PROJECT SUMMARY PAPER

Title: An Equity, Diversity, Inclusion, and Access Model for a Science Center in Northeastern Maryland

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1. Abstract

The Explorable Center (a pseudonym) is planned to be a major regional science and technology center located in northeastern Maryland, located on the I-95 corridor between Baltimore and Philadelphia. When the Center opens in 2023, it will provide families and tourists experiential science-based activities in an informal, playful environment.

Informal science – meaning science activities that take place outside of the formal classroom – plays an enormous role in developing a person's capacity for learning and inquiry. Science, by its very nature, creates opportunities for exploration and experimentation. It requires a student to ask "why" and then engage in critical thinking. The benefits of informal science activities go far beyond helping students become better science students. Indeed, science learning helps students become better global citizens.

But not everyone benefits equally from informal science opportunities. Research shows that instead of erasing equity gaps in education, science centers can worsen the inequity by enriching those who are already succeeding in school and society, in what is known as the "Matthew Effect" (Merton, 1968; Stanovich, 1986, as cited in Feinstein & Meshoulam, 2014). This has the potential to have life-long consequences for those with little science literacy, because as an informal science researcher writes, "The role of science is sufficiently central to the different cultural, social, political, educational, and economic aspects of contemporary lives that being unable to access opportunities to learn about, participate in, critique, or otherwise enjoy science can be understood as a form of marginalization," (Dawson, 2014).

And so, science centers across the country are grappling with how to create an inclusive and accessible environment for all learners. Through interviews with science center leaders, this paper explores how science centers are addressing diversity and inclusion and how they are making themselves accessible for all members of the community. This project also reviews recent academic research on practices that increase equity and inclusion, and those that do not. Findings from this research will be incorporated into a model and set of recommendations for use by the Explorable Center as they develop their diversity and inclusion strategy.

2. Issue Overview

"I just wish someone would come up with a standard name and acronym for diversity and inclusion," said the chief of human resources for a major science center in a recent interview. In their organization, DEA&I was the standard naming convention. In other organizations interviewed, DEI, IDEA, AIDE, and D&I were commonly used as shorthand for diversity, inclusion, equity, and access programs. Each of these letters – concepts – are distinct from each other and represent one facet of a complex challenge for organizations like science centers – how to engage and enrich people from a wide variety of backgrounds and experiences.

There has not yet emerged a consensus on the definition or priority of these components across the field of study or practice. And so, for the purposes of this summary paper and the client deliverable, we will create our own working definition of diversity, inclusion, access, and equity that draws from the thinking of several researchers and practitioners (Dawson, 2014; AAM, 2018; Molefi, 2021).

2.1. Definition of Equity, Diversity, Inclusion, and Access

For the purposes of this paper, and in context of organization development and change, we will define **Equity** as the removal of barriers for individuals and groups so that the organization creates a level playing field for all participants. **Diversity** is often used to mean race, but in an organization, the definition of diversity expands to include differences of age, beliefs, class, culture, disability, education, gender and gender identity, language, nationality, and sexual orientation, in addition to race and any other variable that creates differences between people. **Inclusion** is an environment that is welcoming and comfortable to a widely diverse set of people, who feel respected and valued for their individual contributions. **Access** is the availability of facilities, programs, content, and services to all stakeholders, regardless of characteristics.

2.2. A Framework for Action: Equity>Diversity>Inclusion>Access (EDIA)

We are biased toward action; therefore, this paper recommends a framework in which each element is treated as a step, or category, of activity, toward reaching the goal of a maximally accessible science center (Michel, 2021). If we treat accessibility as the ultimate goal (see Figure 1), then equity becomes the first step toward reaching that goal. Equity in a science center means removing barriers to participating in the experience offered. These barriers may be physical, like exhibit height, or educational in that content assumes a degree of literacy and cultural competence, or institutional in hiring practices that implicitly favor a particular demographic. Removing these barriers is a crucial factor toward an organization achieving diversity among its staff and visitors, which is the next step on the journey to accessibility.

A diverse staff, and ample opportunities for diverse audiences to connect with science subject matter are two foundational elements for attracting people from underrepresented communities and creating an environment where visitors feel a sense of belonging. Research shows that even after implementing these interventions, science centers continue to struggle to attract diverse audiences, the reasons for which we delve into later in this paper. But without this foundation of diverse staff and representation, a science center cannot create an inclusive environment. In this way, diversity is a necessary step toward creating an inclusive environment.

Inclusivity is a set of organizational practices that ensures that individuals with different backgrounds are accepted and welcomed into an organization. A science center that embodies inclusive principles, such as valuing and promoting its diverse staff and actively welcomes visitors from all walks of life with multi-lingual exhibits, ramps instead of stairs, and low sensory experiences, can reach the goal of accessibility as defined by the American Association of Museums (Stein, 2018): "Accessibility is giving equitable access to everyone along the continuum of human ability and experience."

Subsequent sections of this paper are organized using this framework and adopt the acronym EDIA as shorthand for equity, diversity, inclusion, and access. Figure 1 depicts the EDIA Action Framework.

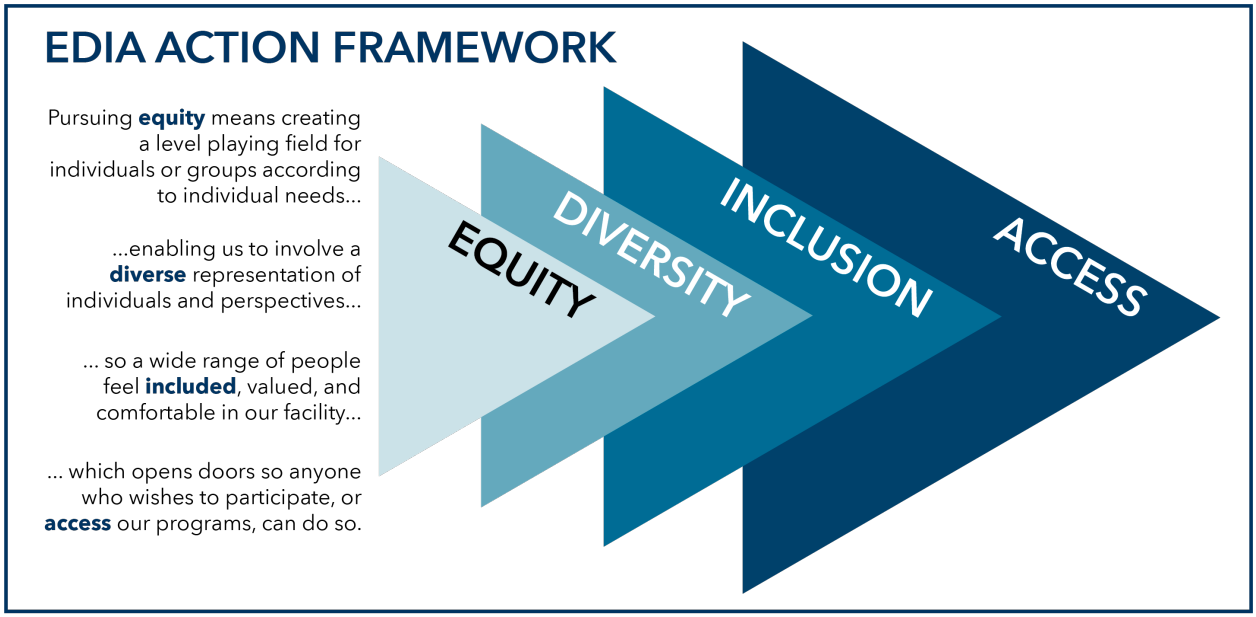

Figure 1: EDIA Action Framework (Michel, 2021)

2.3. Organizational/Industry Profile

The Association of Science and Technology Centers (ASTC), an international organization, polls its 473 members each year on a variety of metrics related to organizational health – attendance, funding, employee pay, and other data. Their most recent poll, which reflects data from 2019 – prior to the COVID shutdown – shows growth in the science center industry. Worldwide, science centers hosted approximately 108 million visits, 70 million of which were to U.S. science centers. This is an increase in attendance for 60% of survey respondents.

