Community Building Strategies:
Arts & Culture in the Planetarium

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ABSTRACT
Throughout this session, discover new and innovative ways to grow your audience and better connect with your community using case studies from a variety of planetaria.

INTRODUCTION
We know that for many planetarium guests, the dome is more than just a place to learn about the night sky. For them, the planetarium means exploration, adventure, and community.

In our field, we believe in the lifelong quest for knowledge and meaning. Lucky for us, we have the great fortune of working in a space that seems to engage guests and foster this naturally. However, our work is not effortless. The IPS Summary of the Value of Education in the Planetarium highlights our field’s ability to inspire, educate, and build community. Experience and research shows us that the planetarium inspires learning at any age and provides new views
of the world and beyond. To do this fully, we embrace the arts, culture, and creativity in our domes.

Through our efforts, we interact with our communities, encouraging curiosity, interest, and engagement in our shared world. How can we better plan, promote, and implement our community engagement strategies? Additionally, how can we expand our reach, and therefore our dome’s impact on the communities we serve?

I. WHAT DOES COMMUNITY ENGAGEMENT LOOK LIKE?
Community engagement ranges from a one-time special experience to a long-term partnership or tradition. As a part of our work, community members attend and experience theatre, music, and other arts, educational, environmental, and entertainment events in our domes.

The Strasenburgh Planetarium’s 50-year history includes many experimental performances and community participation projects. Some of their recent collaborators include the indie rock band Joywave, a local BIODANCE Company, W. Michelle Harris (a video artist from the Rochester Institute of Technology), student and faculty performers from the University of Rochester’s Eastman School of Music, the Rochester-based jazz-electronic band Vanishing Sun, and A Gamer’s Nostalgia (a local computer gaming business).

Adult Programming at the Museum of Science in Boston develops events and experiences meant to engage adult audiences in all communities. Called “SubSpace,” their programming experiments with different formats, mediums, and ways of learning with diverse perspectives for audiences 18 years and over. Since 2016, SubSpace has focused on expanding the cutting-edge arts and nightlife work in the Charles Hayden Planetarium. Every season of SubSpace programming welcomes new adult audiences to the Museum and encourages discussion on the various societal issues that affect them. By doing so, SubSpace reaches underrepresented communities and voices, signaling their value and importance to the Museum and STEM fields. Partnerships with musicians, improv comedians, the eGaming industry, Drag performers, theater artists, and more, have revolutionized the artistic landscape of Boston, established a new accessible performance venue for the city’s artists, and allowed the Museum to become a more welcoming space for every adult.

The Adler Planetarium also has a long history of special events and programming, which includes a monthly Adler After Dark event for the 21-and-up crowds. These after-hours events give adults the chance to explore the Museum Campus attraction while enjoying themed drinks and community-driven experiences and entertainment. Previous themes ranged from A Night In the Afrofuture to Geek Chic, and Out in Space (a Pride celebration event for the LGBTQ+ community). The structural differences and flexibility of Adler’s two dome theaters allows them the ability to host creative events. Over the past few years, they have hosted music video shoots, album and podcast premieres/‘first listens,’ a drag show, live music performances, poetry readings, video game nights, and yoga sessions.
At Universities, community engagement activities can look similar to those at museums and science centers. At Ball State University (BSU), the Charles W. Brown Planetarium has partnered with the city’s Muncie Symphony Orchestra for the past 5 years to have performances in the dome. The partnership selects themes for the yearly performances strategically as to best suit the symphony schedule and the available Brown Planetarium dome visuals. Past themes have been Nature (with works from Vivaldi and Mendelssohn), Space (including Beethoven’s *Moonlight Sonata* and music from *Star Wars*), and a family-friendly event highlighting Camille Saint-Saëns’ *The Carnival of the Animals*. The Brown Planetarium has also hosted university groups and classes from music, theater and dance, world languages, and more for various class projects. Some class projects became public events, and were successfully ran almost entirely by the students themselves. Some of these experiences have led to partnerships with departments and units across campus. For instance, the Ball State University Meditation Partnership was created to unify and expand the meditation and mindfulness programs available to campus and community members. Additionally, the planetarium is a part of the Integrated Cultural Committee, a group that helps unify community engagement efforts on campus. Read on to learn more about the efforts of these partnerships below.

