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RETHINK GREEN

Integrating Art, Sustainability, Education

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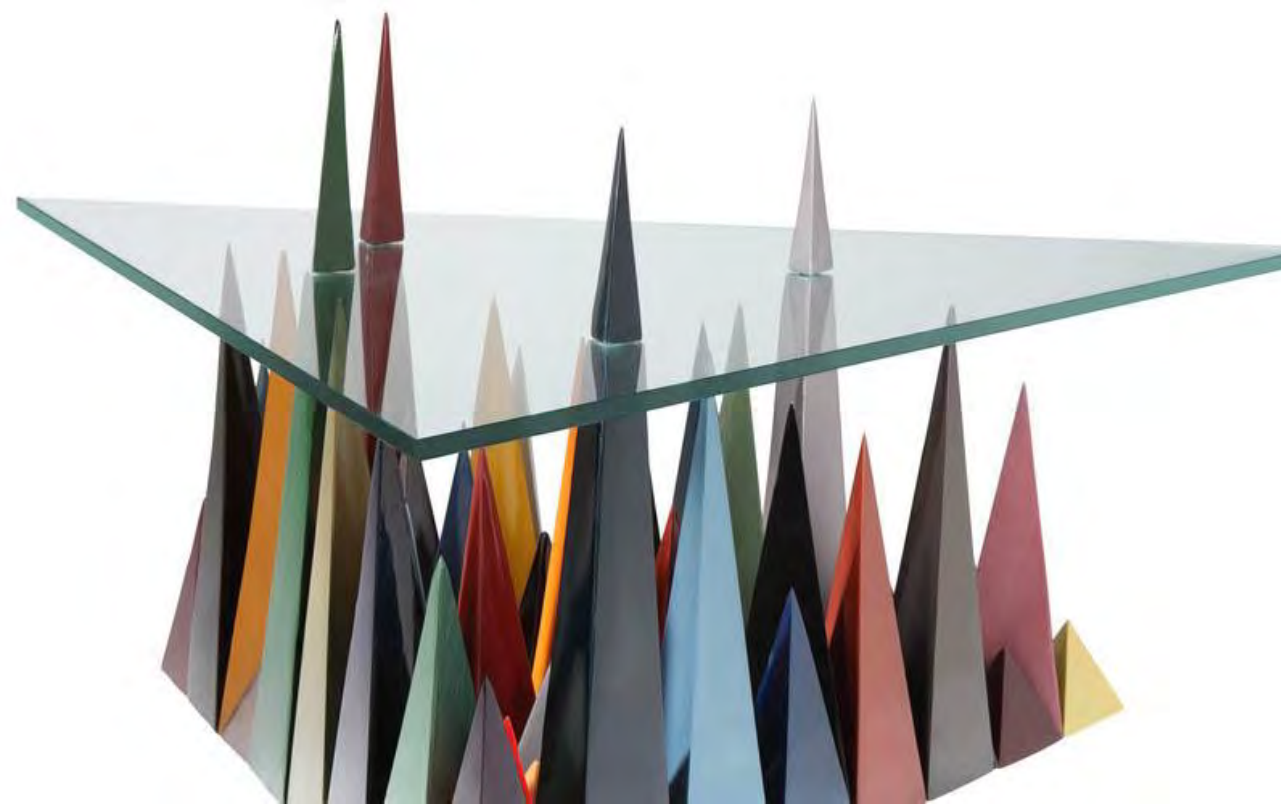
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“Protrusion Low Table.” Table constructed of recycled materials.

Our Project Goals in Summary:



An online platform that allows children to share their ideas and projects, learn from one another and professionals and create with recycled materials.



A real life, collaborative effort to create an art-space for recycled art, bringing together artists from around the world



A curricular addition for children of all ages to include positive sustainability education, artistic inspiration and a basis for living with and understanding the impacts, difficulties of and beauty of living in urban, waste-dense areas



Abstract

Rethink Green focus on celebrating sustainability through artistic creation. By targeting grade school age children, we introduce sustainably habits from an early age that can develop into a lifestyle and influence adults around them.

Our program integrates three components: a website in which recycled art projects and techniques can be shared and celebrated; a school curriculum that teaches the why and how behind a sustainable lifestyle and provides the real-life space for engagement; and an art exhibit for display and appreciation. Like the biological principle of the Central Dogma, in which DNA becomes RNA and then functional proteins, we provide information-rich platforms that, through collaboration with teachers, artists, the local government and students, can be synthesized into action. By giving Parisians agency over creating a sustainable Paris for the future, we empower them to see a green lifestyle as more than just a chore, but as a source of beauty.



BACKGROUND

Paris Today: A Sustainable City?



The City as a Living Organism

Every day, the city pulses with movement, ideas and creation. Bringing together innumerable elements, the urban structure of a city allows for the cooperation and connection of millions of people.

Similarly, the cell is changing non-stop. To fuel life, the cell is constantly working and adapting to create what it needs to keep functioning, requiring the full functioning of all of its parts.

When a part of a cell breaks down, the health of the organism suffers. Imagine a cell in which waste could not be removed. Quickly, toxins would build up and corrupt the vital functioning of other parts of the cell, and soon the entire cell's function would arrest.

What does that tell us about the city?



Like the cell, a city is irrevocably tied to the waste it produces. As carbon accumulates in the atmosphere and plastic in the sea and in landfills, it is clear that waste is one of the largest problems future generations will have to contend with.



The Problem

With a European Union-wide goal to increase recycling rates to 50% by 2020, and with France lagging behind at only ~35% only five years before the goal year, it is clear that a push must be made. Current projections based on the increase in recycling rates place France beneath this goal (see figure 1). But if infrastructure already exists, what is missing from allowing France to catch up to the rest of the EU?

*Only 25% of Parisian waste is recycled. Of the pieces that are recycled, 3 of 10 are sorted incorrectly.*¹

