

# Evaluation Report

# Burke Museum

## On Twitch:

### Bringing Behind The Scenes To Guests At Home



Today's Guest:  
Melissa Frey, Malacology Collections  
Manager



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**W**  
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# Project Purpose

## Project Problem Statement

There are many existing virtual engagement tools that museums do not make use of. The Covid-19 pandemic illuminated museums' needs for engaging virtual tools for folks that could not come into the physical space. The Twitch infrastructure is one such existing tool that is worth exploring in the museum space.

## Project Problem Description

The focus for this project is to create live, long-form virtual programming for the Burke using Twitch to understand the potential of this format in engaging virtual audiences. Specifically, the project seeks to understand 1. If virtual audiences are engaged through these events and 2. If virtual audiences enjoy these events and return for a follow up event.

## What is Twitch?

Twitch is an interactive live streaming service. Originally built for livestreaming video games, the platform has spread to other venues such as music, art, and in-real-life streams.

## Why Use Twitch For This Project?

Twitch is built specifically for long-form, live content. While other platforms have live streaming capabilities, it is not their core concept. YouTube, for example, has invested in their live streaming service, but it's main focus is still on pre-recorded content.

## Purpose of This Evaluation Report

This evaluation report coalesces the large amount of data that Twitch provides along with the survey data gathered from the streams. The report includes a synthesis of that information, an explanation of findings, and recommendations for next steps.

# Project Timeline

## **Host Site Agreement (October-December 2022)**

The Burke was chosen as the host site for this project for two major reasons. First, the size of the museum along with the wide range of collections allowed us to experiment different places of content. Second, the Burke social media team has a strong following with a history of video content, so livestreams fit close to the type of content that their followers are used to. Tim Kenney, Assistant Digital Communications Manager, agreed to be the host site partner, and helped with the logistics and marketing of the livestreams.

## **Pre Livestreams (January-March 2023)**

This phase consisted of researching and setting up the technology for the project. First, was setting up the design of the channel itself following Burke branding guidelines. Second, was the gathering of the hardware required for the livestreams. Some required hardware needed purchasing, and some was already owned personal devices. Overall, the hardware cost about \$800 to procure. Once gathered, the mobile livestream rig was put together, and a test stream was run to confirm that there would be no technological snags. The test stream went smoothly so it was a clean transition to actual livestreams.

## **Livestreams (March-April 2023)**

I hosted three fully mobile behind the scenes livestreams on Twitch at the Burke over a period of five weeks. Each livestream had one expert guest. First was Michael Holland, Fossil Preparator. Second was Craig Matsuda, Exhibit Fabricator and Shop Coordinator. Third and last was Melissa Frey, Malacology Collection Manager. Each stream also had an attached survey that I created. These surveys garnered a total of 27 responses.

## **Post Livestreams (April-May 2023)**

Twitch gives a large amount of data to the streamer that needed to be synthesized. I coalesced that data alongside the survey data into this evaluation report for the Burke Museum. This report has findings from that data along with recommendations based on those findings.

# Findings From Twitch Data

## Stream Time

**186**

Minutes  
Streamed

<b>61</b>	<b>58</b>	<b>67</b>
First Stream	Second Stream	Third Stream

**3162**

Minutes  
Watched

Average Viewer Watch  
Time

<b>42</b>	<b>9</b>
Minutes	Seconds

## Viewership

**17**

Average  
Viewers

<b>25</b>	<b>9.1</b>	<b>16</b>
First Stream	Second Stream	Third Stream

**75**

Unique  
Viewers

<b>43</b>	<b>22</b>	<b>32</b>
First Stream	Second Stream	Third Stream

## Chatting

**346**

Chat  
Messages

<b>163</b>	<b>23</b>	<b>161</b>
First Stream	Second Stream	Third Stream

**25**

Unique  
Chatters

<b>20</b>	<b>10</b>	<b>14</b>
First Stream	Second Stream	Third Stream

# Findings From Twitch Data

## Stream Time

Stream content varied and was sufficient in creating a one-hour engagement program. Content varied from a fully structure agenda with Melissa Frey (Malacology Collection Manager) to an unstructured discussion with Craig Matsuda (Exhibits Fabricator and Shop Coordinator).

A unique viewer is defined as a viewer who watched any moment of a live stream, and only counts once. For example, a person who watched all 186 minutes across three streams counts as one unique viewer, as does someone who watched 1 minute of one stream.

The average time watched per unique viewer is promising. The average unique viewer watching two-thirds of one of the streams means that, for the most part, when a person got to the stream, they found it engaging enough to stay.

