

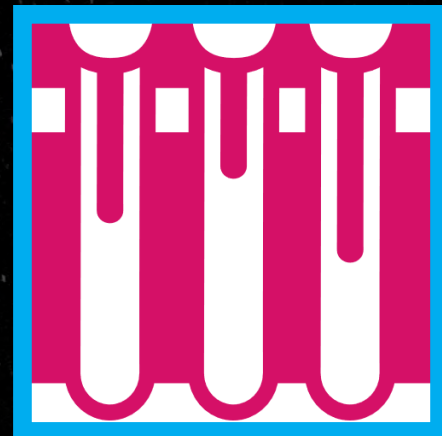
HOLISTIC
THINK TANK

H O L I S T I C H U M A N - C E N T E R E D
I N T E R D I S C I P L I N A R Y S U B J E C T

INTERDISCIPLINARY LEARNING



Math



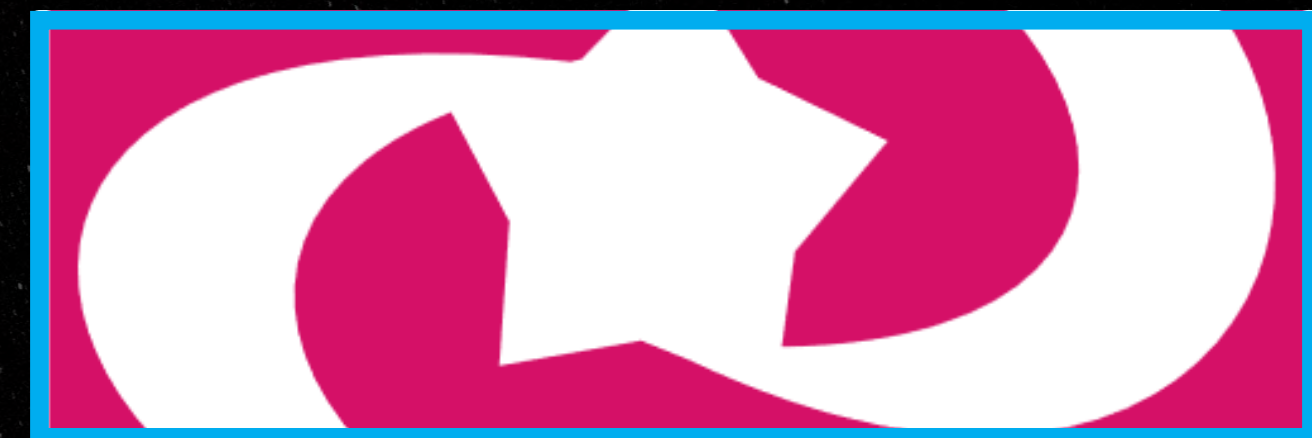
Science



Language



Social Studies



Interdisciplinary



The Arts

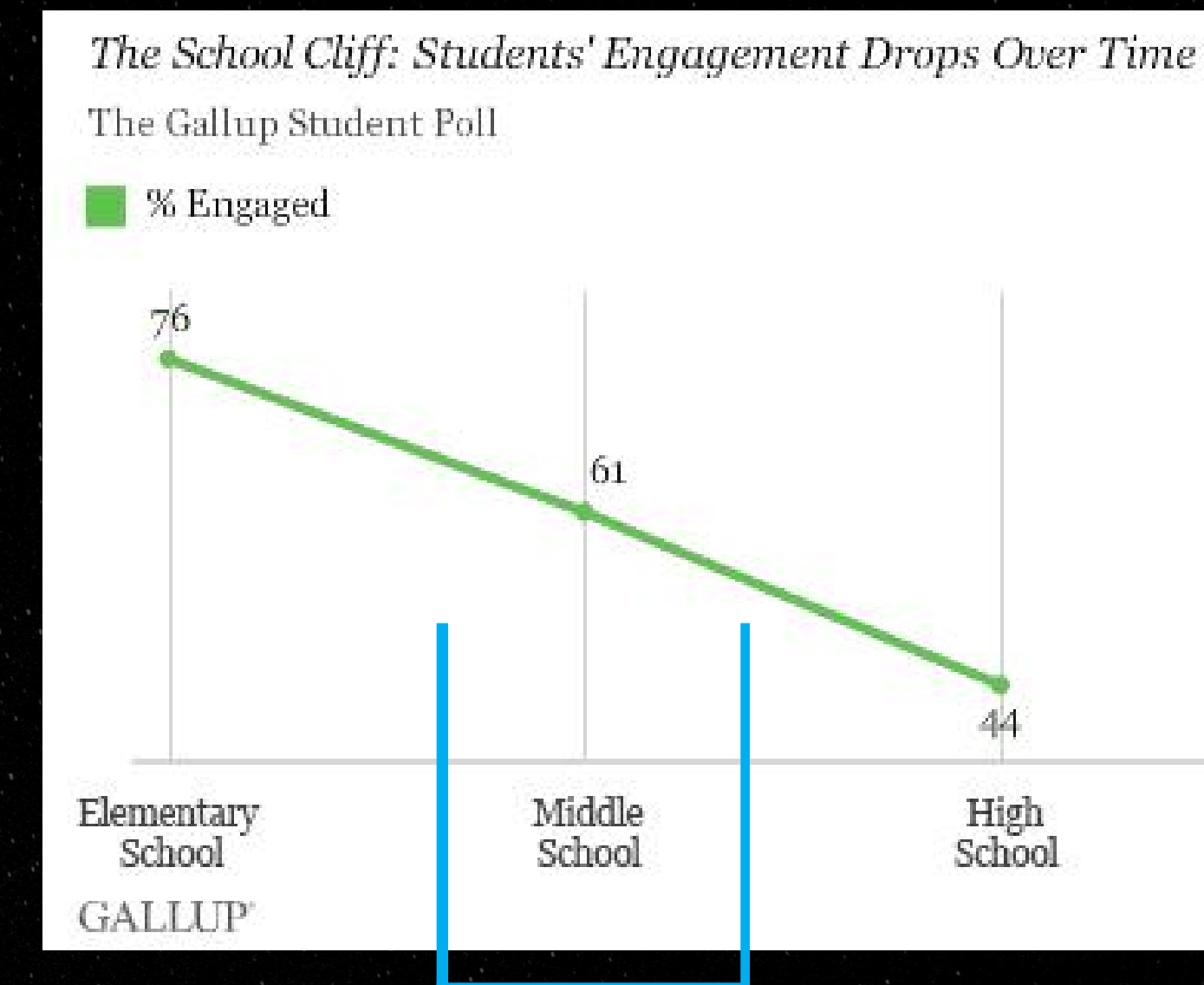


Physical Education

WHY?

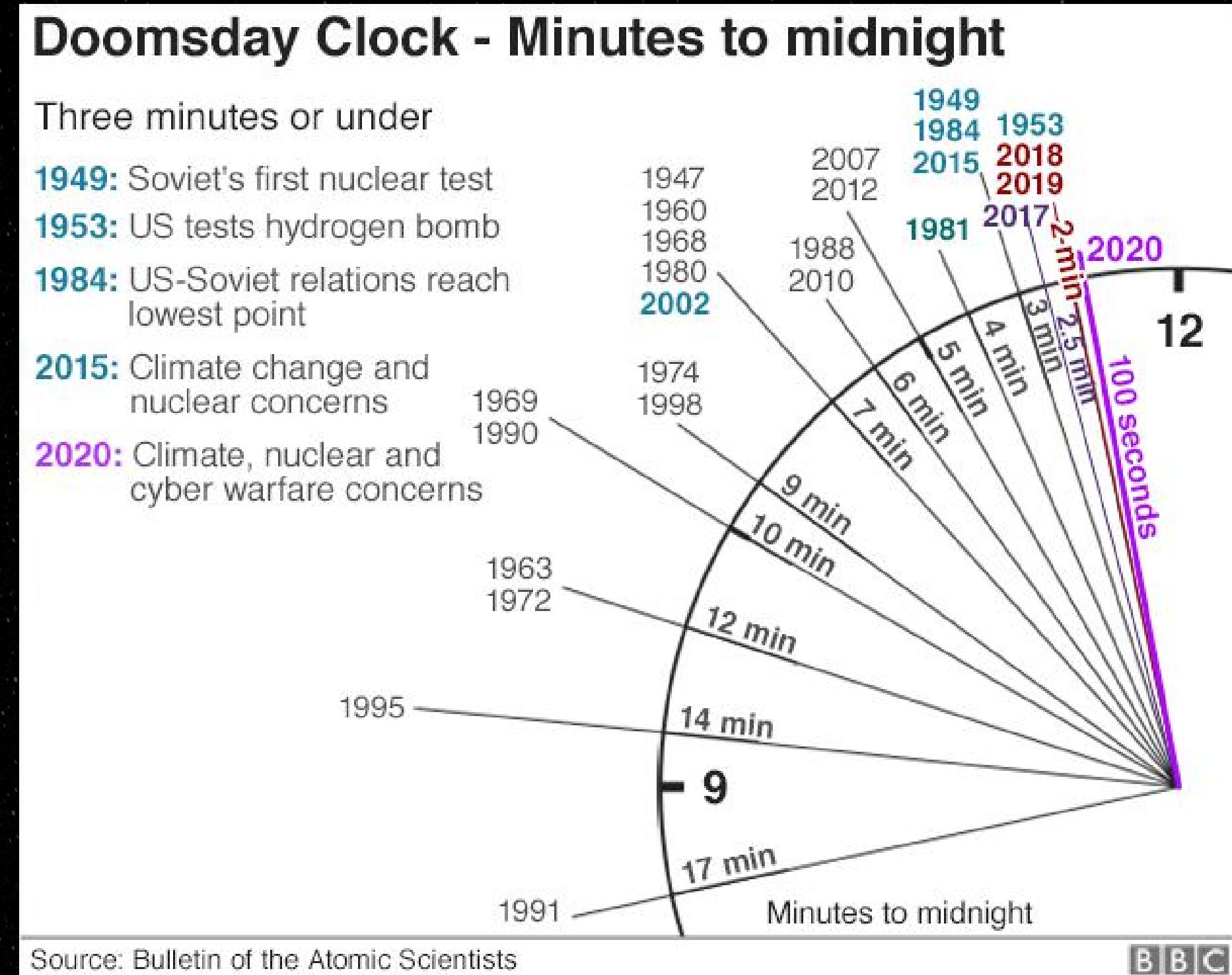
AN INTERDISCIPLINARY CURRICULUM EQUIPS STUDENTS WITH A TOOLKIT FOR THINKING ABOUT THE COMPLEX PROBLEMS OF THE WORLD AND OF THEMSELVES AS LEARNERS.