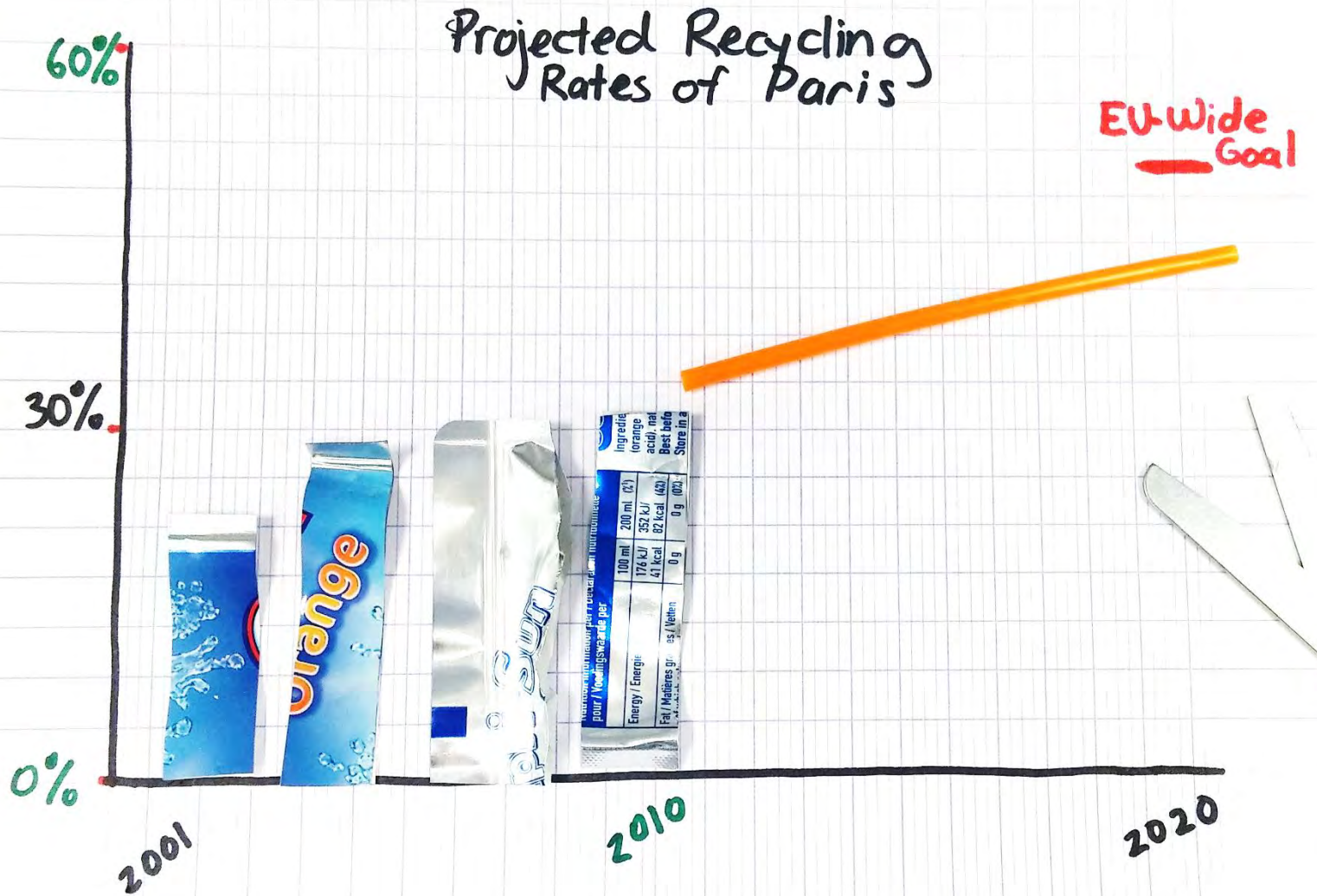
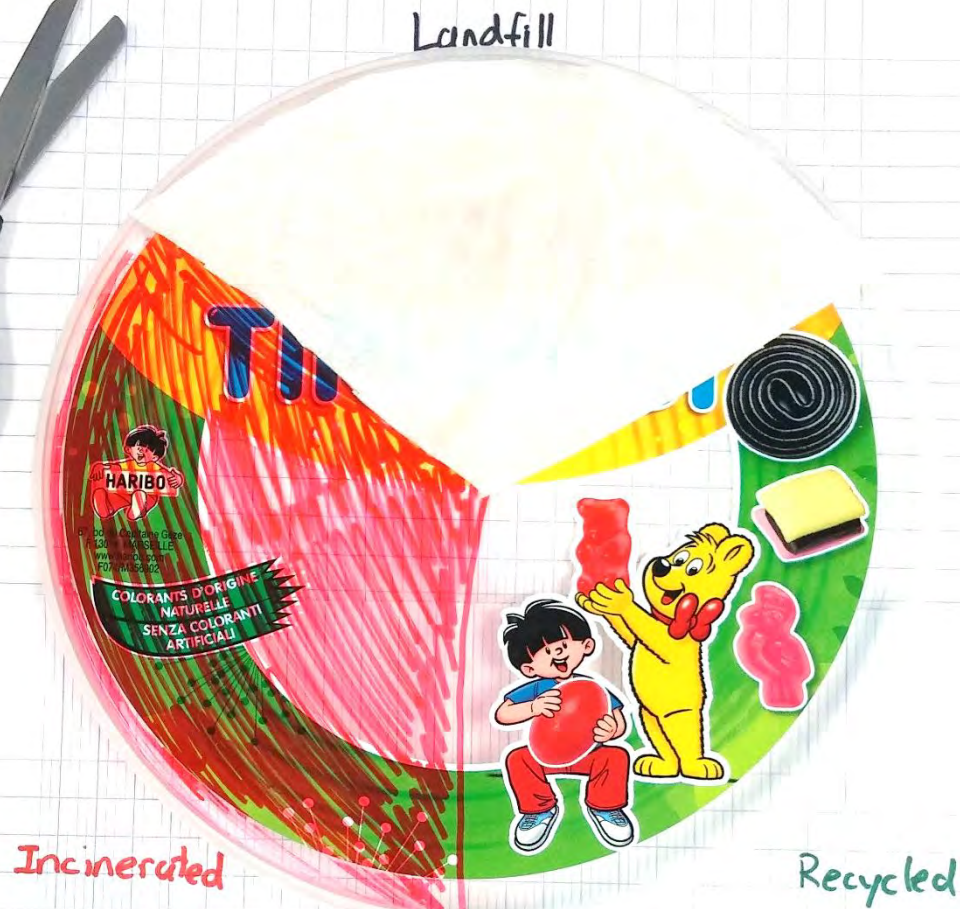


Figure 1. Projected Recycling Rates.
Made with a recycled juice box.
Image produced by Harvard Summer School.

Where does waste go in France?



Though the numbers are not promising, there is already an effort to create a more sustainable city. Paris sets up clear and specific regulations on the separation and disposal of different materials.

France has a similar system to many other countries for sorting household waste: there are separate bins for papers, plastics and glass; recycling bins exist in public areas with plentiful trash receptacles. However, this infrastructure remains underutilized, and France remains heavily reliant on incineration and landfilling as methods to deal with its waste, two methods that release toxins into the environment and waste valuable materials.³

Waste in France is increasing: 3 198 000 tonnes in 2001, 34 535 000 in 2010, a 7% increase in nine years

Per capita waste is also increasing: 506 kg in 2003; 543 kg in 2007 with a minor decrease of 2% in 2010 to 532 kg⁴

Figure 2. Fate of waste produced in France. Made with a Haribo box lid.
Image produced by Harvard Summer School.

If Not Infrastructure, Then What?

Further infrastructural changes are difficult to implement in a city like Paris, where space is limited and there is a strong desire to preserve history. Moreover, past infrastructural and policy changes, has had limited effect on the actual behavior of Parisians.

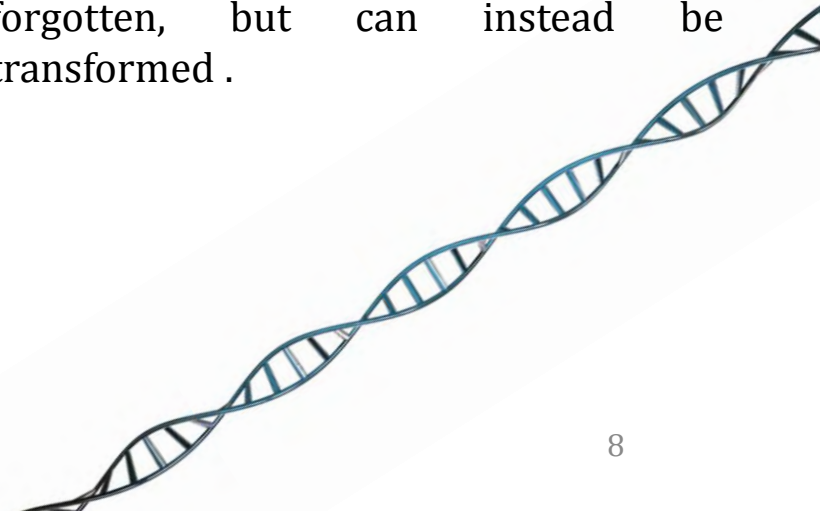
But what if waste were viewed as something other than just a problem? What if it wasn't just something for us to deal with, to get rid of, but something we could create with once more?

Our goal is not to redo the entire system, but to empower people towards a sustainable lifestyle.



"What Came First?" By Kyle Bean. A sculpture made of eggshells. Does the eggshell lose its value without the egg? Or does it have the potential to become something beautiful?

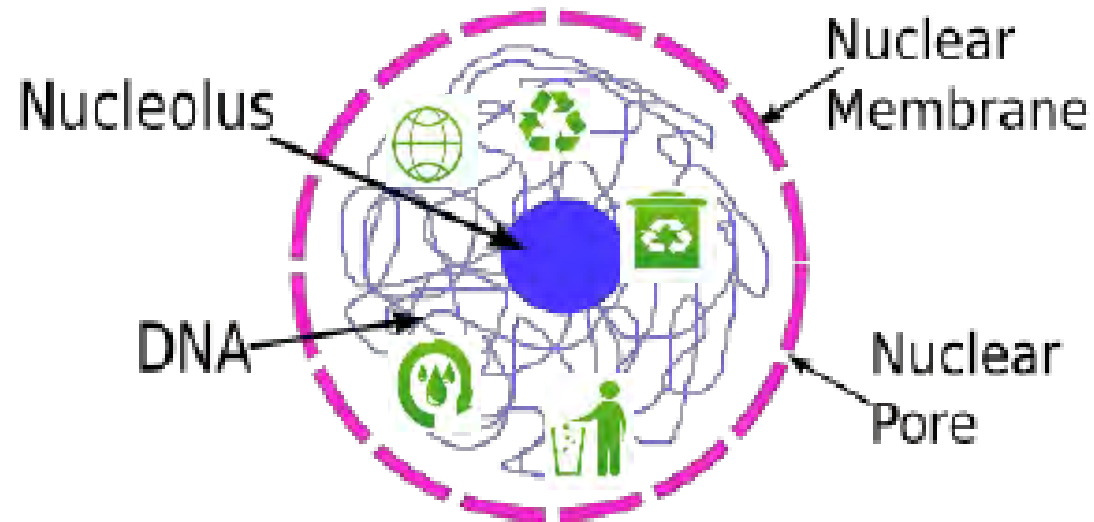
In our project we strive to promote sustainable living habits by celebrating the connection it gives us to creativity. We strive to change the Parisian attitude towards recycling and sustainability, making it a source of inspiration rather than a chore. By educating Parisians on the potential for recycled materials, we can reorient them in the global goal of creating greener, beauty-filled cities. We aim to teach Parisians that waste does not have to be thrown away, burned or forgotten, but can instead be transformed.



Educating a City

To enable us realize this goal – promoting sustainable living by changing Parisian's attitude towards recycling in a way that both empowers and prompts them to recycle – we will invest heavily on providing the right information and appropriate resources. In designing a model to enable us achieve this, we will derive our inspiration from the cellular central dogma.

