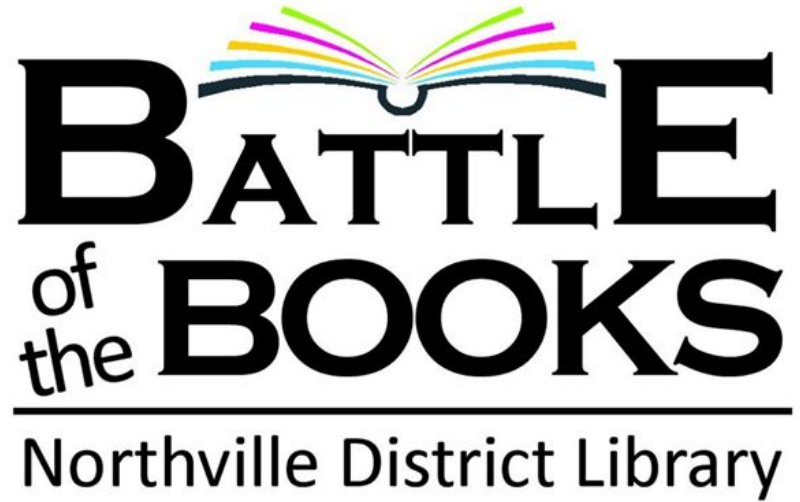


# Bringing Battle Back:

**Virtual Battle of the Books and  
How It Changed Everything**



Michael McEvoy, Natalie Molnar, Tyler Vitale

# Battle of the Books – Northville Style

## 1 | Enormous Game Show Settings

- Cafeteria of the Northville High School
- 120 to 150 middle schoolers
- 12 to 20 staff and volunteers
- 300 to 500 people in total

## 2 | 15 years running!

- First Battle run in 2007
- Largest Battle run in 2011 (over 500 people including audience and competitors!)

## 3 | Interactivity

- 7 books
- 4 middle schools
- 8 Q's per round, 7 rounds.
- 1 GONG
- So many prizes!

# A 'Normal' Year

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- 2017 Battle of the Books  
Promo Clip (1 min, 4 seconds) -  
URL is  
<https://youtu.be/LXn8Ei7CI-4>



# 2020 » 2021

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## 1. March 11th, 2020

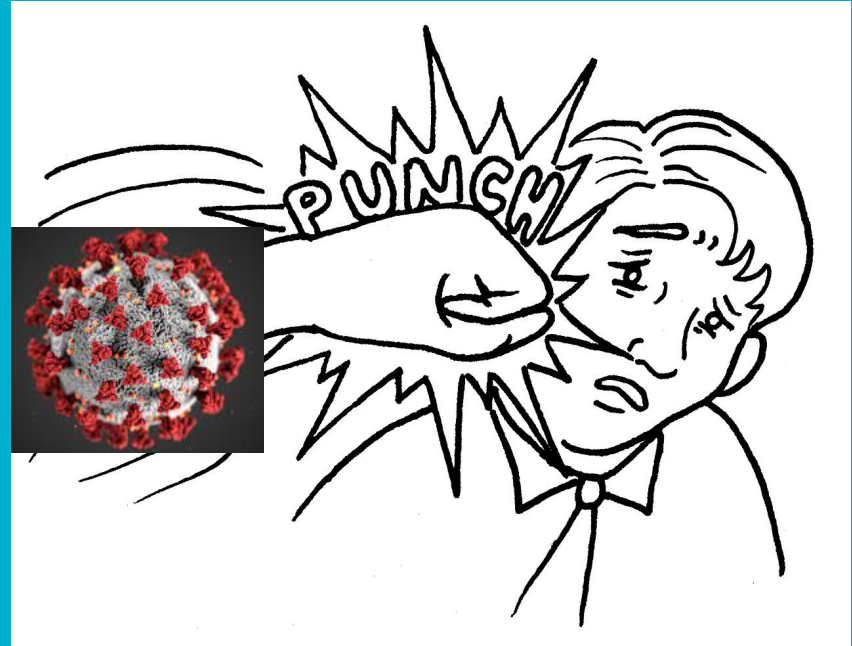
Governor Whitmer announces that groups of 50+ may no longer gather in Michigan... an hour into a 400-person Battle of the Books extravaganza.

## 2. March 23rd, 2020

Stay-at-home order announced for all non-essential workers.

## 3. August 2020

Planning begins for the next BotB!