SCHOOL ENGAGEMENT DROPS OVER TIME...



The IDS is designed for 6th to 8th grade (11-14 years old) but can easily be adapted for younger/higher grades

AND THE
WORLD NEEDS
CREATIVE,
ENGAGED
LEARNERS



IN TODAY'S PRESENTATION...

- INTRODUCTION
What is the purpose of the human-centered IDS?
- USING THE INTERDISCIPLINARY SUBJECT
How can one use the IDS?
- NEXT STEPS
What can we do to sustain the IDS?

WHAT IS IT?

The need for a new interdisciplinary
subject.



LAYOUT



PEDAGOGICAL GUIDE

Understand the goals, objectives, and use of the IDS.



ACTION LESSONS

Engage with lessons that inspire **wonder** and **community action**.



EXTENSION ACTIVITIES

Expand the conversation with activities into other courses, through engaging media, and additional hands-on projects.



EMBRACE NEW PRACTICES

Learn about innovative teaching practices and put them into practice.



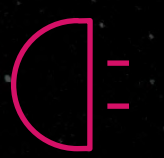
IMPACT GUIDE

Set yourself up for success with an introduction to experiential, project-based learning.



PROJECTS

Inspire with student-led and generated projects based on previous content.



2.

USING THE INTERDISCIPLINARY SUBJECT



PEDAGOGICAL GUIDE

An introduction and guiding handbook for understanding and implementing the IDS.



ACTION LESSONS

The materials themselves that educators can use as a framework for the IDS standards.

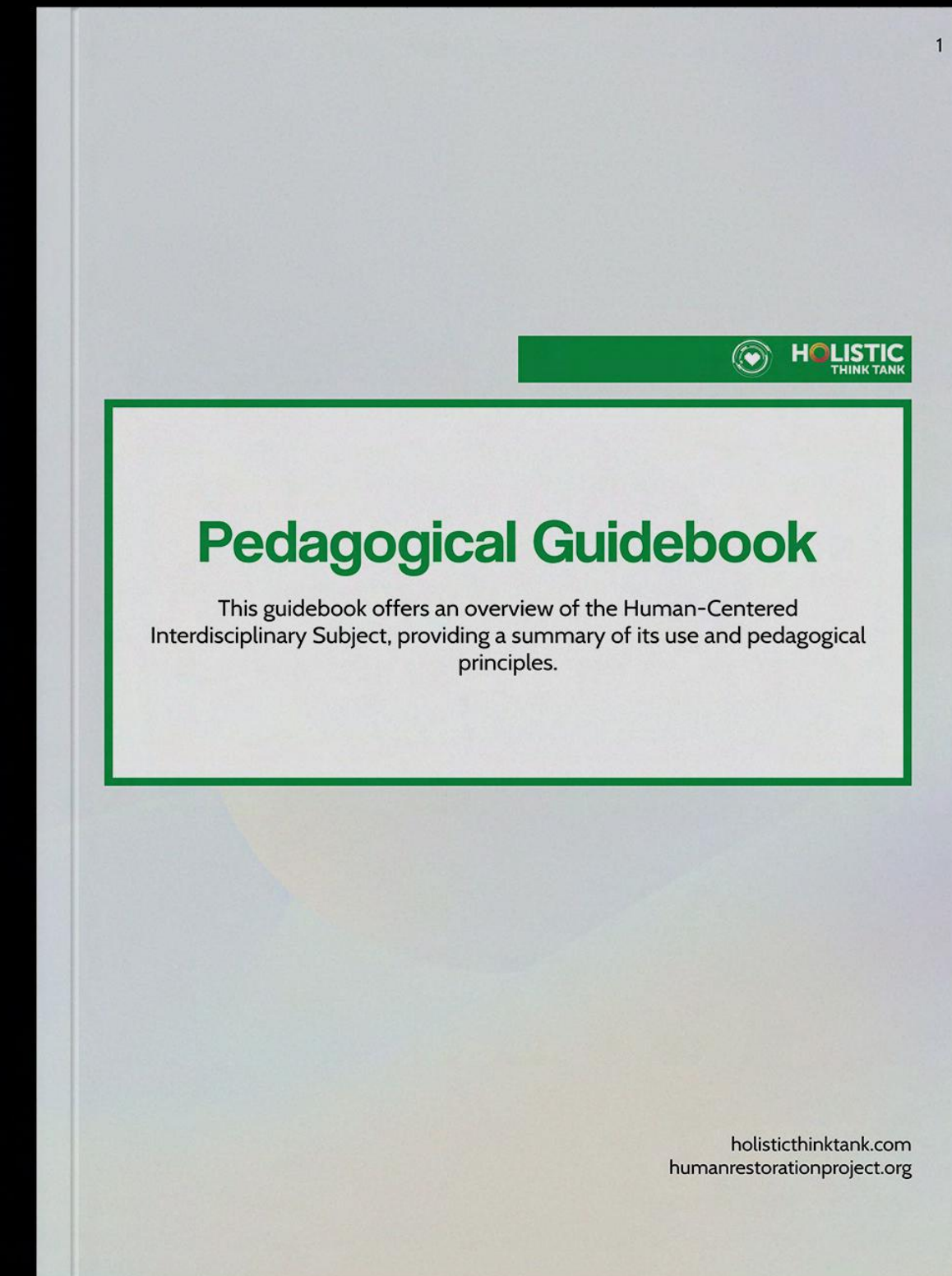


IMPACT GUIDE

An overview for the second half of the course which is project-driven and student-led.

PEDAGOGICAL GUIDE

- How to use the IDS
- Implementable as a standalone course, in homeroom/advisory, as extension for existing class



MODULAR

From Empathy to Action

therefore, knowledge of cultural differences and of appropriate rules of behavior in various social situations, especially unfamiliar ones; awareness of prejudice and discrimination; ability to adapt to the wishes or needs of others, and considering the consequences of differences between people and various cultural backgrounds for important social processes, such as exclusion or inclusion.

Purpose

We can all think of moments where we “stood out” from the crowd in ways that made us feel uncomfortable or out of place. This could be for relatively trivial reasons within our control such as our choice of fashion not “fitting in” with the setting, but also in ways that are more substantial and out of our control such as a language barrier preventing us from accessing an essential service.

In this lesson, we will make visible the norms and decisions that define how we conduct ourselves in physical and interpersonal spaces, emphasize the importance of empathy and understanding in dealing with difference - particularly in areas we personally take for granted - and develop ways to make our communities and spaces more accessible and inclusive of people from a range of backgrounds and abilities.

Introduction

Brainstorm or define what it means to be “outstanding” versus what it means to “stand out”? Which term has a more positive connotation? Negative? Why is that?

Outstanding	Stand Out

Can you think of a time where you were “outstanding” compared to when you felt like you “stood out”? Were those feelings positive or negative? Why is that?

Outstanding	Stand Out

If your experience is a negative one, what could have been different in the scenario to make that experience positive? Is that change within you, the environment, or the way you were treated by others?

Consider This

This activity will help us understand how we take for granted our behavior in certain social situations and emphasize how our differences impact our experience of these “common” scenarios. What we take for granted could be a confusing or embarrassing situation, or even an impassable barrier, for others!

1. Close your eyes and imagine your daily routine: the morning rituals that may take you out of your residence and into the world, the ways you navigate the world outside your home, your daily interactions at school and work, with friends and family, etc.
2. Generate a list of common scenarios you face in your daily life where you interact with other people and public spaces:

3. Choose ONE of these scenarios to write a detailed description of exactly how you engage in that activity from start to finish. Imagine you were writing a script for a robot to follow who had never experienced these human situations before. Your script will be the model someone else will use to act out the scenario!

EXTENDABLE

Take It Further



Community Connection

Nearly 430 million people worldwide have disabling hearing loss, making speech and the spoken word difficult to access for about 5% of the global population. There are numerous sign-language alphabets, research which one is used primarily in your community and learn to communicate the basics to improve your ability to interact with deaf and hard of hearing individuals. Alternatively, you can start a sign-language club to encourage others to pick up the language!



Community Connection

Designing for disability is a vitally important element of our society. In schools, learning disabilities can often lead to many difficulties, including failure or discipline. Consider, what would your community look like if it centered disabled people? What would you need to account for? What would change? Create a plan that highlights these changes and propose them to your local governance.



Take Action

Many people who have difficulty seeing or reading information use screen readers to browse the Internet. However, many websites are not designed properly for these screen readers to function. Learn about accessible web design. Perform an audit of your school's (or community's) website(s) and offer suggestions to increase accessibility.

Media

Things People With Disabilities Wish You Knew (YouTube)

A brief video featuring disabled people speaking in their own words about their experiences and how they want to be treated in public.

5 ways to embrace cultural differences while traveling (Article)

A brief article outlining five ways to be a more respectful and receptive global traveler.

What is Neurodiversity? (YouTube)

What is Neurodiversity? What do the terms "neurotypical" and "neurodivergent" mean? How does the Neurodiversity movement fit into the broader disability rights movement?

Extend

Language Arts

Does listening to an audiobook count as "reading"? As one of the fastest growing forms of entertainment in the world, many argue that audiobooks are "cheating", and that it isn't the same as reading a book. Have a class discussion about audiobooks. Is it reading? If we say it isn't reading, what about those who have difficulty reading books for a variety of reasons?