Our first goal will be to consolidate information on existing ideas on creative sustainability, scholars and artists exploring this field, and the current waste management infrastructure in a single website, like the cell packages its information in the DNA in the nucleus.



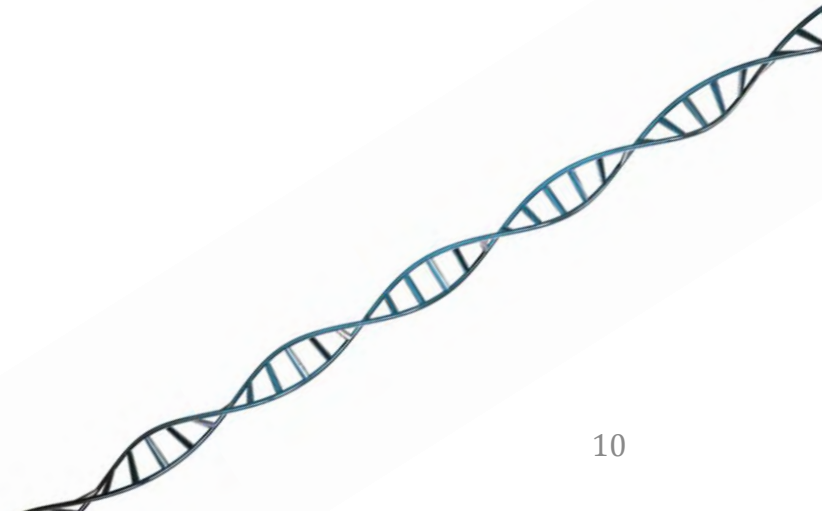


We will then collaborate with the local government to ensure that the information reaches our target population – students. The local government, like mRNA, will facilitate access to this centralized information by ensuring access to computers and the internet in schools, as well as making the website a crucial learning tool in the creative sustainability curricula .

Once the information is accessible, we will invite a collaboration between teachers and artists in explaining and bringing to life different concepts about sustainable art as laid down in the

website. This teaching exercise is akin to translation where the knowledge gained is synonymous to the protein that results.

We will then assess whether the translation product is functional by engaging the students in sustainability projects where they can apply their knowledge in an artistic project





CONTEXT & AUDIENCE

The Students, the Teachers, The Artists

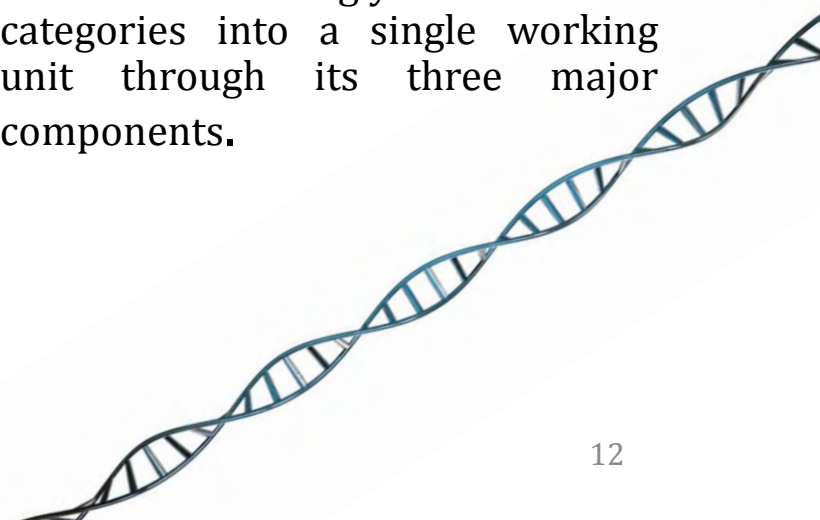




A woven paper art piece, bringing together simple strips of paper into something cohesive and beautiful.

Informing and Integrating: Our Plan for Changing a City

Our project, Rethink Green focuses on re-evaluating attitudes and behavior on sustainability from an artistic perspective. It does so by inviting collaboration from an array of different networks to ensure effective distribution of information and ready access to appropriate resources. These collaborations blur the line between public and private, theory and practice, art and science. Our project helps blend these seemingly different categories into a single working unit through its three major components.



Paris and The Website

The website is the nucleus of our project and the first avenue for collaboration. It brings together sustainable art bloggers, scholars, and artists by offering them a platform in which they can exchange and share their ideas with a broader audience. It also invites sponsors of different sustainable art events to publicize their activities and connect with artists of that field.

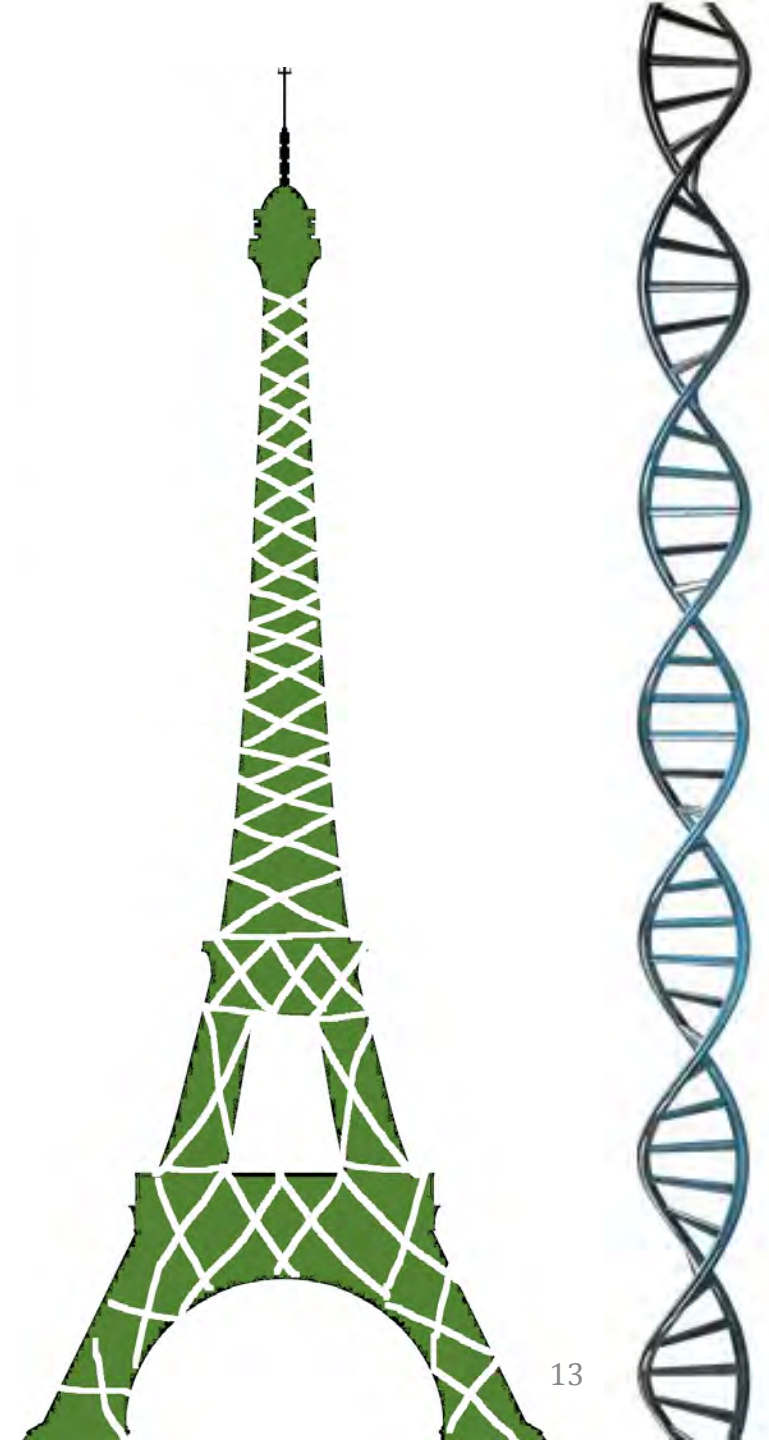
The government's involvement will be to update policy changes on waste as well as to facilitate web access to students.

The private sector- especially the one operating the waste management infrastructure- is not left behind as they are encouraged to use our website to engage more with the public. They will be able to use the website to help make

known when they are have community events and ensure their engagement remain transparent.

Students especially will be encouraged to create and share on the website. This active engagement that will further reinforce their learnings and foster creativity.

Last but not least, user participation on the website will consist of anyone from the public who wishes to explore the site or upload their own creations. Students especially will be encouraged to create and share on the website. This active engagement that will further reinforce their learnings and foster creativity.



Why focus on students?

In addition to its capacity to change attitude, provision of information, especially through government sponsored educational platforms, will enable us reach a broader audience. This is especially true for Paris where over 80% of the students go to public schools. Represented in this huge proportion of school kids, are people from all walks of life -- ethnically, socioeconomically, religious backgrounds, and more. This platform therefore, ensures that we not only reach huge masses, but are also all inclusive of many different backgrounds. Through public education, Rethink Green can foster behavioral change across social boundaries.

