

# School for Environment and Sustainability (SEAS) Camp and Leadership Program: Final Practicum Deliverable

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## Abstract

The goal of this project is to develop a SEAS education camp and leadership program that emulates an interdisciplinary, decolonized curriculum. Diversity, Equity, and Inclusion (DEI) principles are prioritized to provide scholarship opportunities and outreach strategies that make the camp more accessible for historically underrepresented students. The program aims to give all campers an opportunity to learn and become leaders in the environmental and sustainability arena.

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## Executive Summary

### Overview

This project uses interviews with camps at the University of Michigan to build on their existing models and create a program at SEAS. We interviewed five different camps and synthesized our findings into the following key implementation areas: (1) finances, (2) safety, (3) recruitment, (4) Diversity, Equity, and Inclusion (DEI), and (5) future directions. Reference [Appendix A](#) for a summary of the SEAS-specific recommendations discussed in this piece.

Our conversations revealed that Camp Explorations, the University of Michigan Museum of Natural History summer program, is most closely aligned with what could be reasonably implemented at SEAS. This hands-on day camp aimed at K-8 students integrates science themes over a 1-week program (offered 9 times over the summer). While Camp Explorations may be the best fit, our document pulls insights from all interviews. Table 1 on the next page is a summary of the camps we learned about.

### Connection to SEAS Mission

Faculty, staff, and students at SEAS are committed to achieving a just and sustainable world. Central to this mission is ensuring that all communities benefit from a happy, healthy environment. SEAS Camp

promotes these objectives through leveraging interdisciplinary curriculum to create a safe space where students and young adults of all backgrounds can explore intersections between people and environment. After engaging in the program, campers leave equipped with tools to be mindful stewards of their environment and leaders in their communities.

### Project Goals and Deliverables

This project intends to design a program that:

- (1) Brings underrepresented groups into the environmental field
- (2) Engages youth in interdisciplinary, decolonized summer camp curriculum
- (3) Finds a use for underutilized SEAS outdoor properties

Our work culminates in the following:

- (1) Overview of existing research on environmental education and decolonial scholarship
- (1) Implementation plan that highlights finances, safety, recruitment, and Diversity, Equity, and Inclusion (DEI)
- (2) Set of curriculum resources that are adaptable, interdisciplinary, and inclusive

\*Text highlighted in gray represents specific recommendations for SEAS Camp

Table 1: University-Sponsored Camps Interviewed for this Project

| Camp Name                                                                | Description                                                                                                                                                                   | Duration                                                                                                                         | Students                                                           | Price                                                                                              |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| <a href="#">Michigan Math and Science Scholars Summer Program (MMSS)</a> | Overnight residential summer camp for high school students to engage in mathematics and science classes.                                                                      | 2-week camps (3 total over the summer)                                                                                           | 50 students per session (3 sessions total)                         | \$2,250 (2 week session)                                                                           |
| <a href="#">Camp Explorations</a>                                        | Interactive and science-based day camps for grades K-8. Daily activities revolve around themes like archeology, paleontology, astronomy, forensic science, zoology, and more. | 1-week day camps (9 total over the summer) with a morning, afternoon, or whole day option (aftercare available at an extra cost) | 14-20 students per session (9 sessions total)                      | \$185 morning session, \$175 afternoon session, \$75 optional aftercare (1-week session)           |
| <a href="#">Camp Michigania</a>                                          | Overnight recreational and educational summer camp for alumni and their families situated on Walloon Lake in the Adirondack Mountains.                                        | 1-week camps (10 total over the summer)                                                                                          | 10 families per session (10 sessions total)                        | \$1,190 for adults which decreases by age to \$350 for 3-4 year olds (1-week session)              |
| <a href="#">MPulse Performing Arts Institute Summer Program</a>          | Series of overnight residential summer programs that invite pre-college students to build skills in music performance, theater, music technology, dance, and musical theater. | 12 different programs held throughout June 19th and July 30th                                                                    | 200 students total with varying amounts in each of the 12 programs | Prices vary by program (each differ in length). The Clarinet Institute is \$1,700 (1-week session) |
| <a href="#">Summer Engineering Exploration (SEE) Camp</a>                | Overnight residential summer camp for high school students to explore engineering disciplines and industries.                                                                 | 1-week camp                                                                                                                      | 50 students total                                                  | \$700 (1-week session)                                                                             |

## Environmental Education Background

A sustainable future involves empowering young people to pursue equitable pro-environmental action. Studies show that students exposed to environmental education have a positive correlation with their sustainability attitudes (Boca et al., 2019). This research suggests that regardless of involvement in the environmental field, students can bring sustainability practices into whichever career path they choose. Scholars also argue that education must be more practical and interdisciplinary for durable change (Focht & Abramson, 2009). Equitable solutions will require a social-and-humanities-driven approach because sustainability problems extend beyond the environmental realm.

Place-based and interdisciplinary education can support deep learning. Research shows that environmental education programs that focus on local issues and collaboration with others working on similar problems have the most direct impacts on students (Ardoin et al., 2020). Further, an interdisciplinary approach is helpful for students to gain a holistic understanding of sustainability challenges. Another study finds that environmental education is most productive when weaved into traditional teaching subjects instead of as its own (Omoogun et al., 2019). Incorporating interdisciplinary learning in the classroom can help students apply sustainability and environmentalism across a wide range of subjects and professional paths.

