



Approved Minutes  
Education Committee Meeting  
Sharp Design Studio inside The Forge (2<sup>nd</sup> Floor)  
2500 West Broad Street

October 25th, 2018  
1:00 p.m.

Present: Mary Anna Broadbent, Chris Adams

Staff Present: Rich Conti, Elizabeth Voelkel, Chuck English, Timshel Purdum,  
Eugene Maurakis, Matt Baker, Jim Blow

Other Attendees: Glenn Davidson  
Dr. Denise Walters  
Patricia Nicoson

Mr. Davidson called the meeting to order at 1:05 p.m., followed by a roundtable introduction.

Mr. Conti introduced Matt Baker and discussed The Forge. He then introduced the new Director of Education, Timshel Purdum, and introduced Chuck English as the new Statewide STEM Coordinator. Dr. Walters will be taking over as the Chair of the Education Committee in January.

### **Approval of Minutes**

Mr. Davidson called for a motion to approve the April 26<sup>th</sup>, 2018 minutes. Ms. Nicoson made the motion which was seconded by Ms. Broadbent. Mr. Davidson called for a vote, and the minutes were unanimously approved without objection.

### **Inspiration Index Update**

Mr. English highlighted the following from the Inspiration Index:

- The Museum has been busy over the last quarter based on comparisons of previous periods
- 13% fewer Life Science demos but greater participation in larger spaces.
- Opening of the Forge allows for improved flow of programming, specifically the larger space allows for more tailored demos/classes for larger groups

- Summer Camps sold out every session, also sold 3 extra weeks to Chesterfield County Schools
- Themes included maker, astronomy, chemistry and animal encounters
- Science After Dark showed a 74% dip in participation for July 20<sup>th</sup> event compared to last year
- Dip in 2018 summer SAD participation is due to such high participation in 2017 summer SAD which featured Bon Secours da Vinci Robot.
- 2017 Summer SAD also received greater advertising from partnership with Bon Secours.

Ms. Nicoson asked what the difference in capacity is between the old venues like Cosmic and Constellation classrooms or Challenge Lab and venues like the BTT and Science Lab. Mr. English answered that the BTT holds 120, which is much larger than the classrooms or Challenge Lab. This allows the Museum to accommodate much larger audiences for demonstrations and hands-on demonstrations.

Dr. Walters asked about the drop in attendance for Science After Dark. Ms. Voelkel answered that in 2017 the event featured the da Vinci Robot from Bon Secours which was a very big draw.

Mr. Davidson asked what the age range was for the Summer Camps. Mr. English replied that the program was focused on 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> graders. Mr. Adams asked if there was a program to show teachers how to do some of the projects that are done in the Museum. Mr. Baker then discussed a pilot program for teachers through Build RVA.

Mr. English then expressed his excitement with how much the Museum has grown and turned the meeting over to Ms. Voelkel

### **Collections Report**

Ms. Voelkel highlighted the following:

- WestRock Gallery outside of The Forge showcases products of innovation from all across the Commonwealth in technology, design, marketing, and materials
  - Many of the objects are on loan from partnerships across Virginia
  - Objects will rotate depending upon length of loan
  - Display of real objects will serve as inspiration for our Maker Space
- Centennial of Broad Street Station 1919-2019
- The first train departed Broad Street Station on January 6, 1919.
- Festivities will kick off Thanksgiving Weekend at the Model Railroad exhibition “All Aboard” on November 23<sup>rd</sup> – 25<sup>th</sup> 2018
- The history of the building told through historical objects.
  - Tie ins will include
    - Lunch Break Science

- Centennial Bottled Water, Centennial Roast coffee made by Blanchard's Coffee, and commemorative T-Shirts will be on sale in concessions and Shop4Science.
- Collection of the oral history of Broad Street Station by Jim Blow.
- Giant Screen film "Rocky Mountain Express"
- January 6<sup>th</sup> 2019 Anniversary Celebration Event
  - Small exhibit from Branch House
  - Plaster workshop in The Forge to re-create rosettes seen in Broad Street Station.

Ms. Voelkel then turned the meeting over to Ms. Purdum as the new Director of Education.

### **Introduction of Education Director**

Ms. Purdum introduced herself and expressed excitement in joining the team. She said that she was excited about the content of offer and the Museum, meeting the staff, and shared some of her background in Biology and Natural History Collections.

Ms. Broadbent complimented the staff on the content at Science After Dark: Glow! Her grandchildren aged 5 and 8 were at the event and enjoyed the experiments very much.

Ms. Purdum then turned the meeting over the Mr. English for the State of STEM in VA.

### **State of Stem in VA**

Chuck English discussed change in the museum over the past few years.

- People around the state are doing great things but not sharing resources, information and energy across the entire state. This has led to the following issues:
  - Duplication in and wasting of effort.
  - There is a great need for more efficiency.
  - New platform needed to share resources and information
- Currently working with Dr. Tina Manglicmot, Department of Education STEM Coordinator who oversees Science, Technology, Engineering, and Math.
- Work together to develop common goals and common language for the state STEM Strategic Plan.
- Plan for schools K-12 as well as complementary programs for informal education venues and community.
  - Coordination with Smart Beginnings and Early Childhood, an external agency helping state programs and Head Starts to get kids off to school

- Looking to other state models for inspiration and ideas, such as Massachusetts, Oregon, and Iowa.
- Strive to involve parents, goal of parents advocating and inspiring children to participate in STEM
- Nonprofits for STEM; Capture involvement with Nonprofits to bolster STEM effectiveness and reach
- Reaching out to libraries with maker's spaces to boost family STEM programming

Mr. Davidson asked what Mr. English liked the most about the STEM education programs in MA, OR, and IA. Mr. English replied that those programs placed an emphasis on developing a passion for STEM in students as opposed to being solely focused on rigorous testing. The programs also focused on developing realistic measures. Dr. Maurakis asked if any of the states had developed programs to assist the parents in the STEM education process. Mr. English said that consistently the parents were a missing part, and the focus was on developing school programming.

Ms. Nicoson asked if Mr. English planned to involve non-profits. Mr. English said that was being discussed, but the actual role that non-profits would play is still being developed and asked the committee members to share any connections that they had to non-profits with him.

Mr. Adams asked about the role of PTAs/PTOs in improving STEM education. Mr. English responded that the school districts that are most in need do not have PTAs/PTOs.

### **Discussion of Maker Education**

- Matt Baker discussed history of The MiX, focus on teenagers, and HOMAGO.
- HOMAGO stands for “hanging out, messing around, and geeking out”
- Multiple tiers/levels of involvement in making for teenagers
- Involvement has grown from 10 to over 800 members of the teen advisory council over time
- The Forge is cross generational, aim to involve children, teens, and adults
- Personally relevant projects, minimal instruction to encourage creativity
- Currently The MiX running with tight schedule
- Maker Challenges in the mornings, open to all ages and ability levels
- Open modular challenges that rotate monthly
- Maker Workshops in the afternoons, restricted to teens and adults
- More in depth projects, offer two 45 minute workshops which focus on skills such as circuitry, woodworking, textiles, electronics, and design
- Special programs coming up working with different school groups and community groups
- Capital One C1 Coder Challenge is an example of these special programs.

- Communication with members and community as well as timing of workshops are being fine-tuned
- Open to input from members

### **New Business**

Mr. Davidson then asked for new business. Nothing was heard from the committee.

### **Adjournment**

There being no new business, Mr. Davidson requested a motion to adjourn. Dr. Waters made the motion, which was seconded by Ms. Nicoson. The motion carried without objection and the meeting was adjourned at 2:09 p.m.