“Education is the most powerful weapon which you can use to change the world.”

-Nelson Mandela



Students and artist Patrick Geo Bride come together to share in the creation of a plastic water bottle art piece.



The completed project:

“Multicolorus” is a dragon that pupils from the Ambrussum College and artist Patrick Geo Bride.

Together, the students and artist used recycled plastic bottles, and display the piece of art in the main hall of the college.

Why Art?

The significance of art in this program goes beyond the creative aspect of the discipline. Not only is art deeply valued in Paris, it also forms a significant part of the French culture. The extensive catalogue of artistic resources and galleries, and the huge investment in resources by the Ministry of Culture on art-inspired events in Paris speak volumes about the place of art in Parisian culture. Using art as a resource to impact Parisian's attitude and behavior towards waste, therefore, invokes their cultural pride in helping shape their sustainability behavior.



An art piece from *La Metamorphose des Materieux*, an annual exhibit and celebration of recycled art in le marais of Paris.



OTHER SUSTAINABLE EFFORTS

Inspiration from in and out of Paris



Eco Ecole and Green Teams

Already, there exist educational systems for sustainability. Programs such as “Eco Ecole” exist to bring recycling and composting education to children in the International School of Paris. According to their website, children at the International School of Paris are taught about the importance of creating a sustainable lifestyle, the materials they can and cannot recycle, and are engaged in tending a school garden.⁵

Similar programs also exist elsewhere in the world, such as the Green Schools Initiative in the USA, a volunteer-run initiative aims to reduce the environmental footprints of schools and to teach students literacy in sustainable practices.

This initiative has already spread through over 350 schools in California, though similar widespread campaigns have not yet arrived in Parisian elementary schools.⁶



The success of “Green Teams” may be in part because of its larger effect on the population. Influencing children may indirectly affect their parents.

A study in São Paulo found that using educational “interventions” led to a 90% reduction in intermediate/high-risk individuals on the Framingham Risk Score for cardiovascular illness when compared to a control.

Influencing children may indirectly affect their parents.

The program explicitly contained activities to engage the young students with projects, art and written. From this study, we can infer that active engagement with children on important lifestyle changes can not only develop the children’s habits for adulthood, but influence the lifestyles of their parents.

The Success of Targeting Students: The Power of Children to Influence Adults

The success of “Green Teams” may be in part because of its larger effect on the population. Influencing children may indirectly affect their parents.

A study in São Paulo found that using educational “interventions” for students- various workshops on improving heart-health (the goal of the study was to find ways to improve cardiovascular health) through exercise, quitting smoking, and eating healthily- led to a 90% reduction in intermediate/high-risk individuals on the Framingham Risk Score for cardiovascular illness when

compared to a control.⁷

The controls were simply given forms that listed guidelines on how to maintain good heart health, a passive form of engagement. Meanwhile, the other group’s program explicitly contained activities to engage the young students with projects, art and written. From this study, we can infer that active engagement with children on important lifestyle changes can not only develop the children’s habits for adulthood, but influence the lifestyles of their parents.

Our program focuses on children, not only because children are receptive to new information, but because by influencing children we can indirectly alter the behavior of Paris’s adult population.



Community Involvement: La Recyclerie

Located in the 18th arrondissement of Paris, there exists a hybrid restaurant, farm and repair workshop all dedicated to sustainability. We traveled to the location, built into the abandoned remnants of Le Petit Ceinture, La Recyclerie is a privately owned, non-profit based building and community dedicated to have a cyclical, self-sustaining system. With a garden and farm, they grow much of the food they cook and sell. The space also provides repair tools for those in the neighborhood, alongside workshops that educate people on how they can live more thoughtfully and sustainably.⁸



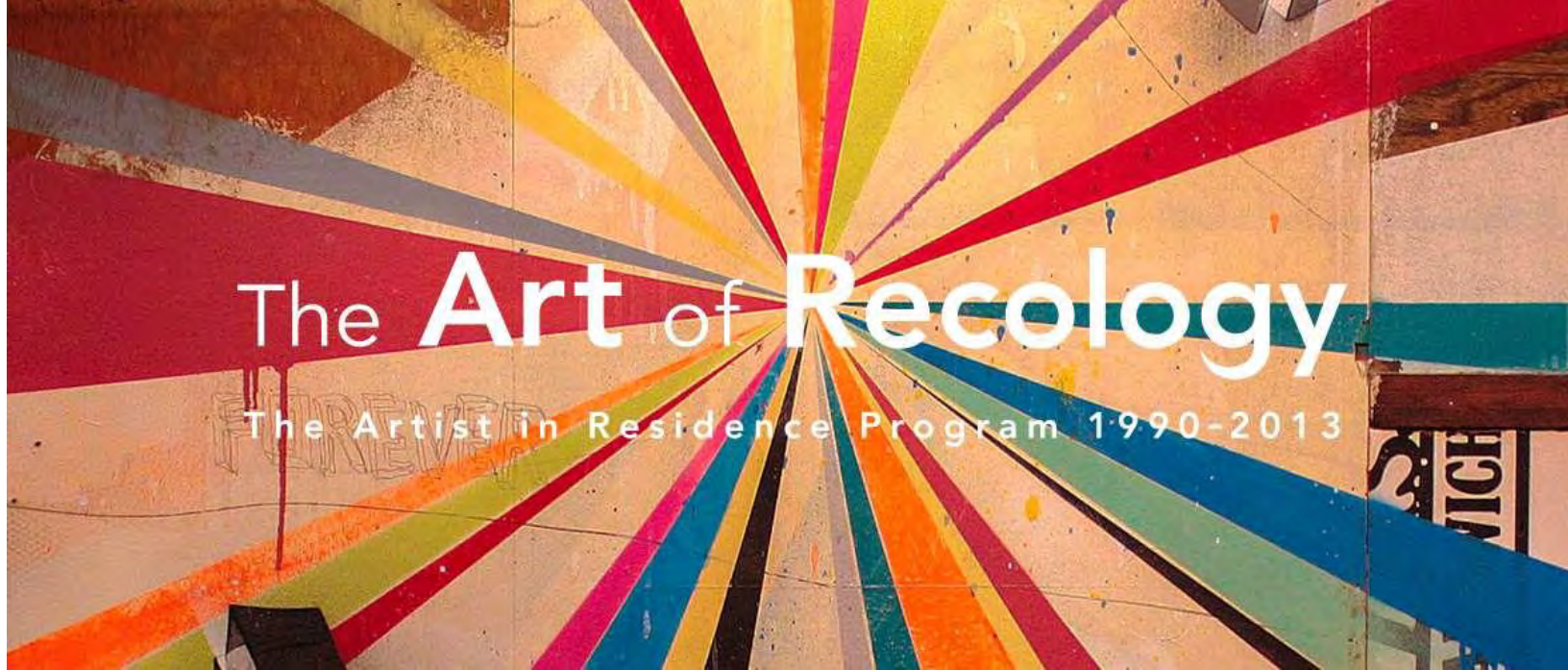
“L’Atelier de Rene,” a space in La Recyclerie that provides tools for repair for free to anyone who visits. The workshop also provides free lessons to those interested, often with more than fifteen workshops occurring per week.

What fuels the popularity of La Recyclerie?

We interviewed employee Sara Carino, and learned about the goals of La Recyclerie: not to force sustainability on the community, but provide the knowledge in an interactive, non-forceful way. Sara reiterated many times that people will not pick-up sustainable habits if they are forced upon them. Most who become regulars at La Recyclerie begin looking for tools or a snack, and end up returning time after time to learn new things.⁹

The accessibility and casual atmosphere of La Recyclerie make sustainable practices easier and more accessible for Parisians. The lesson to be learned? If the information is readily available and fun, people will want to learn it themselves.





Aimed at an older demographic is a program located in San Francisco called Recology Artist in Residence. Aspiring artists are provided space, funding and discarded materials to create art pieces.

Artists present their art to schoolchildren in the community and at the end of their residency, contribute their pieces to the permanent collection. Recology aims to not only spur creative reinventions of

discarded materials, but to educate the community and promote awareness, goals that enhance the classic goals of teaching the community how to separate paper from plastics, or how to compost.¹⁰

We aim to take inspiration from the collaborative effort of Recology, but focus more on the other end of the collaboration: the students.

"All of my work takes shape with love and care and takes issue with waste and disregard. I feel the work as a metaphor for transformation and transcendence. It insists that we change our ways and our thinking and become guardians of the resources of the earth which supports our life and is more fragile and endangered than we used to believe possible."

–Artist and activist Jo Hanson (1918–2007)



Artist and Student Collaboration: Terra

Another inspiring group we met right here in Paris is Terra, a French artist-run program that aims to bring recycled art projects to students. We interviewed Patrick Geo Bride, one of the artists in the group, and he told us of their inspiration: "Growing up, I did not have the money for most art supplies. Instead, I turned to materials I could find for free... what most people would call trash."¹¹

Bride also emphasized the ease with which children can accept and embrace sustainable lifestyles: "Children understand, they want to help the planet... They understand how important it is to live sustainably."¹²

Terra's dedication to art and outreach to children is similar to what we imagine for the student-artist collaboration in Rethink Green, except scaled to a much larger size. We aim to collaborate with artists as impassioned as those at Terra.