Mathematics

Although many are familiar with dyslexia, less know about dyscalculia: a learning disability that hampers mathematical thinking. Roughly 10% of elementary school students are believed to have dyscalculia. Consider other ways that mathematics can be taught than simple arithmetic, and showcase these ideas through that lens. For example: rhythm, music, games, hands-on activities, building.

Science

Learn about inclusive design in digital spaces and revisit this lesson to rewrite scripts with digital spaces in mind. For example, how does a visually impaired person navigate their social media feed or use their mobile phone? How can we help make digital spaces more inclusive of people from different backgrounds and abilities?

Social Studies

Use the following online tool, Exploring Your Cultural Iceberg, to get an understanding of your own visible and hidden cultural characteristics. How would you describe your cultural identity? Revisit this lesson through the lens of cultural identity. For example, how might these scenarios be different between people from different cultures based on how we perceive visible and hidden cultural characteristics?

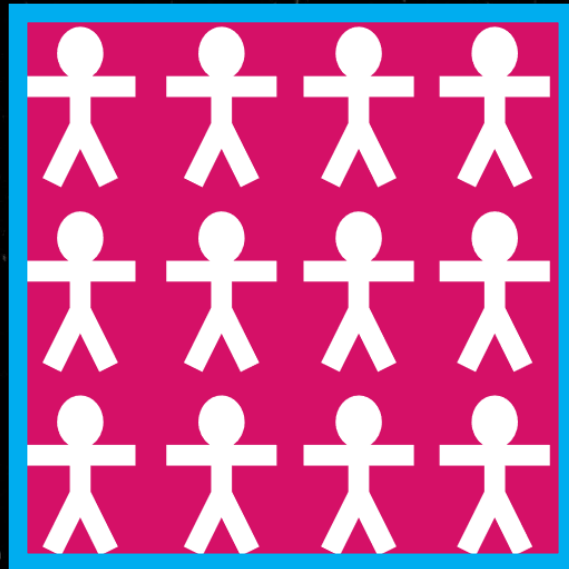
Art

Using Nick Sousanis' Blind Accessible Comics as a resource, redesign/remix existing art pieces to improve accessibility to art and culture for a range of impairments and disabilities.

Physical Education

Perform an audit of your physical spaces (appearance, entrances, fixtures, safety, etc.) using some of the guidelines of universal design in physical spaces. Is the environment appealing, welcoming, and accessible to those with a variety of cultural backgrounds, ages, abilities, and other characteristics? Create an action plan to address areas of improvement.

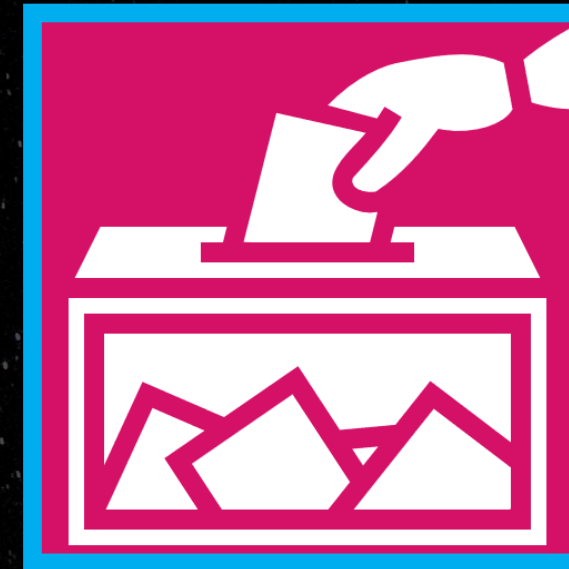
PROGRESSIVE



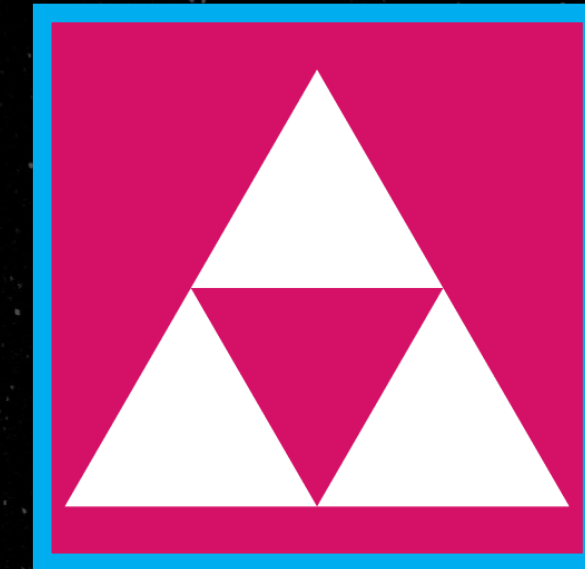
Universal Design for
Learning (UDL)



Experiential Learning &
PBL



Critical Pedagogy &
Democratic Classrooms



Crossdisciplinary Planning



Multimodal Literacy



Self-Determination Theory

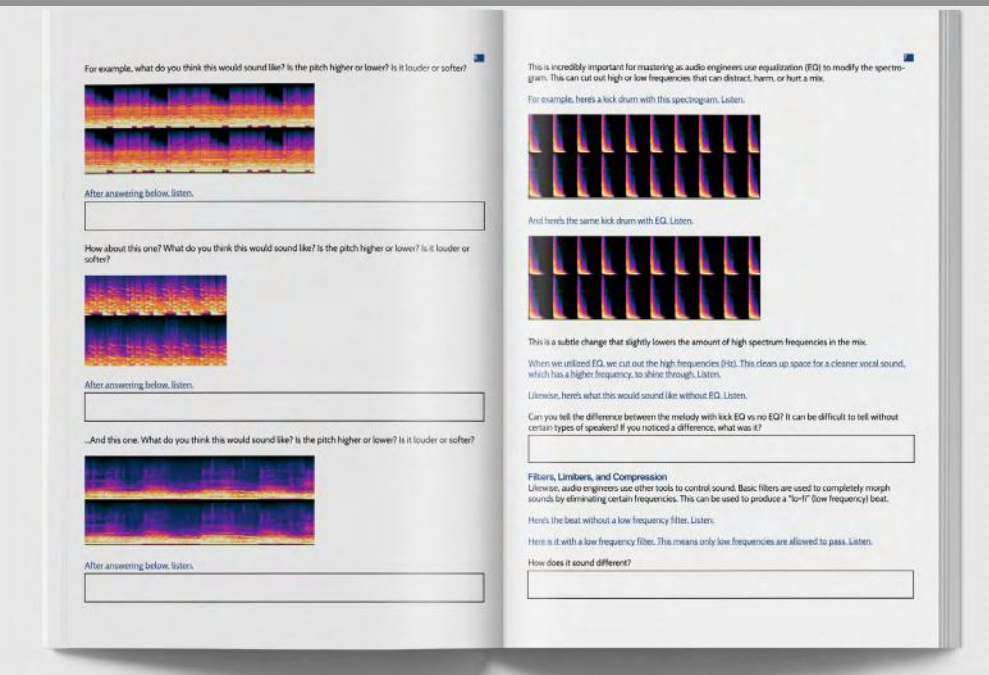


Reflective Thinking &
Feedback

Action lesson examples!

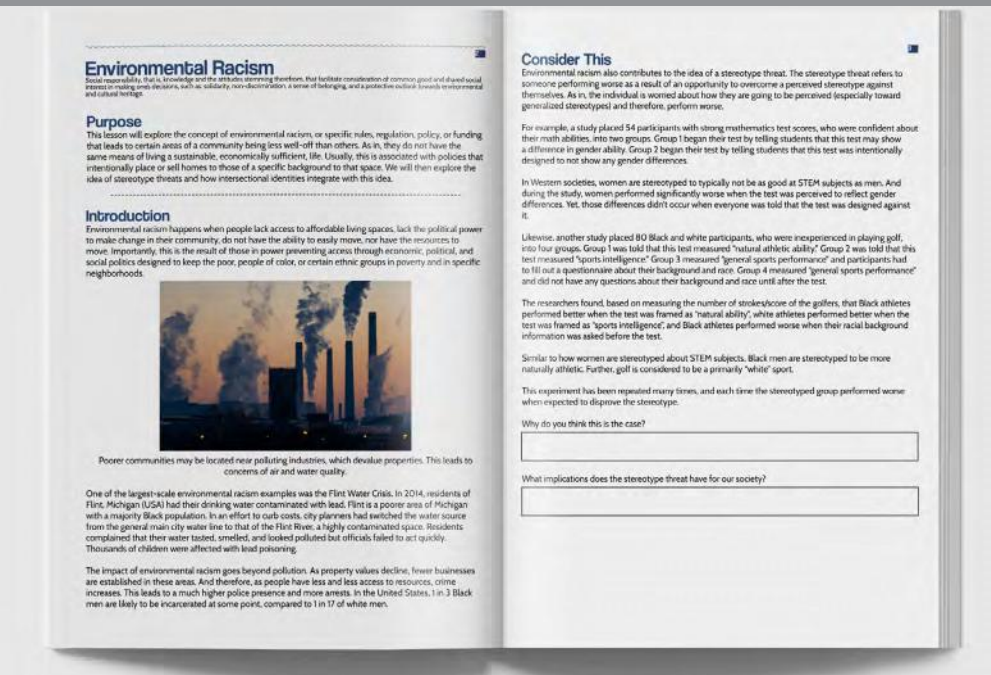
SOUND DESIGN

Learn how music producers mix and master audio, determining what makes something sound "good." Then, analyze a variety of audio sources to mix audio yourself.



