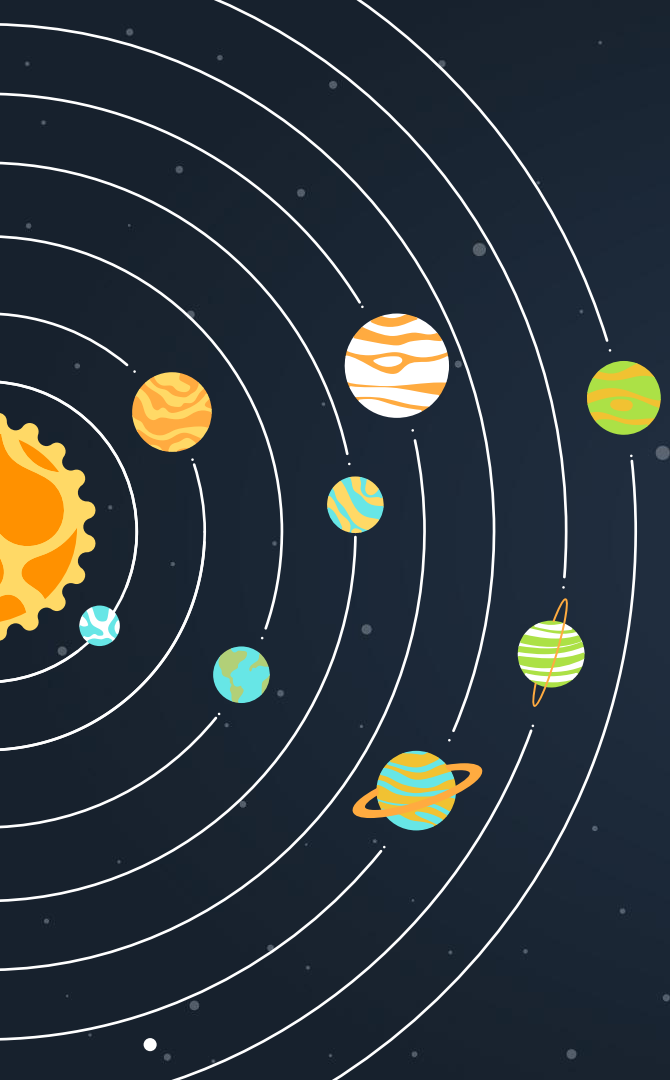


VIRTUAL AND REMOTE PLANETARIUM PROGRAMMING

CASE STUDIES AND RESOURCES

Corrie Roe

IVOA Edu IG — August 2020

OUTLINE FOR THIS BRIEF PRESENTATION

HELLO!

About me,
my positionality

NOW BROADCASTING

Exemplar virtual
programming

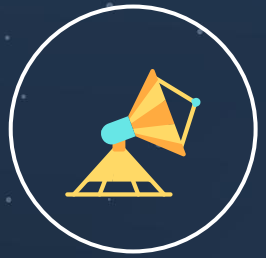
PREPARE FOR LAUNCH

Resources
and strategies

Note: Underlined text are hyperlinks to programs / resources

HELLO!

About me, my positionality



NOW BROADCASTING

Exemplar virtual programming

Example formats of virtual planetarium programming

- Field trips
- Look at the night sky
- Interviews or conversations
- Space news
- Trivia and other interactive modes

NOW BROADCASTING

Exemplar virtual programming

Field trips

- Virtual exploration or tour using planetarium-style software
- Program can be pre-planned (see: AMNH; requires more development time) or based on audience requests (see: Cal Academy; easily repeatable with strong presenter)
- “Flying” live makes for interactive, engaging program, but may need practiced presenter or two people (pilot & presenter)
- Typical length: 15-60 minutes

Examples

American Museum of Natural History August 21 Field Trip: Comets (monthly)

California Academy of Sciences’ Morrison Planetarium July 22 Tour of the Solar System (weekly)

Museum of Science Boston August 25 Virtual Planetarium (above, weekly)

North Carolina Museum of Natural Sciences August 13 Science Cafe

NOW BROADCASTING

Exemplar virtual programming

Look at the night sky

- What's up in night sky tonight / this week / this month using star maps or planetarium-style software
- Great way to connect with local (regional) audience
- Capitalize on exciting things (meteors, comets, planets, constellations, etc.) in the night sky
- Repeatable on regular basis
- Typical length: 15-40 minutes

Examples

Amateur Astronomers Association of NYC August 13 Astrovis Tour (above, weekly)

California Academy of Sciences' Morrison Planetarium August 28 Night Sky Update (weekly)

Liberty Science Center August 27 Tour of the September Sky (weekly)

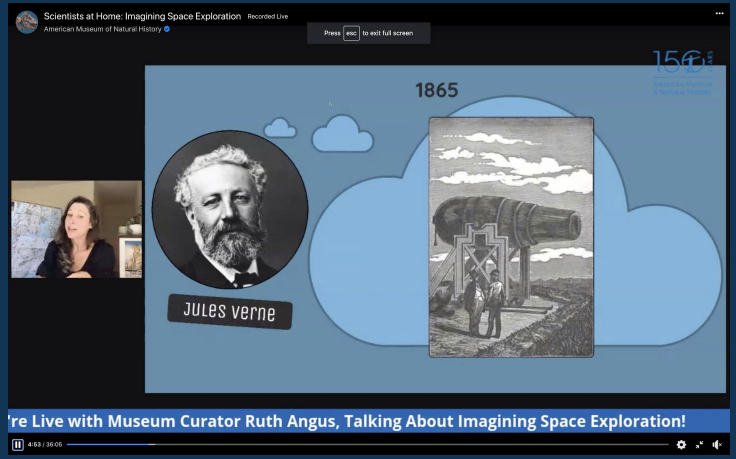
Sci-Port Discovery Center April 21 Starry Night