II. PLANNING, PROMOTION, and IMPLEMENTATION

II.1 TIPS FOR PLANNING

Whether you are expanding the types of special events you offer, or just starting to branch out, it is important consider how these unique events will fit into your current programming. You may want to have a special event series and market it separately from your astronomy-based content. On the other hand, you want all of your special events to have an astronomy tie-in, which would then fit into your typical marketing materials. Either way, think carefully about how you want to package these new experiences. If marketed in the right way, the public will better understand what your “product” is. This is the first step to get excited about it, encouraging them to invest in it in the future.

For many planetariums, minimal staffing often operates large theaters – and, therefore, efficiency is important. As such, you may want to work with people who have demonstrated reliability and professionalism in the past. Even so, you will encounter various working styles, from loose and intuitive, to carefully structured and planned. Flexibility is key to be able to adapt to the differing styles of artists who have good records of accomplishment. To help with the

![Red lighting is being used at the Museum of Science in Boston’s Charles Hayden Planetarium to help guests see the music performance.](image)
process, and with special event planning in general, the Strasenburgh Planetarium suggest the following tips:

- Consider charging a high-ticket price for valuable performances. Past special performances at planetariums have sold out at $20 USD per seat, more than twice the price of a typical movie or Planetarium ticket in home city.
- Do not underestimate the time needed for back-office and administrative work, including negotiations and contracts, scheduling, obtaining insurance, promotion, equipment delivery and pickup, and ticket sales and collections.
- Reserve about five percent of the dome’s seats, to be assigned by the Planetarium director or artistic director for any last-minute VIP guests.

It is also likely that you will be working with people who have never performed in a planetarium before. The dark environment can be daunting to some. By having clear and upfront conversations about the limitations of the space, and the solutions or work-arounds, you can avoid some surprises the day of the event. For instance, clear guidelines or policies would be helpful in the planning stages as well as in-person tours of the dome for partners to see the space first-hand. This is an opportunity to brainstorm ideas for the event as well as a chance to alleviate any concerns they may have. A dark room may seem like a barrier at first, but once you show them the special lighting you have used in the past, they will feel at ease and know that the event will be successful (see Figure 1).

Additionally, some special performances will require extra equipment you may not have immediate access to. For instance, for the special art performance at BSU’s Brown Planetarium, scaffolding was needed in order for artists Evelina Domnitch and Dmitry Gelfand to successfully show their performance art piece, 10000 Peacock Feathers in Foaming Acid, on the dome (see Figure 2).

**II.2 PROMOTION & IMPLEMENTATION**

A key part of any institution, partnership, and event is marketing. When working with a variety of groups, performers, or organizations it is important to maintain a look that is consistent for
your organization while still staying true to the unique events you wish to highlight. For some partnerships, it may make sense for you to simply host the event and play a back-seat role in promotion and implementation. However, when possible, it would benefit your institution to maintain control of the narrative, making sure that all marketing and communications align with your mission and values.

This is why BSU’s Brown Planetarium Director, Dayna Thompson, helped lead the creation of the BSU Meditation Partnership as well as the Integrated Cultural Committee (which she chairs). Designed to move the university forward in their quest for increasing community engagement, the Integrated Cultural Committee provides general oversight and guidance to the campus to ensure visitors fully benefit from their array of assets and unites the assets in their efforts. The committee consists of BSU leaders from the planetarium, the office of community engagement, the educational greenhouses and woods, the glass blowing center, the art museum, theater and dance performance halls, and athletics as well as leaders from local schools. Outlined in the university’s strategic plan, BSU is dedicated to serving their extensive community in a way that revitalizes and sustains the city and the region. BSU defines “their community” as all of their faculty, staff, and students, and also the residents of and visitors to the city and region. By formalizing the Integrated Cultural Committee, university leaders can better dedicate themselves to:

- Cultivating a culture and climate throughout campus events where community members experience a sense of belonging and engagement.
- Evaluating, revising, and communicating organizational policies and systems to improve clarity, efficiency, and ease-of-use.
- Ensuring events and programming reflect BSU’s commitment to Inclusive Excellence.
- Engaging with the community to diversify and expand their reach.
- Providing and advocating for opportunities and tools that increase the impact of their programs and sites.

By unifying efforts in any town or city, we can make sure we are presenting our content in a way that truly reaches the most people and does so in a way that people can relate to and connect with almost instantly.

