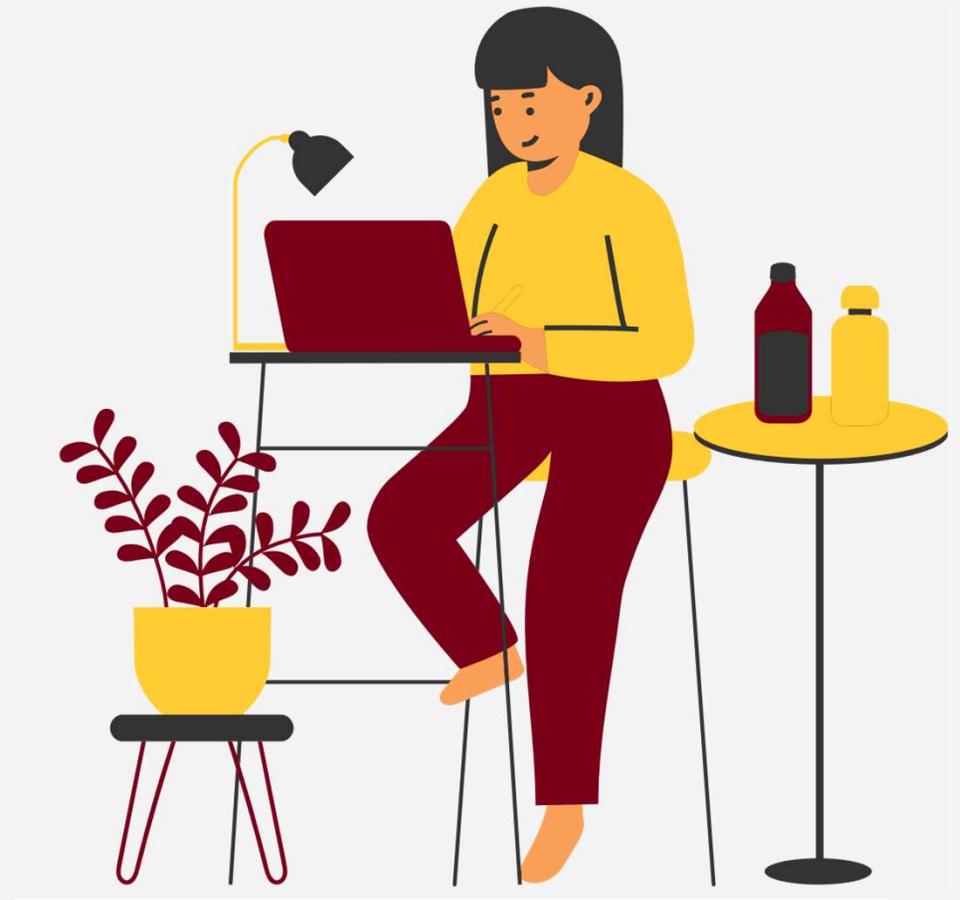


# Watershed Engagement Programming (WEP) Hub

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Anne Nelson, MS  
(Anne^2)



# Why build a website?



- ✘ COVID 😞
- ✘ Conversations with target audience revealed a need for resources and materials
- ✘ Opportunity for funding and support from Extension Foundation in late 2021
- ✘ Further conversations expanded mission to include topical resources and engagement

# NTAE Grant

New Technologies for Ag Extension  
Extension Foundation and NIFA



## Unique fellowship opportunity

Designed for projects in the early stages of development to shape and accelerate project implementation.

## Grant award of \$10,000

Used for stipends to advisory team of SWCD, WD, and non-profit collaborators.

## Team-oriented approach

One year of support from Extension Foundation "Catalysts" and "Key Informants" across the country in areas of leadership, communications, marketing, digital engagement, evaluation, and partnership development.

# WEP Hub vision

Build a **one-stop-shop** of materials and resources for local water resource entities that support them in building successful, sustainable, and measurable programs for education, outreach, and engagement, with an initial focus on agricultural and rural watersheds.