The Explorable Center anticipates hosting over 100,000 visitors a year once its full-scale facility is open. With the closest science center an hour away, the Explorable Center envisions filling a very important community need. Plenty of science resources already exist in the community due to a thriving science and technology sector, which is anchored by York Proving Ground, the Army's primary site for research and development activities.

The research and development community in northeastern Maryland suffers from an inadequate supply of candidates qualified for science and technology positions, particularly in the area of computing sciences. Locally, many health science and technology development jobs remain chronically unfilled. For instance, as of last week in the two counties closest to the Explorable Center, there were 297 open jobs for nurses and only 59 applicants, according to the Maryland Workforce Exchange database. Similarly, there were 73 open jobs for Software Developers and 15 candidates – one candidate for every five jobs. This chronic shortage is also found across the state, limiting economic growth and in the case of the Army, potentially jeopardizing defense and national security.

The Explorable Center sees itself as part of the solution to this problem, and research supports that claim (Falk, 2010). Some studies show that informal science experiences have an outsized impact on whether students pursue STEM subjects and careers (Rodari, 2009). One study found

that students who participated in summer and afterschool STEM activities were almost twice as likely to pursue a STEM career than students who did not (Kitchen et al, 2018).

Science Centers are also economic drivers for the communities that host them. A feasibility study commissioned by the Explorable Center estimated that based on local demographics and statistics from other similar regional science centers, the Center can anticipate contributing approximately $14 million in tax benefit and 187 jobs to the economy. In other communities with science centers, every $100 of economic activity created by its museum or science center generates an additional $220 in supply chain and employee expenditure impacts (Stein, 2018).

Currently the Explorable Center is led by an all-volunteer board of directors and supported by several consultants who assist with planning and programs. Its board is predominantly white and male, with significant representation from the local defense science community. The Center is preparing to hire an Executive Director to run day-to-day operations.

Urgency in the science center community to address issues of equity and accessibility tracks with the public's increasing focus on acts of injustice, starting with the Trayvon Martin killing in 2012, which led to the rise of numerous social justice movements across the country. Today, diversity and inclusion are core values of many science institutions, and organizations are experimenting with a variety of practices to address the issue in their communities. As lamented in scientific literature and confirmed by interviews conducted for this project, there are few practices that have consistently proven to move the needle on a science center's most visible measure – the diversity of visitors coming through the door each day. More research on effective practices is needed.

2.4. Performance Problems, Issues, or Concerns

Building a physically accessible facility that accommodates all types of disabilities is a straightforward process. National construction standards as outlined by the Americans with Disabilities Act (ADA) prescribe building specifications that ensure wheelchair access and remove barriers in new construction. Similarly, many science centers now offer "sensory hours" to expand access for autistic and neuro-diverse visitors, which is a relatively simple intervention. Yet, enormous challenges remain to attracting visitors from socially or economically underrepresented parts of the community. It has proven to be more problematic than simply offering transportation or reduced admission. In fact, much of the challenge stems from the perception that a science center is "not for us." This is a cultural phenomenon, which like a corporate culture change initiative in an organization, can be more entrenched and difficult to change than removing barriers. "Social positions – gender, ethnicity, class, or age, may play a more important role in informal science experiences than barriers prevent those from participation," (Dawson, 2014). Science center experiences where participants feel "othered" by lack of culturally relevant content, or non-diverse staff, reinforce the feeling that non-white, non-middle-class people don't belong and further drive them away.

Nevertheless, science centers are embracing the challenge of reimagining themselves for a more diverse community and attempting to make a difference by employing a variety of tactics. In the Key Findings section of this paper, we will discuss tactics that science centers are using to build relationships with underrepresented communities.

3. Project Description: Goal, Objectives, Model, Stakeholders, and Process

3.1. Project Goal

The overall goal of this capstone project is to create a roadmap for the Explorable Center that will guide its facility and program EDIA development, thus ensuring that accessibility remains central to the vision for the Explorable Center. This project will not deliver a definitive EDIA plan, but instead provide a roadmap for the Board of Directors to develop their own plan, using the information gathered, analyzed, and presented for this project.

3.2. Project Objectives

- To build the business case for a comprehensive diversity and inclusion plan and help the Board understand its importance in the operating of the Explorable Center, thus earning the Board's buy-in and commitment to investment
- To involve the community in articulating its needs and requirements as they pertain to science center experiences, facilities, and exhibit content
- To find and incorporate best practices from other science centers

3.3. Assessment Model, Process, and Tactics

This project delivered a report and set of strategies and tactics for the board to consider as it assembles its EDIA roadmap for the future. To develop this report and recommendations, we followed the five phases of the Penn State OD Effectiveness Model™. During the first two phases – Inquiring and Strategizing – we asked and answered the following questions:

- Inquiring
    - What science centers have launched an active EDIA program?
    - What does EDIA mean to them in a science center environment?
    - What is their "business case" for an EDIA plan?
    - Are they willing to contribute to this project?
    - What is the current research on challenges in equity, diversity, inclusion, and access for informal science education and science centers?
- Strategizing
    - What is the current research on best practices in equity, diversity, inclusion, and access programs for science centers?
    - How are other science centers implementing EDIA practices?
    - Priorities and process of developing EDIA program at other science centers
    - What appears to be working for other science centers and how are they evaluating?
    - What are the current and future demographics for the region around Explorable Center?
    - What are community priorities to address in Northeastern Maryland?

Process and tactics used to conduct and complete this project:

- Conducted a literature search on EDIA and informal science/science centers and used the results from this research to formulate interview questions and guide our conclusions and recommendations.
- Developed an interview protocol, which is included as an Appendix.

- Interviewed seven science centers across the country – Florida, Western Pennsylvania, Minnesota, Central Pennsylvania, Southeastern Pennsylvania, California, and North Carolina. These science centers were selected from web searches that identified them as having some form of EDIA program.
- Interviewed two local government and nonprofit leaders that represented targeted populations.
- Performed thematic coding on results of the interviews using NVivo. Themes aligned with key milestones (launch) and categories of intervention (staffing, exhibits, etc.).
- Using the Maryland State information database, pulled current and projected demographic data for three countries from which the Explorable Center will attract most of its visitors. These data focus on race and ethnic growth projections.
- Compiled a list of grant opportunities related to STEM diversity and inclusion programs to support the business case and inform the resulting strategic plan.
- Conducted a two-part discussion on workplace diversity and inclusion issues to discern effective inclusive hiring, recruiting, and workforce development strategies already in our community.

This paper is the first step in the Planning Phase of the OD Effectiveness Model™ as its research and findings build the foundation for a planning process that involves members of the Board and the community and delivers a set of research-based recommendations for the planning committee to consider. We envision facilitating a community forum where board members and key stakeholders develop a comprehensive EDIA strategic plan that will include a communications plan for building relationships with communities. This strategic plan will also map out implementation (Doing), and evaluation and sustainment (Revitalizing).

A few questions that will be asked and answered during the remaining Planning, Doing, and Revitalizing phases include:

- What does EDIA mean to the Board and community of the Explorable Center?
- Based on the needs of our community, as identified in the Capstone Project, what are our top priorities in EDIA for the Explorable Center to address?
- What are best practices that have been effective at centers like ours, and how can we adopt them for our region?
- How can we meaningfully involve the community in this work both now and in the future when the Center is operational?
- How will we know when we are successful? How will we evaluate our efforts?
- How can we build and maintain an open dialogue with key stakeholders during this process?