Achieving a sustainable future requires advocates of many identities and backgrounds.

However, outdoor education programs such as day and overnight camps have a legacy of overlooking underrepresented and historically marginalized communities. Camps often propagate barriers to participation by being costly and far away. Lack of representation amongst staff and participants also contributes to an exclusive atmosphere. The environmental movement stems from White, elite leaders—making those coming from different identities feel like they do not belong. Even when underrepresented campers have the means (or scholarship) to attend a nature program, some students may not feel welcome (Arias, 2020). Environmental education programs must enact relational care for their students. This can look like focusing on personal student needs, practicing cultural humility, and shifting concepts of “home” in the program goal (Arias, 2020).

Current environmental education approaches are inaccessible to underrepresented communities, lack interdisciplinary curriculum about human-natural systems, and are geared towards outdated pedagogies. The University of Michigan School for Environment and Sustainability (SEAS) has a wealth of resources, such as currently underutilized outdoor properties, that could be leveraged to make environmental camp experiences more within reach. Students, staff, and faculty at SEAS can also help build an innovative, inclusive, and engaging curriculum plan for our future leaders in the field. Hence, we believe SEAS has potential to be a leader in the outdoor education camp arena.

## Decolonized Pedagogy

Current approaches to environmental education reinforce a western knowledge narrative (Hall, 2014). This approach is problematic because it brings reductionist and decontextualized perspectives to learning about sustainability problems (Aikenhead & Ogawa, 2007). The western narrative omits diverse voices and sources of knowledge that helped shape the environmental movement (Harmin et al., 2016). Students cannot develop successful, equitable sustainability solutions without deconstructing dominant narratives that guided environmental work in the past.

Moving towards land-based education is one avenue to bring together Indigenous and western thinking. For example, land-based learning explores the “culture, language, society, technology, experiences, and views” of a community (Datta, 2018, p. 52). Taking time to examine these different dimensions of environmental problems can prompt questioning, open mindedness, and deeper understanding (Quigley, 2009). Land-based education also prioritizes situating the self during learning. The role of personal identity is important because it guides our worldviews, perspectives, and biases. Situating the self can help build better relationships, foster trust, and mutual sharing when working with communities impacted by environmental challenges (Wilson, 2008).

Another important aspect of decolonizing pedagogy is integrating knowledge from diverse scholars and practitioners. Within academia, the work of elite environmentalists is referenced for credibility—putting western science at the top of the knowledge hierarchy. (Harmin et al., 2016). However, alternative forms of knowledge such as those not featured in peer-reviewed literature are often not considered reliable. A transformative sustainability curriculum will question existing privileges while acknowledging the contributions of underrepresented knowledge holders (Kuokkanen, 2007). This can encourage students to challenge power dynamics and work towards more integrative solutions (Miller et al., 2011).

Untraditional evaluation processes in the classroom can encourage decolonized scholarship. Understanding should move beyond content memorization so that students can interact more intentionally with material. Examples of alternative evaluations include art, poems, storytelling, and outdoor activities (Datta, 2018). It is important to note that these unconventional forms of assessment do not have to act alone. They can build on content memorization to provide a more comprehensive understanding of sustainability. Overall, decolonizing the classroom should encourage students to engage in new ways of thinking that promote deeper learning.

# School for Environment and Sustainability (SEAS) Camp and Leadership Program: Implementation Plan

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## Finances

### Program Budget

Most camps break down their finances into the following categories: staff compensation, supplies (including t-shirts), scholarships, and room/board (if staying overnight). Their camps are predominantly funded by camper tuition with some being supplemented with grants or the program that hosts them. Some camps keep their budget low by having students bring their own lunches instead of providing food. SEAS may also consider having students bring their own lunch to reduce cost barriers and logistical issues like allergies and transporting meals to outdoor properties.

Reference [Appendix B](#) for a sample SEAS Camp budget. This example is broken down into a one-week session that runs 9 am-3 pm for 10 weeks total. We also included an after care program between 3-5:30 pm for parents who are unable to pick up their child in the afternoon. This camp model accommodates up to 20 campers per session but also includes scenarios for when maximum registration is not achieved. The main expenses are staffing, supplies, and scholarships. See the sample budget for specific expenses and predicted revenues.

### Scholarships

Our camp budget aims to direct surplus revenue towards scholarships for students. Some camps have success getting additional scholarship money from grants or other sources like the Center for Educational Outreach. Common approaches to determine who gets scholarships include:

uploading a most recent tax return, filling out a financial aid form similar to FAFSA, qualifying for free or reduced lunch at school, reporting estimated household income and the number of people living there, submitting an essay (e.g. why are you applying for aid?), or a combination of these.

We recommend that SEAS Camp assess scholarship eligibility through requesting a short essay and optional supporting document (e.g. evidence of free or reduced lunch). This gives families who may have hardships that extend beyond financial need an opportunity to receive support. The review committee should also be mindful of applicants with limited English, such as immigrant families, who may not be able to provide perfect grammar on essays. As for the scholarship amount, SEAS should consider offering partial to nearly full scholarships. Some camps use this approach because they find participants are more likely to show up if they have some buy-in instead of it being completely free.