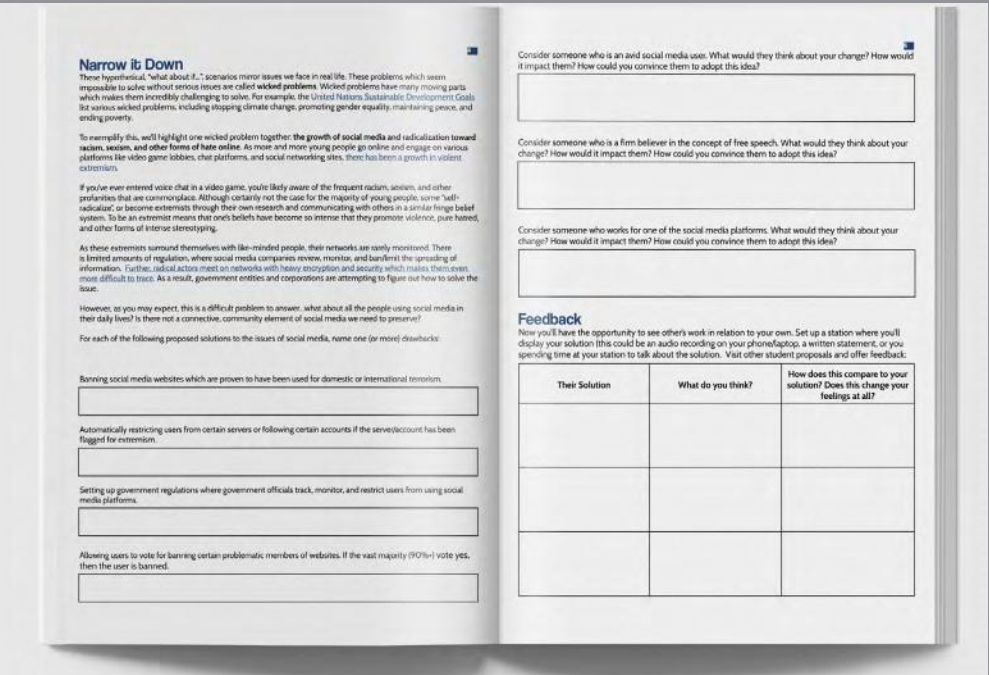
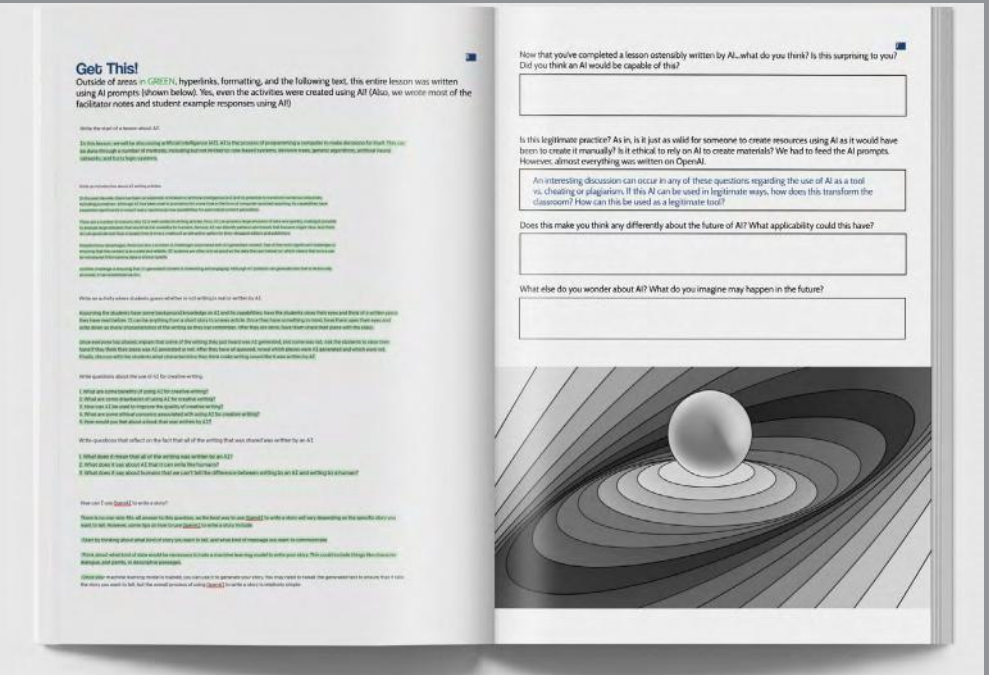
ENVIRONMENTAL RACISM

Policies exist that intentionally place or sell homes in undesirable spaces to marginalized people. Consider why these policies exist and what actions we can take to build a just, sustainable future.



ARTIFICIAL INTELLIGENCE

Explore the impact of AI on writing, art, and other content creation by determining what writing is "real" or "generated", with opportunities to use the software yourself. What are the implications for AI?



EXTREME SOCIAL MEDIA

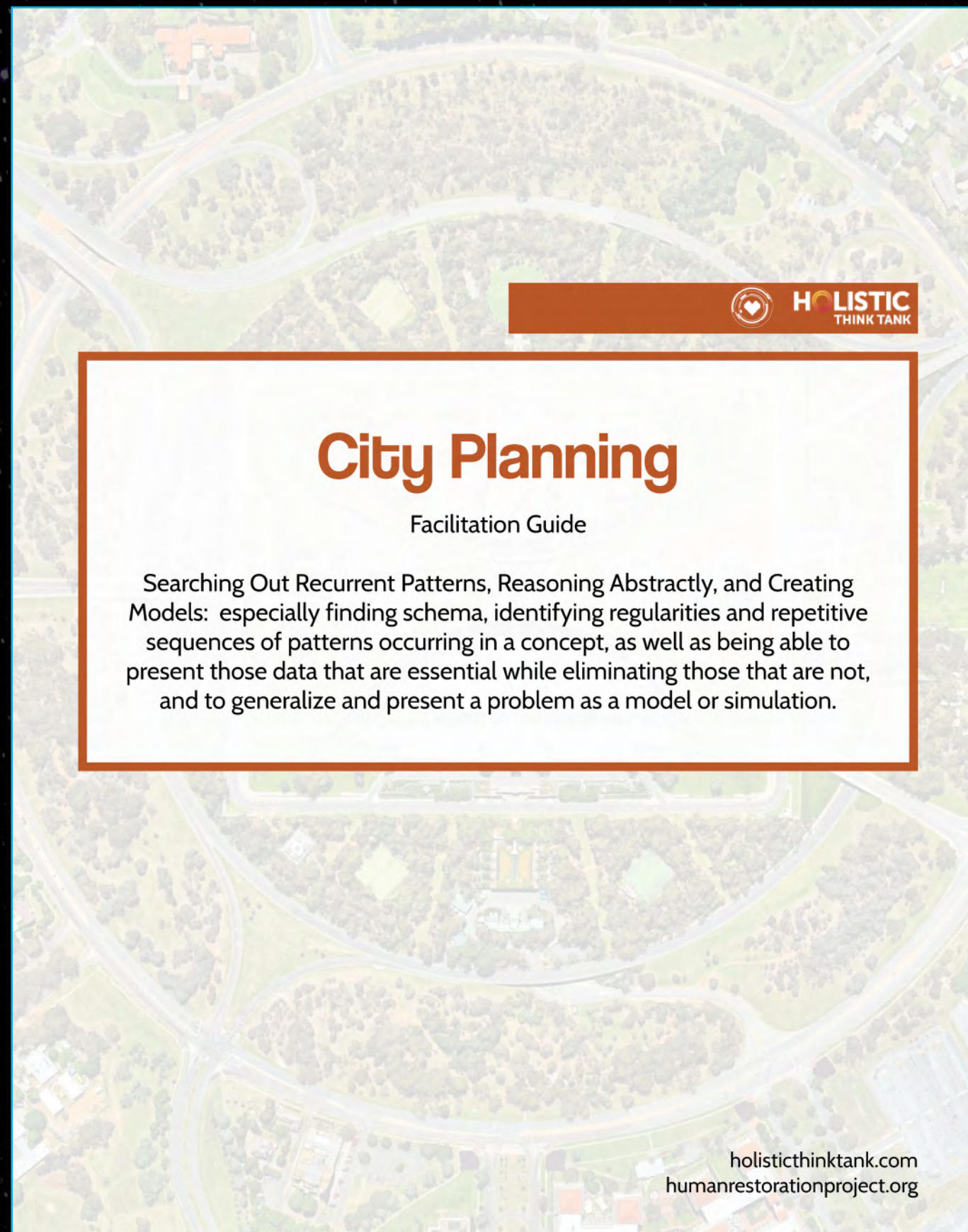
Examine how "wicked problems" are difficult, yet worthy to solve through the lens of social media use and the growth of extremism. At what point does social media need regulation? How can we regulate social media while creating spaces for community?

THE IMPACT OF FAST FASHION
SYSTEMS-BASED THINKING
CITY PLANNING
MAKING CHOICES BASED ON THE
COMMON GOOD
THE SCIENCE OF LIVING FOREVER
WHY DO WE KNOW WHAT WE
KNOW?
SELF-REGULATED LEARNING
BREAKING ACROSS SOCIAL MEDIA
ANALYZING SOURCES
WAYS TO DEAL WITH CONFLICTS
STANDING UP FOR WHO YOU ARE
INTRODUCTION TO WORLD
RELIGIONS
WHAT DO WE VALUE?

RECOGNIZING BIAS AND PRIVILEGE
UNDERSTANDING BODY LANGUAGE
AESTHETIC COMPETENCIES
SOUND ANALYSIS
THE ROOTS OF MATHEMATICS
CREATIVITY
THE IMPACT OF LOCAL AND GLOBAL
HUNGER
FROM EMPATHY TO ACTION
GLOBAL CULTURAL LITERACY
SOFT SKILLS
DEMOCRATIC ACTION
CHILDISM
ENVIRONMENTAL RACISM
PROFESSIONAL PLANNING

FINANCIAL DECISION-MAKING
HOPE
TAKING MITIGATED RISKS
HOW "GRITTY" ARE YOU?
PITCH YOUR INVENTION!
VERBALIZING ONE'S THOUGHTS
LANGUAGE DISCRIMINATION
REVERBERATING IMPACT
WICKED PROBLEMS
HOW TO REMAIN LIFE-ORIENTED
HUMANE THINKING
FEATS OF STRENGTH
ARTIFICIAL INTELLIGENCE
WHAT MAKES "YOU", YOU?