3.4. Project Key Stakeholders and Decision Makers

To understand the current research about EDIA and its role in informal science, we relied on literature searches of current published, peer-reviewed papers. We focused on research conducted in the U.S. and the U.K. because of the demographic similarities to the Explorable Center. In these countries, science is predominantly the domain of white males (NSF, 2019), and the U.S. and U.K. share the same challenges in attracting underrepresented groups.

To learn about best practices in EDIA at other science centers, we sought to talk with the institution's subject matter expert on the topic, rather than an administrative lead. In some cases, the interviewee was dual hatted as an administrative leader and the diversity champion.

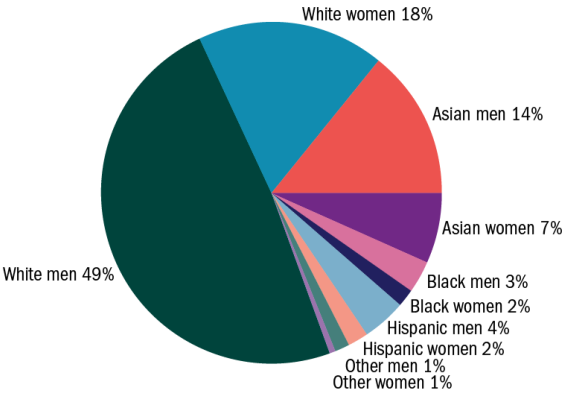

Figure 2: Participation in science and engineering careers by race and gender (NSF, 2021)

To conduct the local community needs assessment, we talked with directors of government agencies and nonprofits with a mission to serve specific groups affected by inequities. These interviews focused on effective strategies and practices they have witnessed that serve their target audience.

4. Key Findings and Results

This section is organized using a model developed by the Centre for Global Inclusion (Molefi et al, 2021), an international organization of equity professionals that is dedicated to advancing an inclusive culture and improve organizational effectiveness. Using this model, the Centre has developed a set of benchmarks for effective diversity and inclusion practices. The model groups practices into four categories – internal, external, bridging, and foundation. We will use three of these categories to organization our key finds and results.

Figure 3: Global Equity and Inclusion Benchmark Model

4.1. Foundation: Drive the Strategy

A theme repeated throughout the interviews with science center leads was that their CEO or Executive Director was an active part of strategizing, building, funding, and implementing the center's EDIA plan. This hands-on leadership with diversity and inclusion was named as a key success factor by five of the seven centers interviewed and is backed up by recommendations coming from industry leaders.

In a recent *Harvard Business Review* article (Cox & Lancefield, 2021) that listed the authors' five top recommendations for infusing EDIA into an organization, "Ensuring the CEO positions themselves as the top champion for D&I efforts," was the first recommendation. "The CEO

needs to take a public stance, embed D&I in the organization's purpose, exemplify the culture, and take responsibility for progress toward goals. They need to be out front, even if a CDO is part of the team."

Here are remarks from project interviews on the role of the CEO: "You must have buy-in and support from the CEO," "I report to the CEO," the CEO is also the DE&I Officer," "Our CEO went to [EDIA training]," and "I make sure my CEO is in alignment with my plans. We agree on how we demonstrate commitment and culture."

The Boards of Directors appear to be an area of concern for many science centers. As a 2014 study of equity in U.S. science museums reports, "The board of directors was typically the least diverse group of people affiliated with the institution. The traditional role of board members as financial contributors was a constraint on recruitment, so that even ethnically diverse boards were not economically representative of their communities," (Feinstein and Meshoulam, 2014). Similarly, no center interviewed for this capstone project was satisfied with their Board's composition by gender and race:

- "Our Board is not representative of the community. Our founding board members and donors are predominately white males. We've reached gender parity, but all they are all white, which is a problem."
- "We have 45 members with the Board. Our target for the new slate has to be 50% women or people of color. We've had this target since 2017."
- "Need a reason more than skin color to come on board."

Also, Board leadership on diversity and inclusion was missing in many organizations:

- "I had to work to gain Board buy-in:
- "Some board members were hesitant, but after educating themselves, were on board …mostly."
- "The board didn't lead the discussions, but it would have been nice if they had started sooner talking about [EDIA] for themselves and the organization."
- "A now former board member is still not comfortable with us using the statement "Black Lives Matter" because no matter the conversation, she does not believe that it is better than "all lives matter."

4.1.1. Best Practices in Leadership and Strategy

First, each organization interviewed for this project had a diversity and inclusion statement on their web page. This is one of the best practices recommended by industry and academia because it helps to gel leadership support of the EDIA program internally and, because it is posted publicly, holds the organization accountable for its EDIA initiatives. The Centre for Global Inclusion recommends that vision and mission statements expressly commit to EDIA, and that the EDIA strategy be included as part of the overall organizational/business strategy and is reflected in values, policies, and practices. Specifically, the organization's strategy should include "numerical goals resulting in equitable representation of underrepresented groups across functions and levels," (GDEIB, 2021).

Second, a best practice recommended by interviewees and experts is that all leaders in the organization have EDIA embedded in their job responsibilities. GDEIB specifically suggests that

"leaders promote DEI initiatives, communicate the strategy, and provide recognition for DEI champions and advocates."

Third, Board members need to be recruited not only for the economic and functional skills they offer, but for the demographic they represent. Special care to deliberately go outside of existing networks may bear fruit. Center leaders can recruit assistance from local government and civic leaders to identify potential board members. As with any board member, once they are brought into the organization, it is a best practice to pair them with another board member for onboarding and relationship-building.

4.2. Internal: Attract and Retain People

Building a diverse workforce is a topic of interest to researchers and science center leaders. All of the interviewees mentioned their staff composition and the need for it to reflect more diversity to be an essential part of their diversity and inclusion program. Many science center leaders said that visitors to the center need to see people who look like them when they enter the facility with the hopes that this will improve participation among minority and underrepresented groups. However, science centers vary in the extent to which they focus on hiring diverse staff. "At the passive end, staff diversity was delegated to the human resources department… The more proactive organizations used recruitment strategies that either drew upon the cultural and racial diversity of the local community or targeted a particular equity-related role of potential employees," (Feinstein and Meshoulam, 2014).

In many centers, including those interviewed, organizations struggle with having a diverse "front of the house" team while the leadership team remains stubbornly white. "Participants from several organizations reported an inverse relationship between diversity and seniority, with non-white staff serving in lower-ranked and lower-paying positions," (Feinstein and Meshoulam, 2014). Interviewees named ways they are working to diversify their staff:

- "We addressed hiring so that for every hire, there was a diversity question and we made sure our hiring committees were representative"
- "We are looking for small changes like reviewing all job descriptions to pay attention to language and qualifications and it has resulted in a much more diverse pool of candidates to hire from"
- "We think more about how we word job posts, we are mindful of pronouns, we are actively reaching out to diverse groups…"
- "Our diversity among physical disabilities is lacking"
- "We're trying to move toward more blind hiring practices"

Training of staff, volunteers, and board members arose frequently in interviews. Many organizations have delivered unconscious and implicit bias training at a minimum, and gradually focusing training more on specific issues. One organization just concluded 10 sessions of equity training with their board of directors, another hosted a training on working with neuro-diverse visitors, and yet another provided training on disability awareness and policies. Several national training programs exist for science center staff members, such as the iPage program at the IDEAL Center in Minnesota, and the Association of Science and Technology Center's Cultural Competence Institute.

