



Approved Minutes
Education Committee Meeting
ZOOM Meeting
2500 West Broad Street

December 18th, 2020
2:00 p.m.

Present: Cristina Ramirez, Dr. Denise Walters

Staff Present: Timshel Purdum, Chuck English, Dr. Catherine Franssen, Devin Jefferson, Dr. Jeremy Hoffman, Rich Conti,

Other Attendees: Cynthia Norwood, Office of the Attorney General, Charles Valentine

Ms. Purdum called the meeting to order at 2:05 p.m.

Welcome and Strategic Planning Updates

Ms. Purdum discussed the following

- Earlier in the year the committee began strategic planning efforts
- COVID halted the strategic planning process temporarily
- Efforts have resumed and planning is underway
- The aim of the August 2021 meeting is to complete the process of developing the strategic plan

Science Museum as a “Verb”

Dr. Franssen discussed the following:

- Dr. Franssen expressed excitement about joining the Science Museum team
- She is inspired by parallels in higher education and education efforts of the Science Museum
- A current key aim of higher education is to combine knowledge with skills and ability development, especially interdisciplinary
- Focus is shifting to include skills development, not just content knowledge
- Not the “Sage on the Stage” but the “Guide on the Side”
- The Science Museum is more than a building
- The question of “Why?” helps reach the spirit of the organization

- Core values and the responsibilities of each person involved in the Science Museum links with the organization's philosophy
- Reshape perspective to see "Science Museum" as an action word
- Formulating quirky and unexpected interview question to ask various staff to capture some of the spirit of the Science Museum in a new way

Diversity, Equity, Accessibility and Inclusion (DEAI)

Ms. Purdum provided an overview of DEAI efforts

- Science Within Reach part of initial strategic plan
- Currently the team is working on specific measures to amplify efforts for diversity, equity, accessibility and inclusion for staff and guests
- Science Within Reach was developed from previous strategic plan and developed from informed research about the Science Museum's accessibility barriers
- Partnerships are being built with community organizations and field experts to inform inclusivity practices and make the Science Museum experience truly welcoming to all
- Cultural Competency Leadership Institute (CCLI) is an organization designed to help Science Museums increase DEAI
- The Science Museum applied and was accepted into the CCLI program
- The CCLI approach begins with turning the focus inward to how staff needs are or are not being met, and creating tangible inclusivity measures
- A new internal working group called the Center for IDEAs-- to help gather input from staff and lead the initiatives around equity and inclusion

Informal and Formal STEM VCU School of Education

Mr. English highlighted the following:

- Virginia STEM vision: create and advance a STEM-literate, capable, and collaborative community to ensure Virginia's continued economic success and growth in a global society
- Virginia STEM Mission: Re-imagining, transferring, and sharing integrated and equitable STEM-learning experiences
- The Science Museum has a unique opportunity to model informal learning across the Commonwealth
- Currently, Virginia schools have five main models used to teach STEM education in the commonwealth
- The Science Museum's focus will continue to be on accessibility of STEM resources to everyone
- The starting point is to establish a governing STEM board to create common language, assessment, public reporting and STEM curriculum standards
- Next step will be the creation of STEM hub/network to act as a regional focal point for early entry to STEM, formalized partnerships, and community education
- STEM professional development is also a key aspect for pre/in-service educators and non-formal educators

- Term usage of non-formal versus informal, which term is best for the Science Museum?
- addressing environmental factors, broadband access for all, clear communication, STEM educator shortage
- Currently working with the Governor's office to create an executive committee and or non-formal committee
- Focus on non-formal community, partners already invested, current STEM resources are lacking

RVAir and Community Science

Mr. Jefferson shared an update on the status of RVAir project

- Mr. Jefferson joined the Science Museum team in April as the Community Catalyst Scientist
- RVAir project made possible in part by the Institute of Science Museum and Library Services
- Focus of project is on local air quality, began collecting data at the beginning of August
- Community involvement is key aim of project
- Engagement has proven to be successful even with the COVID constraints and added precautions
- Data collected using stationary PurpleAir II Sensors mounted in fixed locations and AirBeam2 Mobile Sensors worn by volunteers
- The PurpleAir II sensors can pick up hyper-local events, for example the GRTC bus fire from May 30th 2020, particulate pollutants detected
- Initial data shows more variability in particulate pollutants in the air between Richmond neighborhoods than previously expected
- iThrive Grant in partnership with University of Virginia and Virginia Tech, focus on impacts of urban design on physical wellbeing
- Data collected from volunteers wearing the AirBeam2 and walking through determined path through areas near the Science Museum
- Data shows the overall benefit of green space on mood in all outcomes relative to the gray space, with decreased stress in green space areas
- Mr. Jefferson was granted a Community Science Fellowship with ASTC