ACTION LESSON



City Planning

Facilitation Guide

Searching Out Recurrent Patterns, Reasoning Abstractly, and Creating Models: especially finding schema, identifying regularities and repetitive sequences of patterns occurring in a concept, as well as being able to present those data that are essential while eliminating those that are not, and to generalize and present a problem as a model or simulation.

holisticthinktank.com
humanrestorationproject.org

Standards

Holistic Interdisciplinary Subject

Searching Out Recurrent Patterns, Reasoning Abstractly, and Creating Models:

-> especially finding schema, identifying regularities and repetitive sequences of patterns occurring in a concept, as well as being able to present those data that are essential while eliminating those that are not, and to generalize and present a problem as a model or simulation.

SDG 3, 6, 11

Format

This lesson is designed for individual, small group, and/or full class discussions to occur over 2-3 50-minute sessions.

Materials

- Maps (embedded within lesson)
- Articles (embedded within lesson)
- Video clips (embedded within lesson)
- [Printable map](#) and [playing pieces](#)
- Writing utensils (sharpees, colored pencils, etc.)
- Tape/glue (if maps will be preserved)

City Planning

Searching Out Recurrent Patterns, Reasoning Abstractly, and Creating Models: especially finding schema, identifying regularities and repetitive sequences of patterns occurring in a concept, as well as being able to present those data that are essential while eliminating those that are not, and to generalize and present a problem as a model or simulation.

Purpose

Today, the majority of the world's population lives in a city and that number is set to increase rapidly over the next few decades. As more and more people move to densely populated areas, city designers work to ensure that the city is run efficiently. If it isn't planned properly, cities quickly become overcrowded, uninhabitable, or undesirable to live in. In this lesson, we will look at all of the elements of city design, eventually brainstorming our own in order to understand why cities are designed the way they are, and how city designers consider concepts like where to build residential areas and stores.

Introduction

Consider where you live. What is necessary for your community to thrive? For example, roads or markets. What else goes into the design of a place where many people live together, such as a village, town, or city? Consider having students brainstorm and crowdsource this information using discussion, writing, and/or art. Let's look at a few examples of city design. Check out these maps:

Roads, markets, utilities (power, water, trash), city services (police, fire, hospitals, schools), green spaces, community areas/cultural areas/faith areas, zoning (residential, commercial, industrial, airports, seaports)

- Chicago, United States
- Tokyo, Japan
- Brasília, Brazil

What stands out about the design of these cities? What do you notice? What do you wonder?

Chicago	Chicago is built almost entirely on a grid (notice how there are no diagonal or curved roads!)
Tokyo	Tokyo has many curved paths and winding roads, with seemingly less planning (despite the modern architecture). This is due to the geography, but also the fact that Tokyo is a much older city than Chicago or Brasília. Tokyo has modernized through public transit and other systems – with cars not used much by the populous (see the below video).
Brasília	Brasília is a modern city planned to house government buildings. Similarly to Chicago, it has a (curved) grid with a line of government buildings through the center.

Check out this video which highlights how Tokyo designs its cities or this video which documents all the details of city planning. If you were designing a city, what would you think is important to take into account?

Access to public transportation, availability of needs (e.g. grocery stores, corner stores), ensuring everyone can easily move from place to place, designing with security in mind.

Consider This

Infrastructure refers to the essential things a population needs. For example, power, water, and roads. In addition, it refers to all of the modern amenities that make cities desirable to live in: good schools, libraries, parks, public transportation, Internet speed, commercial area access, highway access, etc. Think about your community. What are its desirable space? What would you improve?

This answer will differ for each community, but examples may include restaurants, parks, and other gathering spaces.

In most areas of the world, traffic design is vitally important. If roads, highways, driveways, and public transportation are poorly designed, frequent back-ups can occur which delay commutes and deliveries. Watch this excerpt from Road diets from Vox.

What is a “road diet”? What does it have to do with city planning?

It's converting larger lane roads (e.g. 4 lanes) to single lane roads with turn lanes and bike paths. It changes the flow of traffic.

How does a “road diet” differ from a traditional 4-lane American road?

Turn lanes and bike paths, preventing crashes.

Would a “road diet” work in your community? Why or why not? If you live in an area that doesn't have roads like this, consider what changing traffic patterns may look like. For example, what if bike lanes were integrated in your existing community? What about public transit?

Similarly, check out this video on green spaces from Greenlife Matters. As you watch this clip, consider the following:

What are the benefits of green space?

Better air and water quality, areas for recreation, makes people happier

Similarly in city planning – why would green space be important?

Finally, let's think about “third places.” See this video on the concept from the city of Charlottesville in the United States.

What is a third place?

A space beyond work and the home to be at, such as libraries, coffee shops, or recreation centers

Why would third places be important?

What third places are there in your community?

In city planning, why would we even care about third places?



Narrow it Down

In this activity, you will create your own city layout using the provided buildings and zones. Then, you'll ensure that the city is planned to the best of your ability by answering the following reflection questions.

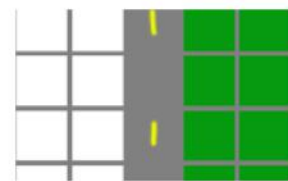
At this point, distribute the gridded maps and cut out map pieces. Students can have as many pieces as they'd like and do not need to use any/all of the pieces. (However, they should be able to explain why they're not including certain pieces!) As an added step, it may be interesting to have students draw the land first (trees, grass, water), then add city elements so students can plan to preserve the environment.

Provided to you are...

Roads: These can be drawn using any writing utensil. You can make your roads however you'd like, showcasing multiple lanes per grid tile or across multiple tiles.



Green Space & Parks: These can be drawn or labeled on the map however you'd like.



Water: Similarly, you can label and place water wherever you'd like on the map, such as a lake, river, creek, or ocean.



Residential: These groups of homes represent people.



Commercial: These groups of businesses contain shops and restaurants.



Industrial: These groups of industries contain factories and warehouses.



If preferred, there are much more in-depth and involved methods to do this activity (specifically SimCity and Pocket City), albeit these are paid alternatives.

And individual pieces: These are specific tiles for important buildings. You may use none, some, or all of these pieces:

School



Fire Station



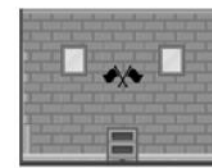
Police Station



Hospital



Government Building



Trash Service / Dump



Library



And anything custom: Feel free to draw and label any additional buildings or concepts in your city.

Here's an example of what a map could look like. In this example, the roads are simply serving as an indicator – students can create this map in any way they like...including more elaborate road networks, larger or smaller areas/buildings, custom buildings, and more.



Think about:

How does your city manage traffic? Is it safe to drive in? Is it easy to commute? Is it walkable?

What green and third spaces exist? Will people want to live here?

What about access to food and services? Can people live here?

How close are people to various amenities and services? Are they too close? Consider noise and other factors.

Do you think it would be affordable to live in this city? Why or why not?

Is anyone excluded from living here? How can it be fixed?

How does this compare to your community? What changes would you make?

Reflect

How would you rate your understanding of this concept? Place an "X" in the corresponding box below.



How has your understanding of this concept changed as a result of this lesson?

Which individual or community actions do you think would be achievable? Why?

What are some important factors to consider when city planning? Why would it matter to know this as a citizen?

Take It Further



Community Connection

Perform additional research about green spaces, third spaces, and other forms of city planning. Dive into a deep analysis of your community and see what types of spaces are available. What changes could be made? Prepare a full blueprint or model and present it to local stakeholders.



Take Action

When considering city planning, it's worthwhile to imagine our communities in the past or in the future. Either by conducting historical research or by looking at upcoming initiatives, create a model of your community in the past or future. Document how it differs from today and why that matters..



Take Action

Having access to quality green spaces ensures that community members have healthier, more desirable places to live. Make a map of your community that highlights all of the areas that could be renovated, demolished, or rezoned for green space. Consider the impact on the community (including the areas that you're changing), and whether or not these green spaces are worthwhile. Present this to local stakeholders.

Media

Cities: Skylines

(Video Game)

One of the most in-depth city builders available, allowing students to build, zone, and consider every element of city design.

Happy City: Transforming Our Lives Through Urban Design

(Book)

"After decades of unchecked sprawl, more people than ever are moving back to the city. Dense urban living has been prescribed as a panacea for the environmental and resource crises of our time. But is it better or worse for our happiness? Are subways, sidewalks and tower dwelling an improvement on the car-dependence of sprawl?"

The 99% Invisible City

(Book)

"99% Invisible is a big-ideas podcast and website about small-seeming things, revealing stories baked into the buildings we inhabit, the streets we drive on, and sidewalks we traverse. The show celebrates design and architecture in all of its functional glory and accidental absurdity, with tales of exceptional designers as well as frequently overlooked everyday designs."

Extend

Language Arts

Consider using excerpts from one of the Media books listed above, highlighting how city design reflects (or doesn't reflect) the design of your local community. Have students lead a discussion about whether or not changing your city's design is worthwhile.

Mathematics

Read and discuss [Life in the City Is Essentially One Giant Math Problem](#) from the Smithsonian. Consider: what math problems must we solve in order to successfully design a city? Have students brainstorm these problems, then consider what their expressions and solutions may look like.

Science

Arcology is a future-driven building initiative to create self-sustaining communities, usually in the form of large, multi-faceted skyscrapers. [Check out this link which provides information about the practice.](#) What stands out to students? Is this a viable practice? What would be the alternatives?

Social Studies

Consider what other factors, especially culturally, which impact people's lives. For example, [this article demonstrates that countries run by women had healthier responses to the COVID-19 pandemic.](#) What other factors influence the city and maintenance of cities, cultures, and society?