"Nowadays, people throw so much things that they are not even aware of the value of their waste. In our society, everything is judged and valued regarding to its utility. If something become useless, so it does not have value anymore. But contrarily, we can use what is thrown away to be creative."

-Patrick Geo Bride, Artist from Terra

The creation of "Pollutortue, a collaborative art project between Terra and French middle school students.

What can we learn from these projects?

The winning elements from the aforementioned projects focuses on behavioral change and education of the population in a way that encourages participation. Engagement is voluntary and the participants gain an intrinsic motivation to participate in a sustainable lifestyle. Focusing on children to influence an entire community is another proven strategy when it comes to behavioral changes.

"We try not to force anyone to participate... Most often people come here for one thing, and end up learning about other opportunities, other ways to live more sustainably."

-Sarah Carino, employee at La Recyclerie

"What Came First?"
By Kyle Bean.
Made with
discarded
egg shells.





EXECUTION

From DNA to proteins,
from ideas to creation



Timeline

20th January 2016
Necessary
information
uploaded to website

1st September 2016
Deployment of Middle
and High School
Classes



31st July 2015
Website Launch &
Artist Outreach
Begins

1st February 2016
Deployment of
Elementary School
Class

20th July 2020
First Trash as Art
Celebration in the
Champs Elysées

From Biology: How New Genes are Expressed and Regulated

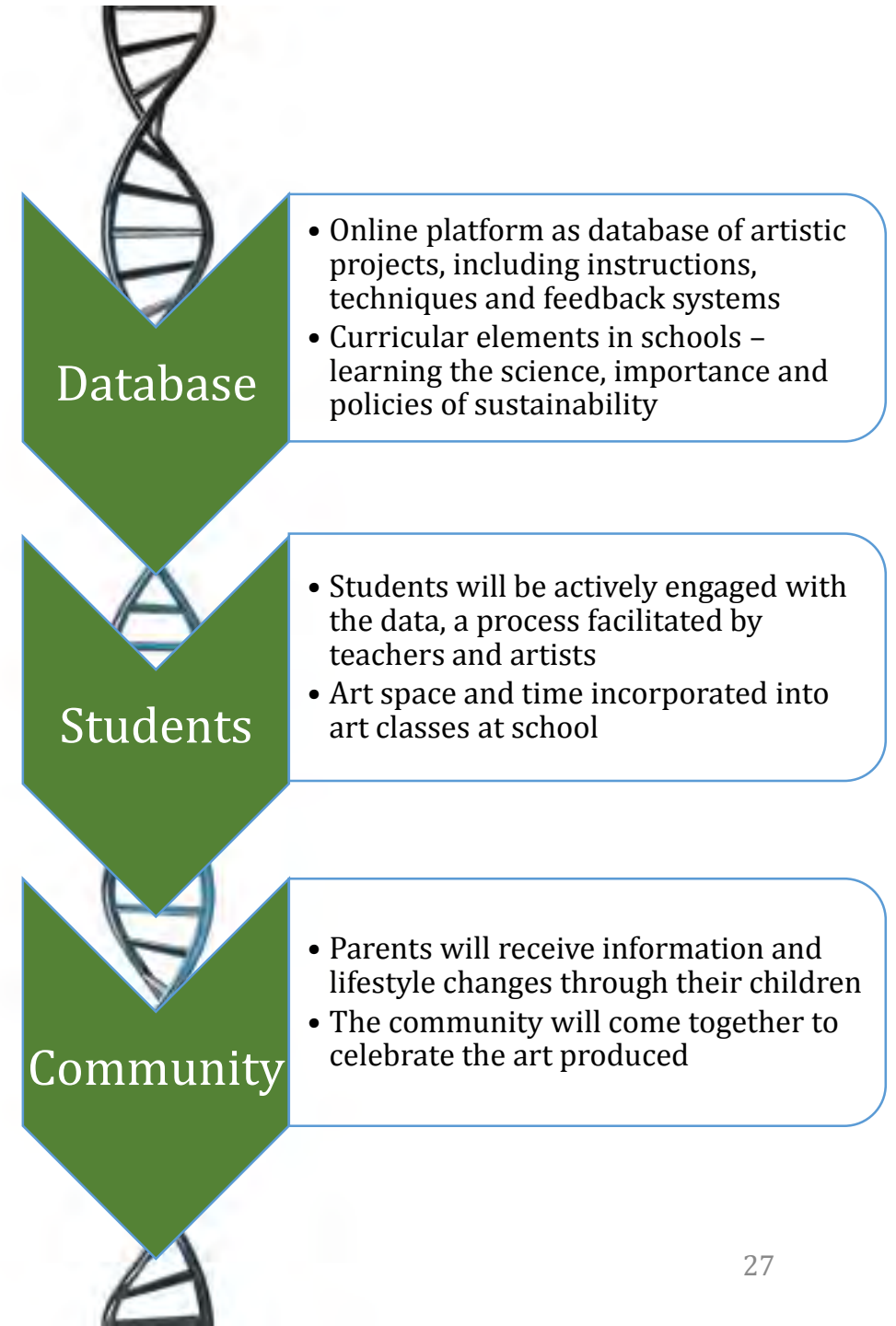
As we can see from other research into behavioral modification, there are 3 main requirements to change the habits of a city:

- Information: Citizens must know how to act
- Agency: Citizens must have the power to, and want to act
- Regulation: Behavior must be reinforced and normalized

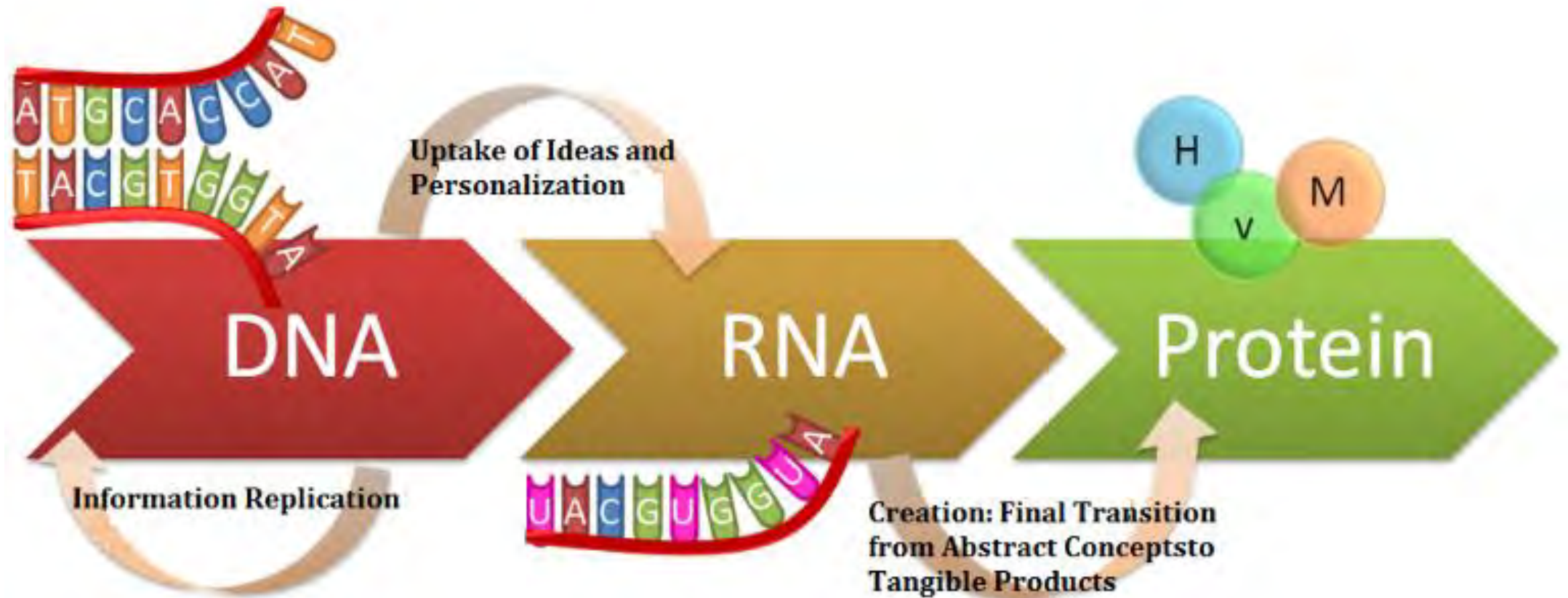
Similarly, the expression and regulation of new genes requires:

- New DNA to be expressed
- Transcription to create RNA, and translation of RNA to create proteins
- Regulatory elements

These three roles will be fulfilled in the community as they are in the cell. Our online platform and school syllabus will act as the information bank, information that will be translated to students through their active engagement with the resources, and then translated to their friends and family through exposure.