## **Accessibility**

---

Online resource hub hosted through Extension, free and accessible to all regardless of affiliation.

## **Convenience**

---

Individual resources available without having to complete a course or wade through a PDF.

## **Adaptable**

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Resources can be updated or added at any time based on stakeholder needs and feedback.

# What will the WEP Hub look like?



## Framework

- **Clearinghouse for topical materials** to use with a variety of audiences
- **Resources to build internal program capacity** and stability (peer-to-peer learning, plan templates, evaluation resources...)

## Priorities

- **Useful!**
- Easy to navigate
- Visually appealing
- **Nexus for engagement**

# Who is the WEP Hub for?

**Soil Water Conservation Districts (SWCDs)**

**Watershed Districts (WDs)**

**Watershed Management Organizations (WMOs)**

**Board of Water and Soil Resources (BWSR)**

**Nonprofits**

**Anyone involved in watershed planning, management, or outreach, possibly you!**

**New partnerships on the way**



MPCA photo

# Audience Assessment

## **1:1 Conversations**

23 individuals

"All-stars" in the outreach and education sector or administrative officials

## **Focus Groups**

2 formal focus groups

11 and 6 attendees respectively

3 meetings of our advisory team

## **Needs Assessment**

38 participants

Qualtrics Survey

40 questions

Ability to upload files or links

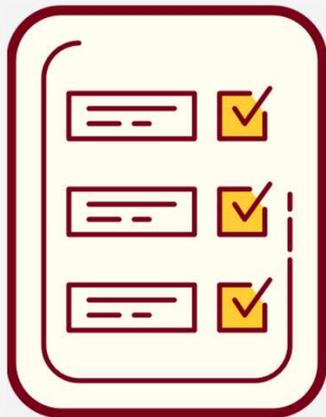
## **Virtual Chat**

15 participants

Other Extension and outreach professionals in natural resources

Extension Foundation hosts

# Needs Assessment Data



**79%** of respondents said that a WEP Hub-type clearinghouse with resources in one location would somewhat or definitely improve their organization's outreach and education programming.

**57%** indicated that an overall lack of topical materials and templates strongly or moderately impacts their ability to conduct outreach, engagement, and educational activities.

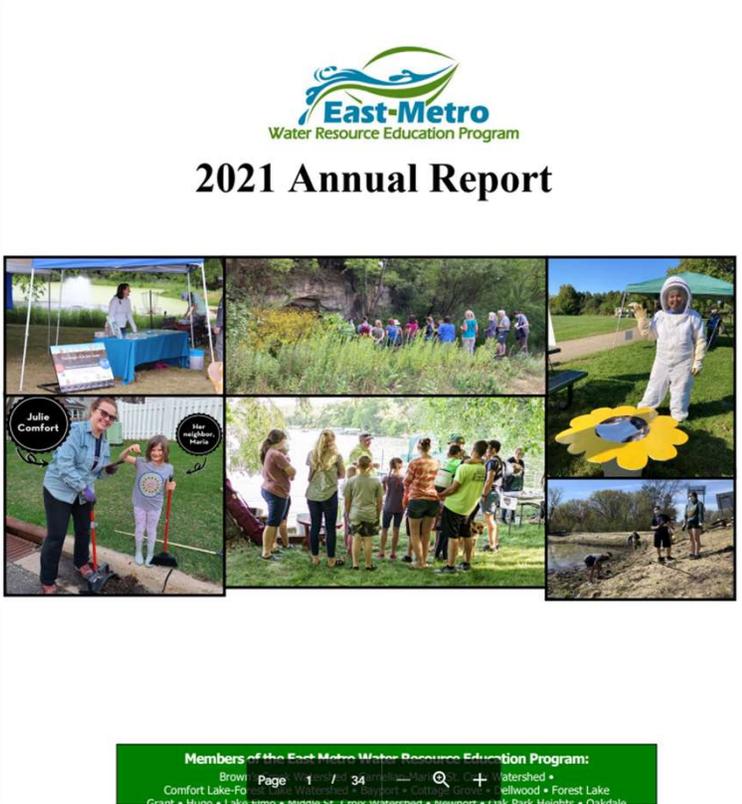
Lack of knowledge related to social science strongly or moderately impacts outreach and educational programming among **71%** of respondents.