4.2.1. Best Practices in Attracting and Retaining People

- Develop relationships with diverse ethnic communities and direct recruiting activities there, use minority search firms and firms that specialize in diverse candidates.
- Establish a work environment that is comfortable for all employees, including supporting internal affinity groups and hosting candid conversations.
- Review job description qualifications and language for bias.
- Establish structured hiring criteria and interviews, including hiring by committee, equalizing resumes, training interviewers, drafting interview questions.
- Examine processes for assigning job tasks, especially those that provide opportunities for advancement and promotion.
- Collect data, measure outcomes, and hold people accountable.
- Provide EDIA training on an ongoing basis for all staff, volunteers, and board members.

4.3. External: Listen to & Serve Society

For organizations interviewed for this project and throughout all the research literature, what emerged as a science center's most important piece of equity work was increase the ethnic and socio-economic diversity of admissions. Visitor data suggest that people most unlikely to visit a science center may come from minority ethnic, working class, rural, or low-income backgrounds. (Dawson, 2014). There are numerous ways that science centers are attempting to increase the diversity of visitors – diversifying frontline staff, lowering admission prices, arranging for transportation, working on exhibits to make sure they represent a diverse community with culturally relevant material, and more. And while these tactics are important and help break down barriers, there is evidence that these practices do little to penetrate the culture of "not for me" that is often embedded in socio-economically disadvantaged communities. In the U.K., several museums eliminated entrance fees. And while their visitor numbers rose dramatically, it did not increase diversity. Existing visitors were just attending more often (Dawson, 2014).

Science centers are trying address this cultural divide in new ways – working in the community to attract more visitors to the science center and adapting the exhibit floor to be more appealing to diverse audiences. Collaborating on the development of content for science programs and floor exhibits with marginalized communities surfaced as a favored practice among science centers interviewed for this project and those participating in academic research studies. These organizations often also had community advisory boards to ensure representation and flow of information. Organizations also went into the communities with portable exhibits and demonstrations and hosted family science workshops at local neighborhood venues.

Multiple studies reviewed for this paper warned against taking a barriers perspective – seeing diverse communities as having barriers to visiting a science center – because it requires participants to change to fit the institution and adapt to the dominant culture's norms. This in turn positions underrepresented groups of people as "problems to be solved" and outsiders, which perpetuates the feeling that the center is "not for me" (Archer, 2020; Dawson, 2018; Feinstein and Meshoulam, 2014).

So how do we overcome exclusion and nonparticipation of socio-economically diverse audiences in science? Minority ethnic communities? Women? A 2016 research study examined the

"science identities" of disadvantaged families. A science identity is the extent to which an individual sees themselves as someone who is competent and interested in science (Carlone and Johnson, 2007, as cited in Archer, 2016). This is influenced by the person's history, family, experiences, gender, class, and leads to the person's understanding of what is "normal for people like me" (Archer, 2016). A science identity can be changed but it requires change at the cultural and capital level. Simple exposure to science experiences is inadequate. In fact, visits to science centers where a disadvantaged person's culture and capital are not accommodated can do more harm than good for that person's science identity (Feinstein & Meshoulam, 2014). Nevertheless, there are strategies that academic researchers have proven to move the needle on science identity, but the effort is extensive, and it requires informal science leaders to understand the relationship between power, people, and institutions, and recognize when organizational practices encourage inequity and inaccessibility.

4.3.1. Best Practices in Community Engagement

Author Dawson (2014) proposes a three-part framework for evaluating equity in informal science, building on prior research on enhancing computer literacy. This framework also lends itself to developing equity interventions, which we discuss in the Recommendations section of this paper. The framework includes:

- Infrastructure access: the extent to which people can physically access a science center, including location, cost, doorways. Infrastructure access according to Dawson may also include what audiences are targeted for marketing and power-sharing between the institution and the community.
- Literacy: literacy refers to the ability of an individual to navigate the infrastructure of a science center, such as knowing what to do when they arrive, how to participate in science activities, how to interact with staff, and understanding the "rules of the game."
- Community acceptance: how willing are practitioners to redevelop a learning environment to recognize and accommodate the needs of underrepresented communities, even if they clash with "traditional" ways science is presented.

We will use this framework in the next section to organize our equity recommendations for the Explorable Center's EDIA program. But first, let's review some of our interviewees' perceptions on community engagement:

- "It is important to identify what is important by involving the communities. They need to be involved in determining the programmatic outputs. Engaging in collaborative efforts with the center."
- "We try to practice sincere community engagement by asking communities to hold us accountable. You have to suspend the sense of defensiveness. Take input. Truly listen. You are always going to need to be checking yourself."
- "You can't go into a community and tell them what to do. Must go in as co-collaborators. Community members have to provide input."
- "We need to find out who we are not serving, why we are not serving them, and how can we change that. Might be physical, or inclusiveness of exhibits. We were created solely for expanding our audiences and growing our science community."

5. Recommendations

The Explorable Center is located in a suburban area of Maryland between major metropolitan areas. It will primarily draw from communities within a 60-mile radius. For the purposes of analyzing its future visitor base, we limited our demographic analysis to the three closest Maryland Counties – Harford, Baltimore County, and Cecil County. There are additional regions that the Explorable Center will draw from – Baltimore City, other Maryland counties, southern Pennsylvania, southern New Jersey, and Delaware – that bear more research because they represent very diverse communities.

Our first recommendation is that even though the Explorable Center needs to initially examine equity across the board, that it focuses on accommodating the needs of five diverse communities: Black, Hispanic, women, neuro-diverse, and those with physical disabilities.

- In the region immediately surrounding the Center, the total population is expected to grow by almost 14% by 2045. The Hispanic population will grow by over 122%, the Black population by 75%, and "other," which includes Asian, Alaskan Native, and Native American, will grow by 95%. The White population is expected to shrink by 19%. See Figure 4 and Appendix A for demographic data.

Whole Region											
Ethnicity	2010	2015	2020	% change from 2010	2025	2030	2035	% change from 2010	2040	2045	% change from 2010
Black	486,654	533,342	588,474	20.92%	648,220	705,290	759,102	55.98%	808,734	850,112	74.69%
Hispanic	91,510	113,310	133,482	45.87%	154,974	168,186	181,042	97.84%	193,046	203,322	122.19%
Other	149,946	173,590	197,654	31.82%	223,400	242,672	261,122	74.14%	278,288	292,734	95.23%
White	1,573,816	1,540,148	1,462,568	-7.07%	1,392,470	1,344,870	1,316,102	-16.38%	1,295,526	1,273,400	-19.09%
Total	**2,301,926**	**2,360,390**	**2,382,178**	**3.49%**	**2,419,064**	**2,461,018**	**2,517,368**	**9.36%**	**2,575,594**	**2,619,568**	**13.80%**

Figure 4: Race projections in Northeastern Maryland

- According to the County Office of Disability, neurodiversity is the fastest-growing factor in youth in our region. Many of the science centers interviewed for this project had created programs to accommodate neuro diversities, such as brochures that described the exhibits and experiences and "sensory hours" where stimuli are reduced. Recent statistics show that one in six people are considered neuro diverse, with autism affecting thousands of people in this region.
- Of all people who do not have a positive science identity, women comprise the vast majority. Also, women make up the largest demographic living in poverty in Northeastern Maryland and elsewhere.
- Accommodating physical disabilities in a facility is required by law with the Americans with Disabilities Act (ADA), but there are many additional practices beyond the facility requirements that can help people with disabilities access science.

