Team), Academic Discipline Teams, EXCEL, Student Life, Residence Life, Office of DEI, IT, FMG, Facilities, Security |
Operational Sustainability and Governance Programs

Developing and using an equity lens when considering major policies, programs, practices, or decisions in order to realize desired outcomes.

The ECAP yielded an Equity Dimension Score, in which IMSA received 348/696 for Culturally Responsive Teaching and 509/762 for Student Control Learning. In fact, teacher interviews demonstrated a lack of understanding between the difference of equality and equity, and most had an underlying belief that educational equity happened organically. In addition, it was found that only 22% of parents, 37% of staff and 40% of administrators believed that school improvement efforts focused on changing policies, systems, and adult practices to better support students rather than “being” students, and are coordinated such that efficiencies are optimized and redundancies are minimized.

Strategy #  Equity Indicator #  Year 1  Year 2  Year 3

1. Leadership and Governance

Provide on-going support for the creation and sharing of research, scholarship and innovative expression that addresses issues of diversity, equity, inclusion and anti-racism.

Increase IMSA's presence and leadership in national and international research, scholarship and innovative expression groups and publications.

Evaluate the experiences of CLED and other marginalized students while engaged in research, scholarship, and innovative expression.

The Equity Context Analysis Data (ECAP) also yielded significant inequities across CLEED populations in access to some STEM offerings. From the Theory of Change process, it was suggested that IMSA creates a common understanding of what cultural competence looks like in practice and provide related professional learning, as well as ensure faculty understand their audience, include culturally relevant language/culturally relevant examples and "problem sets", so that equity and excellence is demonstrated in all learning offerings.

Operational Sustainability and Governance Programs

Developing and using an equity lens when considering major policies, programs, practices, or decisions in order to realize desired outcomes.

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Strategy #  Equity Indicator #  Year 1  Year 2  Year 3

1. Leadership and Governance

Provide on-going support for the creation and sharing of research, scholarship and innovative expression that addresses issues of diversity, equity, inclusion and anti-racism.

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Evaluate the experiences of CLED and other marginalized students while engaged in research, scholarship, and innovative expression.

The Equity Context Analysis Data (ECAP) also yielded significant inequities across CLEED populations in access to some STEM offerings. From the Theory of Change process, it was suggested that IMSA creates a common understanding of what cultural competence looks like in practice and provide related professional learning, as well as ensure faculty understand their audience, include culturally relevant language/culturally relevant examples and "problem sets", so that equity and excellence is demonstrated in all learning offerings.
### Addressing Culturally, Linguistically and Economically Diverse and gender-based STEM education/learning gaps by developing student and professional programs and services, as well as conducting research, that will help strengthen and diversify the STEM education to career pipeline.

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<thead>
<tr>
<th>Strategy #</th>
<th>Equity Indicator</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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<tr>
<td>5.2 Leadership and Governance</td>
<td>Develop a process to collect, organize, analyze and make meaning of diversity, equity and inclusion related institutional data, including data from the equity lens examination of department/discipline specific policies, practices, programs, services, and resources.</td>
<td>Begin to collect and organize diversity, equity and inclusion related institutional data, including data from the equity lens examination of department/discipline specific policies, practices, programs, services, and resources.</td>
<td>Ongoing collection, organization, analysis and meaning-making of data, with a specific focus on demonstration of progress and growth in achieving equity.</td>
<td>Equity Scorecard</td>
</tr>
<tr>
<td>6.1 Environment and Resources</td>
<td>Examine the body of literature around racial and gender-based STEM inequities to create understanding and learn about best practices, including the D-STEM Equity Model to minimize the gap that will inform the repurposing of current and development of new programs focused on achieving equity.</td>
<td>Implement STEM programs designed to achieve racial and gender equity and continue to build upon D-STEM Equity Model by creating a racially-based STEM potential identification protocol and a culturally responsive STEM curriculum.</td>
<td>Create STEM education to career pathway through partnerships to ultimately achieve racial and gender equity in STEM careers as well as provide packages and share D-STEM equity model with related identification protocol and curriculum.</td>
<td>STEM Equity Program Evaluation Rubric</td>
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### Stakeholder Engagement

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<tr>
<th>Strategy #</th>
<th>Equity Indicator</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
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<tr>
<td>7.1 Environment and Resources</td>
<td>Recruitment: Develop and implement a equity focused recruitment plan, inclusive of representation goals.</td>
<td>Recruitment: Provide ongoing professional learning for search committee members for incorporating best practices (implicit bias, critical race theory, cultural competency) on diversity, equity and inclusion in the hiring and advancement of staff, including faculty.</td>
<td>Recruitment: Monitor and assess equity focused strategies, including faculty with transition into IMSA, and retention, by building upon best practices in mentoring and academic/career support, ensuring that talent is nurtured.</td>
<td>The Institutional Model for Increasing Faculty Diversity and Self-Assessment Tool</td>
</tr>
<tr>
<td>7.2 Environment and Resources</td>
<td>Support: Retention: Implement process that assists staff, including faculty with transition into IMSA and retention, by building upon best practices in mentoring and academic/career support, ensuring that talent is nurtured.</td>
<td>Support: Retention: Monitor and assess process that assists individuals with transition into IMSA with the ultimate goals of development, advancement and retention.</td>
<td>Support: Retention:</td>
<td>Human Resources, DEI</td>
</tr>
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**Notes:**
- The Theory of Change data suggests that IMSA examine the impediments that lead to CLEED gender gaps in STEM fields. Then, address, confront and disrupt the racial and gender bias that exists in STEM education and careers. It further stated that IMSA's Center for Teaching and Learning needs to have more representation across the State of Illinois to share the value of diversifying and strengthening STEM and STEM equity to solve the problems of the world.
- The Institutional data, including institutional data, including data from the equity lens examination of department/discipline specific policies, practices, programs, services, and resources.