### Staffing

“[Children on Campus](#)”<sup>1</sup> has recommendations for how many counselors should be hired per attending student depending on age level and activities (Table 2). Registering the camp with Children on Campus is mandatory and guidance on a reasonable ratio can be provided from there. At SEAS Camp we recommend four camp

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<sup>1</sup> [Children on Campus](#) provides guidance for university-sponsored programs that serve minors. There is a wealth of established processes already in place to address safety and legal logistics. When registering SEAS camp as a program, Children on Campus staff will help navigate these procedures and provide resources to assist in meeting requirements.



counselors for 20 students and one assistant director to help coordinate logistics during and before the program. Another staffing consideration for SEAS camp is to provide first aid/CPR training. Further, staff should

be compensated for their time in completing these certificates and other training tasks leading up to the program start date. These costs are implemented into the sample SEAS Camp budget ([Appendix B](#)).

| Children on Campus Supervision Ratios |                  |                    |
|---------------------------------------|------------------|--------------------|
| Age Range                             | Number of Adults | Number of Children |
| Infant - 2 years                      | 1                | 6                  |
| 2 years - 5 years                     | 1                | 8                  |
| 5 years to 9 years                    | 1                | 10                 |
| 10 years to 13 years                  | 1                | 12                 |
| 14+ years                             | 1                | 20                 |

Selecting Campers

More students may apply to SEAS camp than what can be reasonably hosted. Some examples of how other camps select students for participation include: personal statements, letters of recommendation from a teacher, transcripts, first come first serve, and a lottery process. Relying on the first come first serve approach may be easiest although it should include a waitlist and/or some possibility of having priority for future camps. If there is capacity to have a more rigorous selection process, then a short essay question (e.g. what does attending this camp mean to you?) should suffice and an optional letter of recommendation from a teacher.

Safety

Forms

“Children on Campus” has developed a set of [forms](#)<sup>2</sup> to help with administration and safety requirements. Among these are: Waiver of Liability, Medical Information and Release, Over the Counter Medication, and Pick-up Authorization (for children under the age of 12). Optional forms that we believe SEAS may consider are: Self-Administration of Prescription Medication Authorization, Media Release, and Travel Permission Slip. Some programs also collect voluntary inclusion of insurance information which is something SEAS could include.

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<sup>2</sup> The Children on Campus [Forms](#) page provides a list of required and optional forms translated into Arabic, Spanish, and Chinese. It also gives guidance for selecting which suggested forms are a good fit for different programs.

## University Insurance

Once SEAS camp is successfully registered with Children on Campus and has complied with all [requirements](#)<sup>3</sup> (including background checks for staff and mandatory training), the program will receive insurance under university policy and no additional coverage is required. It is not recommended that SEAS seek insurance outside of what the university already provides.

## Recruitment

### Getting the word out

Many of the camps we interviewed already have an established presence and do not need to pursue heavy recruitment. They lean on social media updates to stay connected. Camps that are attached to a university school also leverage that name as an outreach tactic. SEAS may have a similar advantage given the weight its name holds and affiliation with the University of Michigan. From here, platforms like [UM Youth Hub](#)<sup>4</sup>, the [Ann Arbor Observer](#)<sup>5</sup> (camp section published in May), and connecting with local

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<sup>3</sup> The Children on Campus [Requirements](#) checklist summarizes key guidelines for establishing a university-sponsored program. The main areas include: registration, code of conduct, supervision, safety and security, insurance requirements, reporting, forms, background checks, and training.

<sup>4</sup> [UM Youth Hub](#) is a place to find opportunities for engaging in University of Michigan pre-college programs, K-12 events, and educational resources. There is also a specific page for summer programs on the website.

<sup>5</sup> The [Ann Arbor Observer](#) is a magazine that shares news about people, shopping, dining, entertainment, education, and more. It has a monthly circulation of 53,000 and publishes a camp section in May.

teachers/counselors are also recommended strategies for SEAS Camp promotion. We believe getting in touch with schools may be the most meaningful way to conduct recruitment.

### Collecting feedback/keeping in touch

Most programs collect feedback from campers and/or their parents after the camp ends. Google Forms is a popular avenue but existing camps mentioned a strong preference for in-person evaluative activities when possible to increase response rates. Other successful tactics shared were keeping the forms anonymous and having students rank their favorite activities to inform future planning. We recommend using a combination of in-person evaluations and google forms to collect feedback.

### Registration

Once a student is recruited and ready to register there are different platforms to use. Some examples include: Salesforce, [CampBrain](#)<sup>6</sup>, and Google Forms. Regardless of which tool, it is helpful to include name, email, parent/guardian signature, and where students go to school (to prevent everyone coming from the same elementary or middle school). We suggest omitting or limiting the registration fee to help alleviate financial barriers. Therefore, using Google Forms could be the best approach given its cost-free nature

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<sup>6</sup> [CampBrain](#) is a software that streamlines camp registration. It can also be used to track attendance, collect medical information, and help manage staff.