# A Different Battle

Starting from Scratch



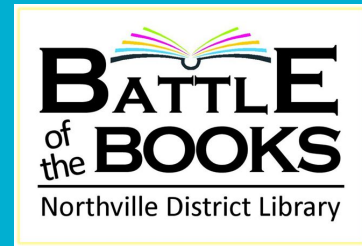
URL is <https://youtu.be/7pf28XrNtpo>

# Traditional Battle Setup



# Making A Virtual Battle Plan

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- Cases were on the rise in Northville and news changed every day. We couldn't be sure what would happen next but had to cover for all bases.
- We always started picking books early.
- Debating where and how to hold it. We had four options:
  - Try to hold it at the high school as per usual... NOT HAPPENING!
  - Try to hold it in the library... how? Where?
  - Hold it virtually! But with what software?
  - Skip a year of battle! (NOOOOOOOOOOOOOOOOO!!!)
- Debating whether to set a limit on registrants for the first time ever

# The Big Decision

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## Kahoot

- Pro and Con: Most students are familiar with it, staff was not.
- Pro: Easy to input and save questions.
- Pro: Automatically scores answers.
- Con: Couldn't support as large of a group.
- Con: Would have to be run in conjunction with Zoom, gotomeeting, or another video chatting service that could support screensharing.
- Con: Would require an additional membership.
- Pro: Had worked for other libraries.

## Zoom

- Pro: Staff and patrons are all familiar with it.
- Con: Couldn't input questions ahead of time.
- Con: Scoring would have to be done manually... but how?
- Con: How would answers be kept private?
- Pro: Could handle a much, much larger group!
- Pro: The video could be saved and uploaded later on.
- Pro: We already had Pro level zoom accounts (500 attendance) that would work for this.



# The Book Problem

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- Although we could stock the shelves with as many books as we wanted, it wouldn't help with patrons who didn't feel comfortable coming into the library during the height of the pandemic. So how could we make sure that every team had access to the books they needed?
- BOOK BAGS! Each team got a bag containing one copy of each book to keep. We had talked about this in previous years, but this was the impetus to introduce them.
- Able to accomplish this due to extra funding from the Friends of the Library. Thanks, Friends!



# An Ever-Changing Situation

- August - go ahead
  - (Tech - Start designing new Scoring system)
- Start picking books
- Commit to battle
  - Design method to use Zoom and scoring system.
  - “Game play” how it can break
- Books finalized
- Managers meeting
  - Train staff to use scoring and game play
- Judges training
  - This would be our only chance to show the how BOTB works in 2020...



# Top scores--for us!

Creating the Battle  
Score  
Aggregator--aka  
the BSA for short!

## Battle Score Aggregator

### Main Menu

Judging
Totals
Admin
Data Export

```
from aiohttp import web
import aiohttp_jinja2
import aiohttp_session
from aiohttp_session.cookie_storage import CookieStorage
import base64
from cryptography import fernet
import jinja2

class Dash:
    """Class defines the dashboard."""

    def __init__(self):
        self.host = conf.host
        self.port = conf.port
        self.templateDirectory = conf.templateDirectory
        self.staticDirectory = conf.staticDirectory

    def setup(self):
        """Perform setup."""
        self.app = web.Application()
```

Tabby

C:\Program Files\PowerShell\7\powershell.exe

taira@GLaDOS:../Battle-Score-Aggregator/src\$ python .\main.py

===== Running on http://192.168.1.2:80 =====

(Press CTRL+C to quit)

# The New System

- **Web Based** - Built on HTML, CSS, Javascript, and Python.
- **Like Excel** - Uses a system of cells to keep track of scores to keep it familiar for the judges.
- **Automagic** - No saving, no tallying. Scores are sent dynamically to the server, and automatically summed.

Question	The Red Apples	The Orange Oranges	The Blue Blueberries
Round 1			
Q1	5	4	1
Q2	1	4	1
Q3	5	5	5
Q4	4		
Q5			
Q6			
Q7			

Welcome, Right Honorable Taira.

Help Me!

Scoring Key	
Score	Description
0	All incorrect
1	Answer wrong, author's name correct
4	Answer correct, author's name incorrect
5	All correct

## Scoring Status

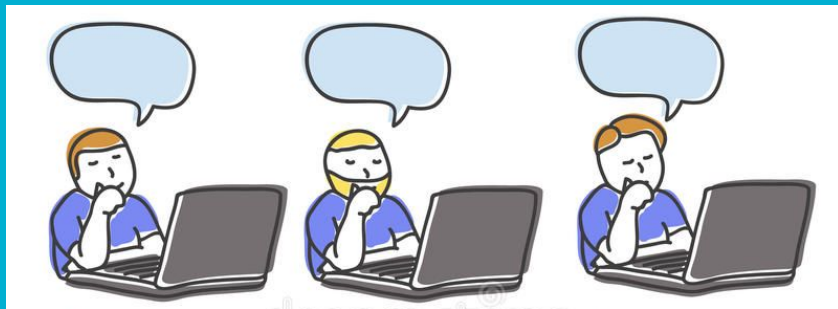
Judge	Currently Scoring	Status
Taira	Q4	

Clear All Help

# Training the Judges

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- A day was set aside to train judges in February in the library. Before then, we tested out the answer submission-system with the manager's meeting in January. That way, both patrons and staff got a chance to try things out!
- Judges were recruited from librarian members of staff.
- None of them had ever judged at battle before, so we had to train them both on what battle was about as well as on using our new scoring system.