The second recommendation we make is that the Explorable Center engages the community in a diversity and inclusion strategic planning process. While this paper contains data about the local community and national best practices, it is critical that the Explorable Center create its own dialogue with diverse communities in the region. The goal of the strategic planning process will be to create a 5-10-year roadmap for EDIA programs and facilities. A best practice that other science centers have employed is standing up an Advisory Board that includes both internal and

external stakeholders and whose charter is to expand access to science to the widest possible number of people regardless of ability, gender, race, ethnicity, etc. During this process, the Center should create a public statement that explicitly states its commitment to diversity and inclusion. Additionally, develop metrics to assess and revitalize EDIA efforts.

Third, we recommend that the Explorable work with its design vendor and exhibit planners to use Universal Design principles for creating experiences in the Center. Universal design accommodates a wide range of user requirements and preferences. There are many excellent resources on this topic, such as the National Equity Project, which has material on designing for equity. Additional sources are listed in the Resources section of this paper.

In addition to the above, we recommend the Explorable Center evaluate the following best practices found in other science centers:

- Equity:
    - Apply universal design practices to exhibit design.
    - Provide opportunities for visitors to create new interpretations and definitions of what science means to them
    - Offer translations of critical information into Spanish.
    - Design an introduction and orientation space for first-time visitors that helps them understand and navigate the center.
    - Design exhibits, programs, curriculum, and interactives that provide people the opportunity to make the link between science and their personal lives.
    - Provide assistive technology or multiple access vehicles for information.
    - Provide equity training to board members and volunteers.
    - Noise-blocking headphones. Audio for everyone.
    - Use Airport wayfinding, symbols – iconography for signs
- Diversity
    - Ensure that exhibits and imagery, texts, and stories depict different ethnicities and genders. Uses the voices of diverse communities to tell their stories.
    - Diversify board with representatives who have disabilities, are people of color, and who represent economically depressed communities.
    - Develop a talent management plan that identifies goals for hiring and developing people of color.
- Inclusion
    - Inclusive design for interactives (see Resources).
    - Ensure a breadth of cultural representations across the center.
    - Implement a communications plan that encourages candor and promotes individual growth in the area of EDIA.

6. Costs and Benefits

Most centers interviewed for this project did not feel their efforts were adequately funded. One center's strongly worded recommendation was to make sure that diversity and inclusion has its own budget line. Compensating workers, bringing in trainers and speakers, and funding outreach campaigns are several expenditures this center would make.

In Figure 5, we depict the costs associated with a year-long level of effort to lay the foundation for a comprehensive internal and external diversity and inclusion program. The cost estimate includes a range of effort – minimum and recommended. The work is scalable and can be funded relative to available revenue. For a start-up center that has under 30 employees and volunteers and 10,000-SF of exhibit space, we recommend a contractual team that could bring the flexibility and diverse skills to bear at the appropriate time. There would be deliverables associated with a statement of work they would be expected to perform. That statement of work would include:

- EDIA recruiting and hiring plan for staff
- Staff development and training
- Board training in equity issues
- Volunteer training on working with neuro-diverse
- Community outreach and relationship building
- Focus groups, community forums, and other vehicles for dialogue with diverse communities
- Exhibit development or redesign for greater accessibility
- Center content and subject matter research and revision to create more inclusion of diverse voices and nontraditional science professionals
- Consultants to speak/train/advise on specific issues

Equity, Diversity, Inclusion, and Access Program

Level of Effort for Start-Up Science Center - One Year

Staff Member	Cost Per Hour	Minimum Level of Effort	Cost: Minimum Level of Effort	Recommended Level of Effort	Cost: Recommended
Senior Consultant	$120	200	$24,000	400	$48,000
Human Resources Specialist	$70	500	$35,000	1,000	$70,000
Community & Education Specialist	$55	1,000	$55,000	2,000	$110,000
Exhibit Designer	$52	200	$10,400	800	$41,600
Junior Consultant	$35	1,000	$35,000	2,000	$70,000
Total CLIN Hours/Cost		**2,900**	**$159,400**	**6,200**	**$339,600**
Other Direct Costs			**$5,000**		**$10,000**

Figure 5: Estimated cost for EDIA start-up new center - 1 year

The benefits of a science center investing in an EDIA program are many and varied. First, a science center's very mission is to expose people to the joy of scientific exploration and discovery. Unless a science center is deliberately focused on diversity and inclusion, it is likely to only expose those who are already interested in science, according to many of the sources

referenced in this paper. Therefore, to truly expand the reach of scientific knowledge, a science center must reach beyond its traditional audience into communities that do not typically visit a science center. Bringing new people to the science center is where the growth is and where the science center can truly fulfill its mission.

Another benefit is that it is well-known that organizations with extensive diversity on its staff and leadership tends to outperform its less-diverse competitors. According to a McKinsey study on financial performance and diversity (Dixon-Fyle, 2021), companies with at least 30% female executives were 48% more likely to outperform their competitors. Racial and ethnic diversity statistics were remarkable as well. The most racially and ethnically diverse companies outperformed the least diverse in profitability by 36%. There is little research on comparable effectiveness measures in this area for science center or nonprofit performance.

7. Conclusions

One of the most impressive aspects of these interviews with science center leaders was their commitment to continuous improvement of their organization in EDIA. “We will never claim we are an inclusive organization. We can never claim victory because it is not possible to be a fully inclusive organization.” “We are a work in progress.” “We’ve reached a level of inclusion, but we are always working toward the next goal. As a very small non-profit, this can mean progress feels slower than we would like.” “Wow, we’ve done so much but when I look at other museums, I realize we have leagues to go.”

The industry itself is a work in progress. Certainly, science centers face tremendous challenges in building bridges to diverse communities. It is not the people of these communities that need to change, but the informal science institutions themselves. “Historically, the culture of informal science spaces tends to represent, value, and reproduce dominant, white, male, middle-class values, histories, and identities,” (Archer, 2020). This culture must be challenged and a new one created where science is framed and interpreted through diverse identities, values, and experiences. By listening with empathy and humility, by respecting young diverse people’s identities and contributions, and by letting go of our preconceived ideas and expectations of how people engage with science, we can usher in a new generation of passionate scientists from all backgrounds and abilities.

Project Lessons Learned and Tips for Others

This was not a typical linear project that started on Step One and ended at its expected destination. It had many moving parts, and several key people were unexpectedly unavailable during the course of this project. To adjust, we added and dropped assessment tools, and swapped out interviews with science centers. This is much like a typical organization development client engagement that unfolds over a period of time, changing course and information is uncovered. A lesson learned from this project was to not hold too rigidly to the project plan created at the start. Be willing to change direction as the winds shift. You’re probably going to learn something very interesting by going in another direction.

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9. Resources

- Access Smithsonian: Resources for Museum Professionals
- American Association of Museums DEAI Working Group Report
- ASTC Diversity Equity Toolkit
- Centre for Global Inclusion
- Institute for Human-Centered Design
- Inclusive Digital Interactives Best Practices
- Liberatory Design Deck
- The National Equity Project
- Smithsonian Accessible Exhibit Design Guidelines