## Diversity, Equity, and Inclusion (DEI)

### Recruitment

For this section we spoke with a program manager who specializes in summer conservation leadership initiatives geared towards diverse scholars. An important aspect of elevating DEI in camp structure is to be mindful of who is being recruited. One approach to reach students from underrepresented backgrounds is to use census tracts for identifying diversity metrics (e.g. race, income level, etc.). From here, schools can be located in that area to share promotional materials with. Some schools already have this information available on their website. Beyond these metrics it is also helpful to look at what kind of clubs schools offer (e.g. LGBTQ+ clubs). These techniques help to identify key places for connecting with school counselors, teachers, and students. Reference [Appendix C](#) for a sample list of school contacts in Washtenaw county to connect with.

### Staff

Staffing is another important aspect of recruitment. SEAS Camp should be intentional about camp counselor representation to make students from diverse backgrounds feel included and more comfortable engaging. Inviting guest speakers, facilitators, and faculty members from diverse backgrounds to camp sessions can also help achieve this goal. Finally, counselors should be trained in a way that equips them to educate and interact with campers from historically marginalized communities.

### Promotion

Marketing materials must elevate inclusive language and images. However, designs must be wary of tokenizing students in the process. Images should include representation from everyone, not just what may be considered diverse. Further, we want to avoid making students who do not identify with an underrepresented background feel like they are not eligible for camp. Language like “we invite underrepresented communities and their allies to apply” can help make everyone feel welcome. See [Appendix D](#) for a sample SEAS camp flier.

### Cost

Another critical element of our DEI plan is eliminating financial barriers to participation. For that reason, our budget prioritizes offering generous scholarships to campers. Under the proposed budget SEAS Camp could provide up to \$150 per student. Although, the intention is for these funds to be distributed equitably amongst participants. In other words, students could either have no scholarship, a partial one, or near-full financial support.

### Location

We also kept a DEI lens when assessing different SEAS properties to host the camp. While we see potential for having the Dana building be our home base for camp activities, we also want to take advantage of the available SEAS properties and opportunities to get outdoors. We believe Saginaw Forest would be the most viable option because it is closest to campus, has a designated trail, and can be accessed via vehicle for those with limited mobility.

## Curriculum

The final element of our DEI plan is to be mindful of western knowledge narratives. Environmental education has historically been led by privileged scholars—omitting the voices of Black, Indigenous, and People of Color (BIPOC). They also reinforce power dynamics that situate teachers at the top of the knowledge hierarchy. We encourage SEAS camp to emphasize decolonial scholarship by encouraging students to learn from each other, ask questions, guide their own education, and engage in alternative forms of environmental science curriculum. For example, integrating elements of storytelling, poems, art, and experiences that encourage exploration and co-learning. A collection of example lesson plans have been curated in [Appendix E](#).

## Future Directions

### Where to go next

The list below outlines possible future directions for this camp. These projects can

either be taken on by future Masters project groups or developed overtime as the camp becomes more established.

- Expand to an overnight experience
- Connect with federal agencies to provide food if hosting low-income campers who qualify for free lunch
- Establish a SEAS course, specifically in the Behavior, Education, & Communication (BEC) track, that offers credit for staffing the camp
- Create a BEC curriculum design seminar to practice developing activities that can be used during programming
- Involve SEAS faculty in building curriculum and carrying out camp activities
- Collaborate with other schools on campus and set up sustainability projects for participants to work on during camp
- Include more age groups in programming

# School for Environment and Sustainability (SEAS) Camp and Leadership Program:

## Appendix

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Appendix A: Summary of Recommendations

| Section  | Summary of Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Finances | <p><b>Budget</b></p> <ul style="list-style-type: none"> <li>● <a href="#">Appendix B</a>: SEAS Camp budget main expenses: staffing, supplies, and scholarships (students to bring their own lunches from home)</li> <li>● Total registration fee: \$350/camper, aftercare available for an additional \$75/camper</li> <li>● 10 one-week sessions that run from 9am-3pm with after care between 3-5:30 pm</li> <li>● 20 campers maximum per session</li> </ul> <p><b>Scholarships</b></p> <ul style="list-style-type: none"> <li>● \$150 of scholarship funds available per student to be distributed based on need</li> <li>● Assess scholarship eligibility through submitting a short essay (e.g. Why are you applying for aid? What does coming to SEAS camp mean for you?) paired with an optional supporting document (e.g. evidence of free or reduced lunch)</li> <li>● Review committee to be mindful of hardships that extend beyond financial need and applicants who may encounter barriers with limited English</li> </ul> <p><b>Staffing</b></p> <ul style="list-style-type: none"> <li>● Four camp counselors (\$15/hour + benefits) and one assistant director (\$18/hour + benefits)</li> <li>● 20 hours of orientation for camp counselors, including first aid/CPR certification (+5 hours for Red Cross training)</li> </ul> <p><b>Selecting Campers</b></p> <ul style="list-style-type: none"> <li>● First come, first serve with waitlist and/or some possibility of priority next season</li> <li>● If capacity for a more rigorous selection process: short essay question and optional letter of recommendation from a teacher</li> </ul> |
| Safety   | <p><b>Forms</b></p> <ul style="list-style-type: none"> <li>● Available through “<a href="#">Children on Campus</a>”</li> <li>● Required: Waiver of Liability, Medical Information and Release, Over the Counter Medication, and Pick-up Authorization (children under age of 12)</li> <li>● Optional: Self Administration of Prescription Medication Authorization, Media Release, Travel Permission Slip</li> </ul> <p><b>Insurance</b></p> <ul style="list-style-type: none"> <li>● SEAS camp to receive insurance under university policy after registering with Children on Campus</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