	A	B	C
1	<b>Grouping</b>	<b>Family</b>	<b>Comment</b>
2	Links between issues	Environmental Processes	Links between climate change, waste (including plastic and
3	climate change	Climate Change	Links between climate change, waste (including plastic and
4	waste	Waste Management	Links between climate change, waste (including plastic and
5	plastic waste	Waste Management	Links between climate change, waste (including plastic and
6	organic waste	Waste Management	Links between climate change, waste (including plastic and
7	natural resource consumption	Energy Use	Links between climate change, waste (including plastic and
8	accessible resources	Accessibility	Ability to make existing resources handicap accessible.
9	ability to make resources assessible	Accessibility	Ability to make existing resources handicap accessible.
10	framework for outreach/education planning that will lead to behavior change	Social Science	A framework for developing a "Comprehensive Education/"
11	well testing	Drinking water	More information on well testing, groundwater visuals for d
12	groundwater visuals for more regions of the state	Groundwater	More information on well testing, groundwater visuals for d
13	groundwater-surface water interactions	Groundwater	More information on well testing, groundwater visuals for d

# Discovering the categories

<i>Family</i>	<i>Comment</i>	<b>COUNTA of Cor</b>
[-] Accessibility	Ability to make existing resources handicap accessibl	2
Accessibility Total		2
[-] Agriculture	Ag BMP's, Lawn Care, Water Conservation, Garden C	1
	Public speaking tips - how you present is as importan	1
	Sediment sources and effects. Unpaved roads.	1
	soil health, cover crops, erosion control practices, farr	2
	Soil health, well sealing, no-till practices, urban agricu	3
	stormwater issues for urban communities	1
	Stormwater Topics for Small Towns, Climate Change	1
	Templates for after-event surveys, soil health related t	2
Agriculture Total		12
[-] Climate Change	how soil health and water quality are connected, storr	1
	Links between climate change, waste (including plasti	1
	Stormwater Topics for Small Towns, Climate Change	1
Climate Change Total		3
[-] Design	More information on well testing, groundwater visuals	3
	None come to mind. We custom build a lot of stuff on	2
	Templates for after-event surveys, soil health related t	3
Design Total		8
[-] Drinking water	Ag BMP's, Lawn Care, Water Conservation, Garden C	1
	More information on well testing, groundwater visuals	5
	Soil health, well sealing, no-till practices, urban agricu	1
	Templates for after-event surveys, soil health related t	2
Drinking water Total		9

# Gathering Resources



  
**2021 Annual Report**

The cover features a collage of six photographs showing various environmental education activities: a person at an outdoor table, a group in a field, a person in a white protective suit, a woman and child with a shovel, a group by a lake, and a person with a dog near a pond. A green banner at the bottom lists members of the program.

**Members of the East Metro Water Resource Education Program:**  
 Brown • Comfort Lake-Forest Lake • Grandview • Linden • Maplewood • North • Oakdale • Park • Roseville • St. Louis Park • University Heights • West • Woodbury

HENNEPIN COUNTY

## Environmental education network



**Hennepin County environmental education network**  
 Private group · 168 members

[Join group](#)

[About](#) [Discussion](#)