Learning: Modeled from the Central Dogma of Biology



Rethink Green

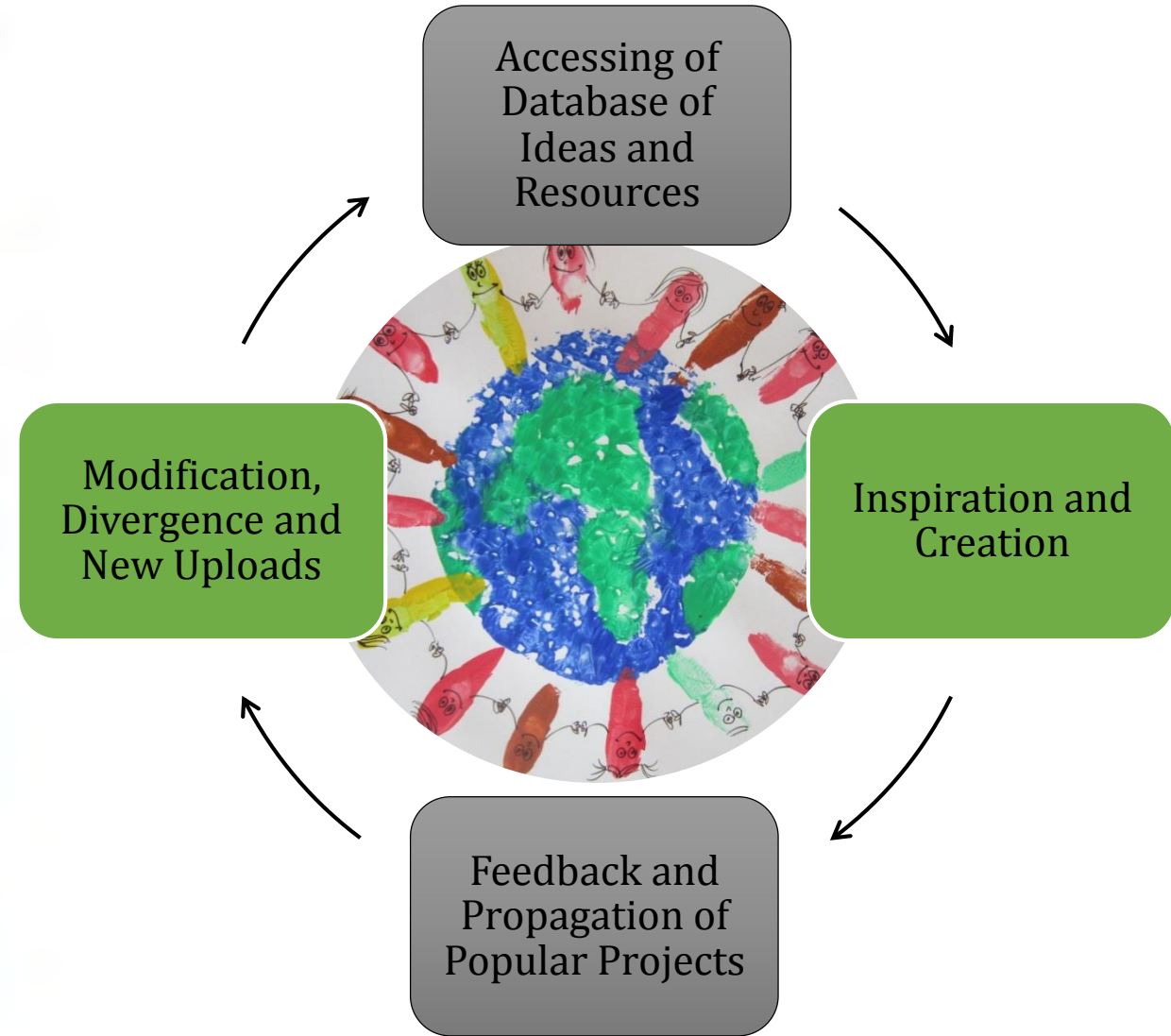
Allier l'éducation, l'art et le recyclage.

Plateforme de partage de projet éducatif visant à sensibiliser les enfants au recyclage en transformant les déchets en œuvre d'art.

Model for Website: Creation, Collaboration and Divergence

Website users will have unlimited access to the database compiling sustainable art projects from any other users. Collaborative efforts would be made to include the projects of artists who volunteer their work, in order to offer professional inspiration and technical knowledge. Project ideas would be uploaded in a variety of ways, from basic photos or infographics, to videos.

The website will include an upvote system to allow trending projects to gain more light. Top projects will have the opportunity to be displayed in an art exhibit temporarily. Users will also have the ability to connect with other artists and learners to collaborate and to share ideas.



Creation and Proliferation of Ideas

The interactive component of our website- especially the one that encourages students from different schools to share ideas and artistic skills by uploading their art-inspired projects- helps inspire others to create and recycle. This creates some kind of positive feedback where students are inspired by artists and their creations help inspire other students. A biological parallel occurs when a transcription factor is translated and then goes back to the nucleus to activate or drive the transcription of a different gene.



The screenshot shows the Harvard Summer School website with a green header. The header contains the Harvard Summer School logo on the left and navigation links for 'Accueil', 'Projet', 'Vidéos', 'Contacts', and a UK flag on the right. The main content area is titled 'Proposer une vidéo' and contains a form with four input fields: 'Nom', 'Adresse mail', 'Sujet', and a larger text area for 'Bref descriptif et lien de votre vidéo.'. A green 'Envoyer' button is located at the bottom right of the form.

Students and artists will have the opportunity to upload their own DIY tutorials and project ideas. Videos will be screened by moderators for appropriate content and then added to the website for everyone to see and learn. Other users will be able to comment on, share and/or upvote projects.

La recyclerie

Projet

Cette plateforme fait partie d'un projet éducatif pour sensibiliser les plus jeunes au recyclage et à la mise en valeur des déchets. Vous pouvez y poster les vidéos de projets réalisés avec les enfants ou vont inspirés de celles déjà postées pour réaliser vos propres ateliers !



Recyclage

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Education

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Art

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Special pages will feature information about organizations and artists in particular fields, allowing students to connect with people in areas of interest. For example, those interested in aquaponics could find contact information for La Recyclerie and visit the location themselves. Other students interested in specific types of materials or techniques could search for artists who specialize in certain artforms.

Creating the Website

- ✓ Locate literature on creative sustainability (books, blogs, etc.)
- ✓ Contact artists specializing in recycled art
 - ✓ Collaborate with them and offer to share their art on the website
- ✓ Locate sponsors interested in displaying or funding recycled art
- ✓ Contact private waste management and recycling companies: Information on their work, hours, tours, etc.
- ✓ Contact public waste management facilities - bio, contact persons and contact details



The Curriculum

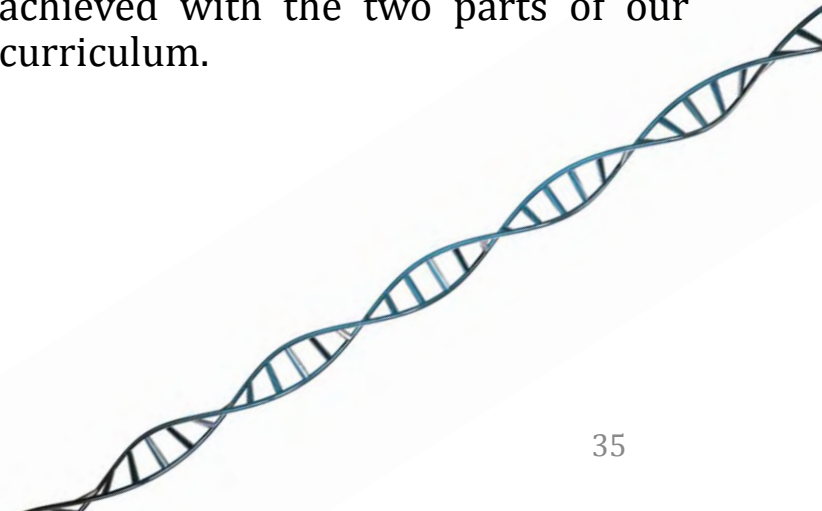


Model for Schools: Engagement and Education

Part of the reason why people do not recycle, social psychologist Shawn Burns argues, is because they are disconnected from the existing waste infrastructure.¹⁴ By limiting citizen's engagement with waste to sorting, and managing/disposing waste in sites beyond citizen's reach they feel less responsible for the challenges waste poses and less inspired to address them. Our goal is to bring citizens closer to waste and foster discussions around it in ways that encourage them to own up the waste management process. This will be achieved with the two parts of our curriculum.



A waste processing plant by a landfill in France. Paris does not house any waste processing sites due to unavailability of land, and waste is processed outside of the city, making it even easier to be forgotten about.