Art

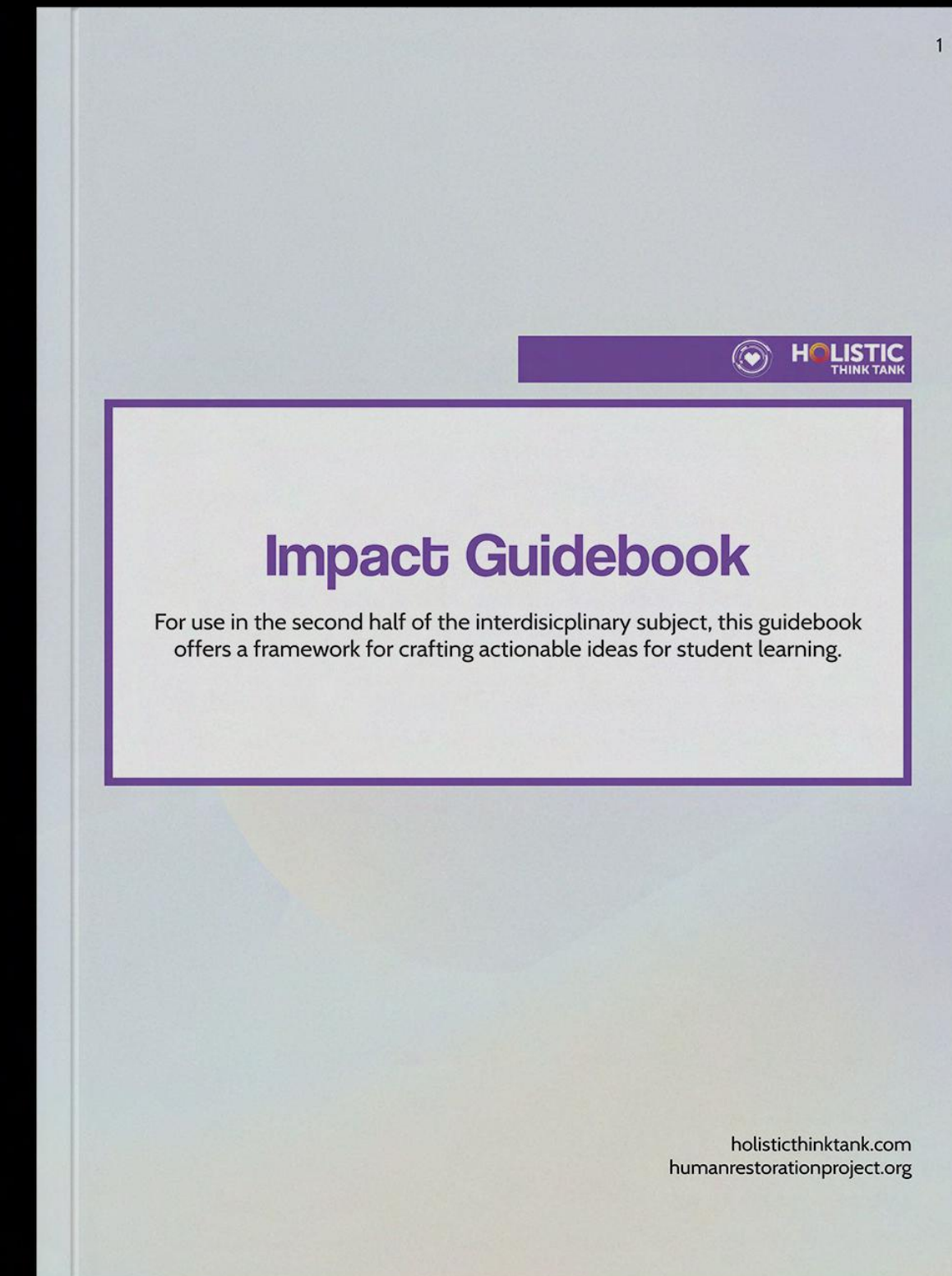
What will the city of the future look like? Beyond infrastructure and strictly logistics, aesthetics are also incredibly important to a flourishing city. Study different forms of architecture historically and around the world. Then, have students brainstorm their own unique, intriguing, or outright wacky versions of new, modern architecture.

