

The Pando logo consists of the word "Pando" in a white, bold, sans-serif font, set against a solid magenta rectangular background. A small, white, stylized graphic element resembling a leaf or a branch is positioned to the right of the letter 'o'.

**Team Water Pandas**

*Nina, Irene, Jenny, Dylan, Shantanu*

## Our Focus

After our sophisticated research and 2 rounds of interviews with high school students and educators, we have synthesized our project focuses into four main pillars:



### Environment

for engagement,  
support, and growth



### Motivation

through building  
community and  
social connections



### Relevancy

to be able to entail  
your personal goals  
and academic path



### Opportunity

by providing educators  
resources and space to  
voice up their passion

## Our Main User Persona



### Mark, 17

**High school student** who feels responsible for contributing to **impactful projects**. He wants to make sure that the **time and effort** he puts into projects are worthwhile, but is wary of **obstacles that may arise without proper guidance and direction**.



### Alice, 38

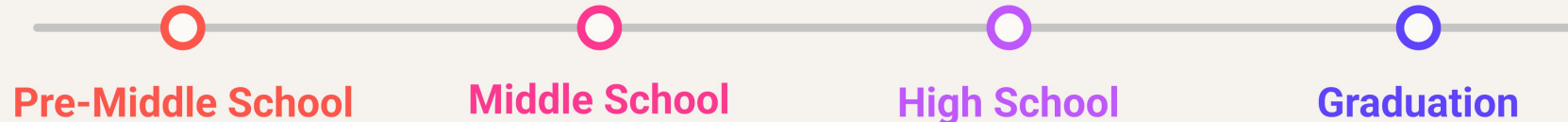
**Teacher** who feels **passionate about inspiring students about community/social impact**. They need to organize **hands on activities** to get students involved, but don't have the **time or resources to do so**.

**Opportunity** **Concept**

Introducing...

## *Degree of Sustainability*

A comprehensive curriculum designed for local schools to introduce students to sustainability and encourage them to engage in sustainable practices



## Degree of Sustainability

### Pre-Middle School

#### 1st - 6th Grade

##### Goal

*What is sustainability and why do students need to know about this concept?*

##### Plans

*We are introducing students to the concept of sustainability, why the planet needs it, and how they can implement it in their own homes and day to day life utilizing teaching methods that are fun and engaging. This will set the precedent for more advanced sustainability topics.*

##### Examples

- Field trips to locations that are related to sustainability (Ex: Recycling centers)*
- Outdoor activities that connect students to the importance of preserving nature*
- Mini lectures bringing in sustainability experts*

## Degree of Sustainability

### Middle School

#### 7th - 8th Grade

##### Goal

*How does sustainability relate to more traditional subjects taught in school?*

##### Plans

*Sustainability can be integrated into each topic in school, allocating 2-4 weeks each semester to focus on sustainability related teaching. This demonstrates to students that the concept of sustainability is everywhere. Pando can create starter packs to assist teaching as well.*

##### Examples

- *Chemistry behind green material innovation*
- *Math behind atmosphere heating*
- *Debate over current sustainability dilemmas*
- *Sustainability and political activism through writing*

## Degree of Sustainability

### High School

9th Grade

10th - 11th Grade

12th Grade

Goal

*What does sustainability look like in real life? What are some ongoing concerns/trends?*

Plans

*We want to establish sustainability as a separate academic subject. Schools will hire professional, dedicated instructors with expertise in the field. Students, on the other hand, will be given space to fully engage in sustainability-related learning and participate in discussions to share their views on the topic.*

Examples

- Lecture-styled class that teaches key topics under sustainability. The focus can shift every semester. For examples include Energy Management, Water Conservation, Green Building & Infrastructure, etc.*
- Seminar-styled class during which students interact with and learn from sustainability industry professionals.*

## Degree of Sustainability

### High School

9th Grade

10th - 11th Grade

12th Grade

#### Goal

*How can students contribute to solving the real-world sustainability challenges through organizational partnerships?*

#### Plans

*During the 2-year period, students are offered opportunities to participate in real-world sustainability projects and make tangible impacts. Under guidance of school teachers and project mentors, these students collaborate with local organizations to promote sustainability. They start small and focus on local issues in the first place. Once students get the chance to further develop their skillsets, schools can connect those who are interested in making larger impacts to additional opportunities.*

#### Examples

- “Clean Up Green Up” or “Trees” with LASanitation*
- Social media campaigns with local sustainability initiatives*



## Degree of Sustainability

### High School

9th Grade

10th - 11th Grade

12th Grade

#### Goal

*What are some new sustainable solutions that students can initiate themselves?*

#### Plans

*During students' final year of high school, schools will offer those who are interested in furthering their impacts in sustainability opportunities to start their own initiatives. Students will have full autonomy in their projects and need to go through the entire process of idea generation, development, and testing. When needed, schools will provide necessary assistance and guidance.*