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|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Recruitment</p>                            | <p>Getting the word out</p> <ul style="list-style-type: none"> <li>● Lean on social media and website, highlight affiliation with SEAS</li> <li>● Post on <a href="#">UM Youth Hub</a> and in the <a href="#">Ann Arbor Observer</a> (camps published in May)</li> <li>● Connect with local school teachers/counselors</li> </ul> <p>Collecting feedback/keeping in touch</p> <ul style="list-style-type: none"> <li>● Use a combination of in-person evaluations/activities and Google Forms</li> </ul> <p>Registration</p> <ul style="list-style-type: none"> <li>● Include name, email, parent/guardian signature, and where students go to school</li> <li>● Omit registration fee to alleviate financial barriers</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <p>Diversity, Equity, and Inclusion (DEI)</p> | <p>Recruitment</p> <ul style="list-style-type: none"> <li>● Use census tracts to identify diversity metrics (e.g. race, income level, etc.) and then locate schools in these areas to share promotional materials with</li> <li>● <a href="#">Appendix C</a>: Recruitment List of Washtenaw County Schools</li> </ul> <p>Staff</p> <ul style="list-style-type: none"> <li>● Be intentional about camp counselor representation</li> <li>● Invite diverse guest speakers, facilitators, and faculty members to help with activities</li> <li>● Train counselors to interact with campers from historically marginalized communities</li> </ul> <p>Promotion</p> <ul style="list-style-type: none"> <li>● Elevate inclusive language and images in marketing materials</li> <li>● Images should include representation from everyone and not tokenize students</li> <li>● Avoid making students who do not identify with an underrepresented background feel like they are not eligible for the camp (“we invite underrepresented campers <i>and their allies</i> to apply”)</li> <li>● <a href="#">Appendix D</a>: sample SEAS Camp flier</li> </ul> <p>Cost</p> <ul style="list-style-type: none"> <li>● Offer generous scholarships to eliminate financial barriers</li> <li>● Scholarships range based on need from none, to partial, to near-full support</li> </ul> <p>Location</p> <ul style="list-style-type: none"> <li>● Home base as Dana building with field trips to SEAS outdoor properties</li> <li>● Saginaw Forest as an ideal choice for proximity to campus, designated trail, and vehicle access for those with limited mobility</li> </ul> <p>Curriculum</p> <ul style="list-style-type: none"> <li>● Emphasize decolonial scholarship</li> <li>● Integrate elements of storytelling, poems, art, and experiences that encourage exploration and co-learning</li> <li>● <a href="#">Appendix E</a>: Sample Lesson Plans</li> </ul> |

[Appendix B: SEAS Camp Budget](#)

[Appendix C: Recruitment List of Washtenaw County Schools](#)

See linked spreadsheet for specific contact information:

- Pittsfield Elementary
- Bryant Elementary
- Pattengill Elementary
- Mitchell Elementary
- Lakewood Elementary
- Allen Elementary
- Dicken Elementary
- Scarlett Middle School
- Carpenter Elementary
- Abbott Elementary
- Pleasant Ridge Elementary

[Appendix D: SEAS Camp Flier](#)



[Appendix E: Sample Lesson Plans](#)

1. Lesson Plan 1: [Poet-tree](#)
2. Lesson Plan 2: [Planning the Ideal Community](#)
3. Lesson Plan 3: [Who are YOU?](#)
4. Lesson Plan 4: [Looking at Leaves](#)



# Poet-tree

Adapted from the [Project Learning Tree: K-8 Environmental Education Activity Guide \(p. 31\)](#)