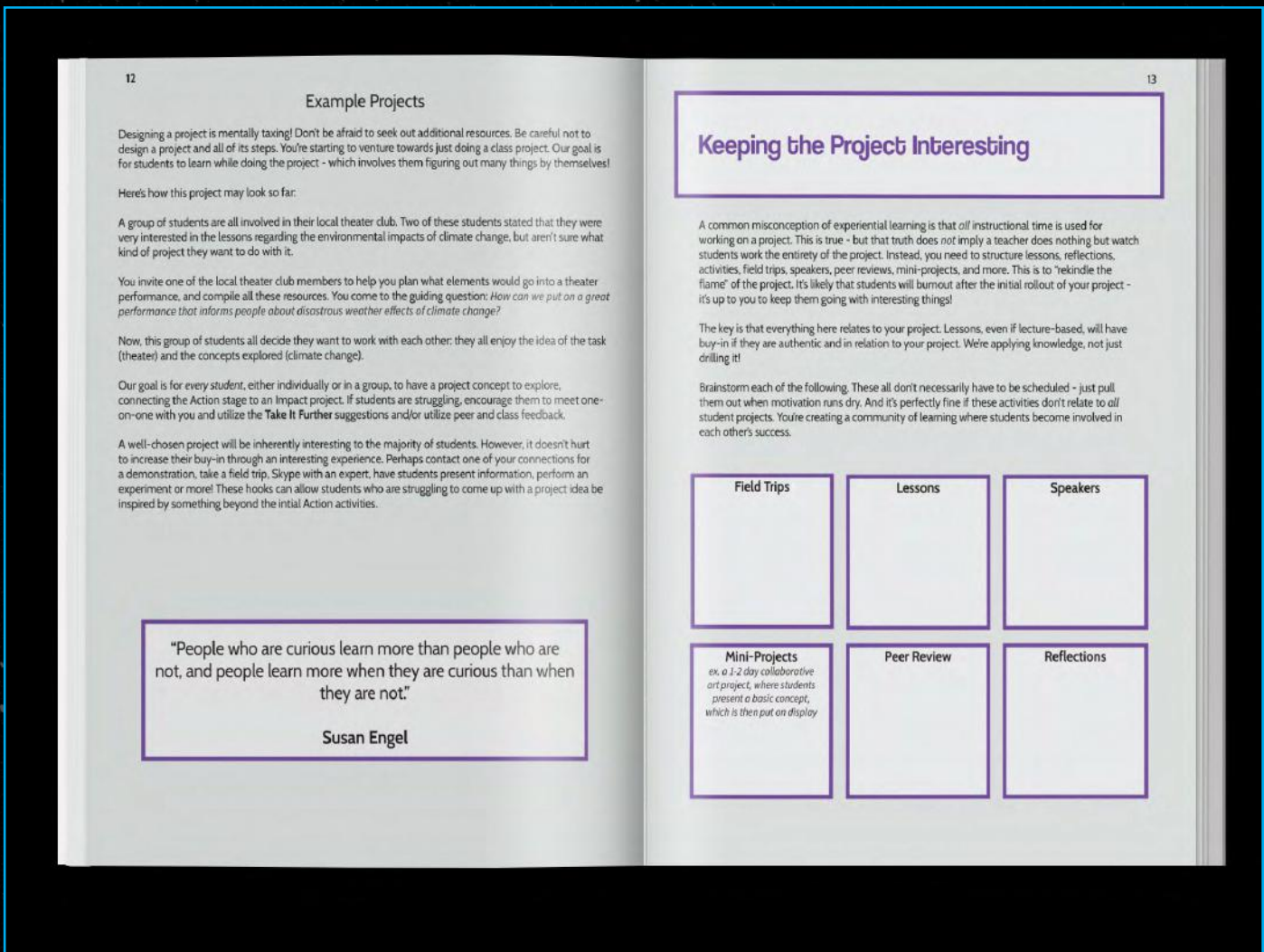
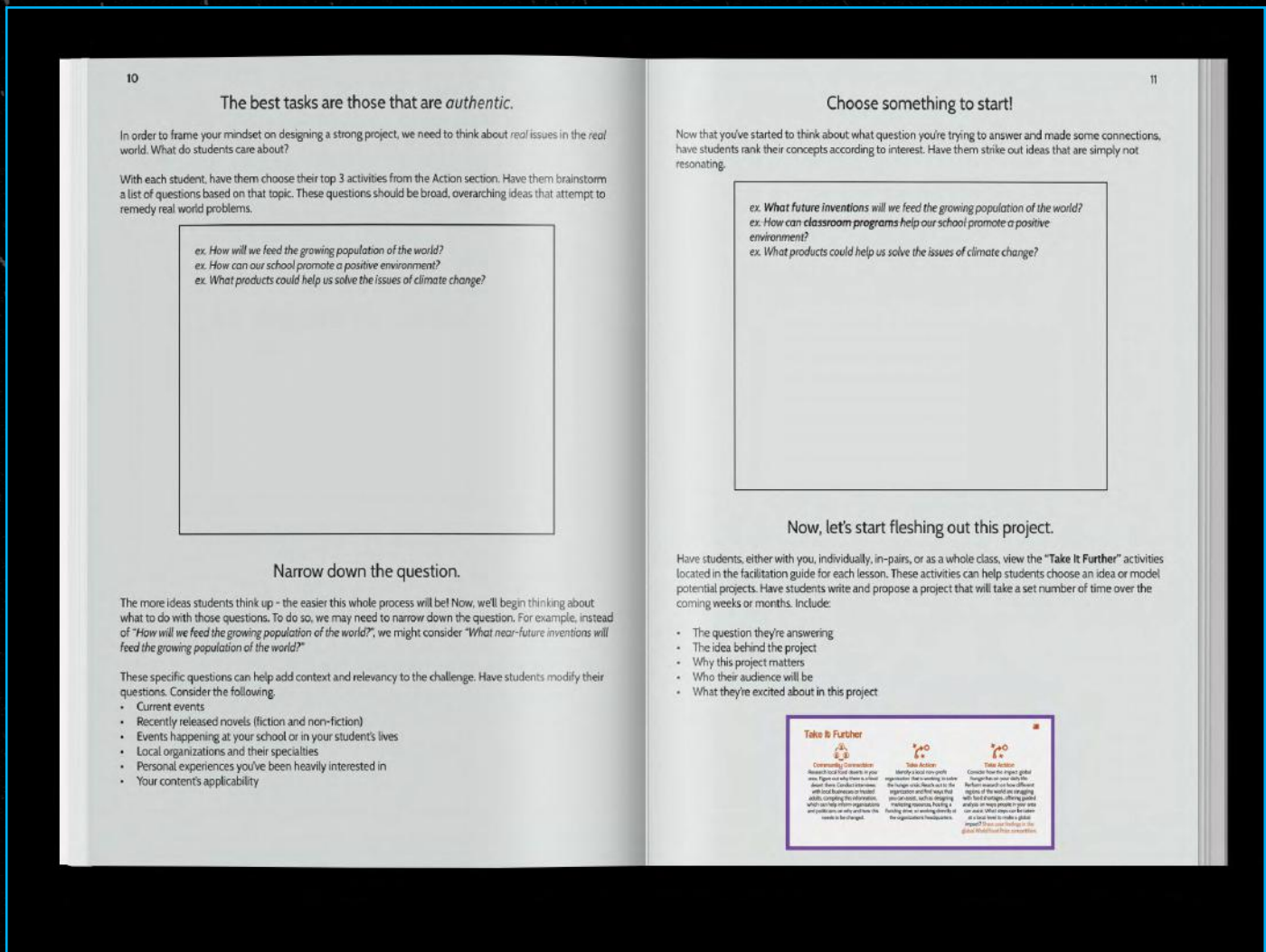
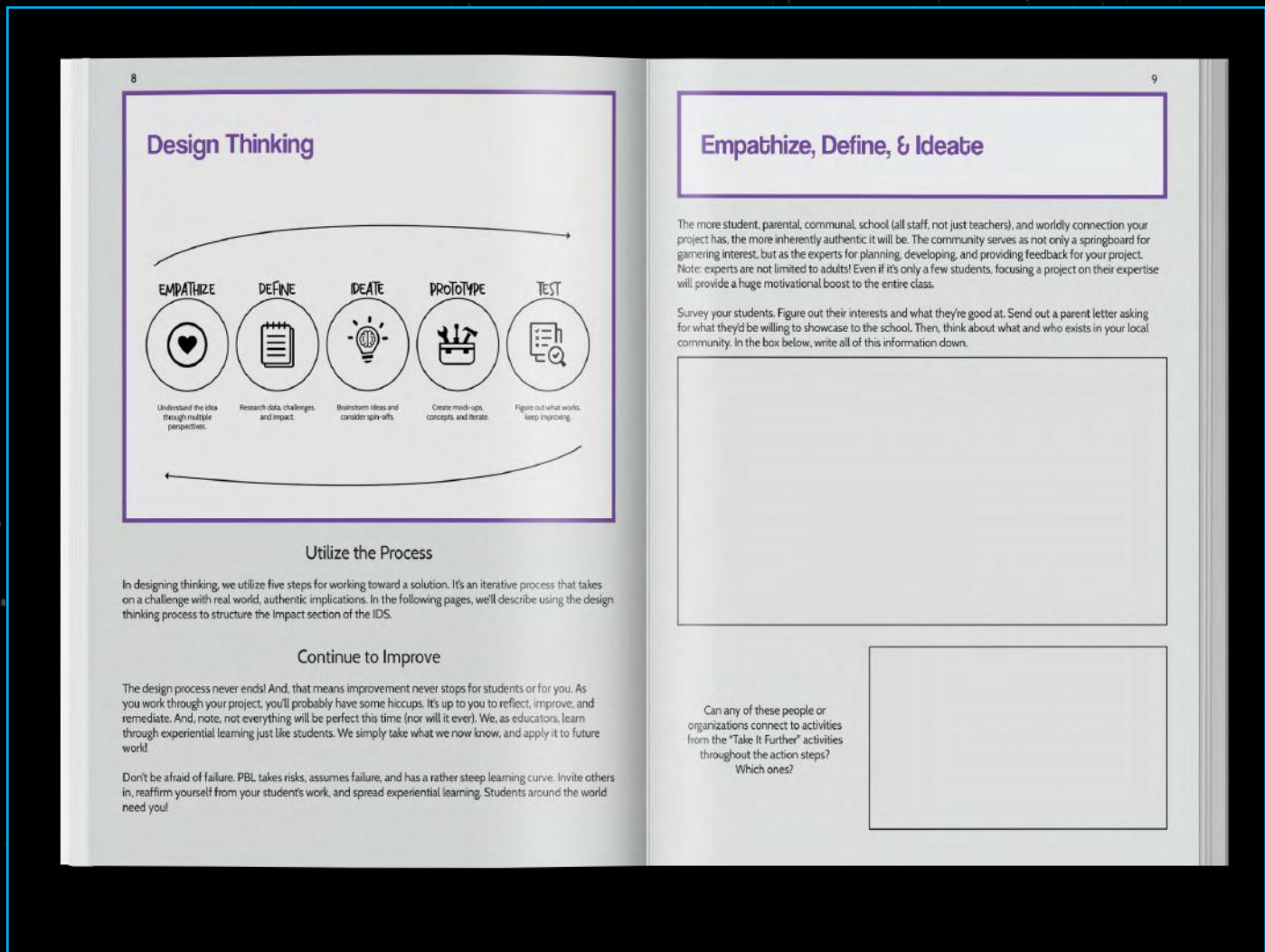
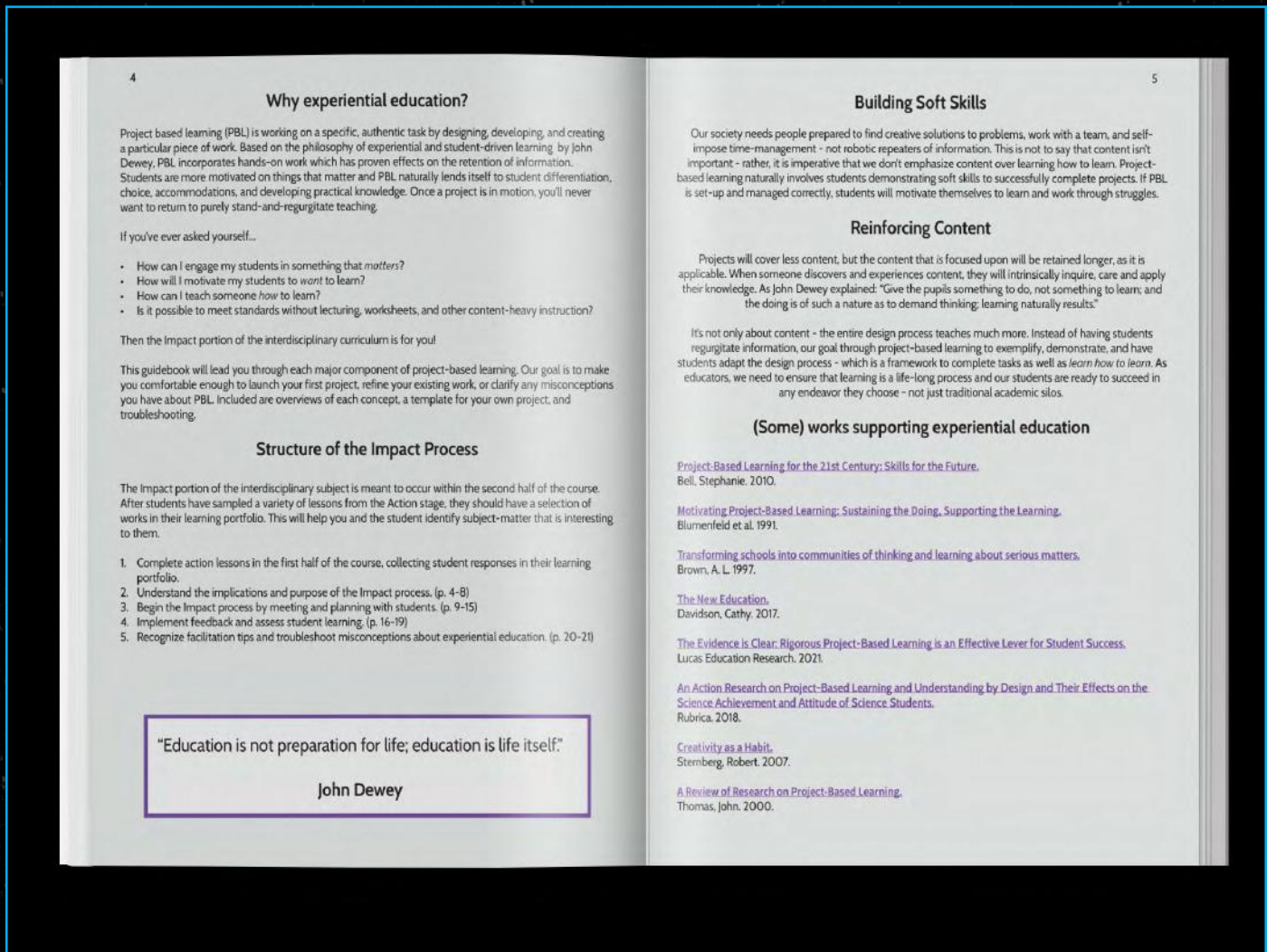
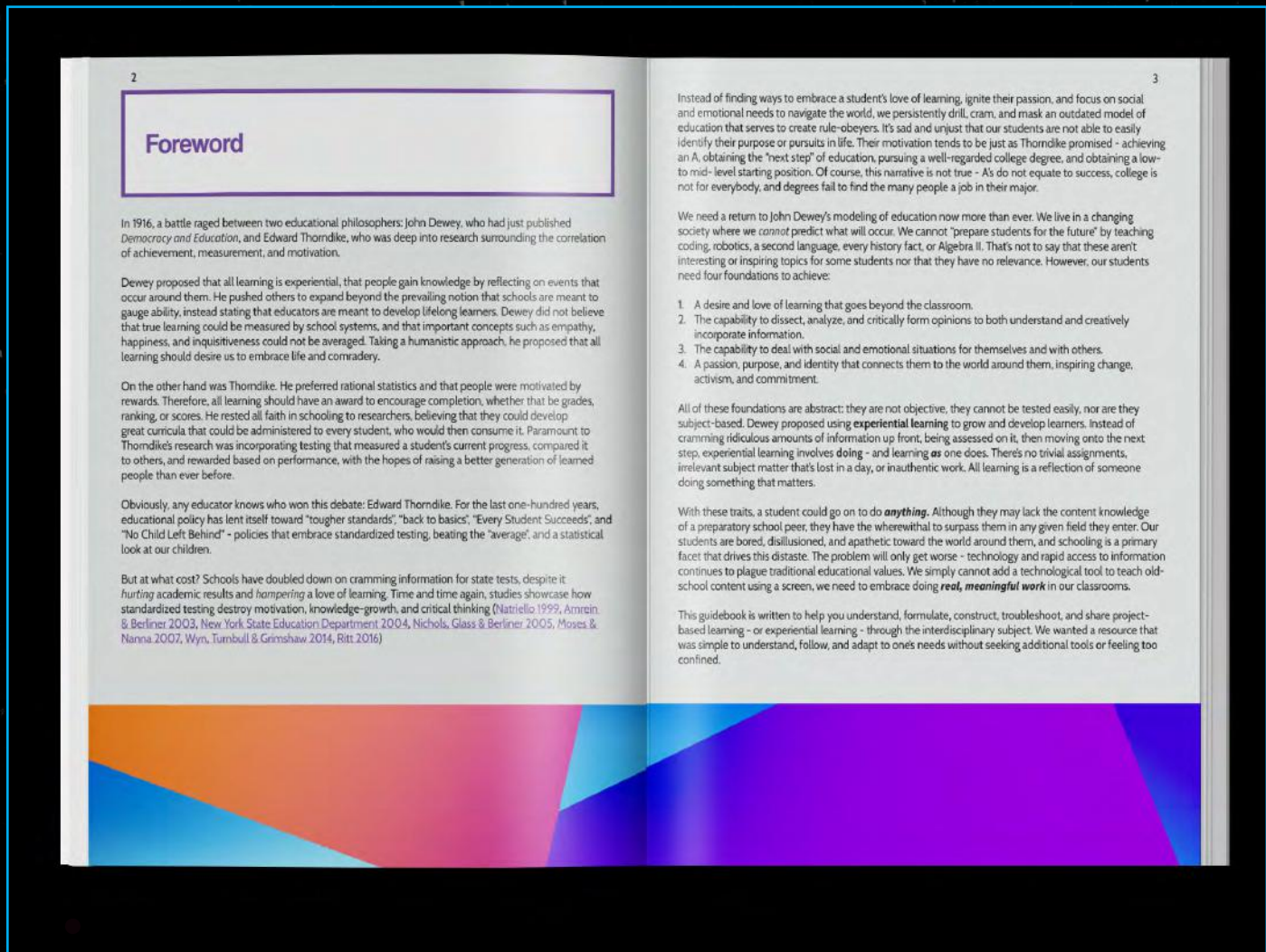
Physical Education