10. Appendices

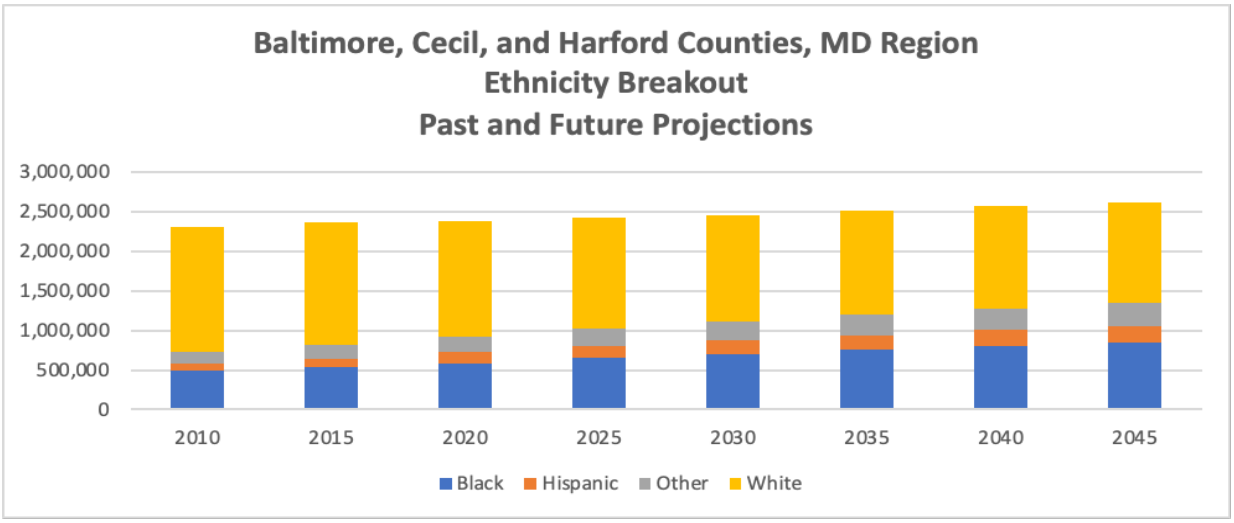
A. Demographic projections

Baltimore County											
Ethnicity	2010	2015	2020	% change from 2010	2025	2030	2035	% change from 2010	2040	2045	% change from 2010
Black	413,826	455,110	501,222	21.12%	551,364	597,182	638,786	54.36%	676,110	706,190	70.65%
Hispanic	67,470	83,818	97,904	45.11%	112,840	121,390	129,210	91.51%	136,276	141,964	110.41%
Other	119,650	138,852	157,256	31.43%	176,970	191,040	203,856	70.38%	215,398	224,686	87.79%
White	1,009,112	977,750	904,238	-10.39%	835,942	783,570	745,980	-26.08%	718,476	695,124	-31.12%
Total	**1,610,058**	**1,655,530**	**1,660,620**		**1,677,116**	**1,693,182**	**1,717,832**		**1,746,260**	**1,767,964**	

Cecil County											
Ethnicity	2010	2015	2020	% change from 2010	2025	2030	2035	% change from 2010	2040	2045	% change from 2010
Black	12,160	13,012	14,996	23.32%	17,394	20,062	22,776	87.30%	25,176	27,600	126.97%
Hispanic	6,814	8,430	10,198	49.66%	12,264	14,048	15,878	133.02%	17,484	19,114	180.51%
Other	6,546	7,624	8,672	32.48%	9,948	11,492	13,068	99.63%	14,460	15,858	142.25%
White	176,696	175,730	172,330	-2.47%	172,600	178,506	186,686	5.65%	193,770	200,526	13.49%
Total	**202,216**	**204,796**	**206,196**		**212,206**	**224,108**	**238,408**		**250,890**	**263,098**	

Harford County											
Ethnicity	2010	2015	2020	% change from 2010	2025	2030	2035	% change from 2010	2040	2045	% change from 2010
Black	60,668	65,220	72,256	19.10%	79,462	88,046	97,540	60.78%	107,448	116,322	91.74%
Hispanic	17,226	21,062	25,380	47.34%	29,870	32,748	35,954	108.72%	39,286	42,244	145.23%
Other	23,750	27,114	31,726	33.58%	36,482	40,140	44,198	86.10%	48,430	52,190	119.75%
White	388,008	386,668	386,000	-0.52%	383,928	382,794	383,436	-1.18%	383,280	377,750	-2.64%
Total	**489,652**	**500,064**	**515,362**		**529,742**	**543,728**	**561,128**		**578,444**	**588,506**	

Whole Region											
Ethnicity	2010	2015	2020	% change from 2010	2025	2030	2035	% change from 2010	2040	2045	% change from 2010
Black	486,654	533,342	588,474	20.92%	648,220	705,290	759,102	55.98%	808,734	850,112	74.69%
Hispanic	91,510	113,310	133,482	45.87%	154,974	168,186	181,042	97.84%	193,046	203,322	122.19%
Other	149,946	173,590	197,654	31.82%	223,400	242,672	261,122	74.14%	278,288	292,734	95.23%
White	1,573,816	1,540,148	1,462,568	-7.07%	1,392,470	1,344,870	1,316,102	-16.38%	1,295,526	1,273,400	-19.09%
Total	**2,301,926**	**2,360,390**	**2,382,178**	**3.49%**	**2,419,064**	**2,461,018**	**2,517,368**	**9.36%**	**2,575,594**	**2,619,568**	**13.80%**



B. Global Diversity, Equity, & Inclusion Benchmarks

GLOBAL DIVERSITY, EQUITY & INCLUSION BENCHMARKS: STANDARDS FOR ORGANIZATIONS AROUND THE WORLD
SAMPLES OF BEST PRACTICE BENCHMARKS

GDEIB, which is free, contains 275 benchmarks in four groups and 15 categories. Each category is in 5 levels from where little work is being done to best practices. Below is a sampler of a few benchmarks at the best practices level of each category.

Global Diversity, Equity & Inclusion Benchmarks

FOUNDATION GROUP

Category 1: VISION, STRATEGY, AND BUSINESS IMPACT
- DEI is embedded in organizational culture as a core value, a source of innovation, and a means to sustainability and success.
- The organization is proactive and responsive to DEI challenges that are faced by society, including but not limited to political and economic trends, and recognizes that organizations are microcosms of the societies in which they operate.

Category 2: LEADERSHIP AND ACCOUNTABILITY
- Leaders are change agents and role models for DEI. They inspire others to take individual responsibility and become role models themselves.
- A large majority of employees across a wide array of diversity dimensions rate their leaders as trustworthy, citing equitable and inclusive treatment.

Category 3: DEI STRUCTURE AND IMPLEMENTATION
- The most senior person responsible for DEI is an equal and influential partner on the senior leadership team.
- DEI is integrated into core organizational structures, policies, systems, and practices.

INTERNAL GROUP

Category 4: RECRUITMENT
- The organization's reputation for quality DEI efforts enhances its ability to attract diverse and underrepresented employees.
- When technological solutions are used for recruitment, the organization implements practices to minimize and remove algorithmic bias.

Category 5: ADVANCEMENT AND RETENTION
- Diverse employees hold positions at all levels and functions to ensure equitable representation.
- The pool of candidates in the organization's succession plan is diverse along multiple dimensions and prioritizes underrepresented groups.

Category 6: JOB DESIGN, CLASSIFICATION, COMPENSATION
- Regular reviews of pay differentials are conducted and discrepancies between underrepresented groups and the dominant group are eliminated.
- Performance rating, pay, bonuses, and promotions are tied to a variety of DEI measures.

Category 7: WORK-LIFE INTEGRATION, FLEXIBILITY, AND BENEFITS
- The organization's policies and practices regarding benefits, work-life integration and flexibility meet the organization's commitment to decent work, psychological safety, and respect for human rights.
- All leaders model and encourage work-life integration by promoting its benefits.

BRIDGING GROUP

Category 8: ASSESSMENT, MEASUREMENT, AND RESEARCH
- In-depth DEI assessments are regularly conducted on the overall organization and within departments, and the results are incorporated into strategy and implementation.
- A reputational risk assessment including several DEI issues, such as racism, sexism, homophobia, harassment, disability discrimination, and other forms of discrimination, is regularly conducted.

BRIDGING GROUP CONTINUED…

Category 9: DEI COMMUNICATIONS
- The organization is known for its high-quality DEI initiatives that are regularly communicated internally and externally enhancing the organization's reputation.
- The organization uses bold and transparent communication in naming and dealing with challenging issues such as racism, sexism, homophobia, privilege, toxic masculinity, and white supremacy.

