

# LEAD. CARE. INSPIRE.

## Freeman Environmental **Education Center**

#### **ADVISORY COMMITTEE RECOMMENDATIONS**

Presentation to the Ann Arbor Public Schools Board of Education June 19, 2019

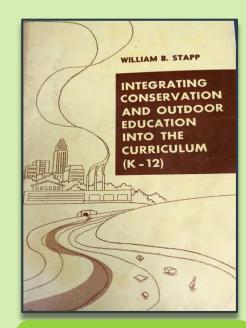
# **Tonight's Presentation**

- AAPS Environmental Education (EE) history & staff
- What's new in the EE program and at the Freeman EE Center in 2018-19?
- Advisory Group purpose, membership, and process highlights
- Advisory Group vision and framework
- Recommendations and exemplars
- Q & A



## **AAPS Environmental Education Program**

- Starting in the late 1950s, a talented group of local educators developed a pioneering K-12 EE program for AAPS
- Currently the program reaches 9,000+ PreK-6th grade students annually
- 2 certified teachers and more than 2,000 hours donated by volunteer naturalists each year
- Excited to continue this tradition of excellence as we begin a new chapter of student engagement with the Freeman EE Center!



By 1965, William Stapp of the AAPS EE Program had literally "written the book" on environmental education.

# What's new in Environmental Education?

#### At the Freeman EEC Center

- Fall 2018: AP Environmental Science classes analyzed biodiversity
- Adult volunteer site clean-up day
- 5th grade Winter Survival
- Spring 2019: Skyline students carried out tree and plant survey in woodlot; in partnership with the Huron River Watershed Council





Click <u>here</u> to visit the AAPS EE website and <u>here</u> to go directly to our Freeman webpage.

### What's new in Environmental Education?

#### Other new EE programming

- Developed digital trip orientations
- Service learning activities and stewardship takeaways
- Elementary Shade Tree Program educational materials





## Who else is enjoying the Freeman property?

Trail camera shots from the Freeman woodlot!







# Freeman EE Center Advisory Group Purpose

The purpose of the Freeman Environmental Education
Center Advisory Committee is to **engage** staff, parents and
community members in a **collaborative process** to **envision programming** for the Freeman Environmental
Education Center facility and property.

## **Advisory Committee Membership**

### 25 Members

- 9 current AAPS teachers
- 3 High School students
- 2 retired teachers
- 1 current building admin
- 1 retired building admin
- 5 parents of current students

For a list of members and meeting dates, visit <a href="https://www.a2schools.org/Page/13248">https://www.a2schools.org/Page/13248</a>

#### **Members representing:**

- Great Lakes Commission
- SE Michigan Stewardship Coalition
- AAPS Farm to School Collaborative
- The Farm at St. Joe
- **UM, EMU, MSU**
- Rec & Ed
- Michigan Alliance for Environmental and Outdoor Education
- National Association for Interpretation

## Timeline for Advisory Committee Work

Nine full Advisory Committee meetings and several subcommittee meetings from May 2018 - April 2019.



## **Exemplar Research**

- 2 subcommittees: high school and elementary/middle
- Collectively gathered and reviewed 40+ exemplars
- Many useful EE program models all over the U.S.
- Share 3 in this presentation: Detroit EcoWorks/Youth Energy Squad; Lenawee Center for a Sustainable Future; Nature Kids Lafayette/Jóvenes de la Naturaleza

## Visioning Activity

- Imagine that it's five years from now. You're visiting the Freeman Environmental Education Center and meet a group of 12<sup>th</sup> grade students who represent all five AAPS high schools.
- The students have participated in many aspects of the district's EE program at Freeman from elementary through high school.
- What is your vision for these students as they graduate from AAPS?

### One student's vision



"Freeman is an inspiration point. It's sustainable, useful, and embedded with youth voice...

Growing up with Freeman, I learned how the environment could take care of me. And then I started my own mini projects, making biofuel out of waste scrap, shadowing a landscape developer, discussing green options for AAPS at the bimonthly roundtable Youth Advisory Council session. I followed the monarch migration in the fall and watched robins hatch in the spring. That's when I learned how I could take care of the environment."