NOAA Project

Dr. Hoffman highlighted the following points:

- In January, The Science Museum published a paper on redlining and urban heat impacts which has received great response and acknowledgement
- New York Times published an article “How Decades of Racist Housing Policy Left Neighborhoods Sweltering” on August 24, 2020 by Brad Plumer and Nadja Popovich
- The NYT article focused on the Science Museum’s work on redlining and urban environments
- Publications were crucial in helping the Science Museum to receive a new NOAA grant

- Richmond community efforts to create new green spaces, park development, tree planting are ongoing
- Five city owned parcels of land will be developed into green spaces as part of Mayor Stoney's redevelopment of Richmond's southside
- The Science Museum was granted an environmental literacy program award to advance community resilience through education
- The Science Museum will continue to expand existing partnerships with Virginia Community Voice, Groundwork RVA, Happily Natural, RVAgreen 2050, and Southside ReLeaf

Strategic Plan Highlights

Mr. Conti discussed the following:

- The Science Museum is a small organization that undertakes large and significant projects
- A strategic plan was developed in 2018 and 2019
- The plan development showed areas that the Science Museum needed to work on such as utilizing tools like Facebook and digital media to full capability
- some priorities need to shift from the previous plan to adapt to current climate
- Investing in the State STEM plan is extremely cost effective for the Science Museum's mission of equal access to quality science education
- The Science Museum is extremely excited for the work with citizen science and involving the community with hands on projects
- Need to develop more of the formal science education initiatives
- Continuing to develop relationship with VCU School of Education
- Renovating the Workers Compensation building will allow for enhanced rental space, potential lease to the VCU School of Education

Next Steps/Discussion

Dr. Walters asked a question about linking the citizen science projects of Mr. Jefferson and Dr. Hoffman with potential formal or informal internships for students. Ms. Ramirez echoed the same sentiment that opening opportunities to draw in members of underserved communities and create connections would be mutually beneficial.

Mr. Valentine asked what are some of the specific strategic plan aspects that the Science Museum team wrestles with. Mr. Valentine asked for a list of items for the Committee to provide feedback on. Mr. Conti responded that creating a list of struggles/opportunities is a great tactic. One struggle identified is weighing the options and prioritizing importance. For instance, if the Science Museum should seek funding for paid internships, or funding to bolster Mr. Jefferson's work; he added that both options are great, but the benefits and costs must be analyzed.

Dr. Walters shared that during a recent brainstorming session at the American Chemical Society, the group systematically compiled a list of wants/needs and categorized them based on core company initiatives. The larger group split up into smaller groups and each took a category to focus on and explore avenues to make the top three ideas a reality. Ms. Purdum responded that the Science Museum staff does need to take some time to really sit down and strategically plan out the next couple of years of programming in light of insights recently gained. Ms. Purdum shared the possibility of hosting community listening sessions.

Dr. Walters asked if any polling had taken place from the area teachers. Ms. Purdum said that data collection from teachers and educators has been collected over the past two years, and listening sessions were also conducted with the out of school time groups. She added that the intent is to explore having more listening sessions with more focused questions. Mr. English added the topic of what field trips would look like now is another area that needs to be explored.

Dr. Walters asked about the gap in reaching students that are transitioning from highschool to college. Mr. English said that this is an area that needs attention, and added that the time period between high school and college is an often overlooked cohort that requires efforts and resources to support students to engage with and pursue STEM majors/jobs.

Mr. Conti asked for an overview from Ms. Ramirez on the status of the greater Richmond area libraries amid the pandemic constraints. Ms. Ramirez stated that in Henrico County hard copy resources are available by curbside pick up only. The different counties are handling resources differently from one another. Richmond county libraries have remained closed but Chesterfield library locations are open for use. Overall, the libraries have shifted emphasis to online programming, offering individualized resource assistance to patrons with questions. Ms. Purdum asked Ms. Ramirez if she anticipates that areas of the library sector will be permanently altered as a result of the COVID restrictions and changes. Ms. Ramirez stated that through the year 2021, in person services are expected to resume in a phased manner. She added that one lasting change will be digital customer service and research assistance, as it has proven very efficient.

Mr. English encouraged members of the team to reach out to similar organizations currently engaged in strategic planning to glean insights from them. Focus on collaboration and mutual benefits of sharing information. Ms. Ramirez asked about the possibility of a third party consultant or liaison to assist with strategic planning and networking with similar regional organizations.

New Business

Dr. Walters asked for any new business with nothing heard.

Adjournment

There being no new business, the meeting was adjourned at 3:06 p.m.