#### Examples

- In-school projects: establishing a student sustainability council at school*
- Out-of-school projects: start a "company" that solves a local sustainability-related problem*

## Degree of Sustainability

### Graduation

#### Graduation

##### Goal

*What are key takeaways for the sustainability curriculum and how can students leverage their learnings?*

##### Plans

*When students graduate, selected individuals who have made significant contributions to sustainability will be awarded the certificate of sustainability in recognition of their effort. Schools can also choose to host award ceremonies to make official recognitions. As students head off to attend higher education, schools are encouraged to keep in touch with them and invite these students back to “teach” others and scale their impacts*

##### Examples

- Certificate of Sustainability - Energy/Materials/Water/etc. Track*
- Building an alumni network for graduating students to connect with current students and provide guidance on sustainability projects*

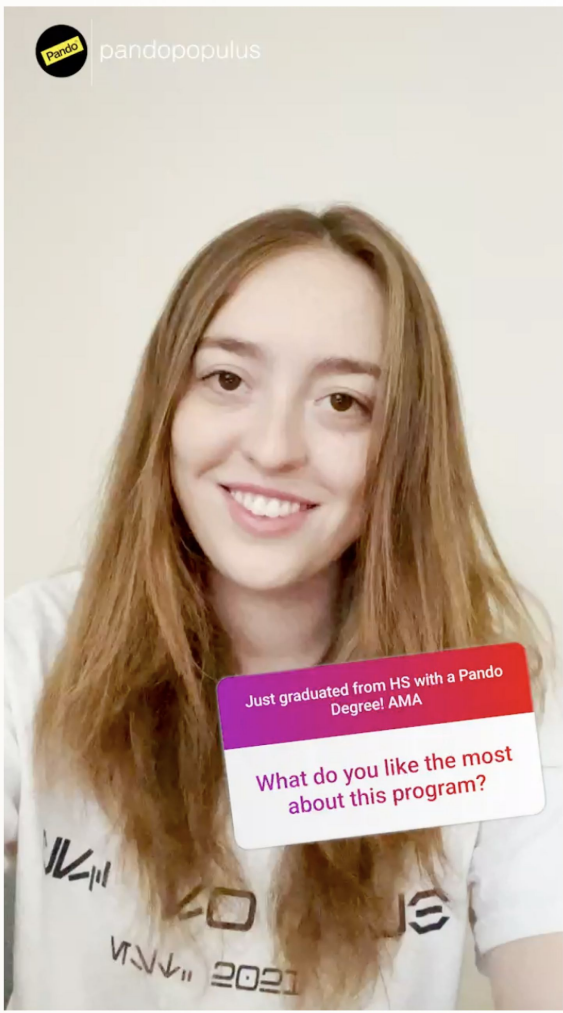
**Opportunity** Concept

**Degree of Sustainability**

*The sustainability degree allows students to feel a sense of accomplishment and validation within the program. This degree will ideally gain respect due to the comprehensive nature to it and can be shown to colleges and more.*



# Degree of Sustainability



## Analysis Current Solutions / Competitors

All examples integrate in **school curriculum, provide external resources, and have project based learning.** There is the **opportunity to focus on sustainability** and provide an external interdisciplinary degree.



### Odyssey STEM Academy

It integrates project based learning within each topic at school.



### XQ Super Schools

Help transform their innovative ideas into action at high schools across the US..



### NuVu X Studios

Empowers the next generation of young designers, entrepreneurs, and makers.

# Unanswered Questions and How to solve them

***How does the program adapt to fit students who may join the program at different years in their middle school/high school?***

For transfer students who are interested in enrolling the sustainability curriculum, introduce summer or weekend bootcamps as ways for students to catch up with the rest of the group. Additionally, organize students into small-size study groups so that they can help each other on new (and past) sustainability knowledge acquired at school.

***How might we better standardize the structure of the sustainability curriculum to ensure its quality?***

Local schools are encouraged to organize into a “league.” The group can host periodic meetings for teachers to collaborate on creating sustainability-related course materials and share lessons on what they have learned from teaching students of different ages sustainability. Furthermore, with more members, the group has more leverage when negotiating with local organizations to devise new projects for students to participate in.

***How might we scale the sustainability curriculum to impact more students?***

One way to scale is to leverage the alumni network developed over time. Students who have benefited from the sustainability curriculum are best sources to spread the cause in various university campuses. On the other hand, local schools can invite more members (even universities) into the “league” to expand the impact. With university involved, middle/highschool students are more motivated to join the program in order to get into these schools.

## ***Empowering Innovation***

**Project focused:** This comprehensive curriculum gives guidance to ensure that said project is meaningful and impactful, but also allows for the flexibility students need when working on a project.

**Impact & scale:** Template that teachers can follow enables meaningful student impact for their futures as well as sustainable scalability to the Pando mission

**Mutually beneficial:** Teachers with busy schedules can follow a syllabus that empowers them to teach this important message, but also allows their students to explore along the way



**Thank You**

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