### Native Flowers, Shrubs and Trees for Yards, Raingardens & Shorelines

**Native Plants Moist to Dry Soils - Shade**

 <p><b>Columbine</b>  <i>Aquilegia canadensis</i>              Ht: 36" Flower: Orange Bloom: May-June              Habitat: Full sun to shade. Moist to dry soils.              Woodland and Forest.</p>	 <p><b>Harebells</b>  <i>Campanula rotundifolia</i>              Ht: 24" Flower: Purple Bloom: June-September              Habitat: Full sun to part shade. Moist to dry soils.              Savanna and Woodland.</p>
 <p><b>Pennsylvania Sedge</b>  <i>Carex pennsylvanica</i>              Ht: 9" Flower: Brown Bloom: May              Habitat: Full sun to full shade. Moist to dry soils.              Woodland and Forest.</p>	 <p><b>Wild Geranium</b>  <i>Geranium maculatum</i>              Ht: 18" Flower: Purple Bloom: May-June              Habitat: Full to part shade. Moist to dry soils.              Woodland and Forest.</p>
 <p><b>Bloodroot</b>  <i>Sanguinaria canadensis</i>              Ht: 12" Flower: White Bloom: May</p>	



# Website development

Holy cats, this was way harder than we thought it would be!

Here are some things we've learned along the way.

# Selecting a platform

1

Google Sites?

2

WordPress?

3

Drupal Lite!

# Digital Accessibility



## Challenges

## Opportunities

Guidance has been confusing.

Target audience needs can conflict with digital accessibility requirements.

Many not aware of importance of accessibility; opportunity for engagement.

We will create accessible materials and templates for their use.

# Ownership

Only "host" U of MN created or co-created materials

Other authors are limited in ability to give permission

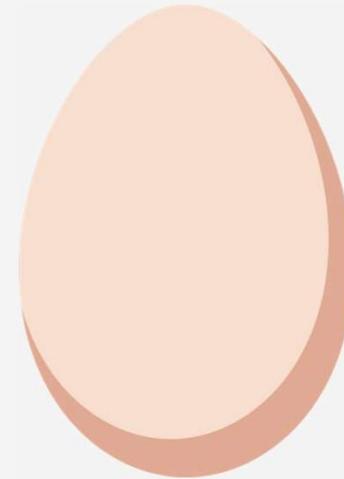
Creative alternatives to meet stated needs



# Which comes first?



**Structure**



**Content**

# Finding examples

Models for design and function

College of Agriculture, Food and Environment

FORAGE EXTENSION HOME

Home Events People County Agents Forage Research at UK KY Forage News Publications

### All Things Alfalfa

The objective of the Alfalfa Information X-Change is to consolidate and organize on-line resources for alfalfa production and utilization. This site is part of a USDA-NIFA project focusing on the production of high quality alfalfa hay for export from the humid eastern United States.

- HARVESTING AND UTILIZATION**
  - Hay Sampling: Strategies for Getting a Good Sample
  - Understanding Forage Quality
  - Harvest Management of Alfalfa, Penn State
  - Harvest Schedule for First Cutting Alfalfa, Michigan State University
- GRAZING**
  - GRAZING ALFALFA: Economic and Sustainable Use of a High-Value Crop, Alfalfa for Beef Cows
- INSECTS**
  - Insecticide Recommendations for Alfalfa, Clover and Pastures - 2020
  - Alfalfa Weevil Field Sampling Program
  - Alfalfa Analysis, NAEA
- DISEASES**
  - Kentucky Drought Disease Management Guide for Forage Legumes
  - Managing Diseases of Alfalfa
  - Kentucky Integrated Crop Management Manual for Field Crops, Alfalfa
  - Alfalfa Analysis, NAEA
- VARIETY INFORMATION**
  - Forage Variety Trials, University of Kentucky
  - Ohio Crop Performance Trials, The Ohio State University
  - Forage Variety Trials, Penn State
  - Forage Variety Trial Results, University of
- WEEDS**
  - Weed Control Strategies for Alfalfa and Other Forage Legume Crops
  - UK Weed Science Website

Home About Suggest Content Search Tips Login

## Minnesota Digital Water Research Library

DISCOVER MnWRL DIGITAL COLLECTIONS

**BROWSE BY**

- Year Issued
- Associated Organization
- Location - County
- Location - HUC8 Watershed
- Journal Title