The implementation of programing can also depend heavily on unifying efforts. While sometimes performers or events will not bring any outside staff in, there will be times when the partnership requires more collaboration on this front. For instance, BSU’s Brown Planetarium does not charge for their events, but the Muncie Symphony Orchestra - who they partner with – do charge. In this case, the orchestra’s team handles all ticket sales, while the Brown Planetarium staff helps with ticket collection and seating during the performance. As with all event panning, you need great communication and diligent planning for things run smoothly. This is especially true for the collaborations and partnerships that will help energize your institution, bringing it a new and fresh look.
In May 2019, the Washington Post approached the Adler Planetarium about producing a custom planetarium show to pair with the inaugural episode, Moonrise, of their new podcast set to premiere during the Apollo XI 50th Anniversary celebration (Figure 3). Washington Post journalist Lilian Cunningham created and hosted Moonrise, which aimed to tell the real origin story of our efforts to reach the Moon. Digging outside of established narratives, the podcast peers into the nuclear arms race, societal shifts, and the origins of science fiction. While Mike Smail, Director of Theaters & Digital Experience at Adler, and the Adler Planetarium team went through many iterations of how the partnership would play out, they settled on hosting a ‘First Listen’ event for the podcast at Adler. The attendees would be the first people on the planet to hear it, and as an additional bonus, they would simultaneously experience a fulldome presentation in the Adler’s 8K Grainger Sky Theater (Figures 4-5).

While the timeline was extremely tight, Mike Smail was able to work through the first episode’s topics: Charlie Duke, Apollo 16, JFK, Sputnik, Apollo 11, and author John Campbell, and assemble an impressive multisensory experience using existing digital assets (fulldome and flat), and new sequences produced in one of our realtime software packages (Digistar 6). It was an interesting challenge, creating a visual story to highlight, amplify, and sometimes yield to an already produced audio narrative. NASA archives were useful for Apollo mission-related content, and the Post even shared some newspaper headlines and archival materials to help the stories mesh. “I certainly wish there was a longer timeline to further finesse the show, but I’m quite proud of what was accomplished,” reports Smail.

The show was presented three times at their July 18, 2019 Adler After Dark 21+ night. The creator of the podcast introduced each show, and Adler hosted two making-of panels. All three screenings were sold-out, for a total audience of just under 600 people. Attendees shared portions of the presentation on social media channels, and when coupled with media releases about the premiere, the presentation reached millions of people.
online. “It was great for us institutionally to be able to grow a relationship with a national media presence like the Washington Post, and they were quite happy with the finished product, and the reaction it received from our in-house audiences,” Smail remarks. In addition, this one-off Moonrise fulldome show was entered in this year’s Third Coast International Audio Festival. Here’s hoping for good news about that later this fall!

IV. INCREASING OUR REACH

For the Museum of Science in Boston, live music collaborations in the dome have continued to lead the performance-based work in the dome, remaining a staple of their brand since the summer of 2016. Branching out from the traditional indie rock or classical music performances, the brand continues to collaborate with and host performers under the dome, including musicians and acts of all genres.

Partnerships with Boston’s Hip Hop community have become especially important events in utilizing the dome as a convening space for an audience who has traditionally not felt
represented by the institution, nor its mission or work. Through the Hip Hop shows in the dome, the institution began a partnership with the Fierce Urgency of Now Festival, which is designed to highlight the experiences of, challenges experienced by, and existing possibilities for millennials of color in Boston; hosting the opening night event and celebration in 2018. In amplifying the work of Black artists in Boston and providing space at the table for them to explore and experiment with this new artistic medium, has helped to initiate and deepen the institutions commitment to racial justice. In turn, this has contributed to the fight for racial equality in STEM fields across the board.

In 2016, the SubSpace 18+ event team and Planetarium team developed two full-length theater pieces, turning the Planetarium into a site-specific, immersive stage like no other in Boston. Collaborating with regional theater artists, Liars & Believers and Brian King, the team has pushed the boundaries of the medium as a performance space, storytelling device, and set piece that has taken Boston audiences on theatrical journeys not typically seen at science institutions. Through this work, the Museum built relationships with the Boston theater industry, partnering with organizations such as ArtsBoston, Arts Emerson, the American Repertory Theater and more. These events expand an audience’s perceptions of the importance of technology, opening their eyes to the possibilities that come out of fusing art and technology together. This shows how the Museum of Science is an incubator for new, original, and cutting-edge theater pieces.