# Battle Day!

...and everything that went  
wrong.  
(and right!)

## **Dawn of The Final Day**

- 24 Hours Remain -

# Battle Prep – In-person vs. Virtual

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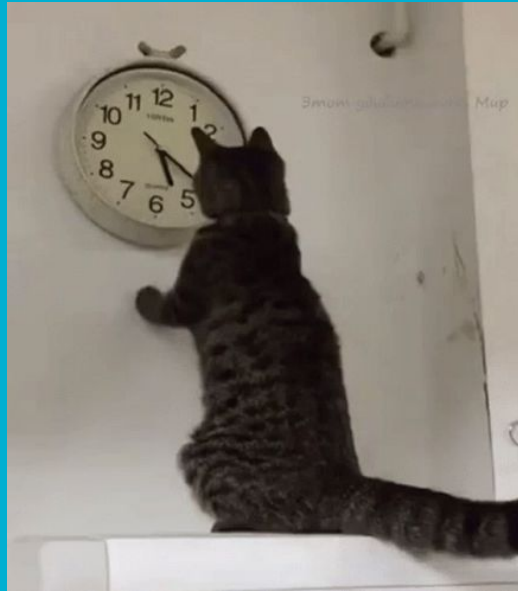
## In-Person

Leaving the library early to set up the high school cafeteria.

Arranging volunteers as judges, runners, and more.

Tech walkthrough at high school the week before.

Creating scorecards, event programs, and more to pass out during event.



## Virtual

Closing the entire library early to get everything set up and ready.

Arranging staff members as judges and technical help.

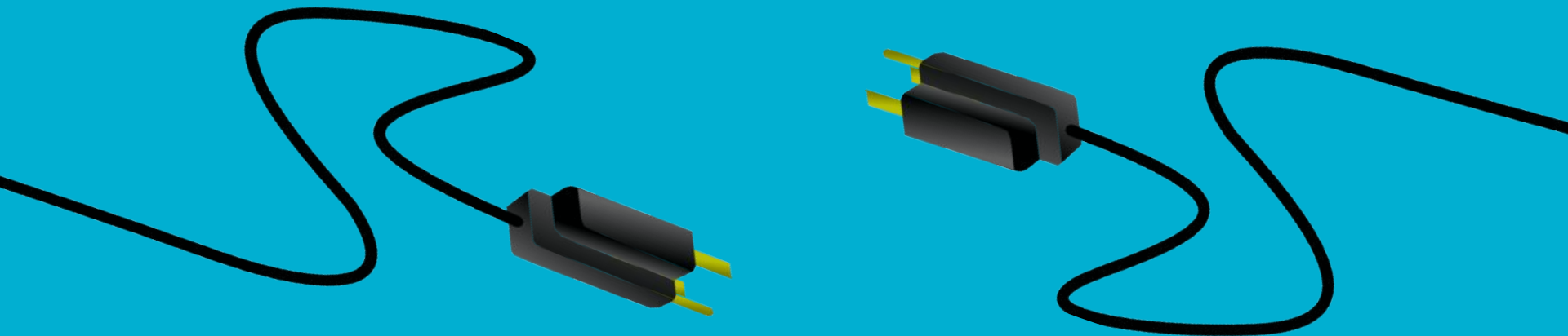
Dress rehearsal a few days prior.

Creating event programs and certificates to be picked up later on or downloaded through the website.

# Coming Up to the Wire (or the Ethernet Cable)

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There were issues with the Facebook stream but we were committed! Due to changes Facebook has made, we couldn't get it working on time and had to stall. But it paid off in the end—people from all over the country watched the event and cheered the competitors on!





# Battle Begins!

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- Allowing patrons into Zoom
- Activating the Facebook Stream (finally!)
- Judge and Contestant Communication



**KEEP  
CALM  
AND  
LET BATTLE  
COMMENCE**

# Gameplay!

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Step One:  
Show the Question

## Sample Question

Q. What is the name of Han Solo's ship?

# Gameplay!

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Step Two:  
Begin the Countdown



# Gameplay!

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Step Three:

End the Countdown.  
All answers must be  
in chat to the  
appropriate judge.