Implementation

The school element of Rethink Green is the translation machinery and an avenue for more personalized interactions. It brings artists to classrooms and links teachers to other professionals. The curriculum will begin as an addition to the sciences and arts studies that already exists. By having the course as a “plug-in” to existing classes, it will be easily integrated into schools.

In terms of cost, the program will only require a few workshops to train teachers how teach the new lessons. Materials will be recycled or tools already available in schools. Learning materials such as readings and instructions will be made available through the website.



Students putting the finishing touches on a recycled art piece in a competition in Malaysia.

Part 1: Information

We will rely heavily on the website in consolidating and facilitating the distribution of this information. We will include information about:

- Existing policies on waste management
- Contracted curb side waste collection companies, their contact details, and the fate of the waste they collect
- Different waste recycling agencies both public and private, their recycling methods and open hours
- The fate of non-recyclable waste

Part 2: Field Work

Once information is made available, we will encourage physical engagement between the students and the waste infrastructure. We will encourage discussions around waste that focus on the emotional as well as the physical experience such visits inspire. Field work will be structured in the following way:

Students should visit the different waste management facilities and experience first hand the whole waste management practice.

- They should be encouraged to write about this experience, highlight emotive aspects of it, what they liked and hated about it etc.
- Encouraging discussion around this infrastructure to help identify gaps within it and encourage creative (artistic) ways of filling these gaps

Curriculum Goals and Outcomes

Core Concept

In fostering sustainable lifestyle habits in students, inspiration can be found in both the arts and the sciences. In order to develop a respectful understanding of the impact humans have on the Earth, students must engage in activities that raise awareness, create long-term interest and fuel intrinsic motivation to being a more conscientious citizen.

Class Focus:

The focus of elementary school education in sustainability is to foster respect, understanding and excitement towards a sustainable lifestyle. This provides the foundation for all students in

Parisian public schools to bring sustainable habits into their lives.

Middle school education supplies an optional foray into sustainability that focuses on increasing the complexity of understanding and beginning to provide the tools and skills to become independent artists and creators for the future of Paris.

High school education challenges students to be active creators and artists in Paris. The focus falls on supporting independent projects, allowing students to go from participants in sustainability to innovators.



A child decorates a reusable water bottle in a sustainable arts workshop.

LEARNING GOALS	Elementary School	Middle School	High School
After completing this addition to the ARTS curriculum, students will be able to:	<p>Create simple recycled art projects as instructed by their teachers</p> <p>Collect materials from around their homes and neighborhoods for art projects</p> <p>Appreciate recycled material artists and their works</p> <p>Voice what they like about recycled art</p>	<p>Enter school and arrondissement-wide art competitions</p> <p>Produce original ideas</p> <p>Synthesize and apply techniques from different sources</p> <p>Critique and learn from other art projects and forms</p> <p>Demonstrate personal style in their art</p>	<p>Construct larger scale recycled projects</p> <p>Innovate new methods for handling recycled materials</p> <p>Formulate independent solutions to problems</p> <p>Collaborate actively with other students and artists</p> <p>Take active roles in public art and awareness projects</p>
After completing this addition to the SCIENCES curriculum, students will be able to:	<p>Understand the importance of separating and sorting waste</p> <p>Appreciate the need to live sustainably</p> <p>Be familiar with the local ecosystems and the effect waste has on them</p> <p>Comprehend the difference between organic and non-organic waste</p> <p>Demonstrate respect towards the environment</p>	<p>Create their own home compost systems</p> <p>Understand the chemistry of pollutants affecting the environment</p> <p>Describe alternative agricultural systems, such as aquaponics</p>	<p>Assess the “greenness” of products and technologies</p> <p>Provide feedback into policy changes that affect sustainable infrastructure</p> <p>Participate actively in the proliferation of sustainable technologies, fuels and habits</p> <p>Ideate ways to improve the city’s sustainable infrastructure</p>

Example of a Gr. 2 Art Lesson with Rethink Green

Lesson Goal: To create a paper maché pig

Time: 3 Lessons (Day 1: Paper Maché; Day 2: Base Coat Paint; Day 3: Personalization)

Skills:

- Working with recycled newspaper and toilet paper rolls
- Working with balloons and glue
- Painting 3D shapes
- Personalizing individual pigs

Children will supply from home:

- Newspaper
- Toilet paper rolls

Teachers will provide:

- Glue and water for paper maché
- Acrylic paints
- Paintbrushes
- Painting smocks
- Balloons

Instructions:

1. ...
2. ...
3. ...



Learning Goals:

After this activity, students will be able to:

- See the potential for art with newspaper
- Work with mixed media: paper maché, cardboard and paint
- Personalize their own artistic creation
- Describe the method for making this art project to their friends and family

Alternative Splicing: Inspiration for Effective Learning and Creation

The protein coding sequence of eucaryotic genes is interrupted by non-coding intervening sequences called introns. Similarly, the information we provide has a huge content body in which different concepts on sustainability art are infused. For efficient translation of the RNA into a protein, these introns have to be excised. We also don't want the students to memorize the details but to understand the concepts behind them which they will later use to develop recycling art ideas. Cells have developed a way of excising these introns through a process called splicing.¹³ Our project equivalent for splicing is the collaborative learning process.



Like a collage, splicing together brings together different elements of a large amount of material to create one cohesive piece.

One Concept; Infinite Possibilities for Art



A Never-Ending Remix: DNA and Art

The way information in our website is organized, encourages the mixing of different art concepts. Website users, artists and students, with different ideas on sustainability will post their tutorials and ideas on the website. Sections of the website will feature specialized focuses and contact pages with certain artists.

The diversity of ideas allows for a controlled randomness of ideas giving students freedom of exploration and a chance to mix and match different concepts as well as discover and develop new concepts from the content.

This phenomenon is seen in₁₄ the DNA especially during splicing. The protein coding sequence of

eukaryotic genes is interrupted by introns just like concepts are mixed up with content. Introns are not just interference in the protein coding process, but play a crucial role in the development of new genes and new proteins facilitating the evolutionary process. Similarly, wrapping concepts in content is not meant to burden students with work but offer them an opportunity to develop new concepts

The introns also necessitate the splicing process which allows for a reassembly and a rearrangement of different exons leading to the development of different sets of₁₅ proteins from a single gene/RNA. We imagine a similar remix of artistic creation.



Tyrese, Rethink Green's firsthand attempt at reviving an old tire.

Alternative splicing involves the creation of mRNA from DNA, and then the rearrangement of mRNA segments into different, unique transcripts. This allows for the efficient utilization of DNA, and serves as inspiration for the potential for knowledge to be rearranged into completely new creations.