Category 10: DEI LEARNING AND DEVELOPMENT
- DEI is integrated into all learning offered internally and externally to key stakeholders.
- Learning and education addresses racism, anti-racism, sexism, white supremacy, privilege, internalized oppression, classism/casteism, homophobia, transphobia, religious bias, disabilities, mental health awareness, and other issues.

Category 11: CONNECTING DEI AND SUSTAINABILITY
- DEI is seen as integral to the sustainability of the organization and its stakeholders. Sustainability is fully integrated into DEI strategies/initiatives.
- The organization takes a leadership role in influencing and supporting the connection of DEI and sustainability initiatives locally and globally including being a champion of ESG and the UN's Sustainable Development Goals.

EXTERNAL GROUP

Category 12: COMMUNITY, GOVERNMENT RELATIONS, AND PHILANTHROPY
- The organization helps its community by promoting economic growth, addressing income inequality and groups that have been historically disadvantaged, and/or serving those most in need.
- The organization takes bold stands in word and action on societal issues related to achieving equity and justice for marginalized people, such as #BlackLivesMatter, #MeToo, #Genderbasedviolence, #UnitedAgainstRacism, and #Standup4humanrights.

Category 13: SERVICES AND PRODUCTS DEVELOPMENT
- The organization successfully leverages diverse teams, including diversity networks, customers, partners, the community, and other stakeholders, to improve its products and services.
- The product and service development cycles prioritize diversity and accessibility from the start. The organization doesn't merely adapt products first developed for the dominant group or culture.

Category 14: MARKETING AND CUSTOMER SERVICE
- The organization uses advanced and unbiased analysis techniques to understand and respond to the diversity of its customer base, including nuances of intersectionality.
- While outside DEI expertise may also be sought, the organization leverages the marketing, sales, distribution, and customer service expertise of its diverse staff.

Category 15: RESPONSIBLE SOURCING
- The organization has embedded DEI in its responsible and ethical sourcing as evidenced by its policies, systems, and inclusive practices.
- The organization treats its suppliers with respect and dignity, pays them in a timely manner, and collaborates with them to make the supply process work.

Go to www.centreforglobalinclusion.org and navigate to the free GDEIB to download it. You will need to sign the User Agreement to use it. Also notice the many free User Tools. At the top of each page on the site, notice a place to subscribe to our monthly newsletter.

The Centre for Global Inclusion
RESEARCH. EDUCATION. SOLUTIONS. SUPPORT.

C. Inclusive Design Cheat Sheet

Institute for Human Centered Design

What is universal design…inclusive design…design-for-all?

…a **framework** for the design of places, things, information, communication and policy that focuses on the user, on the widest range of people operating in the widest range of situations without special or separate design.

Or, more simply: **Human-Centered design (of everything) with everyone in mind**

Universal Design Principles:

Equitable Use: The design does not disadvantage or stigmatize any group of users.

Flexibility in Use: The design accommodates a wide range of individual preferences and abilities.

Simple, Intuitive Use: Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Perceptible Information: The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.

Tolerance for Error: The design minimizes hazards and the adverse consequences of accidental or unintended actions.

Low Physical Effort: The design can be used efficiently and comfortably, and with a minimum of fatigue.

Size and Space for Approach & Use: Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of the user's body size, posture, or mobility.

[Developed by a group of US designers and design educators from five organizations in 1997. Principles are copyrighted to the Center for Universal Design, School of Design, State University of North Carolina at Raleigh. The Principles are in use internationally.]

Relationship between Legally Mandated Accessibility & Inclusive Design

Legally mandated requirements for accessible design, within a civil or human rights context, provide a vital basis for autonomy and equal opportunity for people with disabilities. To be effective, legal mandates require an infrastructure of information and enforcement in order to ensure meaningful compliance. Inevitably, the legal mandates establish a set of minimum standards for some built,

www.HumanCenteredDesign.org • 200 Portland Street, Boston MA 02114 • 617.695.1225 v/tty • 617.482.8099 fax

D. Interview Protocol

Introduction: It is a common belief that science centers provide informal science education that can help erase persistent equity gaps in education, and so science centers across the country are grappling with how to create an inclusive and accessible environment for all learners. There are barriers to reaching and attracting visitors from underrepresented parts of the community, just as there are barriers to creating exhibits accessible to differently abled visitors. Will science centers help bridge the divide through IDEA programs or will science centers worsen the divide by further advancing those who are already succeeding in STEM? The jury is still out on that question, but science centers are embracing the challenge of reimagining themselves for a more diverse community. Through interviews with science center leaders, this project explores how science centers are addressing diversity and inclusion and how they are making themselves accessible for all members of the community.

Name of University: Joan Michel, Master's in Organization Development & Change, Pennsylvania State University, Graduating August 2021, jcm792@psu.edu

Interviewee Contact Information

Name:
Title:
Email Address:
Phone Number:

Interview Information

Date:
Time:
Venue:

Questions

1	When you first focused on IDEA, did you conduct a needs assessment for the community? Or how did you get your arms around what IDEA meant for your organization?	
2	What was your process for deciding what to address with your IDEA programs?	
3	To what extent is your IDEA program focused on external issues, such as community access, versus internal issues, such as building a diverse workforce?	
4	Did you face any resistance to putting IDEA programs in place externally or internally?	
5	How is your center different now from before its focus on IDEA?	
6	How do you overcome barriers to reaching and drawing in underrepresented	

	communities? What strategies have you found to work?	
7	How is your physical plant or exhibits structured to increase access?	
8	Do you feel like you've achieved a level of inclusion and equity, or is the goal always ahead of you?	
9	How is IDEA included in exhibit/experience design and planning?	
10	What have I not asked about that is important to your IDEA efforts?	
11	Looking back, if you could only do three things to improve diversity and equity, what would those be?	
12	What are your three biggest lessons learned from your IDEA efforts?	
Observations and Notes		
Follow-up from Interview		

E. Sample Maryland EDIA Grant Opportunities

Deadline: 02/04/21

Grants to USA Nonprofits, Schools, and IHEs to Im...

Secondary Education, Two-Year Postsecondary Educat...

U.S. Department of Agriculture, National Institute

Grants to USA nonprofit organizations, high schools, and institutions of higher education to improve K-14 science education in eligible disciplines to prepare students for the workforce. Funding is intended to support th

IN PROCESS

Deadline: 04/30/20

Grants to USA Nonprofits for STEM and Health-Re...

Health and Science Innovation Challenge...

AstraZeneca

Grants of up to $15,000 to USA nonprofit organizations for STEM and health-related initiatives that benefit local communities. Funding is intended for programs that advance the fields of math, technology, engineering, an

IN PROCESS

Deadline: 02/06/20

Grants to USA Nonprofits, Agencies, and Schools ...

NOAA-21st Century Community Learning Centers (21st...

North American Association for Environmental Educa

Grants to USA nonprofit organizations, government agencies, tribes, K-12 schools, and institutions of higher education partnering with learning centers for STEM education programs. Funding is intended to support the impl

IN PROCESS

Deadline: Ongoing

Grants to USA, Canada, and International Nonprofi...

Fluor Foundation Grant...

Fluor Foundation

Grants to USA, Canada, and International nonprofit organizations and educational institutions for charitable programs and projects that focus on the areas of education, social services, community and economic development

IN PROCESS

Deadline: Ongoing

Grants to Illinois, Pennsylvania, Maryland, Texas...

Exelon Grant...

Exelon

Grants to Illinois, Pennsylvania, Maryland, Texas, and Washington, DC nonprofit organizations to benefit communities where the funding source has a business presence. Focus areas include education, arts and culture, envi

IN PROCESS

Deadline: Ongoing

Grants to Maryland Nonprofits for Organizational...