Poetry offers students space to express thoughts, values, and beliefs about the environment in artistic ways. This activity focuses on trees but can be modified to reflect on parts of the built environment like architecture or art.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| <p><b>Poet-tree</b></p> <p><b>Grades</b><br/>3-8</p> <p><b>Duration</b><br/>Preparation: 15 minutes<br/>Activity: 90 minutes</p> <p><b>Skills</b><br/>Observing,<br/>Reflecting,<br/>Composing,<br/>Discussing</p> <p><b>Materials</b><br/>Paper, pencils, clip boards (or hard surface like cardboard and paper clips for writing outside)</p> <p><b>Acknowledgments</b><br/><a href="#">Project Learning Tree: K-8 Environmental Education Activity Guide (p. 31)</a></p> | <p><b>Overview</b><br/>Students will create a book of poetry expressing their feelings about the environment around them. They can choose to focus on a tree, insect, animal, plant, building, piece of art, etc.</p> <p><b>Objective</b></p> <ul style="list-style-type: none"> <li>- Learners will use poetry to express their views and attitudes about different aspects of the environment.</li> </ul> <p><b>Background</b><br/>Poetry gives students an outlet to express their ideas. Providing examples of different poetic styles can help students structure their thoughts. This lesson plan includes some sample forms, but you can use any style that feels right.</p> <p><b>Facilitator Preparation</b><br/>Review the poetry forms on the next page and decide which one(s) you want to highlight. Then, brainstorm where you can take learners outside to observe.</p> <p><b>Recommended Procedures</b></p> <ol style="list-style-type: none"> <li>1. Explore the following questions:             <ol style="list-style-type: none"> <li>a. What are some benefits you get from trees (you can replace this with insects, animals, architecture, art, etc.)?</li> <li>b. Do you have a favorite neighborhood tree?</li> <li>c. Do you have a favorite story or experience with trees?</li> <li>d. What are some characteristics of trees?</li> <li>e. Why is it important for everyone to have access to trees?</li> </ol> </li> <li>2. Go over the poetic form(s) and give examples.</li> <li>3. Visit an outdoor area, this can also be done indoors through windows if needed. Learners will sit quietly underneath different trees for at least 10 minutes. Have students write descriptive words or draw using their five senses:             <ol style="list-style-type: none"> <li>a. How does the tree look, feel, smell, and sound?</li> <li>b. What other living things are on or near the tree?</li> <li>c. Who benefits from the tree? How?</li> </ol> </li> <li>4. While outside, students write their own poems about trees and the environment. Encourage them to draw a picture of their tree too then share with the group.</li> <li>5. Discuss the following questions to draw out how people see trees differently:             <ol style="list-style-type: none"> <li>a. Does your poem explore how people influence trees?</li> <li>b. Does it mention the values of trees to people?</li> <li>c. Does it speak of people's place in nature?</li> </ol> </li> <li>6. Assemble everyone's favorite poems into a book. To save paper, consider scanning poems for distributing to parents digitally.</li> </ol> |
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| <b>Poetry Forms and Examples</b> |                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Haiku</b>                     | <p>A Japanese poetry form with three lines: (1) five syllables, (2) seven syllables, (3) five syllables.</p> <p>EXAMPLE: Birds<br/>Makes a chirpy sound<br/>Pollinators of our trees<br/>Singing in the sky</p>                                                                                                                                        |
| <b>Acrostic</b>                  | <p>A poem that spells out the name of something through the first letter in each line.</p> <p>EXAMPLE: Bugs<br/>Burrowing<br/>Unearthing<br/>Gripping<br/>Sustaining the food chain</p>                                                                                                                                                                |
| <b>Windspark</b>                 | <p>A poem with five lines that start with the following: (1) "I dreamed," (2) "I was..." (something or someone), (3) where, (4) an action, and (5) how.</p> <p>EXAMPLE:<br/>I dreamed<br/>I was a canoe<br/>At the lake<br/>Leaning on the water<br/>Peacefully.</p>                                                                                   |
| <b>Fluxus Poetry</b>             | <p>Poetry that turns everyday objects into art. Write down nouns, adjectives, verbs, and adverbs on small strips of paper that are related to the poem topic (e.g. the environment). Mix strips, pull randomly, and write them down in order while adding punctuation.</p> <p>EXAMPLE<br/>Quiet, strong...beautiful. Sustaining, resilient...life!</p> |
| <b>Free Verse</b>                | <p>A poem that follows any style without a set formula.</p> <p>EXAMPLE<br/>I stand tall in the big city<br/>Providing shade, repose, life<br/>Amongst a sea of concrete.</p>                                                                                                                                                                           |
| <b>Cinquain</b>                  | <p>A poem with five lines: (1) two syllable title, (2) four syllable title description, (3) six syllable action description, (4) eight syllable feeling description, (5) two syllable other word for title</p> <p>EXAMPLE<br/>Butterflies<br/>Flying insects<br/>Pollinating our plants<br/>Lovingly helping our food grow<br/>Helpers</p>             |

# Planning the Ideal Community

Adapted from the [Project Learning Tree: K-8 Environmental Education Activity Guide \(p. 239\)](#)

Communities are made up of facilities, services, resources, human relationships, etc. that help people live happy, healthy lives. This activity shows students how to analyze human systems and plan an ideal community.

## Planning the Ideal Community

**Grades**  
3-8

**Duration**  
Preparation: 30 minutes  
Activity:  
Part A: 60 minutes  
Part B: 90 minutes

**Skills**  
Representing,  
Identifying  
Attributes and  
Components,  
Synthesizing,  
Creating

**Materials**  
Part A: Map of survey area, chart paper, pens  
Part B: Large paper, markers or crayons

**Acknowledgments**  
[Project Learning Tree: K-8 Environmental Education Activity Guide \(p. 239\)](#)

### Overview

Students will identify key components of human systems and plan an ideal community that meets all the needs of its residents.

### Objective

- Learners will understand how community resources support resident well-being and create their own vision for a sustainable plan.

### Background

A human community is made of many components like: schools, public services (police, fire departments, hospitals), transportation networks, agricultural areas, food distribution systems, parks, open space, and cultural resources (libraries, movie theaters, museums). The best communities make sure that all residents have equitable access and means of reaching the resources that help them live, learn, work, and play.

### Facilitator Preparation

Obtain or draw a basic map of a survey area (see next page). Make copies for students or have them copy a sketch. Also have an enlarged version available on chart paper or via projector.