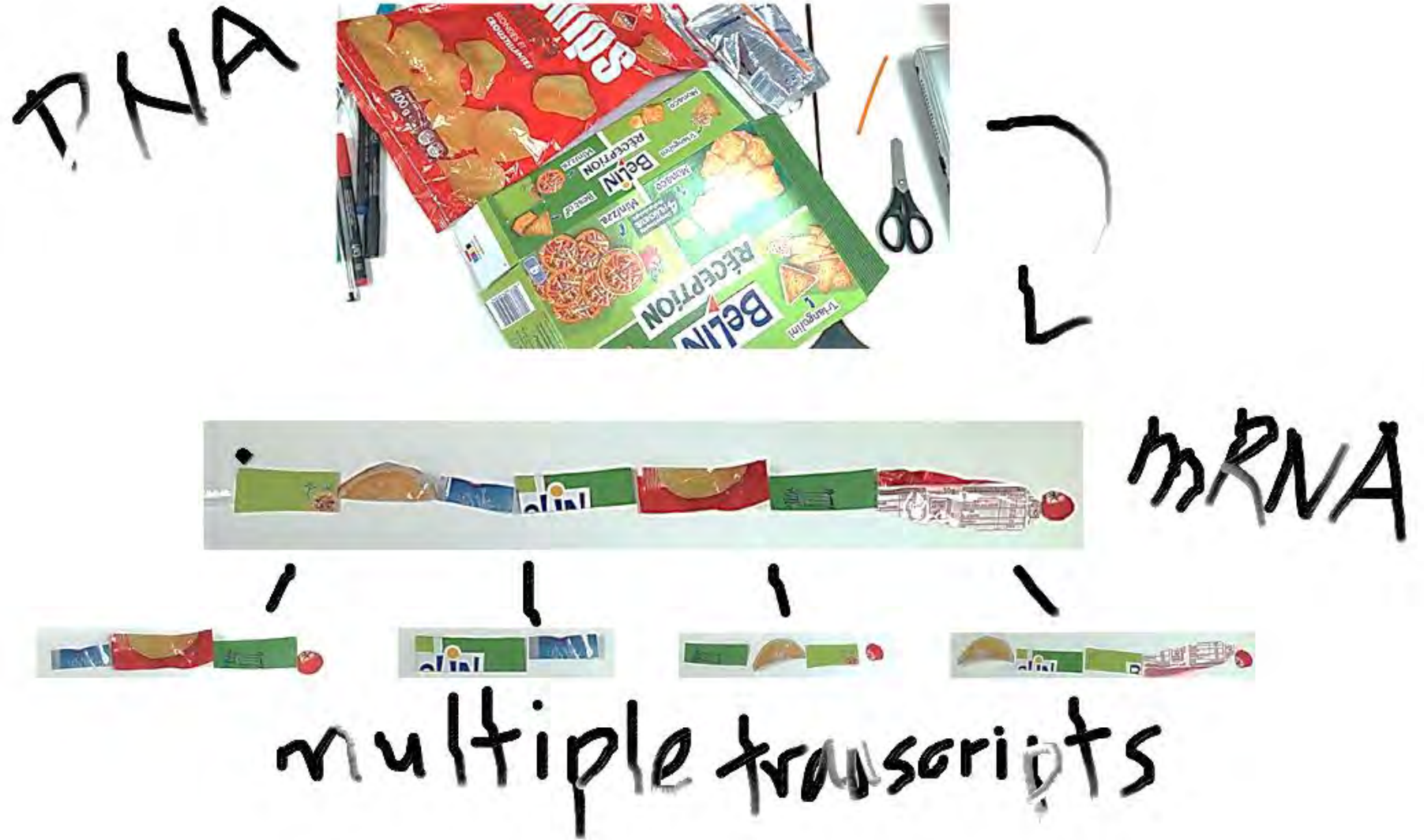


Image created by Harvard Summer School

Artist Outreach: Bringing Together Experts and Fresh Faces

Artists will be an invaluable resource for the execution of our program. Artists will supply inspiration, technical knowledge and mentorship to students in the community. In return, artists will be able to share their creations with a larger, integrated network through the website and through in-class visits and class trips to art exhibits. Both artist and student benefits from this system of mentorship and creation.

Artists in Paris will be invited to participate in in-school activities and offered the chance to host workshops and guided tours of their artwork. They will be connected through the website and real-life with enthusiastic students who want to work more deeply with their artistic specialties.



Creating the Curriculum

- ✓ Contact the Department of Education to add the Rethink Green curriculum into existing science and arts classes
- ✓ Train teachers on how to present the new lesson plans
- ✓ Contact artists; connect one artist to each class enrolled in the program
- ✓ Connect to waste management facilities outside of Paris to arrange field trips and interactive learning activities for students
- ✓ Open competitions and collaborative programs for children to engage in art with one another



The Celebration



Fête du Recyclage: le 20 juillet

By 2020, we envision the beginning of a day to celebrate artistry and sustainability. Paris will have another day in celebration of art, but this time, with a vision that looks towards the future. With public art exhibits that span through major streets in Paris, citizens will be immersed in the creative potential of trash and recycling. Older students who have created larger art pieces, such as large sculptures, will have the chance to submit their artwork for display.



Creating la Fête du Recyclage

- ✓ Contact the Ministry of Culture
- ✓ Implement an annual day to celebrate recycled art
 - ✓ Feature a public art exhibit through famous areas of Paris, such as the Champs Elysées
 - ✓ Feature both professional artists' work and the work of students





ASSESSMENT

How we will learn from our plan, and
how it will grow





“Sunset over Manhattan,” by Tim Noble and Sue Webster. Silhouette art made with trash. The city and its trash are one – can they complement one other?

Will Paris Change? How will we evaluate the success of Rethink Green?

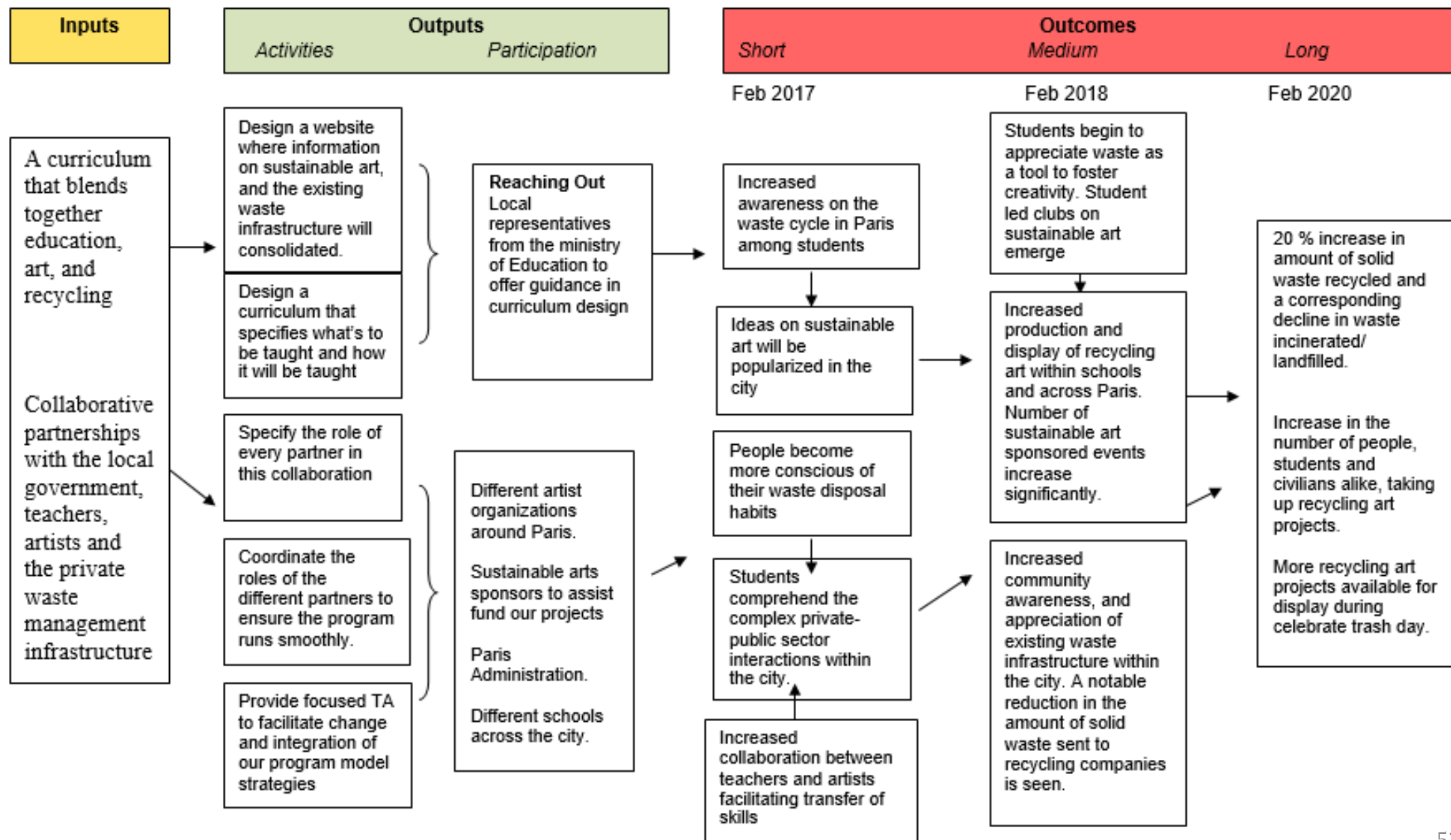
Our program is aimed at changing attitude and behaviors towards waste and recycling. Though our primary targets are students we are using them as a bridge to reach a broader population that goes beyond their present age-bracket. The success of our program relies both on their personal development as well as the impact they have on their respective communities and the larger society.



Assessment Plan

Goal	Measurement Technique	Example of Positive Feedback	Time frame	Group Responsible for Data Collection
Create an online platform to host recycled art ideas and collaboration	1. Measure website traffic 2. Measure number of accounts and average activity 3. Collect comments and concerns in a website “suggestion box”	1. Increased website usage with time and number of existing users 2. Rising levels of posting, collaboration and sharing 3. Positive comments and interest in expanding the site	1. Measured from implementation onwards 2. Measured after schools are introduced to platform (X months) 3. Measured continuously	Website moderators
Educate children on sustainability	1. Measure carbon footprints of Rethink Green schools vs. controls 2. Survey children on enjoyment and retention	1. Rethink Green schools should produce less waste and save more energy relative to others 2. Children should be excited to talk about this class and be able to express the new ideas they have learned	1. Measured between beginning of curriculum to 6 months post-implementation, relative to controls in the same time frame 2. Measured after completion of sustainability module in science curriculum	1. Government of Arrondissements 2. Teachers
Encourage children to participate in recycled art projects	1. Take feedback from students on enjoyment of classroom projects	1. Children should provide overall positive feedback	1. Measured after each lesson in the first launch of the program. Subsequently, measured after each course module.	Teachers
Influence parents to act more sustainably	1. Measure waste production of test arrondissements vs. controls 2. Survey students and parents on how their lifestyles have changed	1. Waste production should go down relative to controls 2. Students and parents should express concrete changes to their home lifestyles	1. Measured at 6 months post-implementation, and yearly afterwards 2. Surveyed after completion of class, with an annual follow-up	1. Government of the arrondissements 2. Teachers

Logic Model



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