## Viewership

Average viewers is the average number of concurrent viewers in a stream. It is a metric to calculate how many people are watching a stream at any random point of the stream.

Averaging 17 viewers across all three streams is a promising average. The channel itself only has 52 total followers, so when people found the stream, they tended to stay.

Twitch data also breaks down each stream into one minute sections. That data shows for each stream ramped up viewership from the 5 to 12 minute marks.

One limitation of the viewership data, is that we do not know how many viewers were personal friends, Museology students, or other people connected directly to me, versus people just interested in Burke programs. It is important to note that viewership could be skewed by viewer's connections to the host, guests, and/or institution.

## Chatting

Total chat messages show that, on average, there were 1.86 messages sent per minute of each stream.

The chat messages per average viewer shows the direct engagement for each stream. In the first stream, there were 6.5 messages per average viewer. The second had 2.5 messages per average viewer. The third 10.0 messages per average viewer. The third stream, Melissa moved from each topic faster and asked direct questions back to the chat. This style should be replicated in future streams.

Unique chatters stayed consistent across all three streams at between 42-45% of unique viewers also chatted.

# Findings From Survey Data

## Viewer Age

Total Responders: 27

<b>18 Or Younger:</b>	<b>2 (7%)</b>
<b>19-24:</b>	<b>5 (19%)</b>
<b>25-30:</b>	<b>7 (26%)</b>
<b>31-40:</b>	<b>6 (22%)</b>
<b>41 or Older:</b>	<b>7 (26%)</b>

## Zip Codes

Total Responders: 27

<b>King County (Inside Seattle):</b>	<b>10 (37%)</b>
<b>King County (Outside Seattle):</b>	<b>6 (22%)</b>
<b>Spokane County, WA:</b>	<b>1 (4%)</b>
<b>Cowlitz County, WA:</b>	<b>1 (4%)</b>
<b>Minnesota:</b>	<b>1 (4%)</b>
<b>Illinois:</b>	<b>3 (11%)</b>
<b>South Dakota:</b>	<b>5 (19%)</b>

## Feedback on Stream

I would recommend this stream to another person	The educational information of the stream was engaging	The people in the stream were engaging
Neither Agree or Disagree: 2/27 (7%)	Neither Agree or Disagree: 1/27 (4%)	Neither Agree or Disagree: 2/27 (7%)
Agree: 9/27 (33%)	Agree: 7/27 (26%)	Agree: 6/27 (22%)
Strongly Agree: 16/27 (59%)	Strongly Agree: 19/27 (70%)	Strongly Agree: 17/27 (63%)

Scale of 1-10

<b>8.70</b>	<b>Average Audio Quality Rating</b>
<b>8.48</b>	<b>Average Video Quality Rating</b>
<b>8.48</b>	<b>Average Design Quality Rating</b>

## Social Media

20 out of 27 responders have interacted with Burke Social Media

<b>14/27</b>	<b>15/27</b>	<b>13/27</b>	<b>16/27</b>
Don't Use Twitter At All	Follow and Interact With Burke Instagram	Don't Use Facebook At All	Use YouTube But Have Not Interacted With the Burke Channel

## Museum Visits

17 out of 27 responders have been to the Burke

12 out of those 17 have been to the Burke within the last 6 months

16 out of 26 responders have been to ANY museum in the last 3 months

# Findings From **Survey** Data

## Demographics

The age range data is consistent across the groups. The original goal of the project was to target young adults. With the streams starting at 4:30pm pst, there has been anecdotal evidence that the original target group was still working or commuting during the streams. It was decided to put each stream at 4:30pm pst for the Burke experts. Asking them to stay later was decided to be too big of an ask for this project.

The zip code data shows that a many of the viewers that were engaged enough to take the survey live within feasible distance to visit the Burke.

44% of the survey responders have been to the Burke within the last 6 months. It is unknown how many survey responders have a direct connection to the Burke, requiring them to come regularly though.

## Stream Feedback

Overall, the stream received positive feedback from survey takers. There was not a single “strongly disagree” or “disagree” response to the three “strongly disagree - strongly agree” statements in the survey.

With the technical responses averaging in the mid 8's the technical quality was generally fine for the viewers, there room for improvement.

The three most common responses to the question “What did you enjoy most about the stream”, 59% of viewers talked about the interaction with an expert, 25% mentioned the entertaining people, and 25% mentioned the behind the scenes aspect of the streams.

When asked “What, if anything, would you like to see improved in the next stream?” 54.54% of responders said something about audio clarity or the audio/video.