### Recommended Procedures

#### Part A: Community Living

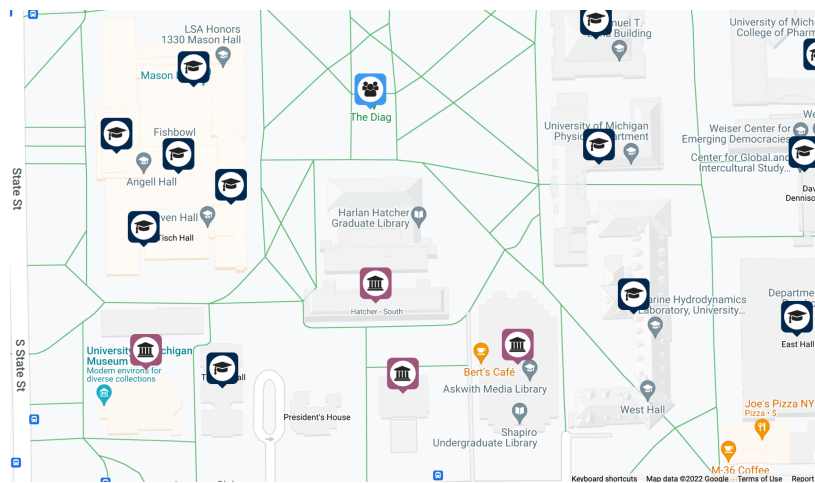
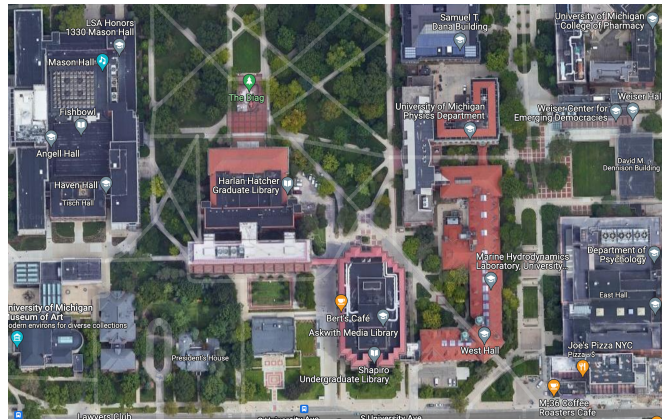
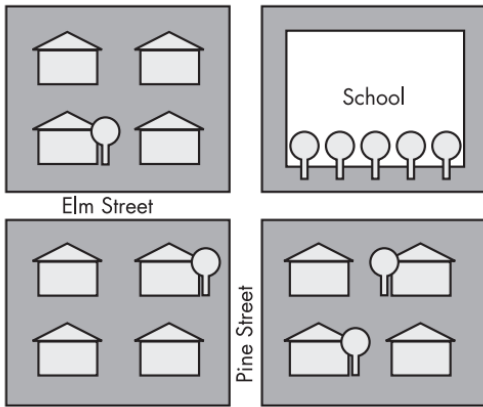
1. Discuss what students think a community is. Break into small groups for brainstorming community places or services (e.g. roads, schools, parks, etc.)
2. Have teams share their ideas and record examples on chart paper. Ask the group what is missing, the following questions may help draw out gaps:
  - a. How do people get food and water?
  - b. How do they get to work, school, etc.?
  - c. How do they get energy? What types are used?
  - d. Where does waste go? Where does wastewater go?
3. Divide into small groups and give each team a map. Explain that students will survey an area to find the community resources and services they listed. When students find an item, they should record it on their map. It may be helpful to assign each group a set of different resources to look out for.
4. Take students to walk around the survey area.
5. Help compile findings onto a collective class map. Use the following questions:
  - a. What community services and resources did you find? What was missing?
  - b. Are there problems because those things are missing?
  - c. What did you learn from your survey? Did anything surprise you?
  - d. What would you change in this community? How can this happen?

**Recommended Procedures Cont.**

**Part B: Community Planning**

1. Students will be community planners and design a vision to meet resident needs. Have them brainstorm a list of facilities, resources, and services for their ideal community in small groups.
2. Give students 90 minutes (either all at once or in dispersed time periods) to create their community map.
3. Have groups share their maps with each other and describe their design features.
4. Use the following questions to discuss:
  - a. How did your group decide which features to use and where to put them?
  - b. How did your group resolve disagreements and agree on common resources to include?
  - c. How are your communities similar and different to actual communities?
  - d. What would it be like to live in your community (for a child, elder, business owner, animal, tree, etc.)?
  - e. Did you include any natural resources?
  - f. What did you learn or find surprising about community planning?

**Map/Survey Area Examples for Part A:**



# Who are YOU?

Adapted from the [Sustainability Teachers' Academy Field Guide to Community Action \(p. 4\)](#)

Acknowledging personal identity is an important part of sustainability science and practice. This activity guides students to reflect on who they are.

## Who are YOU?

**Grades**  
3-8

**Duration**  
Preparation: 10 minutes  
Activity: 50 minutes

**Skills**  
Reflecting,  
Identifying  
Attributes and  
Components,  
Synthesizing

**Materials**  
Paper,  
Pens or pencils

**Acknowledgments**  
[Sustainability Teachers' Academy Field Guide to Community Action \(p. 4\)](#)

### Overview

Students will identify aspects of their identity and map out a diagram describing these different characteristics.