Conduct a walking tour of your local community. As you explore the city, have students document the concepts in this lesson: third places, green spaces, infrastructure, and more. As you walk around and explore, talk about the highlights of the city, any history you're aware of, and connect with local residents.

IMPACT GUIDE

- Second half of the course: creating student-led projects
- How do we create meaningful, authentic learning?
- How do we help students along the way?
- How do we provide feedback?





IN SUMMARY....

- PEDAGOGICAL FRAMEWORK**
- ACTION LESSONS (41) WITH EXTENSIONS**
- IMPACT FRAMEWORK**
- STUDENT-LED PROJECTS TO CHANGE THEIR COMMUNITY**

3.
NEXT STEPS

DEVELOPING PARTNERSHIPS

ENSURING TEACHERS HAVE
SUPPORT

EXPANDING THE CURRICULUM

CREATING COURSEWORK

PILOTING AND IMPROVING

SHARING THE WORK FAR AND
WIDE

BRINGING IN ADDITIONAL
EXPERTS

MARKETING AND BRANDING

INITIAL CURRICULUM DEVELOPED

IDS SHARED ONLINE

PILOT & IMPROVE THE COURSE

CREATE COURSEWORK FOR EDUCATORS

BUILD TOOLS FOR ACCESSIBILITY

DEVELOP PARTNERSHIPS
AND EXPAND THE IDS

**Ensuring IDS
Success**

IDS PILOT


- Secure partnership with multiple schools to develop and implement feedback for lessons



CREATE COURSEWORK

- Utilize existing protocols and partnerships to develop self-paced and group cohorts to teach the IDS, including attaching to graduate credit



 human
proj
Human Restoration Project

Course Syllabus:
Ungrading to Break Barriers Toward Learning

Number of Credits: 3 credits (Licensure Renewal or Graduate Credit)
Course Instructors: Nick Covington & Chris McNutt (Human Restoration Project)

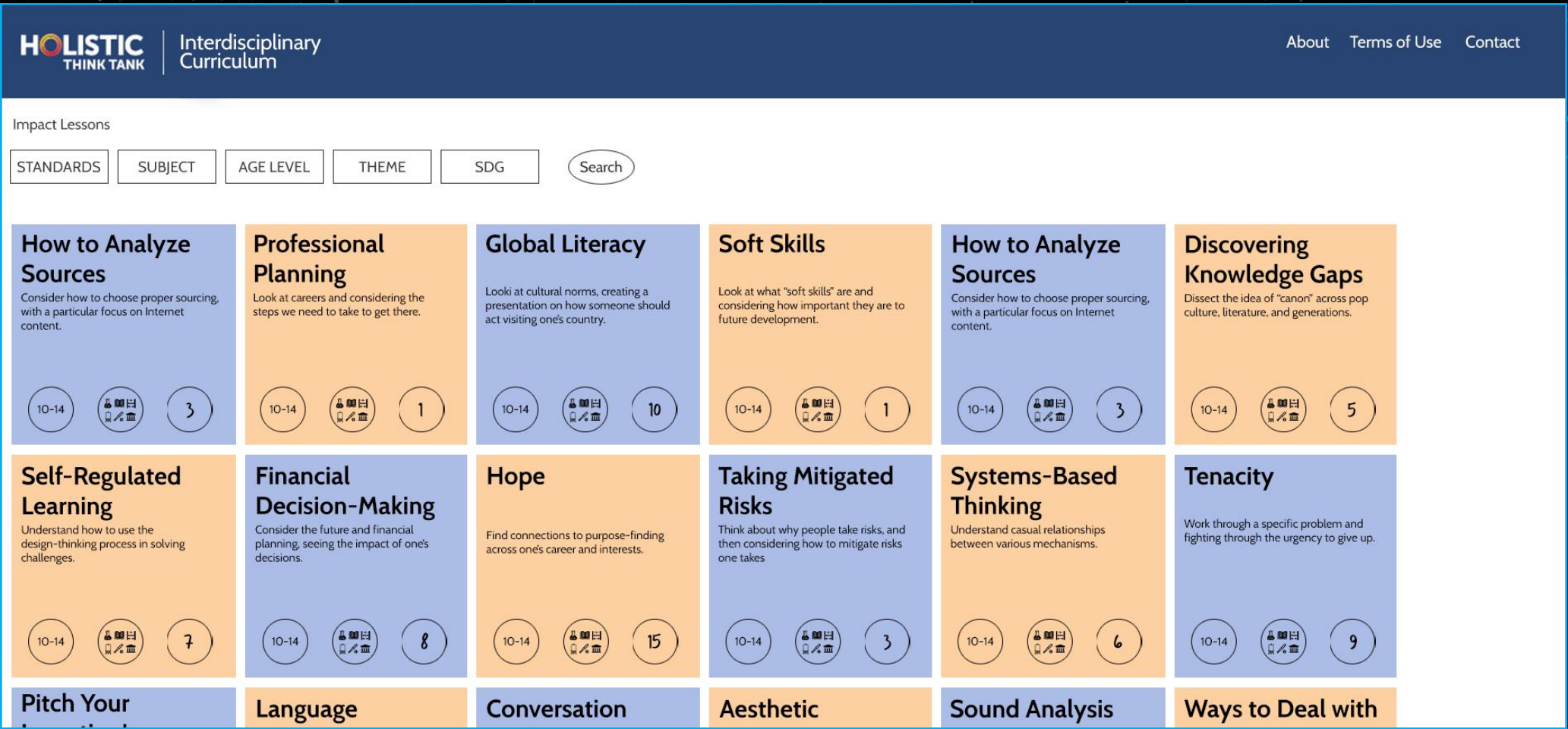
Modern grading systems are a relatively recent arrival in the history of education that, despite our best efforts to reform them, have continued to rank and sort, isolate, and demotivate students – especially those at the margins. What if we could cultivate a classroom culture that allowed learning to flourish in the absence of grades and let students create their own learning narrative through iteration, evidence-gathering, and reflection? By reframing assessment in these ways, educators can truly create an engaged student-centered learning experience for all. In this course, you will learn about the history of grades and grading, the research surrounding assessment, alternative proposals, and practical application in multiple school settings (even those that require a grade). In this course, participants will complete a gradeless portfolio to experience gradeless course design and to be better prepared to implement similar models in their own classroom contexts.

Learning Objectives:
Upon completion of this course, participants will be able to:

- Recognize the history and impact of grades and grading on learners.
- Utilize systems-based thinking toward equitable practice.
- Synthesize the hidden curriculum of education toward "creative noncompliance."
- Implement ungrading systems to support student well-being and engagement.

CREATE ONLINE TOOLS

- Develop website database capabilities to host the IDS online as an ever-expanding framework for interdisciplinary learning



DEVELOP PARTNERSHIPS & EXPAND

- Create partnerships with existing and new organizations within HRP's network
- Expand upon the IDS with new lessons, frameworks, and impact possibilities