Another early experiment in the Hayden Planetarium, were collaborations with local Drag performers. The events that resulted from these collaborations have remained a successful staple for the SubSpace team since its original conception in the spring of 2017. Partnering with local performer, Coleslaw, on the award-winning series Coleslaw’s Corner, and the Slaughterhouse Society’s annual celebration of the Drag King community, the Museum established a brand of Drag shows that has been revolutionary for the community of performers, as well as the Museum. These collaborations have created a new and accessible stage for the producers and performers who typically are limited to LGBTQ-centric institutions only. This new platform allowed the Museum’s mainstream audiences the chance to experience the incredible talent of the Drag

Figure 7 - Drag performance at the Museum of Science, Boston.
community. This work continues to be a vital opportunity to reach out to the LGBTQ+ community of Boston, amplifying the talent and ingenuity of the community, and establishing a trusting and reciprocal relationship. Through this work, the Museum has continued to amplify LGBTQ+ contributions to STEM fields on all of its stages, become a convener for LGBTQ+ organizations and initiatives, and - for the first time in its history - proudly marched in the Boston pride parade. This act showed that the Museum of Science is, and will continue to be, a safe space for everyone.

V. COVID-19 & VIRTUAL EXPERIENCES
Before the COVID-19 shutdown, the Strasenburgh Planetarium was accepting applications for performers for the 2020 Rochester Fringe Festival. Applicants ranged from comedians to an African dance ensemble to a solo electronic performance artist. Unfortunately, like many other institutions, the pandemic shifted this event along with others. However, special arts and culture events are being re-imagined as virtual events – to great success.

Since COVID-19 has limited our venue’s in-person events, many virtual experiences are engaging communities. Boston’s Museum of Science is continuing their work with their Drag and theater collaborators during the pandemic, with virtually based experiences. Back in April 2020, BSU’s Brown Planetarium hosted an Out of this World Laugher Yoga event online with a certified laughter yoga leader. Additionally, the university’s Meditation Partnership promoted their VR version of Sunset Meditation on YouTube. Aimed at improving mental health and resilience, this free guided meditation planetarium program that has been downloaded by over 100 institutions world-wide (Figure 8). Other upcoming virtual events at the Brown Planetarium include an “Astronomy Slam” where students will have 10 minutes to present on an astronomy topic of their choosing in the most interesting way possible to compete for the title of Astronomy Slam Champion.

VI. OUTCOME & CONCLUSION
Steve Fentress from the Strasenburgh Planetarium is not convinced by the “everything we have to offer” argument, which says that visitors who come for a thing that interests them will return for other shows when they see everything we have to offer. Instead, Fentress believes that visitors come for the thing that interests them. However, Dayna Thompson from BSU’s Brown Planetarium suggests that getting people into the door for their first time may help break down
other barriers to participation. For instance, some may be unwilling to pay for a ticket if they are not familiar with the venue – they may not be sure if it is worth the investment. However, if the right theme or event comes along, they will take the risk. Once they get over that initial hurdle, they may be more likely to invest in future, more “high-risk” or “less exciting” programming.

Another barrier that may exist is the perception that parking is confusing, limited, or restricted at your venue. This is especially true for the Brown Planetarium, as it is on a university campus which parking is strictly enforced. On campus, parking is as complex as it can be for a major city, but located within a small town. As such, an individual may not know how to navigate the parking, or is not engaged enough to seek out that information online. Again, if there is a theme or special event that excites them enough, it could be the push they need. This could help a person move beyond their anxieties about finding parking in an unfamiliar area. Once they have parked, and set foot in the building, they are certainly more likely to come back for another event – even bringing new friends along with them the next time.

We feel our ultimate goal of expanding and diversifying our attendance and, in turn, strengthen the communities we serve is well achieved through these partnerships and events. It is also through these efforts that we put a level of accountability onto our institutions, and ourselves, which encourages growth and strengthens our programming. The technical and artistic challenges stretch our capabilities, leading to improvements in our other productions. As an additional benefit, we hope guests, partners, and future partners come to understand the Planetarium is a flexible, lively, competent, and relevant piece of the community.