**Time's  
Up!**



**Time's  
Up!**

# Gameplay!

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Step Four:

Tease them a bit...

And the Answer is...

# Gameplay!

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Step Five:

Show them the answer!

**Sample Question**

Millennium Falcon

*When you absolutely positively have to know, ask a librarian.*

*—American Library Association*

# Watch the Sample Round

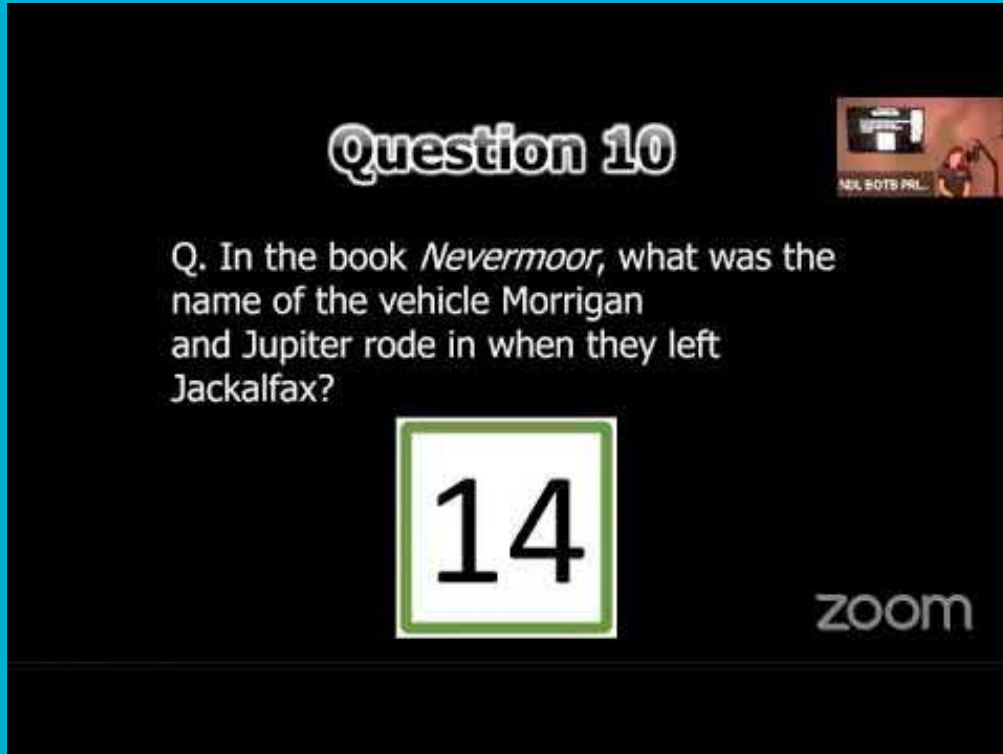
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**Question 10**

Q. In the book *Nevermoor*, what was the name of the vehicle Morrigan and Jupiter rode in when they left Jackalfax?

14

zoom



# Issues During Event

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- Judging
- Team Complaints
- Technical issues  
(surprisingly few!)





# Photo Contest

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Every year we did an in-person costume contest at Battle!

For 2021. It was changed to a social media photo contest--and it was a hit!

We're permanently changing it to a photo contest due to popularity.



# Where do we go from here?

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Hopefully back to in-person... but just in case, we'll be ready for next time!

We'll be sticking with the scoring system (and the social media costume contest) for future years regardless of whether they're virtual or in-person.

To commemorate this very strange year and all of the effort patrons and staff put in to make it memorable, we purchased a plaque and will be engraving the winning teams for each year on it for decades to come.

# Any Questions?





[illegible]

# Get the Battle Score Aggregator

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- Github for Battle Score Aggregator - <https://github.com/tairabiteru/Battle-Score-Aggregator>

Phase 1: Access Github and download the Battle Score Aggregator

Phase 2: ????

Phase 3: BATTLE!



# Contact Us

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Michael McEvoy, Head of IT

[mmcevoy@northvillelibrary.org](mailto:mmcevoy@northvillelibrary.org)

# Links & Sources

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- NDL 2020 Battle of the Books Video - <https://youtu.be/7sHGnjzUBKU>
- Northville District Library - <https://northvillelibrary.org>
- NDL Battle of the Books Page - [https://northvillelibrary.org/?page\\_id=2893](https://northvillelibrary.org/?page_id=2893)
- 2017 BoTB Promo - <https://youtu.be/LXn8Ei7CI-4>
- BOTB Setup Timelapse - <https://youtu.be/7pf28XrNtpo>
- PDF of this Presentation -  
<https://northvillelibrary.org/wp-content/uploads/2021/10/Bringing-Battle-Back-3.pdf>