Julia Heng, Huron High School Freeman EEC Advisory Committee Member

# Advisory Committee's Vision for the Freeman EEC

#### IS

- A center for transformative preK-12 educational experiences
- A place where students can build the knowledge and skills to take action as environmental stewards and leaders
- Student driven, inclusive and representative of our student body
- A place to engage district staff and the broader community in environmental issues
- ► A model of sustainable practices and green infrastructure

#### **IS NOT**

- A duplication of existing programming from nature centers in Ann Arbor
- A replacement for existing AAPS environmental education field trip programming
- Just for school-day use
- Only for K-5 learners
- Offering programming planned only by adults

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### **AAPS Board Policy 8000: Environmental Sustainability**

#### **Excerpt**

The Ann Arbor Public Schools recognizes that:

- Climate change is real, increasing, and caused by human activity; and
- The District has a responsibility to help prepare current and future generations to respond to climate change ...



The District will support the prioritization of:

- **Environmental sustainability education** that prepares present and future generations to become thoughtful stewards of the environment; and
- Developing student leaders prepared to succeed in an uncertain climate change future; and
- Building and enhancing **partnerships** that support the Ann Arbor community's environmental principles.

### 3 Recommendation Areas



Student
Achievement,
Empowerment,
Action,
Leadership



Community and Neighborhood Involvement



Building and Grounds

# Student Achievement, Empowerment, Action, Leadership

A

- 1. Establish Freeman EEC Youth Council
- 2. Tie new environmental education opportunities at Freeman to existing AAPS curricula
- 3. Develop **local**, **problem-based** summer camp experience

- Develop environmental justice & climate change programming
- 5. Implement instructional models (such as local, problem-based programs)
- Support innovative student projects involving demonstration gardening
- 7. Explore skill-based certification and career pathways (CTE)
- 8. Create formal environmental education resource hub

48-60 Months

12-36 Months

0-24 Months



Detroit, MI

The Youth Energy Squad, a program of **EcoWorks**, cultivates the next generation of green leaders by engaging youth from diverse backgrounds in hands-on service learning projects that make their homes, schools and communities more sustainable.

#### Multiple levels of commitment as entry points

#### 2 month projects

Schools participate in one or more "Challenges" (Recycling, Energy, Water, or Gardens & Nutrition), each lasting about 2 months.

https://www.ecoworksdetroit.org/

Schools explore Recycling, Energy, Water, and Gardens and Nutrition through place-based and project-focused activities that work to make their schools more sustainable in each of these categories.

**Full Year** 

#### **Year-Long Capstone Project**

Student groups take on a year-long sustainability Capstone Project. Utilizing local, problem-based curriculum, students investigate an issue in their community, design a project to address it, and see it through to completion.

### **Lenawee Center for a Sustainable Future**

Offers 3 CTE programs for juniors and seniors in Lenawee County that prepare students for careers or further study in dozens of environmental/sustainability areas:

- Horticulture
- Agri-Tech
- Natural Resources





"Students are introduced to sustainability concepts relevant to their programs: building healthy soil, conserving and protecting water, preserving biodiversity and food security, protecting human health and the environment. Students are encouraged to think critically about these options, carefully evaluating energy and agricultural practices."

# Community and Neighborhood Involvement



- 1. Foster **relationships** with neighbors, community groups, and local institutions. In particular, engage with communities **historically unrepresented** in environmental, sustainability and climate conversations.
- 2. Explore local, state, and national funding resources.

3. Use Freeman site to host **environmentally-themed community events** and district **professional development.** 

48-60 Months

0-24 Months

# Nature Kids Lafayette/Jóvenes de la Naturaleza Lafayette, CO

#### **Community Engagement**

- Goal: determine the unique needs and desires of Lafayette's low-income and Latino youth and their families
- Launch event attended by 150 community members
- Community and student focus groups



Community input led to the development of programs and construction projects that are helping to increase the connection between Lafayette's youth and their families to nature and the outdoors.

http://naturekidslafayette.org/

## **Building and Grounds**



- 1. Make cosmetic and functional upgrades to lobby/open area, 3 classrooms, and office.
- 2. Develop and install **EE displays** for school and community education in lobby.
- Develop and install materials and tools that complement the EE program.

- 4. Facilities department: conduct **engineering and structural assessment** to determine long term use of existing structure.
- Develop and install water management systems, gardens, and other grounds projects that tie to EE programming.

12-36 Months

0-24 Months

## Lenawee Center for a Sustainable Future (CSF)

#### A model of sustainable infrastructure

The Lenawee CSF building is a model net-zero energy building, with a solar array, rain garden, demo plots, geothermal heating and cooling, vegetative roof, and rainwater collection tank.





# In the long term...

The Freeman Environmental Education Center will be a model for sustainable practices in our local community and throughout Michigan.

The Center will provide inclusive educational opportunities to develop the next generation of informed and skillful student leaders who will address the critical environmental challenges facing our planet.