NOW BROADCASTING

Exemplar virtual programming

Interviews or conversations

- Showcase who and what's happening in the field
- Can be casual or structured
- Great to take audience questions, and some build program around "Ask a Scientist"
- Best examples are tied to visuals (may use planetarium software or videos) and/or current news
- Typical length: 30-60 minutes



Examples

American Museum of Natural History May 27 Scientists at Home (above, weekly)

California Academy of Sciences' Morrison Planetarium August 28 Cosmic Conversation (weekly)

Museum of Science Boston August 19 Ask a Scientist (weekly)

NOW BROADCASTING

Exemplar virtual programming

Space news

- Break down space news headlines or happenings, great traction with events like launches or eclipses
- Great to bring in experts to provide insight or commentary
- Could be done on fairly regularly (weekly, monthly)
- Typical length: 15-30 minutes

Examples

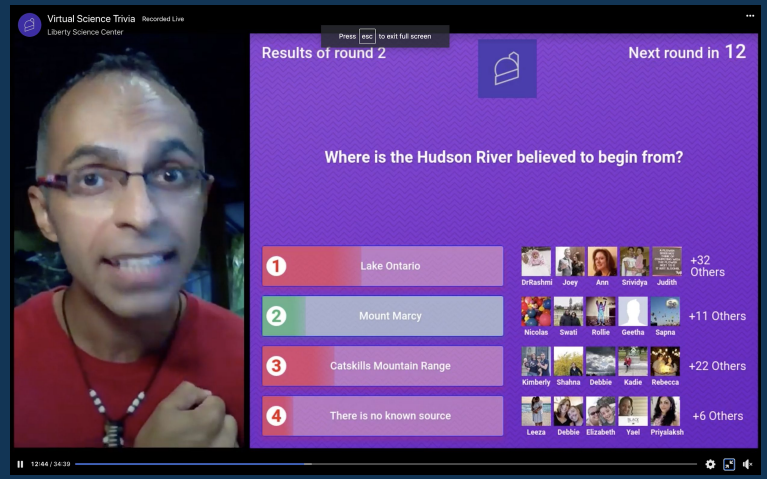
Museum of Science Boston August 21 Coolest Science Stories (above, twice weekly)

NOW BROADCASTING

Exemplar virtual programming

Trivia, other interactive modes

- Program based on audience interaction and participation
- Different degrees of technology, from typical video broadcast to meetings with breakout rooms to trivia apps
- Typical length: 45-90 minutes (allow time for set-up and organic audience interaction!)



Examples

Astronomy on Tap NYC July 1 Online Astronomy

California Academy of Sciences May 14 Virtual NightLife (monthly)

Liberty Science Center August 25 Virtual Science Trivia (weekly, above)

PREPARE FOR LAUNCH

Resources and strategies

Considerations to guide your program

1. **Goals** - what do you have to say with this program? What do you want your audience to take away?
2. **Audience** - who would you like to reach with this program? Are you connected to this audience? What needs and interests do they have?
3. **Resources** - what limitations and opportunities do your resources (time, money, knowledge, access) afford you?
4. **Platform / format** - what format would you like your program to have? What platform best fits your and your audience(s)'s needs?

PREPARE FOR LAUNCH

Resources and strategies

Software and hardware

- **Helpful hardware:**
  - Depending on visuals, may need computer with strong graphics card
  - Headset or microphone will boost audio quality
  - Strong (wired) internet connection

- **Software for space content:**
  - OpenSpace
  - Stellarium
  - NASA Eyes
  - NASA Treks
  - Uniview
- **Software for livestreaming:**
  - OBS
  - Streamyard
  - Zoom

PREPARE FOR LAUNCH

Resources and strategies

Additional resources

- Livestreaming best practices
  - Association of Science Technology Centers resource list
  - NISE Net professional training resources
  - NASA JPL's Museum Alliance trainings
  - Web Accessibility Initiative's Making Audio and Video Media Accessible
- Community
  - Association of Science Technology Centers forum
  - Dome Dialogues Facebook group
  - NASA JPL's Museum Alliance forum
  - Local astronomy groups, colleges, youth groups
- Content: NISE Net content resources

PREPARE FOR LAUNCH

Resources and strategies

Top recommendations

1. Do what you can with what you have, and don't worry about (over)producing
2. Connect with your audience and meet them where they are
3. Quality over quantity: Fewer, shorter, higher-quality programs is better than constant, lower-quality, and longer programs
4. Use same core principles as in-person education: Repeat concepts, ask questions, use plain language, universal design for learning
5. Practice and planning makes for less stressful programs
6. Be yourself, creative, and flexible (ask for feedback!)

CONTACT

Please get in touch!

croe@amnh.org

@Corrie Roe

OpenSpace

openspaceproject.com

openspace@amnh.org

@OpenSpaceProj

Thanks to IVOA Edu IG organizers for this opportunity, Mark SubbaRao for passing it along, and fellow participants and attendees for listening and sharing.

OpenSpace is funded in part by NASA under award No NNX16AB93A. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author and do not necessarily reflect the views of the National Aeronautics and Space Administration.