**ADVANCED SEARCH**

FIELD: Title

SEARCH TERMS: [input field]

Search

Welcome to the MnWRL

The Minnesota Water Research Digital Library is a searchable inventory of

- Agricultural Drainage
- Drinking Water
- Groundwater
- Hydrology
- Surface Water
- Urban & Industrial Stormwater
- Wastewater
- Water Biology & Aquatic Habitat

UNIVERSITY OF MINNESOTA Driven to Discover

Minnesota Office for Soil Health - MOSH

Home About MOSH News & Events Principles Indicators Management Economics Resources

## Building common ground for water quality and agricultural production

**Principles >**

What is soil health and how do you get there?

**Indicators >**

How do you know if your soil is healthy? Start with a shovel.

**Management >**

Integrating tillage, pest and fertility management, seed choices, and more.

**Economics >**

How to make soil health pay.

**About MOSH >**

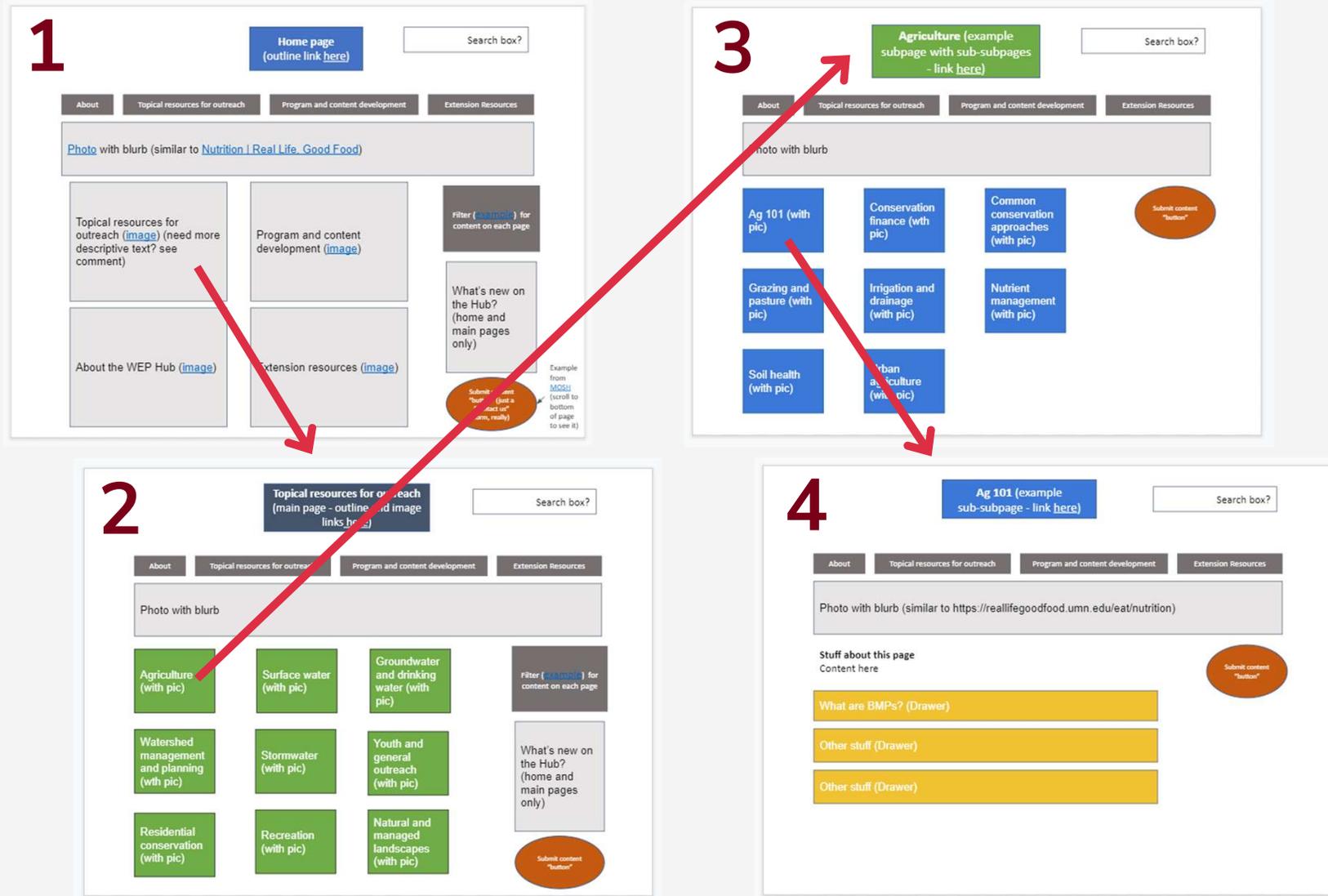
**MN Soil tweets**

Tweets by @MOSHSOIL

It took a long time to get this one established, but just received a final estimate of The Story of Minnesota's Soil. #Minnesota #SoilHealth #MOSH #MnSoil #MnSoilTweets

The Story of MN

# First draft of site layout



# Content and collaboration

Google Drive is our friend... and so is our website developer!

WEP Hub Resources - Master Sheet

File Edit View Insert Format Data Tools Extensions Help

100% \$ % .0 .00 123~ Default (Ar...) 10 B I A

Shared with me > WEP Hub website development > WEP Hub content

Name	Last modified	Filter	Category	Type	Resource Name	Link	Format	Keywords	Link
Program development pages	Apr 21, 2022								
Topical materials pages	Apr 21, 2022								
U of MN Branding	Dec 6, 2021								
Website images	Apr 21, 2022								
About (main page)	Jul 1, 2022								
Contact and content form	May 20, 2022								
Extension resources (main page)	Jul 1, 2022								
WEP Hub (home page)	Jul 1, 2022								
WEP Hub Design Outline 3	3:44 PM								
WEP Hub layout	Jul 7, 2022								

## Watershed management and planning (subtopic)

Top of page info:

Image: [Cannon river](#)