Management Assistance Grants...

Goldseker Foundation

Grants to Maryland nonprofit organizations in eligible locations for organizational development activities. Applicants are required to contact the funding source prior to applying. Funding is intended to assist small org

IN PROCESS

Deadline: Ongoing

In-Kind Grants to USA Nonprofits to Sponsor Event...

Event Sponsorships...

Best Buy Foundation

In-kind grants of event sponsorships to USA nonprofits for events that align with the funding source's charitable giving priorities. Consideration will be given to events in the areas of diversity and inclusion, teens an

IN PROCESS

Deadline: Ongoing

Grants to USA Nonprofits in Multiple States to ...

Social Justice Grants Initiative...

Dominion Energy Charitable Foundation

Grants to USA nonprofit organizations in eligible locations to promote equity and social justice. The purpose of this program is to address the root causes of systemic racism in American economy, education, society, and

IN PROCESS

Deadline: Ongoing

In-Kind Grants to USA Elementary Schools, Head St...

STEM Equity Grants...

Kid Spark Education

In-kind grants of materials and resources to USA public elementary schools, Head Start programs, and preschools to implement a STEM learning program. Priority is given to schools that serve Title I students. The purpose

IN PROCESS

Deadline: 09/30/21

Grant and In-Kind Services to a USA Nonprofit Se...

Mentoring for Racial Equity Grant Program...

Chronus

Grant of $7,500 and in-kind support to a USA or territories nonprofit organization. The purpose of this program is to support a mentoring program in an organization that is working towards racial equity. In addition to f

IN PROCESS

Deadline: 08/25/21

Grants to USA IHEs to Enhance Undergraduate STE...

Improving Undergraduate STEM Education: Hispanic-S...

National Science Foundation (NSF)

Grants to USA Hispanic-serving IHEs for projects that enhance undergraduate education for Hispanic populations in STEM disciplines. Funding is intended to increase the number of students studying and graduating with majo

IN PROCESS

Deadline: 08/06/21

Grants to USA Nonprofits and IHEs to Promote Equa...

ADVANCE: Organizational Change for Gender Equity i...

National Science Foundation (NSF)

Grants to USA nonprofit organizations and institutions of higher education for projects that further the careers of women in eligible fields. A letter of intent or an initial proposal may be required prior to submission

IN PROCESS

Deadline: 08/01/21

Grants to USA Nonprofits and Schools for Childr...

American Honda Foundation (AHF) Grant...

American Honda Foundation (AHF)

Grants of up to $75,000 to USA nonprofit organizations, public school districts, and private and public elementary and secondary schools for children's and youth education programs. Priority areas of funding include the

IN PROCESS

Deadline: 07/23/21

Grants to USA, Canada, and International Nonpro...

2021 Technology Innovation Awards...

Tech Forward

Awards to USA, Canada, and International nonprofit organizations for innovative technology projects. Funding is intended for nonprofits that plan to use technology to further their mission and positively impact the comm

IN PROCESS

Deadline: 06/24/21

Grants to USA Nonprofits, Agencies, Tribes, and ...

Digital Humanities Advancement Grants (DHAG)...

National Endowment for the Humanities (NEH) - Offi

Grants to USA nonprofit organizations, government agencies, tribes, and institutions of higher education for projects to enhance the use of digital technologies in humanities programming. Applicants are advised that regi

IN PROCESS

Deadline: 06/04/21

Grants to USA Nonprofits to Facilitate Workplac...

Women in Apprenticeship and Nontraditional Occupat...

U.S. Department of Labor (DOL) - Employment and Tr

Grants to USA community-based nonprofit organizations to facilitate workplace readiness for women. Applicants are advised that required registrations may take up to four weeks to complete. Eligible programs are those tha

IN PROCESS

Deadline: 03/01/21

Grants to USA Nonprofits, Schools, IHEs, and Agen...

Chesapeake Bay Watershed Education and Training (B...

National Marine Fisheries Service (NMFS), National

Grants to USA nonprofit organizations, agencies, tribal governments, IHEs, and K-12 schools in multiple states for environmental education programs. First-time applicants are advised that required registrations may take

IN PROCESS

Deadline: 03/01/21

Grants to USA Nonprofits for Education, Health, S...

Dr. Scholl Foundation Grant...

Dr. Scholl Foundation

Grants of up to $25,000 to USA nonprofit organizations that are committed to improving the world in a broad range of areas. Consideration will be given to activities in the areas of education, social services, healthcare

IN PROCESS

Grants

View all

Deadline: 02/09/22

Grants to USA Nonprofits, For-Profits, IHEs, and ...

Computer Science for All...

National Science Foundation (NSF)

Grants to USA nonprofits, for-profits, IHEs, and government agencies to promote computer science and computational thinking educational opportunities for PreK-12 students. Funding is intended to support researcher-practi

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Deadline: 01/15/22

Grants to USA Nonprofit Organizations to Strength...

Rumphius Foundation Grant...

Rumphius Foundation

Grants of up to $6,000 to USA nonprofit organizations to strengthen local communities, protect the environment, and educate youth. Funding goals include supporting racial equity and environmental and social justice. BIPO

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Deadline: 11/05/21

Grants to USA IHEs, Nonprofits, and For-Profits f...

Louis Stokes Alliances for Minority Participation ...

National Science Foundation (NSF)

Grants to USA IHEs and nonprofit and for-profit organizations to increase the number of minority students that begin and complete degree programs in STEM disciplines. The purpose of this program is to expand the diversit

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Deadline: 11/01/21

Awards to USA Individuals for Encouraging Underre...

ACS Award for Encouraging Disadvantaged Students i...

American Chemical Society (ACS) - The Camille and

Awards of $5,000 to USA individuals for encouraging diversity in the fields of science and engineering. In addition to a cash prize, the winners will designate an academic institution to receive grants of $10,000 to furt

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Deadline: 11/01/21

Grants to USA Nonprofits for Career Development ...

Mitsubishi Electric America Foundation (MEAF) Gran...

Mitsubishi Electric America Foundation (MEAF)

Grants of up to $75,000 to USA nonprofit organizations for projects that benefit youth and veterans with disabilities. Projects should help individuals with disabilities acquire skills needed for successful career develo

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Deadline: 10/31/21

Grants to USA Nonprofits for Educational, Scienti...

The Ambrose Monell Foundation Grant...

The Ambrose Monell Foundation

Grants to USA nonprofit organizations for a broad range of charitable initiatives, as well as projects that advance education, culture, and science. Applicants must submit an application 4 to 6 weeks in advance of the de

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Deadline: 10/15/21

Grants to Maryland Nonprofits to Improve the Qu...

Abell Foundation Grants...

Abell Foundation

Grants to Maryland nonprofit organizations to benefit disadvantaged communities. Applicants requesting larger grants must submit an LOI prior to submitting an application. Funding is intended to address the needs of unde

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Deadline: 10/06/21

Grants to USA Nonprofits, For-Profits, IHEs, Agen...

Discovery Research PreK-12 (DRK-12)...

National Science Foundation (NSF)

Grants to USA nonprofits, for-profits, IHEs, government agencies, and individuals for research to enhance the quality of PreK-12 STEM education. Projects should build on fundamental research in STEM education and existin

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Deadline: 10/04/21

Grants to USA, Canada, and International Artist...

Science Sandbox Nonfiction Project...

Sundance Institute and Science Sandbox

Grants of up to $25,000 and grants of up to $50,000 to USA, Canada, and International artists for science-related film projects. Priority will be given to proposals that spotlight diversity and expand the scope of scienc

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