### Objectives

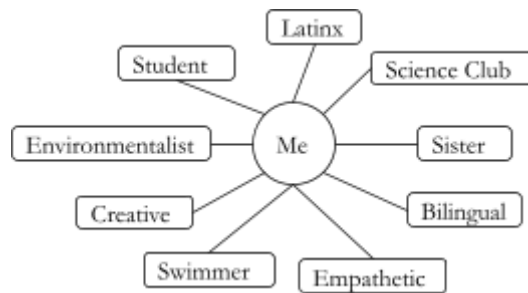
- Learners will understand what identity is and what it means to them.

### Background

Identity plays an important role in how students understand and address sustainability problems. It can be defined both as how we describe ourselves and the labels given to us by others. Identity can include: race, gender, ethnicity, religion, language, and more. Beyond these characteristics—factors like ancestry, history, culture, family, interests, passions, and experiences also make us who we are.

### Facilitator Preparation

Create an example web diagram for students to copy. Consider filling the diagram out with your own identity elements to help students get to know you. Example below:



### Recommended Procedures

1. Ask students what comes to mind when they hear the word “identity” and make a list of the characteristics they identify.
2. Use the Background section of this lesson plan to help students understand the many dimensions of identity in their lives.
3. Show students the web diagram example and have them copy it on their papers. If you feel comfortable, fill some of it out to share.
4. Have students map out words and phrases that define their identity in a diagram.
5. If they feel comfortable, invite students to share favorite parts of their identity. Remind students that they don't have to share anything they're not comfortable with.

# Looking at Leaves

Adapted from the [Project Learning Tree: K-8 Environmental Education Activity Guide \(p. 273\)](#)

Students will make observations of leaves and use these insights to identify plants.

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| <p><b>Looking at Leaves</b></p> <p><b>Grades</b><br/>3-8</p> <p><b>Duration</b><br/>Preparation: 20 minutes<br/>Activity: 50 minutes</p> <p><b>Skills</b><br/>Comparing and Contrasting, Classifying, Organizing, Identifying Attributes and Components</p> <p><b>Materials</b><br/>Tree leaves, pencils, paper, dark crayon, tree field guide (optional)</p> <p><b>Acknowledgments</b><br/><a href="#">Project Learning Tree: K-8 Environmental Education Activity Guide (p. 273)</a></p> | <p><b>Overview</b><br/>Students will collect leaf prints and understand how shapes, sizes, and other characteristics differ from plant to plant.</p> <p><b>Objectives</b></p> <ul style="list-style-type: none"> <li>- Learners will understand various leaf characteristics and how to identify tree species.</li> </ul> <p><b>Background</b><br/>Leaf characteristics such as needles vs. broad leaves, leaf shape, margins, textures, leaf arrangement, and simple vs. compound leaves, are great ways to identify tree species. By creating leaf prints and understanding leaf characteristics, students are able to utilize observations and identify tree species. Visit the following <a href="#">resource page</a> for more information on looking at leaves.</p> <p><b>Facilitator Preparation</b><br/>Identify an area with multiple species of trees and shrubs for students to collect leaves. You may want to collect a few samples (be sure to include needle-like leaves from coniferous trees) to show students.</p> <p><b>Recommended Procedures</b></p> <p><b>Part A:</b> Collecting leaves</p> <ol style="list-style-type: none"> <li>1. Take students outside and have them collect 2-5 leaves from different species (preferably on the ground).</li> </ol> <p><b>Part B:</b> Making a leaf print</p> <ol style="list-style-type: none"> <li>1. Set the leaf on a smooth surface, vein-side up, and cover with a plain piece of paper.</li> <li>2. Rub a crayon sideways back and forth across the paper. As you rub gently, the leaf margin and its veins should show on the paper.</li> </ol> <p><b>Part C:</b> Organizing the leaves by characteristics</p> <ol style="list-style-type: none"> <li>1. Have students form pairs or small groups.</li> <li>2. Ask them to examine their leaves and sort them into groups based on characteristics that they observe.</li> <li>3. Have students share with the group how they sorted the leaves. Discuss as follows:             <ol style="list-style-type: none"> <li>a. What are some differences?</li> <li>b. What do they have in common?</li> <li>c. Do any leaves have teeth?</li> <li>d. Do they have hairs? Where?</li> <li>e. What do the leaves feel like?</li> <li>f. Who found the biggest leaf? The narrowest leaf? The smallest leaf?</li> <li>g. Have any leaves been eaten by insects? How can you tell?</li> <li>h. Have you seen any of these leaves before? Where?</li> <li>i. Which leaf is your favorite? Why?</li> </ol> </li> </ol> |
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### **Recommended Procedures Cont.**

#### **Part D: Identification**

1. Go back outside and walk from tree to tree having students compare their leaves to each one. Share the species name if possible (instructor can use field guides for help).
2. If a student has an exact match, stop and examine more closely. Prompt the following discussion:
  - a. Where on the branch do leaves grow?
  - b. How are they attached?
  - c. If the leaves are needle-like, how many needles are in each cluster?
  - d. Do all the leaves on the tree match exactly?
  - e. What color are the leaves?
  - f. Also, examine other tree characteristics like bark, flowers, or fruits. What do they look like?
3. Continue observing trees until students have identified where their leaf came from. They can then record the species name on their leaf prints.

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