Image text: Watershed management and planning

All text: View of Cannon River with forested banks near Northfield, Minnesota.



Although Minnesota is known as the "Land of 10 000 Lakes", over half (56%) of the state's lakes and streams fail to meet water quality standards. Here you'll find topics related to watershed management that can help with planning and implementation to protect and restore lakes, rivers, and wetlands across Minnesota.

### [Land and watershed management](#) (Subpage)

(includes water storage, governance/roles, and project funding/maintenance)

### Watershed science (Drawer)

[Needs Assessment: Watershed Science for Water Resources Directors](#)

### Water quality standards (Drawer)

# Sneak peek: Topical subpage and content page

UNIVERSITY OF MINNESOTA EXTENSION

Watershed Engagement Programming (WEP) Hub

About Topical Resources for Outreach Program and Content Development Extension Resources

Home >



**Agriculture**  
Agriculture

Urban agriculture > Irrigation and drainage > Grazing and pasture management >



Teaser



Teaser



Some Description

Submit Content

UNIVERSITY OF MINNESOTA EXTENSION

Watershed Engagement Programming (WEP) Hub

About Topical Resources for Outreach Program and Content Development Extension Resources

Home >



**Common conservation approaches**  
Resource issues and conservation approaches in Minnesota.

Topical Category  
Agriculture  
Example text intro: Blah blah blah stuff here.

Expand all

- + Crop and soil management
- + Waterways and buffers

Submit Content

# Moving forward

In addition to ongoing web development and resource collection, curation, and creation:



## Expanding engagement

Collaboration with Environmental Initiative and others



## Evaluation

Web analytics, material review and piloting, follow-up surveys



## Sustainability plan

We'll get there.

# Questions for us?



sawye177@umn.edu



annenel@umn.edu



Share your email on the sign-up sheet in the back

# Questions for you!

Resources to share or highlight?

Ideas for engagement around Hub?

Similar or complementary initiatives?