## Social Media

The survey data gathered on Burke social media shows little usership of Twitter and Facebook, mostly Instagram interaction, and room for expansion of the Burke YouTube.

Of the 15 responders who say they follow and interact with the Burke Instagram, 9 (60%) said that they do so on a weekly basis.

20 out of the 27 responders (74%) said that they had viewed a Twitch stream in the past.

# Discussions and Recommendations

In response to the evaluation questions, data from Twitch showed that 1. virtual audiences were engaged during the Twitch streams but that engagement was impacted by the type of content and 2. virtual audiences did return for follow up events.

Overall, data from Twitch shows that the streams were engaging to the audience. The second stream had a significant fall of in all engagement metrics. There are a few possibilities for this. First, with the late confirmation of stream details, it was hard to advertise it effectively. The small following on the Twitch channel relies on other, stronger social media to promote the stream. Second, it was the second stream in the series, so it did not have the air of novelty that the first or the last streams had. Lastly, exhibit fabrication doesn't have the same level of excitement that fossils or biology inherently generates. It may have been to inside the niche of museums for the average, non-museum employee to know what it was about and draw them in.

A few recommendations for how to improve or test that second stream would be to:

- 1) Run more social media advertising around the stream, and explain more of what will be discussed to give the average viewer more of stepping stone to the stream.
- 2) Try the more nuanced, inside museum mechanics type streams further down the road with more of a defined viewer base. If the Twitch series were longer running, with its own following and regular viewership, that base could better equipped for the nuanced streams because they'll know generally what they're getting into.

With the relative ease in which an hour program was filled with content, there could also be room to test varying lengths of content. For longer streams, we could see if people leave and come back more throughout a single stream controlling their free choice learning, and if that allows more possible unique viewers to catch portions of the stream. And for shorter streams, this could test if people are more likely to stay for the entirety of a said stream.

The data on Twitch also only includes live streaming data, and does not speak to any viewership of the recorded VOD (video on demand). Uploading the VODs to YouTube could be used to see if viewers like watching previously live content after the fact.

Based on the ramp up of when viewers came to the stream, it could be beneficial to test the 5 minute countdown timer at the start. It could be reduced to see if that is having a negative effect on viewership at the beginning.

# Discussions and Recommendations

The age range data shows that it was a balanced group of people watching. Testing out streams starting later (6:00pm pst or later) could see if more young adults are willing and able to join the livestreams, or if it affects any of the age ranges.

There is also a possibility of promotion within the museum itself. During the third stream, Tony and Melissa started out on the floor around in person guests that were looking into the lab spaces. Letting those guests know what we were doing could have brought them to the stream. These live streams could be promoted to guests who are interested in the lab spaces and want to know more inside them.

The equipment used for the streams cost roughly a total of \$800. While it did not seem to detrimentally effect the enjoyment of the stream, investment into higher quality audio equipment could benefit the streams.

With the main bulk of advertisement of the stream happening on Instagram, it is unsurprising that most of the responders use and interact with the Burke Instagram account. There is an opportunity to test out effectiveness in Burke advertising on Twitter and Facebook. With more promotion of the Twitch streams on those platforms there is the opportunity to compare this data to the new data and see what effect that promotion has on viewership.

There is an opportunity to connect Twitch VODs to the Burke YouTube channel. Uploading the VODs could draw the people from Twitch over to the YouTube channel, especially since the majority do use that platform, but have not interacted with the Burke there before.

# Going Forward

The project set up a strong baseline for the kinds of content and engagement for museums on Twitch. The initial framework for this project was to be a proof of concept and to give us information. The proof of concept was successful and that information gave us some strong insights for next steps. Going forward there are a two take aways to consider and continue to test.

1) The role of the host should not be undervalued in future streams. The host must have the ability to multi-task while staying engaging. They not only have to handle all the technological pieces of the stream, but they must act as the a facilitator of conversation. They have to continue conversation and discussion with the guest expert, but they must keep engaging with the chat to keep up the interaction. Finding the balance of letting the expert run with a topic, and interrupting them to bring chat directly to the expert is a practiced skill that takes time.

2) There is room for experimentation in the content, format, and timing of the stream. Each of the three streams for this project were behind-the-scenes, expert-led discussions starting at 4:30pm pst and lasting one hour. Future streams should test the length of streams, adjust start times and/or change the styles of the programs in an attempt to find what best works for the Burke. For example, the second stream discussing exhibit fabrication and the role of the shop at the Burke did not have as much engagement. There is a possibility that a more project building example could have been more engaging. I.e. a thirty minute livestream where the host and expert fabricate a piece of an exhibit build, so the guests can see the actual process that happens.